The Acquisition of English and Arabic Existential Constructions

By

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II

Abstract

This study is an investigation of the acquisition of existential constructions (ECs) in English and in Spoken Arabic. It is the first of its kind in that it examines the acquisition of the pieces and the features that form ECs; namely, existential *there*, the copula, definiteness, and agreement for English and existential *fii*, definiteness, word order, and negation for Spoken Arabic. The children learning English and Arabic had difficulties producing adult-like ECs. However, the difficulties that the children learning Arabic had with ECs are different from the difficulties that the children learning English had with English ECs. An analysis the files of Eve (Brown, 1973), Nina (Suppes, 1973) and Peter (Bloom 1970), taken from the CHILDES database (MacWhinney & Snow, 1985) showed that English existentials are not acquired at the same time as deictic constructions (DCs); existential contexts appear later than deictic ones and are much less productive. The children had difficulties acquiring *be* in both constructions. The data shows that acquisition of *be* in existential constructions follows a different pattern of development than deictic *be* and auxiliary–*be*. Although the rate of provision and omission of *be* in both ECs and DCs is about the same, the use of *be* in existentials is not as frequent as *be* in deictic or as in auxiliary-*be* constructions. The earliest token of an English EC appeared at the age 1;10 although missing *be*. The earliest emergence of an EC with *be* appeared at 2;0. In contrast, the earliest emergence of a DC missing *be* appeared at 1;7 and with *be* appeared at 1;9. The components that form both existential and deictic constructions appear early but they are used deictically before they are used to express the existence of objects. The production data shows that the three children supplied subject-verb agreement correctly most of the time.

An analysis of data taken from five acquisition studies on Spoken Arabic showed that Arabic ECs are not productive. The earliest emergence of an Arabic EC appeared at the age 2;1. The difficulties that children learning Arabic had arise from (i) failure in reanalyzing *fii* as an existential verb separate from the verbal negation marker *ma-(š)*, (ii) the definiteness constraints and (iii) word order constraints that are also observed in Construct States (CSs) and verbal predicates. Existential *fii* is first used as a routine with the verbal negation marker *ma-(š)*. No affirmative ECs (AECs) could be found in the data. No errors in the use of negation with ECs could be found. The children learning both languages treated the negation markers differently. The children learning English produced both NECs and AECs. In contrast, the children learning Arabic only produced NECs. Children learning English appear to observe definiteness constraints in their initial productions of ECs while children acquiring Arabic violate this constraint. However, there is the possibility that the English distinction between ECs and DCs obscures the difficulty that children have with this constraint in English.

List of Abbreviations

1sg	First Person Singular
3msg	Third Person Masculine Singular
3pl	Third Person Plural
Abs	Absolutive Case
Acc	Accusative Case
Cl	Clitic
CSs	Construct States
Dat	Dative Case
DC	Deictic Construction
DE	Definiteness Effects
Def	Definite
Dem	Demonstrative
Dir	Direction
EC	Existential Construction
Erg	Ergative Case
EX	Existential
Expl	Expletive
FP	Focus Phrase
Fsg	Feminine Singular
Gen	Genitive Case
Indef	Indefinite
Loc	Locative
Mpl	Masculine Plural
Msg	Masculine Singular
Nom	Nominative Case
PA	Palestinian Arabic
Poss	Possessive
PP	Preposition Phrase
Pred	Predicate
Pro1sg	First person singular Pronominal
PrP	Predication Phrase
Pst	Past
RPA	Rural Palestinian Arabic
SC	Small Clause

List of Tables

Chapter Seven:

Table of Contents

Chapter One

Introduction

1.1 Introduction:

"Existential sentences" or existential constructions (ECs), a term coined by Jespersen (1924: p. 155), refer to sentences that assert or deny the existence of something. According to Kuno (1971) existential sentences are those that state the existence of certain indefinite objects in some place. English ECs contain the unstressed, non-deictic "existential *there*" (Milsark, 1974), as in (1). Deictic *there* contrasts with deictic *here*, while existential *there* does not (Lakoff, 1987). Arabic ECs contain existential *fii*, an element that is exclusively used in ECs to express existence. Arabic ECs also contain a following indefinite NP and an optional locative, such as (2). These particular constructions are unique syntactically and semantically. Syntactically speaking, they have been given different analyses with no more than a handful of proponents for each analysis. They pose problems for licensing requirements on arguments, specifically θ-Criterion, Case-Filter for English *there* and the elusive syntactic behavior of *fii*. Semantically speaking, they do not presuppose the existence of an individual, but rather assert it. Neither *there* nor *fii* have semantic content. ECs are constructions in which definiteness constraints are imposed on the following NP and in which word order is rigid. While there is complete assent among linguists that English existential *there* is an NP, the nature of Arabic existential *fii* is controversial in previous literature due to its variable syntactic behavior across different dialects of Arabic. I argue for a verbal analysis for *fii*. The facts that *fii* hosts the verbal negation *ma*-(š) and that it requires the following NP to be subject to definiteness constraints across the different dialects of

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Arabic provide a strong piece of evidence for the verbal nature of *fii*. Therefore, while the acquisition of existential *there* is linked to the acquisition of nouns in English, the acquisition of *fii* is linked to the acquisition of verbs in Arabic. The consequences of this distinction are that the licensing mechanisms in ECs in both languages will be different.

1) [Nina 2;9, Suppes, 1973)
   There was a rabbit in Wellfleet.   (MacWhinney & Snow, 1985)

2) Sara [2;4] (Al-Jenaie, 2008)
   *ma   fii   sayyart-i
   Neg there car.fsg-1sg
   = ma   fii   sayyarah
   "There is no my car."   (Kuwaiti Arabic)

The study of English and Arabic ECs offers a wealth of information that can be used to examine many syntactic issues in the adult and child grammar. In this dissertation, I examine the acquisition of English and Arabic ECs by analyzing spontaneous production data taken from the CHILDES archives (MacWhinney & Snow, 1985), for English and analyze data taken from different acquisition studies on spoken varieties of Arabic. Results show that children learning English had difficulties acquiring ECs as well as deictic constructions (DCs). They showed two different lines of development for both constructions. Existential contexts appear later than deictic ones and are less productive. The components that make up both constructions appear from early on but they are used deictically before they are used to state the existence of objects. The children had difficulties producing the copula (be) in both constructions. *Be* omission in EC and DCs is not predicted by the truncation approach (1993/1994). They also showed unstable use of the articles in their early files. They omitted both *a* and *the* in

obligatory contexts and they also supplied them correctly. Last but not least, the children produced a few negated ECs, but the majority is affirmative.

Similarly, findings on the acquisition of Arabic ECs show that the children had difficulties producing adult-like ECs. Negated ECs (NECs) but not affirmative ones (AECs) could be found in the data. NECs appeared from as early as the age 2;1. The children did not distinguish between definite and indefinite DPs in verbal predicates as well as in ECs, thus violating definiteness effects. This is evidence that the children treated ECs as verbal predicates and the use of definite DPs in ECs is evidence for the locative use of *ma-fii-(š)*. In addition, the children did not restrict the preverbal position to definite DPs and thus they violated word order constraints. The omission and provision of Topics with verbal predicates suggests that the children were projecting a left periphery and that they were going through a truncation stage.

1.2   Purpose of the Study

The purpose of this dissertation is to investigate the acquisition of existential constructions in English and Arabic child language. I examine English ECs by analyzing spontaneous speech production in the files of three children acquiring English taken from the CHILDES archives (MacWhinney & Snow, 1985). In particular, I examine those constructions with respect to finiteness, *be* production and *be* contraction and agreement. I also compare and contrast ECs with a related type of constructions – deictic and auxiliary-*be* constructions. I provide a controlled method of coding to define child existential and deictic constructions, something which was lacking in Becker (2000). I compare and contrast my findings with those of Becker (2000) to show that existentials

are not acquired at the same time as DCs; DCs appear before ECs. *Be* production in existentials is not as productive as *be* in deictic or as in auxiliary–*be* constructions. Contra Becker (2000), who argues that what licenses the post-copular NP (the associate NP) [1] is *be*, I argue that it is existential *there* not *be* that licenses the associate NP, thus maintaining Chomsky's Case transmission mechanism in ECs. I also show that the omission of *be* in ECs can not be explained by Rizzi's (1993, 1994) truncation approach. I attempt to respond to the following questions. Do children distinguish between deictic *be* and existential *be*? Do deictic *be* and existential *be* play the same role in the children's grammar? Is acquisition of deictic and existential *be* related to the acquisition of finiteness? When do children produce the contexts for both constructions? When do they produce the contracted forms of *be* for both? When do they produce the uncontracted forms of *be* for both?

To investigate the acquisition of Arabic ECs, I analyze data taken from different acquisition studies on spoken varieties of Arabic. I examine the data for production of existential *fii*, the definite article /ʔil/, the different negation morphemes and word order in verbal predicates. Difficulties in producing adult-like ECs in Arabic can be traced to producing *fii* as a segment in the routine *ma-fii* and difficulties in the acquisition of definiteness effects on DPs. In De Villiers and De Villiers' (1985) terminology, producing *ma-fii* as a routine is an error of inappropriate segmentation of the input and in Peters's (1983) terminology it is the difficulty of how to "disentangle" *fii* from the routine *ma-fii*. These observations might explain why negated forms of ECs appeared children's

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[1] Because a Case / Agreement chain is established between existential *there* and the post-copular NP, the post-copular NP is often referred to as "the associate NP". Similarly, I refer to the post-*fii* indefinite NP in Arabic ECs as "the associate NP" because it is linked to existential *fii* in a relationship in which Case / lexical government is established between the two.

early grammar. I attempt to respond to the following questions. When do children learning Arabic start producing ECs? What difficulties do they have in the production of ECs? How do they express existence in their early grammar if not through the use of ECs? What implications does the acquisition of Arabic ECs have for the syntactic and language acquisition theory?

1.3 Significance of the study

The research on child language acquisition cross-linguistically has become very important only recently. Some of the earliest cross-linguistic research are Pye (1979) on the acquisition of Quiché, Aksu-Koc & Slobin (1985) on Turkish, Hyams (1986), Pizzuto & Caselli (1992) on Italian, Pierce (1989) on French, Poeppel and Wexler (1993) on German, Pye, Aoki, and Morikawa (2000) on the acquisition of verbs in English and Japanese and Berman (1981 a, 1981b, 1982, and 1985) on Hebrew.

There is a scarcity of published research on the acquisition of most aspects of Arabic. While there are full-fledged spontaneous data collections in the CHILDES database on English and a few other languages, there are not any on Arabic. To the best of my knowledge, there are no complete diary recordings nor are there any complete spontaneous data collections made available to the public. What are available, however, are acquisition data scattered in different studies such as Omar (1973) plus four sessions of language development in Smadi (1979) and a manuscript on short conversations that Al-Jenaie (2008) kindly shared with me.

This study responds to major questions raised about the acquisition of English ECs that have to do with first emergence, finiteness, definiteness effects, *be* production,

be contraction and agreement. It also responds to questions about Arabic ECs with respect to first emergence, definiteness effects, word order and interplay with negation. ECs pose problems for the syntactic theory as there is no unified analysis in both languages.

On the one hand, English ECs have always been controversial in the linguistic literature. They pose problems for licensing requirements on arguments, specifically θ-Criterion and Case-Filter. Unlike the dubious grammatical category of Arabic existential *fii*, it is unanimously agreed that English existential *there* is an NP argument that is only needed for structural reasons (Chomsky, 1993: 35). Being an NP that is inserted in the subject position requires *there* to meet the requirement of EPP. In addition, being a nominal expletive requires it to be in a Case-marked position (Chomsky 1995: 156) and every element, including expletives, must have interpretation at the LF (Chomsky, 1995: 27). *Be* acquisition have always been a puzzling aspect of English and it has implications to the current theories of the acquisition of finiteness. It has implications to Chomsky's licensing mechanisms in ECs and Rizzi's Truncation approach (1993, 1994). Understanding the acquisition of English ECs will further the understanding of the acquisition of ECs in other languages.

On the other hand, the status of Arabic *fii* has been controversial in the literature. It has been previously analyzed as a verbal predicate for Egyptian and Tunisian Arabic (Eid, 1993; Halila, 1992), as an expletive pronoun (Mohammed, 1998) and as an adverbial demonstrative for Palestinian Arabic (Hoyt, 2000). Holes (1990, p. 72) holds the view that *fii* and inflected prepositions such as ʕind+pron may have been reanalyzed as verbs while Brustad (2000) argues that they are pseudo-verbs. Linguists that argue for

the verbal nature of *fii* use negation, licensing of gapping (a property that is restricted to verbal heads) and licensing of pro-drop as diagnostic tools. However, those diagnostic tools do not necessarily hold across other dialects (See, Mohammed, 1998, 2000 and Hoyt, 2000 for different analyses).

1.4 Organization of the dissertation

This dissertation contains seven chapters and is organized as follows. In Chapter One I introduce, define and briefly highlight the puzzling pieces of ECs in both languages. Then, I state the purpose of the study and set the goals that I attempt to achieve and clarify the significance of the study.

In Chapter Two, I conduct a typological study in which I investigate ECs cross-linguistically with respect to how ECs are introduced, realizations of definiteness effects, and word order. I also compare ECs with related constructions such as possessives, locatives and deictics. Based on the mechanisms with which ECs are introduced that I observed I classify languages into three categories: i) languages that require a nominal element or a dummy subject, ii) languages that require a verb and iii) languages that do not require a nominal element or a verb but rather utilize other mechanisms such as word order and contextual factors.

Chapter Three summarizes the different analyses that have been proposed for the syntax of English ECs in the adult grammar. In particular, leading analyses such as those by Chomsky, Lasnik, William and Hazout will be presented.

Similarly, in Chapter Four I summarize the three different syntactic analyses that have been proposed for the syntax of Arabic ECs in the adult grammar; namely, Eid's

(1993), Halila's (1992), Mohammed's (1998, 2000) and Hoyt's (2000). In this chapter I also describe ECs in my own dialect, Saudi Arabic, with respect to word order, definiteness effects, past tense and agreement, and negation.

In Chapter Five, I begin the chapter with a review of the studies that have been conducted on the acquisition of the components that form English ECs: Robin J. Schafer & Thomas Roeper (2000) on existential *there*, Susannah Kirby & Misha Becker (2007) on expletive *it* and existential *there*, Abu-Akel & Bailey (2000) on definiteness, and finally Becker (2000) on *Be* and finiteness. I close the chapter by presenting my own study that I conducted on the acquisition English child ECs. In my study, I detail the stage in which child ECs start to emerge. I then explain the method that I used to code child ECs and to extract tokens of the pieces that forms ECs, DCs and auxiliary-be constructions. Based on the data that I extracted, I control for what defines English child ECs and DCs. I close my study with a discussion of the implications that my findings have for Becker's (2000) analysis and the Truncation approach (Rizzi, 1993, 1994).

I examine the acquisition of ECs in Spoken Arabic in chapter Six. In the introduction to the chapter I point out the difficulties that the children learning Arabic had and briefly highlight my findings, all based on the data that I could obtain. After I describe the sources of the data I set out to present my findings on definiteness including children's production of the definite article /ʔil/, how definiteness effects manifest themselves in construct states (CSs) and word order in verbal predicates. I then describe other constructions that exhibit definiteness effects and word order variations, namely, locatives and demonstratives, possessives and interrogatives. Since all tokens of ECs that I found in the data were negated ones, I examine the data looking for tokens of the

different negation morphemes and present my findings under the section Negation. After that, under the section Acquisition of Arabic ECs, I give my own predictions of what defines Arabic child ECs based on Abu–Akel & Bailey (2000) on definiteness and based on Schafer & Roeper (2000) and Kirby and Becker (2007) on English expletives. I close the chapter with a conclusion that summarizes my findings.

Chapter Seven provides a conclusion to the dissertation, a summary of the differences and similarities that hold between English ECs and Arabic ECS, and questions for further research.

Chapter Two

Typology of Existential Constructions

2.1 Introduction:

The pragmatic function of existential constructions (ECs) is to assert the existence (or non-existence, if negated) of some entity in a location[2]. As simple as this notion is, putting it into words has its own complexities across languages. At first glance, examining ECs across different languages will reveal interesting variations with respect to how ECs are introduced and how an existential reading is achieved. The use of an existential verb, a copula, word order, a nominal element, or both a nominal element and a copula are different ways to derive ECs. In a few languages that require a verb, this verb is usually homophonous with the verbs 'to be', 'to have' or 'to exist'. In some languages the existential verb or copula shows agreement with the NP (English, German, Dutch) while some others do not (Hebrew, Arabic Turkish and Chinese). Languages that lack an existential verb or a dummy subject and have no articles, such as Russian, rely on word order and contextual factors to distinguish an existential reading from a possessive or plain locative reading. Freeze (1992) assumes that existential, possessive and locative sentences are all related in that they have the same basic structure (NP theme, Be/Have, NP/PP) and that differences between them boil down to moving either the locative PP or the NP theme to the front. The present cross-linguistic data show that some languages show some variations. Possession in Russian, Arabic and Hebrew is expressed by using a

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[2] ECs in this paper refer to sentences that contain a light verb such as a copula, a verb 'to have' or 'to exist' or the equivalent thereof in other languages. Excluded from this discussion are sentences that contain full verbs such as "to appear", "to seem" or "to stand" as in *There stood by the door a man wanting to see you* since they refer to more than just existence.

PP (a preposition and a pronoun or a noun followed by the possessed noun). In Turkish, the verbs that are used in affirmative and negative existentials are also used in possessives. Both constructions have the same structure and they do not involve any NP movement. Arabic existentials and possessives have different structures. The existential verb *fii* in Arabic is followed by an indefinite NP (*fii*+NP). Possessives, in contrast, are introduced by a locative PP (possessor) followed by an NP (possessed). Russian existentials and possessives have the same basic structure (PP+NP). However, the PP in possessives is the possessor and the NP is the possessed. The NP in existentials gets a NOM Case while the NP in possessives takes a GEN case. No NP movement is involved.

Some distinctions are observed between existential and spatial deictic constructions. In some languages, the difference between ECs and simple locatives is hard to see. ECs in Russian, for example, exhibit the reversed word order of locatives. While English ECs and deictic constructions basically have the same formula: *there/here* [be [NP [XP]]]. The differences are that deictic *there* is stressed and referential (referring to a location in discourse or in context) and the type of NP that is allowed in either one exhibits different definiteness effects. ECs and DCs in some languages are not related. Hebrew's ECs are introduced by the copula *yeš* (in affirmative sentences) and by *ʔeyň* (in negative sentences) while its DCs involve the use of a locative lexeme in the language, such as *hine* (here). German uses proximal *hier* (here), distal *dort* (there) and neutral *da*. Those locatives are not used to introduce ECs. In Spanish ECs, an equivalent of the English verb (have), *hay*, is used. In spatial deictic, locatives such as the proximal *aqui* (here) and distal *alli* (there), the verb *estar* 'to be' is used. In Arabic, existential *fii* is never used in DCs. Rather, the proximal locative *hina* (here) and the distal locative *hnak*

(there) are used.

What seems to be shared among languages in this discussion are the manifestations of the semantic restrictions on the associate NP referred to as the definiteness effects (DE). As noted by Milsark (1974), ECs, generally speaking, are ones in which the existence of an entity is denoted by a non-specific and indefinite NP. Milsark refers to the DPs that are excluded from existentials as strong DPs and those that are allowed as weak DPs. Strong DPs include proper names, pronouns, DPs headed by demonstrative pronouns such as *these, those*, *this* and *that* or by strong quantifiers such as *every* and *all* as well as DPs headed by a definite article. The weak DPs that are allowed in ECs include those headed by 'intersective' determiners such as indefinite articles, cardinal determiners, cardinal comparative phrases such as "*as many books as*", *many, few,* and *no* (McNally, 1997: 8, 9). Not all languages have the equivalent of English definite and indefinite articles *the* and *a/an*. In languages that lack articles, the definiteness effects in ECs still manifest themselves in restrictions on the other types of strong DPs (proper names, pronouns, demonstrative pronouns and strong quantifiers). It must be noted here that there are two uses that have been observed for English *there*-constructions: existential and presentative. The *there*-constructions (and their equivalent in other languages) which have a definite associate NP have different interpretations other than existential. Comorovski (1991) and Lakoff (1997) point out that the sentences that contain a definite associate NP are presentative and introduce new discourse referents. In contrast, the sentences that contain an indefinite associate NP are existential whose semantic function is to assert existence. Lakoff (1997) points out that existential *there* is the grammatical subject of the sentence, while deictic *there* is not (1). Because the post-

copular NP in (1b) is definite, the sentence can only have a deictic reading.

1) a. There is a man in the office, isn't there?
   b. *There is John with his raincoat on, isn't there?

In an attempt to distinguish between generic and existential interpretations of sentences, Diesing (1992) explains the difference in terms of the position of the subject NP relative to an operator. She argues that an existential interpretation obtains when the subject NP is inside the domain of "an existential closure". She takes this closure to be a VP. In contrast, generic interpretation obtains when the subject is projected in a position higher than VP, in Spec IP, so that it can not be existentially bound. Arutjunova (1976, as cited in Partee, B., & Borschev, V., 2007) uses different terms to define the three components that make up ECs. These are: a "localizer" or a locative expression, an "existing object" or the NP whose existence or non-existence is being asserted, and an "Existential Verb". However, as we have seen earlier, not all languages require an existential verb.

In this chapter I review the different mechanisms for introducing ECs in different languages. For the languages that use an existential verb (Arabic, Hebrew and Chinese, for example) I assume a structure as in (2). In those languages, the existential verb heads a VP and is immediately followed by an indefinite NP figuring as the internal argument for that verb. I assume that the existential verb plus the indefinite NP enter into what Diesing (1992) terms "existential closure" in which the verb serves as a head-governor and in which definiteness effects manifest themselves on the NP.

2)

```
            VP
           /  \
              V'
             /  \
            V    NP
         Ex. Verb
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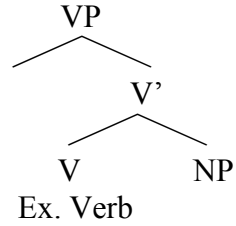
In what follows below, I shed some light on ECs across different languages. The languages included in this discussion have been chosen because they show distinct variations with respect to how ECs are introduced, the element that is used to impart existential reading to the sentence and the restrictions of definiteness effects. There are many languages that require dummy subjects to introduce ECs and there are others that do not. Those languages that do not require dummy subjects have other means to introduce ECs. Based on the literature that I review, languages seem to fall into three categories with respect to how ECs are introduced. The first category includes languages that require a nominal element or a dummy subject and a copula such as English, German, Dutch, and Italian. The second category includes languages that require a verb of some sort such as Turkish, Hebrew, Chinese, Maya-Mam and Arabic. Those languages either use an existential verb that means "exist", a verb "to have" or a special element that patterns with verbs, such as Arabic *fii*. The third category includes languages that do not require anything such as Modern Russian, Finnish, and Japanese. As we shall see later, in a language such as Russian, word order and contextual factors play a major role in determining what interpretation obtains in a sentence.

2.2. Languages that require a nominal element or a dummy subject:

English distinguishes between two types of *there*: referential and non-referential. Under referential, there is deictic *there* and anaphoric *there* (both are locatives) and under non-referential there is existential *there* that is unstressed, and non-deictic. Existential *there* is a dummy subject, a non-argument and a non-referential NP that is inserted in the subject position to satisfy the Extended Projection Principle (EPP) (Chomsky 1993: 101). English ECs require a copula that spells out agreement features that match those of the post-copular NP (the associate NP). This post-copular NP is subject to definiteness effects (DE). Only weak NPs are allowed in that position (Milsark, 1977; Keenan, 1987; McNally, 1997; Kearns, 2000). Strong NPs in ECs are anomalous. Linguists that assume a small clause analysis give the following representation for English ECs. For languages that require a dummy subject and a copula I assume an analysis that proceeds along the lines of English ECs.

3) a. There was a monkey in the tree.

b.   CP

C   IP

DP   I'
there

I   VP
was $_i$

V   SC
t $_i$

DP   PP
a monkey   in the tree
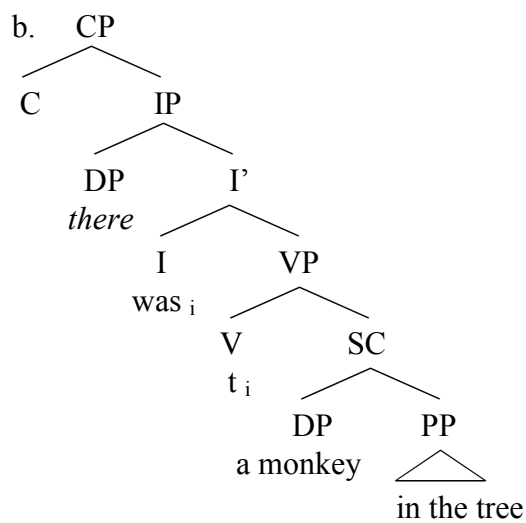
Germanic languages, such as German and Dutch, have dummy subjects in ECs. It is assumed that both languages have SOV as their basic word order. Both languages have the verb-second constraint that forces a finite verb in a main clause to appear in first or second position. German distinguishes between two homophones: existential *es* which is unstressed and non-referential and *es* which is referential. Basically, ECs are introduced by *es gibt* 'there is / are', in which the copula *gibt* does not show agreement with the associate NP, as in (4). The examples also show that definiteness in German is marked morphologically and that the associate NP is subject to the definiteness effects that have been observed in English. McNally (to appear) argues that ECs can be introduced with a verb to 'give' *geben* which he assumes to have been bleached of its possessive meaning as in (5)

4) a. es   gibt ein Buch auf dem Tisch
      there be a   book on the   table
      There is a book on the table

   b. es   gibt Bücher auf dem Tisch
      there be books on the   table
      There are books on the   table

5) Es gab ein Kind in dem Garten. / Es gab ein Kind im Garten
   it gave a child in the garden
   'There was a child in the garden.'   (McNally, to appear)

According to Felser and Rupp (2001) the sentences in (6) also have an existential reading. The copula in those sentences carries tense features and exhibits number agreement with the associate NP.

6) a. Es   war ein Geist /*der Geist/*Elvis/ *er im Schloss.
      There was a   spirit /the spirit /Elvis/ he in.the castle
      There was a spirit in the castle

   b. Es sind/*ist viele Männer im Garten.
       there are /*is many men in.the garden
       'There are many men in the garden.'

Existential *es* and expletive *es* have different distributions. According to Jóhanna and Eythórsson (2003), *es* may appear before the verb in impersonal sentences as in (7). In such constructions, *es* can optionally invert with the subject (8). Existential *es*, on the other hand, is not allowed in EC questions. Curme's (1960) example in (9) shows that *es* is used to fill up the first empty position so that the verb comes second in position. This is so since German is a V-2 language.

7) a. Es   ist mir   kalt.
      it-Expl is me-Dat cold
      'I am cold.'

   b. Es   wurde uns   geholfen.
       it-Expl was   us-Dat   helped
       'We were helped.'

8) Mir   ist (es)   kalt.
   me-Dat   is it-Expl   cold
   'I am cold.'

9) Ist (*es) jemand da?
    Is there somebody there?
    Is there anyone there?   (Curme, 1960, p. 457)

The examples in (10) and (11), taken from (Rodionova, 2001) show that existential *es* causes the subject NP to invert with the verb. It also shows that *es* is indeed of the

category NP.

10) Das Messer ist auf dem Tisch   (Locative)
    the knife   is on the   table
    "The knife is on the table"

11) Es   ist ein Messer auf dem Tisch.   (Existential)
   There is a   knife on the table.
   There is a knife on the table

      Maling and Zaenen (1978: 480) point out that Dutch has two dummy subjects: *er*

and *het*. *Het* is used in weather sentences and with raising verbs such as 'seem'.

12) a. Het regent.
     It rains
     It rains

   b. Het schijnt dat ze   hard werken
      It   seems that they hard work
      It seems that they work hard

The equivalent of existential *there* is the dummy subject *er*. Unlike German *es*, Dutch *er*

is allowed to follow the verb in cases in which the verb-second constraint does not hold.

For example, *er* is allowed in a question such as in (13b).

13) a. Er   is hier veel sneeuw
     There is here much snow
     There is much snow here

   b. Is er   hier veel sneeuw?
     Is there here much snow
     Is there much snow here?

Italian is an SVO language. VSO and VOS word orders are also possible under focus. ECs in Italian can be verbless or tensed (with a verb). Verbless ECs are introduced by using *niente* "nothing" and *nessuno* "nobody" followed by an NP, as shown in (14), taken from (Tovena, 2007). By virtue of using those negative polarity items, the construction has a negative existential interpretation (p. 191). Tovena analyzes *nessun* as a syntactic pronoun but also as a determiner and a quantifier combining with animate singular countable nouns and some mass nouns; while she analyzes *niente* as only a quantifier / pronoun whose domain extends over inanimate entities.

14) a. Nessun   testimone intorno a lei
     (There were) no witnesses   around her.
     "There were no witnesses around her."

    b. Niente processo per la truppa
      (There will be) no trial for the troops.
      "There will be no trial for the troops."

Tensed ECs are introduced by using *c'è* "there is" and *ci sono* "there are". The examples in (15) and (16), taken from Tovena (p. 192-193) show that agreement holds between the copula and the associate NP. To negate those constructions the negative marker *non* "not" is used. Definiteness effects also obtain in Italian ECs. Strong determiners are not allowed in either verbless or tensed ECs (p. 197).

15) a. c'è   una stella nel cielo
      There is   a   star in the sky
      There is a star in the sky

     b. ci sono   poche stelle nel cielo
       there are few   stars in the sky
       There are few stars in the sky

16) a. Non c'è   nessuna stella nel cielo
       NEG there any   star   in sky
       There is not any star in the sky

   b. Non ci sono stelle nel cielo
       NEG there are stars in the sky
       There are no stars in the sky

2.3. Languages that require a verb of some sort:

In this section I introduce a few languages that use an existential verb to open ECs. ECs in those languages, except for Hebrew and Arabic, manifest the basic, unmarked word order. Turkish is a verb final language. It has an agglutinative (i.e. synthetic) morphology with postpositions and regular overt Case-marking (Erguvanli, 1984: 5). According to Erguvanli, Turkish does not have a basic word order. In other words, it has a free word order. OSV is derived by topicalizing the object. SVO and OVS are derived by extraposition past the verb. However, word order becomes rigid in sentences in which NPs are not Case marked. Generally speaking, Turkish has properties typical of OV languages which include German, Dutch and Frisian. Erguvanli (1984: 158-162) describes the Turkish definiteness system as follows. Turkish does not have a definite article but it has an indefinite article *bir* (one/a). Definiteness is marked based on the grammatical role of the NP. In particular, Case marking imparts definiteness to the noun. Subject NPs do not carry Case marking. Word order becomes critical in differentiating between definite and indefinite reading of the subject. When the subject noun occurs sentence-initially, it gets a definite reading. In contrast, when the subject occurs in the immediate position to the left of the verb, it gets an indefinite reading. Consider the following sentences taken from Erguvanli (p.159):

17) a. Arɨ   kɨz-ɨ   sok-tu
      Bee   girl-Acc   sting-Pst.
      The bee stung the girl

   b. kɨz-ɨ   Arɨ   sok-tu
      girl-Acc   bee   sting-Pst.
      Some/A bee stung the girl

Definiteness effects in Turkish, generally speaking, work differently from those in Arabic (and English). In Arabic, indefinite subjects are not allowed in initial position of predicative or verbal sentences unless it is licensed. In Turkish, the positions that are accessible to definite and indefinite subjects are determined by a semantic feature [±animate] which interacts with definiteness (Erguvanli, p. 16). Subject NPs that are [-animate] are patients while subject NPs that are [+animate] are agents. While [+animate] indefinite subjects that are patients can occur sentence-initially or pre-verbally, indefinite subjects with the feature [-animate] that are patients can only occur pre-verbally. Underhill (1972, as cited in Erguvanli, 1984) argues that the "Indefinite NP Movement" word-order rule obligatorily moves any indefinite NP to the left of the verb while the "scrambling" word order rule optionally moves definite subject NPs to any position in the construction. For example, in (18a) the indefinite NP *bir lamba* "one lamp" has been moved to the immediate position on the left of the verb *yan-ɨyor* "burning" due to the application of the "Indefinite NP Movement" word-order rule. (18b) is unacceptable because indefinite NP *bir lamba* has not been moved to the immediate position to the left of the verb *yan-ɨyor*, but rather it has been "scrambled" all the way to the front of the sentence via the "scrambling" word order rule which only optionally moves definite NPs.

18) a. Adam-ɨn   oda-sɨn-da   bir lamba   yan-ɨyor
       Man-Gen   room-Poss.-Loc one lamp   burn-Prog.
       "A lamp is burning in the man's room"

   b.* bir lamba Adam-ɨn   oda-sɨn-da   yan-ɨyor
        one lamp man-Gen   room-Poss.-Loc burn-Prog.
        "A lamp is burning in the man's room"

Turkish uses a verb meaning "to exist" or "to come into existence" in ECs. Since Turkish is a verb final language, existential predicates are expected to appear in sentence-final position. According to (Erguvanli, p. 6) non-verbal sentences fall into two classes: i) substantive (ones that have either a nominal or an adjectival predicates) and ii) existential (ones that have an existential predicates). Affirmative existential sentences are expressed using the existential predicate *var* 'exist' and negative existential sentences are expressed using the negative existential predicate *yok* 'does/do not exist'. Turkish ECs have the format NP-loc NP var/yok and they require that the subject NP be indefinite, as in (19), taken from Erguvanli (p. 6). Recall in our discussion earlier that a subject NP gets an indefinite reading when it appears immediately to the left of the verb and that it gets a definite reading when it appears sentence-initially. (19c) is ungrammatical because the indefinite NP is not in the immediate pre-verbal position. In Diesing's (1992) terminology, the indefinite NP is not bound by an "existential closure".

19) a. Oda-nɨn   orta-sɨn-da   bir kedi   var
        Room-gen middle-poss.3-loc one cat   exist
        There's a cat in the middle of the room

     b. Oda-nɨn   orta-sɨn-da   bir kedi   yok
        Room-gen middle-poss.3-loc one cat   exist.neg
        There isn't a cat in the middle of the room

22

c. *bir kedi oda-nɪn   orta-sɪn-da   var
   one cat room-gen middle-poss.3-loc exist
   There is a cat in the middle of the room

d.

```
              VP
             /  \
                V'
               / \
            NP     V
           /__\   var/yok
          bir kedi
```
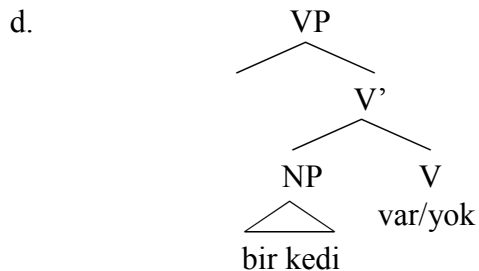
Erguvanli considers existential sentences to be non-verbal. I consider them to be stative verbs because they pattern with verbal predicates in other constructions. The difference, however, is that *var* and *yok* are separate morphemes for affirmative and negative existentials, respectively. According to Croft's (1991) typology of negation, Turkish *yok* seems to be 'an existential negator'. Negative existential negators have been previously reanalyzed as 'verbal negators' for the language Marathi (Madhav Deshpande, 1980 as cited in Croft, 1991). As for *var*, I am not sure how to analyze it except as a verbal predicate. Since both *var* and *yok* have the same distribution in the sentence, I will interpret them as existential stative verbs.

The use of *var* and *yok* does not show any contextual restrictions. Tense does not affect the use of either morpheme. Van Schaaik (1994: 44-45) gives the following examples:

20) a. Su   var
    water exist
    "There is water"

23

b. Su   var-di
   water exist-Pst
   "There was water"

With respect to possessives, Turkish lacks the equivalent of the verb "to have". Instead, *var* and *yok* are again used in conjunction with a possessive NP to express possession, as in (21). The NP *araba* "car" appears immediately to the left position of the verb, a position where NPs get an indefinite reading. Both existential and possessives have the same basic structure (NP + var/yok). However, the possessed NP in possessives takes on a pronominal clitic while the NP in existential do not.

21) Guzel bir araba-m var-di ama, simdi yok   artik
    nice   a   car-1sg. EX.Pst. but now   Ex.Neg anymore
    I had a nice car, but I don't have it anymore.   (Van Schaaik, 1994: 45)

   Another language that employs what seems to be an existential verb is Hebrew. Hebrew has SVO as its unmarked word order. Like Arabic, it also manifests several word orders. I take that to be the result of having a rich inflectional system. ECs are introduced by an element whose identity is still controversial. A marked word order is observed for Hebrew ECs (VS rather than SV). The following examples in (22), taken form Shlonsky (1997), show that *yeš* is used to introduce affirmative ECs while *ʔeyn* is used to introduce negative ECs[3]. *Yeš* is a present tense existential particle equivalent in meaning to English 'there be' (Berman, 1985).

22) a. yeš yladim   ba-gina.   a´. *yeš ha-yladim   ba-gina
       be children in-the-garden   be the-children in-the-garden
       'There are children in the garden'   'There are the children in the garden'

---

[3] For a discussion of *ʔeyn* and *yeš*, see Hermon (1984) and Borer (1983).

24

b. yeš harbe yladim   ba-gina.   b´. *yeš kol yeled ba-gina
   be many children in-the-garden   be every child in-the-garden
   'There are many children in the garden'   'There is every child in the garden'

c. ʔeynˇ yladim   ba-gina.   c´. ? ʔeynˇ ha-yladim   ba-gina
   neg. children in-the-garden   neg. the-children in-the-garden
   'There are no children in the garden'   'The children are not in the garden'

Shlonsky argues that there is no AgrSP in (22c) since *ʔeyn* does not show agreement with

the indefinite NP. What that means is that the indefinite NP must be projected somewhere

lower than AgrSP. In addition, generic interpretation obtains when the subject is

projected to the left of *ʔeyn*. To support his claims, he gives the example in (23). The

sentence in (23) can only have a generic interpretation. It is ungrammatical under

existential interpretation.

23) yladim   *ʔeyn*-am   ba-gina.
    children Neg-Mpl. in-the-garden
    'Children are not in the garden'

The above examples also show that Hebrew ECs exhibit the same definiteness effects as

in the English ones. *Yeš* seems to be involved in licensing the post-copular NP. Shlonsky

(p. 87), based on extraction examples, shows that only indefinite subjects are allowed to

appear in the lower subject position in order for it to be head-governed by *yeš* "*be*". This

"lower" subject position could be anywhere below Spec IP, in a position that is properly

head-governed. He assumes that *yeš* assigns partitive Case to the post-copular NP and

that it does not have the ability to assign any external theta roles. *ʔeyn*, on the other hand,

has been given different analyses. Borer (1983) assumes that there are two *ʔeyn's*: one

that is a negative existential verb and one that is a sentential negator. In contrast, Shlonsky (1997) treats *ʔeyn* only as a sentential negator occupying the head position of NegP. He argues that *ʔeyn* can not be the head governor of the indefinite subject that is in the lower subject position. That is because *ʔeyn* is not the closest governor for that indefinite subject NP. Alternatively, he proposes that there is a "phonetically null verb" 'existential *be*' that functions as the head governor for the trace of the subject NP that has moved at LF. This null verb is the source of existential interpretation. In sum, Shlonsky assumes two different analyses for affirmative and negative ECs. However, what we should take away from Shlonsky's analysis is that there is an existential element that is verbal in nature that functions as the head governor for the indefinite NP. This analysis proceeds along the lines with the analysis that I give to ECs in spoken Arabic. I analyze *fii* as an existential verb that head-governs and licenses the indefinite NP via Case assignment.

Definite NPs may appear with *yeš*. However, the sentence has a different interpretation. In (24) below, the NP *ha-šulxan* 'the table' is marked for definite and so the sentence gets a deicitc interpretation, as if it is said in response to a question with "where?"

24) yeš oto   al ha-šulxan
     be him on the-table
     'There is it on the table.'

The examples in (25), taken from Siloni (1990), show that Hebrew deictic constructions with *hine* "here" do not contrast with ECs as outlined above. Note that

Hebrew lacks a present tense form of *be* but it has a past form as shown in (26) (Shlonsky, 1997)[4].

25) a. hine ʔiš   ha- xošev   ʕal   kesef
      here man   the think.Msg. about money
      "Here is a man who thinks about money"

  b. hine ha-ʔiš   še   Dan raʔa
      here the-man that Dan see.Pst.3Msg.
      "Here is the man that Dan saw"

26) a. ʔani hayiti   šamen
      I   be.Pst.1sg. fat
      "I was fat"

  b. ʔani   šamen
      I   fat
      "I am fat"

Yeš and *ʔeyn* are also used in affirmative and negative present tense possessives, as in (27), taken from Shlonsky (1987)[5]. In past and future tense possessives, the verbs to have' of the root *h.y.y* are used. However, those are negated with *lo* which appears to the left of the verb, as in (28b), also taken from Shlonsky (1987). Shlonsky further points out that the dative possessor, which is a PP, is the subject of the sentence.

27) a. Yeš le-Hanan   sefer
      Is   Dat-Hanan a book
      Hanan has a book

  b. le-Hanan   ʔeyn sefer
      Dat-Hanan Neg   a book
      Hansan does not have a book

---

[4] Hebrew has *hu*, an element that is always inflected for third person masculine singular and is optional. Rapoport (1987) and Ritter (1995) argue that this element is the spell-out of verbal agreement features.
[5] Shlonsky (1987: 141) argues that *yeš* is ambiguous between a copula that selects for a single argument and 'have' that takes two arguments, assigning two Θ-roles.

28) a. Haya   le-Hanan   sefer
       be/have.Pst   Dat-Hanan   a book
       Hanan had a book

   b. le-Hanan   lo   haya   sefer
      Dat-Hanan   Neg   be/have.Pst   a book
      Hanan did not have a book

   c. le-Hanan   yhiye   sefer
      Dat-Hanan   be/have.Fut   a book
      Hanan will have a book

In a few languages that I have come across the verb "have" is usually used to introduce ECs. Chinese and South Slavic languages such as Bulgarian and Serbo-Croatian are examples. Li & Thompson (1981) point out that Chinese does not have a canonical or a basic (unmarked) word order. They attribute that to the fact that Chinese is a discourse-oriented language. The different word orders observed in Chinese are contingent on variations in pragmatic factors and modifiers (p. 26). As we shall see later, Chinese ECs have a VS word order. The verb y*ou*, the equivalent of English "have" (Huang, 1987) or "exist" (Li and Thompson, 1976) is used in ECs. To express possession, *you* is also used, as in (29).

29) Wo you yiben shu   hen youqu.
     I   have one   book very interesting
    'I have a very interesting book.'

According to Huang (1987), the first position in an EC can either be left empty, as in (30) or can be filled with a locative NP, in which Case it functions as the subject of the sentence, as in (31).

30) You gui
   have ghost
   'There are ghosts'

31) Zhuo-shang you   yiben shu
   table-top   have one   book
   "On the table there's a book"

Huang, who maintains that the function of ECs is to introduce new entities in the discourse, argues that the definiteness effects obtain in Chinese ECs. The following examples, taken from Huang (1987), show that an EC is unacceptable if the post-*you* NP is definite.

32) *You neige ren
   have that man
   'There's that man'

33) *Zhuo-shang   you neiben shu
   table-top   have that   book
   "On the table there's that book"

However, Jlanhua Hu and Haihua Pan (2007) argue that there are cases in which a definite NP is allowed in Chinese ECs. A definite NP is allowed after *you* when the focus particle *hai* "in addition" is used to focus on the post-verbal NP, as in (34).

34) Zhuo-shang hai   you neiben shu
   table-top   in addition have that   book
   "On the table there's in addition that book"   (Jlanhua Hu and Haihua Pan, 2007: 134)

For the sentences in (30) and (31) above, a small clause analysis is assumed (Stowell, 1981; Bowers, 1993; Moro, 1995 among many others). The NP in Spec IP hosts a locative and *you* is projected as an AUX in INFL as in (35) (as proposed by Huang, 1987). Huang assumes a small clause analysis for Chinese ECs and proposes that when an overt NP is projected in Spec IP, it functions as the subject of the sentence. When no NP is projected in Spec IP, he assumes an empty expletive is the subject position. The indefinite NP whose existence or non-existence is asserted is the object of *you*. In the light of Huang's descriptions, we may as well assume the same structure as the one for Arabic ECs. In the structure in (36), *you* is projected as an existential verb selecting for an NP complement. This NP gets structural Case under government and is bound by an existential closure (Diesing, 1992). We may take up Diesing's analysis with a little variation in order to explain Chinese ECs. The indefinite NP bound by *you* does not have to be the subject. The relationship that holds between *you* and the indefinite NP is one in which the NP gets licensed as an internal argument.

Huang's analysis is along the lines of the analysis that I assume for ECs in spoken Arabic with some changes. Both Chinese *you* and Arabic *fii* are used to introduce ECs. I assume the domain of *you* and *fii* extends over the NP that follows and requires it to be subject to definiteness effects. NPs figuring as objects to accusative verbs in Arabic are not subject to the same definiteness effects observed in ECs.

35)
```
                    S
            ⌐———————⌐———————⌐
        Loc. NP    AUX      SC
                   you   ⌐———————⌐
                        NP       XP
```

36)

```
              VP
             /  \
                V'
               /  \
              V     NP
          you/fii   indef. NP
```
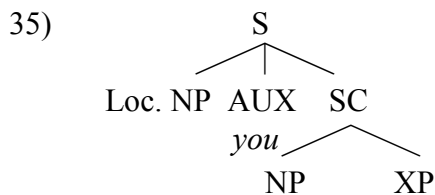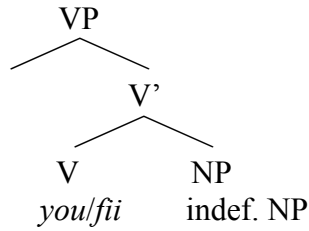
Other languages that require a verb that means 'exist' to open ECs are K'iche' and Maya-Mam, both are ergative Mayan languages that are spoken in Western Guatemala and parts of Mexico. Those two languages, although belonging to the same family, use two different existential verbs. K'iche' has VOS as its basic word order. According to Pye (2001: 648), K'iche lacks a copula but it has *k'oolik*, a lexical all-purpose positional verb that is used to express existence, position and location. The examples in (37), taken from Pye (p. 648) show that when the associate NP immediately follows the verb the sentence gets an existential interpretation but when a locative follows the verb, it gets a locative interpretation.

37) a. K'oo juun ʔetz'ab'aal
     Exist one/a toy
     There is a toy

   b. K'oo pa lee mes   lee tz'iʔ
      Exist on the table the dog
      The dog is on the table

According to (Collins, 1994: 365-369), Mam has VSO as its basic word order and both the subject and object appear lexically after the verb but are grammatically marked before the verb, as in (38). The language also features the lack of a copula. The subject or the object in this language can be fronted for focus and the negative morphemes are

31

emphasized by virtue of appearing in preverbal focus slot.

38) N-chi   ok   t-tzyu'n   tata tx'yan
    Prog.3Pl.Abs.   Dir.enter 3Sg.Erg-grab man dog
    "The man is grabbing the dogs"   (Collins, 365)

ECs in Mam begin with existential verbs that inflect for number. Collins gives the

following examples though he does not differentiate between verbal ECs and copular ECs

as he gives the same gloss for both constructions. The examples in (39) show that *at* is

used to assert the existence of singular entities, while (40) shows that *ite'* is used to assert

the existence of more than one entity. *Nti'* is used to negate singular ECs while *nti'qe'* is

used to negate plural ECs (41).

39) a. At   jun   ichin
       Sg.exist one   man
       There exists a man

    b. At   jun   u'j   twi   watb'il
       Sg.exist one   book   on   bed
       There is a book on the bed

40) a. Ite'   junjun   tx'yan
       Pl.exist several   dog
       There exist several dogs

    b. Ite'   kyaja   xial   tuja
       Pl.exist four   people in.house
       There are four people in the house.

41) a. Nti'   jun   ichin
       Neg.exist one   man
       There does not exist a man

b. Nti'qe' junjun tx'yan
   Neg.exit-Pl several dog
   There do not exist several dogs

Based on Collins' gloss, the NP that follows the existential verb is always indefinite.

Collins argues that because the existence of 'a book' (39b) and the existence of 'people'

(40b) is in focus, those NPs appear before the locative expressions 'on the bed' and 'in

the house'. In contrast, in locative constructions, such as in (42), in which location but

not existence is in focus, the locative expression precedes the NP, appearing sentence-

initially. *Ate* and *ta'ye* for affirmative in (42a) are optional (p.366).

42) a. Nya´ twi′ watb′il (ate)(ta′ye) u′j
       Neg on bed Loc.Sg.exist book
       Not on the bed is the book

    b. Nya´ tuja ite′ya kab′a xjal
       Neg in.house Loc.Pl.exist two people
       Not in the house are the two people.

Based on those examples, the existential verb and the indefinite NP establish an

existential closure inside which definiteness effects obtain. Thus, we may assume for

Mam's and K'iche's ECs a structure similar to the one for Turkish, Hebrew and Chinese:

43) a. At jun u'j twi watb'il
       Sg.exist one book on bed
       There is a book on the bed

b.

VP
V'
V'   PP
at   NP   twi   watb'il
jun   u'j
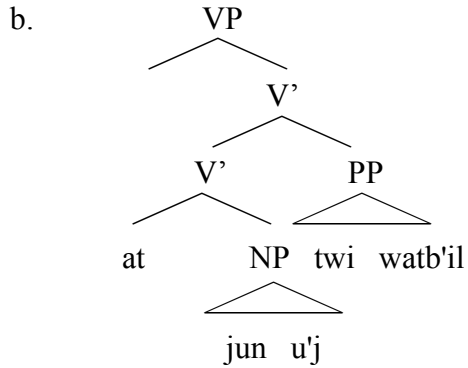
2.4. Languages that do not require anything:

ECs in the languages in this category feature the absence of an overt existential morpheme. Russian, Finnish, and Japanese are examples. Based on the languages that I reviewed in this category, ECs are not different from predicative constructions in the same language from a syntactic point of view. However, these languages use word order, context support and differences in semantic and pragmatic properties of the constituents of the sentence to achieve existential readings.

In this section, I present Russian ECs as an example. Russian is a Slavic language with a basic, unmarked SVO word order (Bivon, 1971; Hawkins, 1983; and Bailyn, 1995). It is also recognized as a free word order language. However, as Comrie and Corbett (1993) point out, the freedom of word order has different consequences. Each word order serves a purpose. ECs in Russian have been shown to have a VS word order. However, their structure is still controversial (Partee and Borschev, 2007). The difference between ECs and locative constructions in Russian is not obvious. Partee and Borschev (p. 147) attribute this difficulty to the relaxed word order, absence of articles and absence of a dummy subject (or an expletive)[6]. With respect to word order, according to Comrie

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[6] See Partee and Borschev (2007) for more details and see Babby (1980) or Kondrashova (1996) for a discussion on the syntax of ECs in Russian.

and Corbett (1993), the initial position in a sentence is for "emphatic topic". And the final position is for "elaborated comment" or extra information. Thus, SV is an unmarked word order while VS is marked. Comrie and Corbett point out that the subject, in an SV word order, is either known from context or at least implied in a preceding utterance. In contrast, if the subject in a VS word order is known from context, then the sentence has a stylistc function as in folklore narratives. However, if the subject is not known, the sentence maybe used to state existence of a "new individual" or to describe a scene (p. 858-859). The distinctions that Comrie and Corbett make between SV and VS word orders are central to our discusson of ECs. ECs introduce new entities into the discourse (Kearns, 2000: 82). Definiteness in Russian is not marked morphologically. In (44) and (45), taken from Hetzron (1975), the NPs in sentences (a) are interpreted as indefinite while the NPs in sentences (b) are interpreted as definite. The sentences in (a) but not in (b) have an existential reading.

44) a. žil   čelovˈek   (VS)
        lived man
        'There lived a man'

     b. čelovˈek žil   (SV)
        Man   lived /
        The man was alive

45) a. Na stole kniga
        On table book.Nom.Sg
        On the table (there's) a book / there's a book on the table.

     b. Kniga   na stole
        Book.Nom.Sg on table
        The book is on the table.

Lambrecht (2000) points out that definiteness is realized syntactically via word order distinctions between SV and VS and also semantically via notions of "presuppositions". To illustrate those distinctions, I quote the examples in (46) and (47) from (Rodionova, 2001: 44). The word order of the answer to the question in (46) is VS while it is SV in (47). The subject in (46) is not presupposed. It is unidentifiable. It is new information. Thus, it gets an indefinite reading and the construction is interpreted as existential. In contrast, the subject in (47) is presupposed and identifiable. And so it gets a definite reading. The sentence is a plain locative. (48), taken from Kondrašova (1996), shows that the sentence is unacceptable because the NP is definite.

46) Q: čto   l'ezit   na stol'e?
    'What is (lying) on the table?'

   A: Na   stol'-e   l'ež-it   nož
      On   table-Prep lie-3sg.Pres knife.Nom.Sg
      There's a knife on the table

47) Q: Gd'e   l'ezit nož?
      Where is the knife (lying)?

   A: nož   l'ezit   na stol'-e
      Knife.Nom.Sg lie-3sg.Pres on table-Prep
      "The knife is on the table"

48) *V Moskve ést tot   čelovek, kotoryj kupil   kartinu   iz Ermitǎza.
     In Moscow be that person   who   bought painting from Hermitage
     'In Moscow there is the person who bought a painting from the Hermitage.'

Russian lacks a copula in present tense sentences. However, other forms of BE are used in sentences with non-present tense. For example, *bylo* is used for past tense neutral singular, *byl* for past tense masculine singular, and *búdu* for future 1st person singular.

Comrie and Corbett (1993) note that the particle *ést* is used for emphasis. Thus, the emphasized reading of (45a) is (49). The appearance of *ést* might suggest that there is indeed a VP whose head is a null verb. However, I assume that this *ést* does not participate in the existential interpretation of the sentence. The examples above have an existential reading without the need for a copula or a verb. *ést* can also be used in possessives. It is also used for emphasis.

49) Na stole **ést** kniga
    On table **be** book.Nom.Sg
    On the table (there IS) a book / there IS a book on the table.

Possessives in Russian have a structure like that of existential sentences (50). They have a VS word order. The difference is that the locative PP in possessives is interpreted as the possessor, while the possessed NP appears in the position for "theme" and takes on a genitive Case (51). Like existentials, no verb is required in the present tense possessives (Kondrašova, 1996; Comrie and Corbett, 1993). However, *ést* can still be used for emphasis (Comrie and Corbett, 1993), as in (51), elicited from my Russian consultant.

50) a. [$_{vP}$ PP$_{LOC/POSSESSOR}$ [v' v [$_{VP}$ (BE) NP$_{THEME}$]]]   [existential]

    b. [$_{vP}$ NP$_{POSSESSOR}$ [v' v [$_{VP}$ (BE) NP$_{THEME}$]]]   [possessive]

51) U menja (ést) kniga
    At me   (be) book.Gen.Sg.
    I have a book

Recall earlier we said that when the NP in an EC is definite, the sentence has a

presentative or a deictic reading. According to my Russian consultant, the sentence in (52) is said in answer to a question with 'where?' In addition, pronouns are strong NPs. The presence of the pronoun *it* is evidence that the sentence has a deictic interpretation similar to English 'There it is on the table.'

52) Ona jest' na stole.
    it   be   on table
    'There is it on the table.'

2.5 Conclusion:

The survey of the languages in this chapter shows that languages differ with respect to how ECs are introduced. As shown in the Table 1, the use of an existential verb, a copula, word orders, a nominal element, or both a nominal element and a copula are different ways to derive ECs. In languages that use an existential verb, the verb is usually homophonous with the verbs 'to be', 'to have' or 'to exist'. Hebrew's *ʔeyn* has been analyzed as a negative existential verb (Borer, 1983) and as a sentenctial negator (Shlonsky, 1997). Hebrew's *yeš* is ambiguous between a copula (be) and a verb (to have), both being light verbs. Chinese uses *you,* a verb that has been analyzed as being ambiguous between a verb (to exist) and (to have). For those languages that do not require a dummy subject but rather require a verb I assume a structure in which the existential verb heads a VP and selects for an NP that is subject to the definiteness effects. Those languages include Arabic, Turkish, Hebrew, Chinese, and Maya-Mam. The languages that require a dummy subject and a copula have a structure similar to that of English ECs. The dummy subject is needed to satisfy the EPP and the copula spells out the agreement features of the associate NP. Dummy subjects are projected in the spec of

some XP while existential verbs are projected as verbal heads inside VP. The languages that do not require a dummy subject or a copula rely on word order and contextual factors. For those languages one might assume that there is a null verb that functions as a null existential operator. However, Russian does not seem to support that assumption since Russian ECs contrast with locatives and possessives based on word order alone. In addition, Russian ECs have an existential reading without the need for a verb. Definiteness effects obtain in the languages surveyed in this chapter. For sentences in which the associate NP is definite, it is assumed that they have a presentative or a deictic reading.

Table 1: Summary of ways of introducing ECs across different languages.

Existential Elements	Languages				
Pleonastic + copula	English (There+ copula)	German (es+copula)	Dutch (er+copula)	Italian (c'/ci + copula)	Spanish (hay)
Verb (to exist/ to have)	Arabic (fii)	Turkish (var / yok)	Chinese (you)	Mam (At/Ité-Ntí′/ Nti′qe) and Ki'che' (K'oo)	Hebrew (*ʔeyn* / yeš)
Copula (without a pleonastic element)	Hebrew's *yeš*		Russian's *ést* ?		
Word order	Russian (VS / Loc+Subj)	Mam and Ki'che' (Subj+loc)			
Null copula	Russian ?	Hebrew ?			

Chapter Three

Syntax of English ECs

3.1 Definitions:

There are three types of deixis: person (you, me), temporal (now, then) and spatial (here, there). What concerns us here is the spatial deixis (here and there). They are used to point at things, contrast things, focus things and pick out locations. Their interpretation is bound by the context. English deictic *there/here* contrasts with existential *there* in that it is stressed and deictic, referring to a certain location. It is locative. Deictic *there* contrasts with *here*, but existential *there* does not (Lakoff, 1987). A deictic use of *there* may be accompanied by a pointing gesture, while existential *there* can not (p. 468). The following examples taken from Lakoff (1987) show the differences between the two types of *there*:

1) a. There was a man shot last night.
   b. There's Harry with his red hat on.

In (1a) existential *there* is unstressed, which can involve vowel reduction and it does not refer to a location. It is not deictic. Argument NPs have "referential functions" while in contrast non-argument NPs do not have that sort of function. Non-referential elements include idiom chunks and non-argument NPs, such as dummy *it* and existential *there*. Those are the elements that are not assigned a θ-role (Chomsky 1993: 35). Existential *there* is an NP that is non-argument, non-referential (p. 101). As opposed to argument NPs which are subject to Case Filter, predicate NPs are not (Chomsky, 2000). Existential *there* must occupy Spec IP of the matrix clause to satisfy the extended projection principle (EPP). Existential *there* is underspecified for ɸ-features, hence its need to

somehow inherit those features from its associate NP.

Lakoff (1987) identifies four other syntactic differences between the two kinds of *there*. The first difference is that existential *there* is the grammatical subject of the sentence, while deictic *there* is not**.** This can be seen in tag questions such as:

(2)   a. There is a man in the office, isn't there?
       b. *There is John with his raincoat on, isn't there?

Because only subjects can undergo raising, existential *there* but not deictic *there* can occur in raising constructions, as shown in the following examples:

(3) a. There is likely to be a man in the office.
     b. *There is likely to be John with his raincoat on.

The second difference is that existential *there* can be negated while deictic *there* can not:

(4) a. There isn't any man in the office.
     b. *There isn't John with his raincoat on.

The third difference is that existential *there* but not deictic *there* can occur in a subordinate clause**:**

(5) a. I wondered if there was anyone in the office
    b. *I wondered if there was John with his raincoat on.

The fourth difference that Lakoff distinguishes is that *here* can occur in deictic onstructions while it can not occur in existential constructions:

(6) a. Here's (there's) John with his raincoat on.
    b. *Here will be a man in the office.

Not only do existential and deictic constructions contrast in the type of *there* that fills the subject position, but they also contrast in the type of DP that is allowed in the post-copular position. While deictic constructions allow all types of DPs in the post-copular position, the post-copular DP in EC is subject to the definiteness effect (McNally, 1997). McNally (p: 8, 9) points out that the DP's that are not allowed to fill up the post-copular position in existential constructions fall under two categories. The first category includes proper names, personal and demonstrative pronouns, DP's headed by a definite possessive such as (John's) and DP's headed by the definite determiner *the,* or headed by a demonstrative pronoun such as *these, those*, *this* and *that* or by strong quantifiers such as *every* and *all*. Below are a few examples.

(7) a. *There were those sitting in the classroom.
    b. *There was John's brother in the office.
    c. *There was Mary in the party.

The other category of DPs that are not allowed in the existential construction are those headed by quantificational determiners such as *every*, *each, both, most, any*, non-negative exceptive determiner *every/all ….but* (8):

(8) a. *There was every/each student upset with the new regulation
     b. *There were both/most secretaries watching the game.

The DP's that are allowed in the construction without any restrictions include those DP's headed by 'intersective' determiners such as indefinite articles, cardinal determiners, cardinal comparative phrases such as "*as many books as*", *many, few, no*, and *no…but*:

(9) a. There were many answers to the question
    b. There was no one but John talking in the classroom.
    c. There was this one problem that I need to attend to.

3.2 Syntax of Adult English ECs

ECS have always been controversial in the linguistic literature. They pose problems for licensing requirements on arguments, specifically the Ө-Criterion and Case-Filter. The examples below, taken from Hazout (2004), show the problem that *there* poses for the Ө-Criterion. In (10a), the subject *John and Bill* gets its Ө-role from the post-copular NP *students in this class*, which is the predicate. Both NPs are referential. However, in (10b), *there*, a non-referential NP, sits in the subject position of the sentence. The predicate *students in this class* has a Ө-role that needs to be assigned to something. Existential *there* is an expression that can not be assigned a Ө-role. It is an NP that is only needed for structural reasons (Chomsky, 1993: 35). The result is a Ө-role that remains unassigned, hence a violation of the Ө-Criterion. Moreover, the post-copular position is a position where no Case is assigned.

10) a. John and Bill are students in this class.
    b. There are students in this class.   (Hazout 2004: 395)

How is the post-copular NP *students* assigned Case in that position? How are agreement features checked as to show on the verb although *there* is underspecified for agreement features? Different syntactic analyses of English ECs have been proposed in order to respond to those questions. Below I review analyses by Chomsky (1986; 1995), Lasnik (1995), Williams (1994), Hazout (2004), and Moro (1995, 1997).

3.2.1 Chomsky (1986; 1995)

Chomsky's analysis follows from the visibility (Case-Filter) and the Chain Condition, both applicable at LF. Both existential *there* and its associate NP appear overtly in the syntax but are licensed (for Case and agreement features) at LF. Copular ECs are derived by different mechanisms in addition to *There*-insertion: Move α and Procrastinate (Chomsky, 1995). Case and agreement features are checked locally under spec-head relations. In sentence (11) for example, *there* is inserted in the empty category in Spec IP to satisfy the strong features EPP. This position is one where no θ-role is assigned. That is under the assumption that copula *be* does not assign any theta-roles to the subject. It is only a functional element that is needed for structural reasons (Williams 1980, Moro 1995, and Pollock 1989). Only expletives are allowed in that position. The index that holds between *there* and its associate is one of number agreement (Chomsky 1993: p. 215). Expletives, in general, must be in a Case-marked position (Chomsky 1995: 156). Every element, including expletives, must have interpretation at the LF (Chomsky, 1995: 27). For NP "women" to get Case, it must raise to the case-checking position of the matrix clause. It raises and attaches to the LF affix *there*, leaving a trace [*t*] behind. Now NP "women" gets Case via Case transmission. Procrastinate requires that this movement be covert at LF. Agreement features of the associate NP percolate from the trace to AgrS. Those features are checked at LF between AgrS and the associate NP, resulting in overt agreement on the verb. Recall that *there* is not a legitimate LF object unless it gets proper interpretation from something. Raising of the associate NP to the LF affix *there* serves another purpose. It gives *there* the proper interpretation, thus satisfying the principle of Full Interpretation.

11) a. NPe are women in the office.
    b. THERE are women in the office.

3.2.2 Lasnik (1995)

Lasnik assumes existential constructions involve two types of Case assignment: i) partitive Case assignment and ii) nominative Case assignment that is checked against Tense (Agrs). Following Belletti (1988), Lasnik assumes *be* to have the ability to assign Partitive Case to its complement, under spec-head configuration, which is in this case the associate NP. Based on this analysis, the associate NP has a Case that is independent of *there*. Existential *there* has nominative Case that is checked against Tense (or Agrs) while the associate NP has Partitive Case assigned by *be* inside a VP-shell. This type of Case is inherent. One feature of inherent Case is that it comes packaged with a Ө-role. What that means is that the Case assigner not only assigns Case to the assignee but also a Ө-role. However, *be* is a light verb that does not assign any Ө-roles. Following Saito and Hoshi (1994), Lasnik assumes that the next lower predicate raises and merges with *be* at LF. In (12) below, quoted from Lasnik (1995), the predicate *here* raises and merges with *be* at LF. The new merger that is composed of *be* and the predicate can now assign a Case and a Ө-role to the associate NP "someone", hence fulfilling the requirements of *be*. The associate NP does not have to move at LF and attach to *there* to get Case from the matrix clause (Contra Chomsky, 1995). The associate NP raises and attaches to *there* at LF to satisfy those features. This movement is not driven by the associate NP's Case features, but rather to satisfy the affixal features of *there*.

12) There is someone here. (Lasnik 1995: 624)

Lasnik (1992) assumes that the Partitive Case is only assigned to an indefinite NP within a VP. Therefore, this type of Case is assigned in ECs but not in deictic constructions.

3.2.3 Williams (1994)

Williams (1994) assumes *there* to be the subject and the post-copular NP to be its predicate based on several pieces of evidence. The examples in (13) below are given as evidence that deletion of the subject in inverted specificational pseudoclefts is not possible. (14) below shows that existential constructions are not inverted constructions. That *there* can not be deleted is evidence that it is the subject, and that the indefinite NP can be deleted is evidence that it is a predicate.

13) a. *What John is is callous, and what Mary is is too.
    b. What John is is amazing, and what Bill is is too.   (Williams, p. 135)

14) We thought there would be a lot and there were [t] NP

The subject-predicate relation between *there* and the predicate (its associate) is not local. *There* is not base-generated in any Spec-XP inside a small clause, but rather in Spec-XP of the matrix clause. The post-copular NP figures as a predicate because *there* binds the variable occupying that position, therefore θ-Criterion is satisfied and feature checking is done via index percolation (long-distance).

3.2.4 Hazout (2004)

Hazout (2004) takes up Williams's (1994) analysis and implements Bowers (1993, 2002) analysis of main clause and small clause predication. Hazout follows Williams in assuming *there* to be the subject and the post-copular NP to be its predicate. As shown in the representation in (15) below, *there* is base-generated in Spec-PrP (Predication Phrase), a position close enough to the associate NP to get a Ө-role from it. Hazout (p.409) proposes that an NP can be licensed by having its features propagated up to the most immediately dominating Pr' node as represented in (15), unless feature-propagation is blocked by an intervening I/T node, in which case it can not figure as a predicate nominal. In the representation in (15), the predicate nominal 'a god' is a predicate as exhibited in its thematic, syntactic positioning and function (Hazout 2004: 395). It has its ɸ-features propagated up to Pr', the head of the Predication Phrase. Existential *there* occupies a position close enough to the associate NP to get a Ө-role from it. It is assumed that *there* must have a value for number features which are checked against the verb as a result of Spec-head agreement checking. In (15), *there* moves to Spec IP to satisfy the EPP and to check number features reflected on the verb morphology. As opposed to argument NPs which are subject to the Case Filter, predicate NPs are not (Chomsky, 2000). Therefore, the predicate NP "a god" does not have to move anywhere to get Case (cf. Chomsky, 1986, 1993).

15)

```
                    IP
                   /  \
                      I'
                     /  \
                    I    VP
                        /  \
                       V    PrP
                       be  /   \
                          NP    Pr' [θ]
                        there  /    \
                              Pr    NP[θ]
                                     |
                                   a god
```
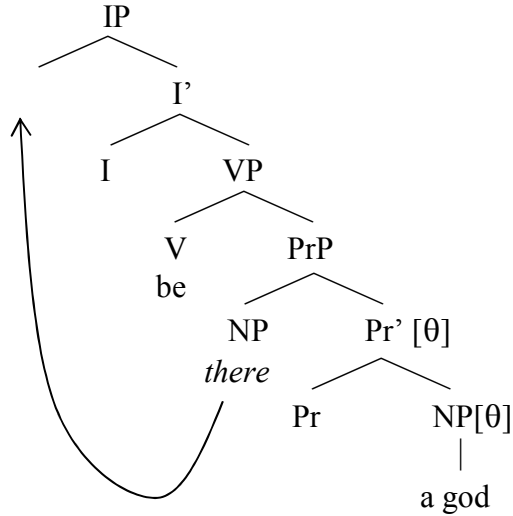
In (16) below, NP *John* is in a position that is Case-marked by the preposition *to*, so it must check its Case. Therefore, the other licensing mechanism (ɸ-feature propagation) is not available or is blocked. The result is NP *John* can not figure as a predicate nominal. Moreover, ɸ-feature propagation can be blocked by an intervening I/T node, as shown in the examples in (17). Hazout gives the examples in (17) to support three claims: i) that propagation of ɸ-features can be blocked by an intervening I/T node that is specified for ɸ-features. Thus, the predicate *a man* remains unlicensed. ii) that infinitival I/T is specified for ɸ-features, and iii) that licensing of *there* has nothing to do with the ungrammaticality of the sentence, as replacing *there* with *it* will not render the sentence grammatical.

16) There seems to John that Mary is sick.   (Hazout 2004: 418)

17) a. *There seems a man to be in the room.
     b. *It seems a man to be in the room.   (Hazout, 2004: 419)

3.2.5 Moro (1995, 1997)

For Moro, ECs involve subject-predicate inversion; hence they pattern with predicative sentences as in (18). In (19) below, Moro assumes that *there* starts off as the predicate of the NP in a small clause (Contra Williams, 1994). *There* agrees in ɸ-features with the NP and then moves, crossing over the post-verbal NP and carrying those features with it, to the subject position of the matrix clause to check them against the verb.

18) a. John is the teacher.
     b. The teacher is John.

19) There is a god.   (Williams 1994: p. 134)

20)

```
                    IP
               ___/  \___
             NP          I'
            there       /  \
              ↑        I    VP
              |            /  \
              |           V    SC
              |          be   /  \
              |             NP    NP
              |            a god   ti
              |_____/
```
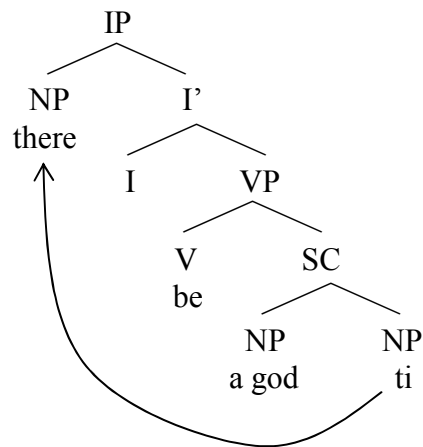
Chapter Four

Syntax of the ECs in Spoken Arabic

4.1 Introduction

ECs in spoken Arabic are introduced by *fii* (in Saudi, Qatari, Jordanian and Egyptian Arabic), *fii* and a*ku* (in Kuwaiti Arabic) and *famma* (in Tunisian Arabic) followed by an indefinite NP and optional XP (AP, PP or CP). I define Arabic "Deictic constructions" as ones that contain deictic *hina* "here" or deictic *hnak* "there" followed by a definite or an indefinite NP, as shown in (1). *Hina* and *hnak* are deictic when their referent is in context. They are locative when their referent is in discourse. The example in (2) shows that *fii* can not be a locative.

1) a. hina / hnak il-kitab
      here / there the-book
      Here / There is the book

   b. ʔil-kitab hina / hnak
      the-book here / there
      The book is here / there

2) fii   kitab   hina / hnak
   There book.Indef   here / there
   There is a book here/ there

Existential *fii* does not have any other morphological realizations. It is not specified for feature agreement, unlike verbs, nouns, adjectives, or inflected prepositions. It does not attach to a pronominal clitic (cf. Hoyt, 2000). It cannot figure as a predicate to a subject (3a), nor can it figure as a complement to verbs that take propositional

complements as a complement. In (3b), the whole CP figures as the complement of the verb (Contra Hoyt, 2000: 108). It can not be an object or an indirect object to a transitive or a ditransitive verb (3 c,d). In sum, *fii* does not contribute to the thematic structure of a verb. I consider *fii* to be an expletive verb that imparts an existential reading to the sentence.

3) a *maryam fii
      Maryam there
      "Mary is there"

   b. ðannay-t   in-ah   fii   kitaab   ʕala ṭ-ṭaawlah
      thought-1sg. that-3msg. there book.INDEF on the-table
      "I thought there was a book on the table."

   c. *tarak-t   fii
      left-1sg there
      I left there

   d. *tarak-t   il-kitaab   fii
      left-1sg the-book there
      "I left the book there."

I consider *fii* to be an element that belongs to the verb category. The examples in (4) show that the relationship that holds between *fii* and the indefinite NP is one in which *fii* must precede the NP, otherwise the result will be a sentence that has an indefinite NP as a subject. In other words, this indefinite NP must figure as an argument to *fii*. To circumvent Burzio's Generalization that a lexical verb that assigns Case to its object must be able to assign an external θ-role to a subject, we have to assume that *fii* is not a lexical verb which has selectional and theta properties, but rather is an expletive predicate (Halila, 1992) that does not take any external arguments, as represented in (5).

51

4) a. *kitab   fii   ʕala ṭ-ṭawla
      book. INDEF there on   the-table
      "There's a book on the table"

  b. fii   kitaab   ʕala ṭ-ṭawla
     there book. INDEF on   the-table
     "There's a book on the table"

5)   VP
          ╱   ╲
       e   V'
               ╱   ╲
            fii   kitab
            └────────⌃
                 Case
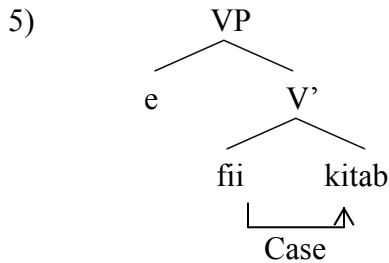
Existential *fii* has been given different syntactic analyses across the different dialects of Arabic. It has been analyzed as a verbal predicate for Egyptian and Tunisian Arabic (Eid, 1993; Halila, 1992), as an expletive pronoun for Palestinian Arabic (Mohammed, 1998) and as an adverbial demonstrative for Rural Palestinian Arabic (Hoyt, 2000). The diagnostic tools that have been used to argue for each one of those categories do not necessarily hold across the different dialects.

4.2 Egyptian Arabic: Eid (1993)

Eid argues that existential *fii* and inflected prepositions in Egyptian Arabic behave like verbs. She bases her arguments on the following observations. First, existential *fii* and inflected prepositions pattern with verbs in that they host the sentential verbal negation morphemes *ma-(š)* in Egyptian Arabic.

6) a. ma-katab-š
   NEG-wrote.3.Masc.-NEG
   "He didn't write."

  b. ma-fii-š   kitab
    NEG- there -NEG book.INDEF
    "There's no book."

According to Eid (1993:139), both negation morpheme *ma-š* and *miš* combine with verbs

in the present tense. However, *ma-š* combines with past and nonfinite verb forms while

miš combines with future verb forms, as shown in Tables 1a & 1b. Another difference is

that *ma-š* does not combine with nonverbal categories such as adjectives, nouns and

prepositions[7] as in Table 2.

Table 1a: The distribution of *ma-š* and *miš* across different tenses and aspects (Eid, 1993)

	Past/perfect	Present
ma-š	ma-šarab-š NEG-drank.3msg-NEG He didn't drink.	ma-b-yi-šrub-š NEG-Pres-3msg-drink-NEG He's not drinking.
miš	*miš-šarab NEG- drank.3msg He didn't drink.	miš-bi-yi-šrub NEG-Pres-3msg-drink He's not drinking.

Table 1b: The distribution of *ma-š* and *miš* across different tenses and aspects (Eid, 1993)

	Future	Non-finite
ma-š	*ma-ħa-yi-šrub-š NEG-FUT-PRES-drink-NEG He will not drink.	ma-yi-šrub-š NEG-3msg-drink-NEG He does not drink.
miš	miš-ħa-yi-šrub NEG-FUT-PRES-drink He will not drink.	*miš yi-šrub NEG-3msg-drink He does not drink.

---

[7] In Moroccan Arabic, according to Benmamoun (2000: 45), nonverbal predicates can also host the sentential negation morpheme *ma-š,* in which case, we have to assume that nonverbal predicate can raise to the negation phrase.

Table 2: The distribution of *ma-š* and *miš* across different grammatical categories (Eid, 1993)

	Adjectives	Nouns	Prepositions
ma-š	*ma-gamil-a-š NEG-pretty-fsg-NEG	*ma-ductor-š NEG-doctor-NEG	*ma-taħt-iš NEG-under-NEG
miš	miš gamil-a NEG-pretty-fsg	miš- doctor NEG doctor	miš taħt NEG under

Eid argues that the distributional differences between the two morphemes have to do with "…the presence/absence of pronominal features on the category to which the negative is attached" (p. 141). The discontinuous negation morpheme *ma-š* requires those pronominal features while the nonverbal negation morpheme *miš* does not. This analysis, Eid concludes, is supported by the distribution of empty subjects. *Ma-š* allows empty subjects while *miš* does not, as shown in (7) and (8). She considers the sentences in (7) to be examples of empty agreement in Agr, something which requires the presence of a subject. Because the copula *kaan* (was) in (8) always inflects for 3MSG, she assumes *pro* but not the pronoun is the subject. The assumption then is that in (7a & b) contains empty agreement in T. Therefore, an overt subject must be present and *miš* must be used. In contrast, in (8), Agr is filled, so the subject can be dropped and *ma-š* is used. The subject pronoun *ana* (I) is argued to be a topic, projected in [Spec, CP]. It is also argued that *pro* fills the subject position in (8). Evidence is the default agreement features that show on the copula *kaan* (was), suggesting that AGR is specified for default 3MSG features (Mohammed, 1998).

7) a. ana/*Ø miš   nabiih-a
      I   NEG intelligent-fsg
      "I am not intelligent"

b. ana/*Ø miš daktoor
     I   Neg doctor-Msg
    "I am not a doctor"

8) a. ana/ Ø ʕand-ii- migalla
     I   at-me   journal
    "I have a journal"

   b. ana/ Ø ma- ʕand-ii-š   migalla
     I   Neg-at-me-Neg journal
    "I don't have a journal"

   c. ana/ Ø kaan   ʕand-ii- migalla
     I   was.3Msg at-me   journal
    "I had a journal"

However, Eid does not explain how the features on adjectival and nominal predicates are

checked. The adjective *nabiih-a* "intelligent" in (7a), for example, has ϕ-features (gender

and number) and a Case. The pronominal subject *ana* (I) has to move to [Spec, TP] to

check its features against T. However, T still has features that match those of the

predicate (the adjective). The assumption then is that the predicate moves to T to check

those features covertly or overtly. It seems to me that Eid assumes predicates to have

temporal semantics in them, which is why she assumes a TP projection.

4.3 Tunisian Arabic: Halila (1992)

    Halila argues that both *famma* and inflected prepositions, such as *ʔind-ha* "at-

her"and *maʕ-ha* "with-her" behave like verbs because they license gapping and ellipsis,

which is a property usually restricted to verbs. Halila gives the following examples from

Tunisian Arabic:

9) a. Basma qarati   ktaab   wa   Kariim jariida
        Basma read.Perf-3Fem. book. Indef and Kariim newspaper. Indef
        "Basma read a book and Kariim a newspaper"

   b. Basma ʕand-ha   ktaab   wa Kariim jariida
       Basma at-Cl.3Fem. book.Indef and Kariim newspaper. Indef
       "Basma has a book and Kariim a newspaper"

Prepositions that make up what Halila terms "predicational prepositional phrases" such as
ʕind Basma "at Basma" or *maʕa Sammy* "with Sammy" do not license a gap in the
second conjunct clause:

10) *ʔil-kitab maʕa Sammy wa   il-galam khaled.
       the-book with Sammy and the-pen Khaled.
       "the book is with Sammy and the pen is with Khaled"

      Finally, both *fii* and inflected prepositions license pro-drop. For inflected
prepositions, Eid argues that they move out of the head of PP to T in a head-to-head
movement, like verbs, when tense is "present stative" (p.150). However, unlike verbs that
move to T for inflectional reasons, inflected prepositions move to T to share agreement
features with the latter. Existential *fii* moves out of the head of VP into a negation
projection, when the clause is negated, and then moves on to (T) all in a head-to-head
movement, as shown in (11) and (12). Eid does not assume a null copula in her analysis.
However, she considers existential *fii* to be base-generated as the head of VP and also
assumes a VP internal subject structure in which the indefinite subject occupies a [Spec,
PP], thus fulfilling the requirements of subjects. The external subject position, which is in
[Spec, TP] is occupied by small *pro* which is needed to check the default 3MSG features
in T. Existential *fii* is base-generated as the head of VP. It then raises in a head-to-head

movement to T to check empty person features. Assuming AGR under T to be empty, existential *fii* and inflected prepositions move to I to check empty agreement features, as in the representation in (11b). When they host a negation morpheme, it is assumed that they move into a negation projection (12b).

11) a.fii   kitaab   fi-l-maktaba
      there book.INDEF in-the-library
      "There's a book in the library."

b.

```
                    TP
              ┌──────┴──────┐
            DP                T'
           △             ┌────┴────┐
          proj        T(AGR)        VP
                      ┌──┴──┐    ┌────┴────┐
                     Pi    T DP           V'
                     │        tj       ┌──┴──┐
                     P                 V     PP
                    fii               ti   ┌──┴──┐
                                          DP     P'
                                        kitaab ┌──┴──┐
                                               P    DP
                                              fii    △
                                                  l-maktaba
```
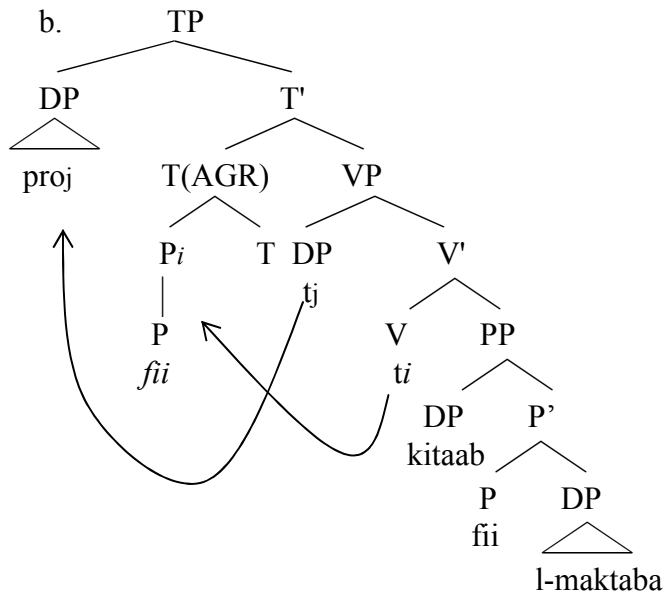
12) a. ma-fii-š   kitaab   fii l-maktaba
     NEG-in-NEG book.INDEF in the-library
     There's not any book in the library.

b.

```
                    TP
                   /  \
                  T    NegP
                 /\   /    \
            ma-fiiⱼ  š     Neg'
                          /    \
                        tⱼ     VP
                              /  \
                             V'
                            /  \
                           V    PP
                               /  \
                             DP    P'
                           kitaab /  \
                                 P    DP
                                fii
                                   l-maktaba
```
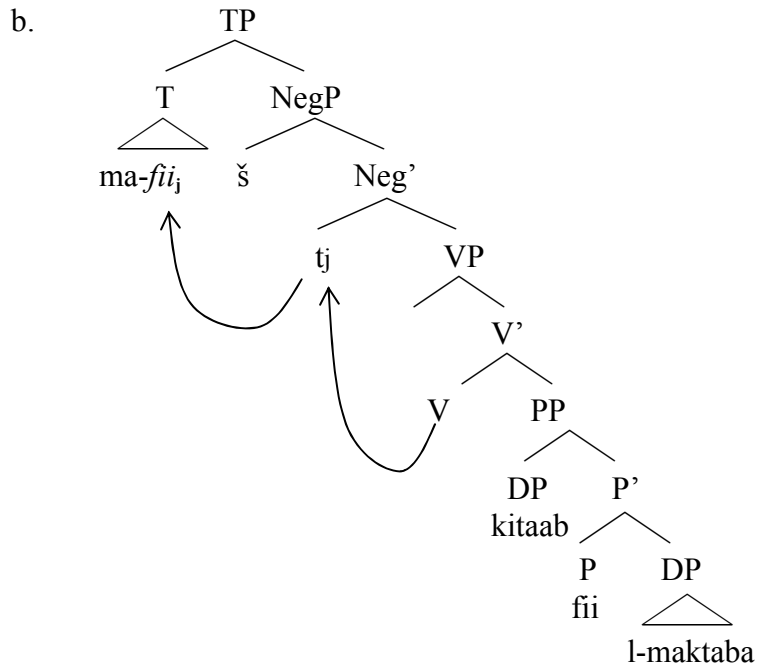
However, Eid and Halila have different views as to the function of existential *fii* and inflected prepositions. To Halila, they assign Case to the post-verbal NP under government. Without existential *fii* and inflected prepositions, the post-verbal NP would go without Case-assignment. According to Eid, *fii* and inflected prepositions raise to T to satisfy empty person features as *pro* does not have features to be checked. Eid argues that *pro* is introduced as an external subject to check default 3rd person singular features on the verb *kaan* "was" as in (13).

13) (ʔana) kaan ʕand-i magalla
     I was to-me a journal
     "I had a journal"   (Eid, 1993: 136)

Notice that in an SV word order, whether the verb is a full verb or a copula *kaan*, the verb agrees with the subject in all features (number, gender and person). As far as I know, this is true of all dialects. The examples below are from Saudi Arabic:

14) a. ʔana kin-t   a-dris   fi-l-maktabah
       I   be.PERF-1sg.   Pres.1sg.-study.IMPERF in-the-library
       "I was studying at the library"

   b. hi kaan-at   ta-dris   fi-l-maktabah
      She be.PERF-3fsg Pres.3FS-study.IMPERF in-the-library
      "She was studying at the library"

   c. hum kaan-u   ya-dris-un   fi-l-maktabah
      They be.PERF-3pl   Pres.3m-study.IMPERF in-the-library
      "They were studying at the library"

   d. hu kaan   ya-dris   fi-l-maktabah
      He be.PERF.3msg Pres.3m-study.IMPERF   in-the-library
      "He was studying at the library"

 The examples in (15) below show that in verbless constructions, the subject position has

to be filled because Agr has empty agreement. However, the sentences in (16) are also

verbless yet the subject can be dropped. Eid explains this case by suggesting that Agr has

agreement features by which the subject is identified (p.138).

15) a. ʔana/*Ø jamiil
       I   beautiful
      "I am beautiful"

   b. ʔana/*Ø fi-l-beet
       I   in-the-house
      "I am in the house/ at home"

16) a. ʔana/Ø ism-ii   Sammy
       I   name-my Sammy
      "My name is Sammy"

   b. ʔana/Ø ʕind-i   kitab
      I   at-me   book.INDEF
     "I have a book"

59

c.
```
              TP
         /          \
      DP             T'
     /  \          /     \
   pro  T(AGR)          PP
        /    \        /      \
      Pj      T    NP         P'
     /  \         /  \       /  \
    P    cl    kitaab  tj   tj   ti
   ʕand  -i
```
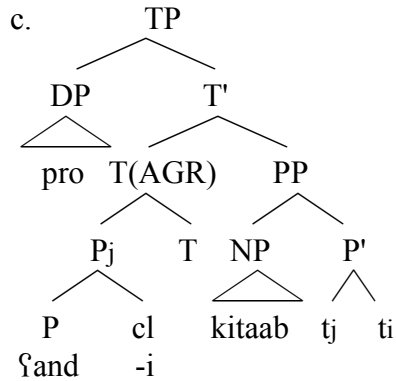
Recall that Eid and Halila argue that *fii* and inflected prepositions license pro-drop. Eid bases her arguments on past tense possessive sentences containing a tensed verb and a prepositional predicate, as in (17) below. She proposes that *pro* is an expletive null pronoun that is specified for third person singular agreement features. The pronoun *ana* (I) is not the subject, nor is the post-verbal NP. Therefore, the subject is neither the pre-verbal pronoun nor is it the post-verbal NP; but rather, it is *pro* which triggers default agreement features that shows on the copula *kaan.*

17) a. (ʔana) kaan   ʕand-i migalla
       I   was.3Msg. at-me journal.Fsg.
      "I had a journal"

   b. *(ʔana) kun-t   ʕand-i migalla
        I   was-1sg. at-me journal.Fsg.
       "I had a journal"

   c. *(ʔana) kaan-it   ʕand-i migalla
        I   was-3Fsg. at-me journal.Fsg.
       "I had a journal"

4.4 Palestinian Arabic: Mohammed (1998, 2000) and Hoyt (2000):

Contra Eid and Halila, Mohammed (1998, 2000) argues that existential *fii* is not a verbal predicate, but rather an expletive, just like English existential *there*. Examining data from Palestinian Arabic (PA), he shows that *fii* and inflected prepositions exhibit freer word order because they are not subject to the Head Movement Constraint (Travis, 1984) in the same manner as verbs. The examples below show that *fii* and inflected prepositions may follow or preceded the copula *kaan* (was). The same analysis applies to locative *ʕind* (at) and possessive *il-* (to).

18) a. fii   kaan   ktab   maʕa mona.
     There was.Masc book.Indef   with Mona.
     "There was a book with Mona"

   b. kaan   fii   ktab   maʕa mona.
      was.MASC. there book.INDEF with Mona.
     "There was a book with Mona"   (Mohammed, 1998)

Full verbs in Arabic are subject to the Head Movement Constraint and can never precede the auxiliary *kaan* (was).

19) a ʔil-walad kaan b-elʕab   be-l-ḥakora
     The-boy was   Indic-play.3Masc. in-the-garden.
     "The boy was playing in the garden"

   b. *ʔil-walad b-elʕab   kaan   be-l-ḥakora
      The-boy   Idic-play.3ms. was3ms. in-the-garden.
     "The boy was playing in the garden"

   c. kaan   il-walad b-elʕab   be-l-ḥakora
      was.3msg. the-boy Idic-play.3msg. in-the-garden.
     "The was playing in the garden"   (Mohammed, 1998)

Like Eid and Halila, Mohammed argues that *ma-š* is used with verbal sentences while *miš*

is used with equative sentences. However, he argues that the integration of *fii* with the

discontinuous verbal negation morpheme *ma-...-š* is not evidence that *fii* patterns with

verbs. In particular, he shows that *ħada*, a negative polarity item, which means "anyone"

in PA also hosts *ma-...-š*. Therefore, *ma-š* can integrate with either a verb or with the NP

ħada (p. 39):

20) a. ma-ḥada-š   be-d-daar.
       NEG-anyone-NEG in-the-house
       "No one is in the house"

   b. ma-fii-š   be-d-daar   zalame
       NEG-*there*-NEG in-the-house   man
       "There's no man in the house"

In addition, Mohammed argues that *fii* and *ħada* can precede or follow the copula.

Therefore, they do not violate the Head Movement Constraint which prevents genuine

verbs from preceding the copula.

    According to Mohammed, past tense copula in existential *fii* constructions in PA

can either have full or impersonal agreement, as in (21). The copula is marked for

impersonal agreement when it checks its features against *fii*, while it shows full

agreement when it checks its features against the post-copular NP.

21) a. fii   kaan / kaanen   xams   bagaraat be-d-daar
       there was.Msg. / were.3F.pl. five   cows   in-the-house.
       "There were five cows in the house."

    Hoyt (2000) argues that existential *fii* was originally an inflected preposition (*fii-h*)

that has lost its thematic property. However, *fii* still has an interpretable D-feature from the clitic and lacks Case and ɸ-features. It is "an adverbial demonstrative" that patterns with inflected prepositions in inverted locative constructions in its distribution (p. 102). Both *fii* and inflected prepositions can either precede or follow the verb and they both can host negation. *Fii* belongs to the determiner category. It selects for a Predication Phrase and is merged with it to check the strong D-feature on PrP. Hoyt assumes a structure as in (22b) to represent a plain existential construction such as in (22a):

22) a. fii   ulaad   fi-d-daar
       There boys   in-the-house
      "There are boys in the house"

   b.

```
                    PrP
                  /     \
               DP        Pr'
               fiih      /  \
                       PrP
                     /      \
                  ulaad      Pr'
                            /    \
                         Pr       PP
                                 /  \
                              fi-d-daar
```
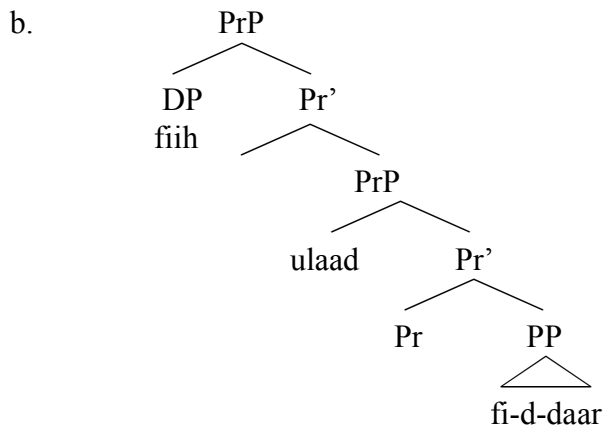
Fii is base-generated in PrP not in TP because it does not co-occur with external arguments of transitive or unergative verbs. Generation of *fii* in PrP to check the strong D-feature on PrP will block the need to generate an argument NP. In an existential construction in which *fii* precedes the copula *kaan* (*baga* in RPA), Hoyt assumes the copula is base-generated in VP then moves into the head of PrP then the complex Pr-V moves into T to check its strong PF-features. The strong D-feature in T is checked by *fiih*

since it is the closest element with a matching D-feature. In an existential construction in which *fiih* follows the copula *kaan* (*baga*), Hoyt assumes the complex T-Pr-V to move into a Focus Phrase to check the strong PF-features on the latter.

With respect to negation, he argues that *fii* and *ħada* have the distribution of nominals (p.160). He observes that while -š, is in complementary distribution with negative polarity items such as *ħetta* (even) and *ħada* (anyone) in Moroccan Arabic, it is not in RPA. In RPA, -š is hosted by inflected prepositions and control verbs and still appear with *ħada* (23). Hoyt argues that -š cliticizes to different grammatical categories, elements that "either undergo head movement (such as tensed verb stems) or which are ambiguous between being heads or maximal projections (such as inflected prepositions, existential *fii*, *ħada*, and copular pronouns)[8] (p. 164).

23) a. Ma-ža-(*š)   ħetta waħad
       NEG-came3MS-NEG even one
       "No one came"   Moroccan Arabic (Benmamoun 2000:71)

   b. ma-maʕ-i-š   ħada
      NEG-with-1S-NEG   anyone
      "There is not anyone with me"   (RPA)

What inflected prepositions and existential *fii* have in common is that they both have the -š segment of the discontinuous negation morpheme *ma-š* as an option. In contrast, nominals are negated with ma- only (24c). Contra Eid, Halila and Mohammed, Hoyt argues that the complex negation morpheme *ma-š* is not limited to negating verbal

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[8] Copular pronouns are such as –*nii*, –*hu*, –*he*. They are called so because they behave like a copula in that they attach to the verbal negation –*ma* and are pronouns in that they refer to the subject.

predicates. It also hosts other categories such as nouns, inflected prepositions, pronouns of negation, negative polarity *ħada* and existential *fii*. He considers *ma-* to be the "default" morpheme of negation because it hosts a wide variety of categories including ones that the nominal negation morpheme *mišÌ†* hosts. Based on data taken from Rural Palestinian Arabic (RPA), Hoyt shows that *ma-* in the complex negation morpheme *ma-šÌ†* is used more often without -šÌ† and argues that -šÌ† does not add meaning to the complex negation morpheme. On the other hand, he maintains that *mišÌ†* and its variants (*mašÌ†* and *mušÌ†*) together with "negative pronouns" or "negation pronouns" [9] (such as *ni*, *hu*, and *hi*) are used in verbless sentences (24e).

24) a. ma-fii   mitθl dʒôz-i   fi-hal-balad
    NEG-there like spouse-CL1S in-this-town
    "There is no one like my husband in this town"

  b. ma-fii-šÌ†   ħada   bi-d-dâr
    NEG-there-NEG anyone in-the-house
    "There is no one in the house"

  c. ma-šey-(*šÌ†)   ṣiʕib
    NEG-thing-(*NEG) difficult
    "Nothing is difficult"

  d. ana mišÌ† firħan.
    I   NEG happy
    "I am not happy"

  f. ana ma-ni-šÌ†   farħan
    I   NEG-pro1sg.-NEG happy
    "I am not happy"

---

[9] Negative pronouns are object pronouns that exclusively cliticize to the negation morpheme *ma-* , hence the name "negative pronouns".

g. *ma-farħan-š
   NEG-happy-NEG

He notes that the distribution of -š in RPA is not as systematic as -š in Moroccan or Egyptian Arabic, in which it attaches to specific categories. This optionality of hosting -š renders inflected prepositions and existential *fii* ambiguous between being maximal projections or heads in RPA. Recall that Halila (1992) argues that existential *fii* and inflected prepositions, but not predicational preposition phrases[10] , pattern with verbs because they allow gapping and ellipsis in the second conjunct just like verbs do. Therefore, according to Halila, existential *fii* and inflected prepositions are heads of VP, thus they delete in the second conjunct of the construction.

Hoyt argues that gapping and ellipsis as discussed by Halila are not well defined. Hoyt follows Kiss's (1996) analysis that ellipsis involves deletion of the TP node rather than the VP node of a clause, as suggested by Halila. Part of Kiss's argument is that expletives are situated in a Reference Phrase (RefP) which is outside of TP. Therefore, in an existential construction that involves ellipsis, existential *there* seems to license the elided constituent since *there* occurs right above the ellipsis site in the paralleled clause (25). Hoyt adds that gapping and ellipsis are not specific to VPs. Hoyt concludes that Halila's analysis could be accounted for if gapping is expanded to include deletion of TP.

25) a. There were problems in the design, and there still are.
    b. There shouldn't be any problems, should there?

There are certainly some significant differences among the dialects that explain the

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[10] Refer to the examples from Tunisian Arabic in (9) and (10) above.

different analyses given to existential constructions. The following Table summarizes the different analyses of *fii* across the Arabic dialects.

Table 3: Summary of the different analyses of existential *fii* across the dialects.

	Dialect	Analysis	Evidence
Eid (1993)	Egyptian	*Fii* is a verbal head	• It hosts verbal negation • Licenses pro-drop
Halila (1992)	Tunisian	*Fii* is a verbal head	• It hosts verbal negation • Licenses pro-drop • Licenses gaps in the second conjunct
Mohammed (1998)	Palestinian Arabic (PA)	*Fii* is an expletive NP	• *Fii* does not obey the Head Movement Constraint • Polarity item *ħada* also hosts verbal negation
Hoyt (2000)	Rural Palestinian Arabic (RPA)	*Fii* is a locative adverb	• *Fii* is an inflected preposition (*fii-h*) • *Fii* does not obey the Head Movement Constraint

4.5 Saudi Arabic

4.5.1 Word Order and the Distribution of *Fii*

The modern dialects of Arabic have impoverished inflectional systems in comparison to Classical Arabic. Word order in Classical Arabic is rather more relaxed due to its rich overt Case marking. A sentence that has a two-place predicate in Classical Arabic could have six acceptable word orders. Moreover, the verb shows full agreement features with the subject when it follows the subject, namely in the SVO word order. In a VSO word order, the verb shows partial agreement features with the subject (missing number agreement). In contrast, the dialects of Arabic have a rigid word order due to absence of Case marking and reduced feature agreement. When there is not enough Case marking to distinguish subject from object, word order is reduced to VSO and SVO (Mohammed, 1999: 34). Speakers of SA prefer VSO word order in past tense sentences

while they prefer SVO word order in present tense sentences. Benmamoun (2000) makes the same observation for speakers of Moroccan Arabic (p. 62). SA, being poor in Case-marking, seems to allow SVO, VSO and OVS in double-predicate constructions, as shown in (26), with preference to SVO word order in present tense and VSO in past tense.

Existential *fii* resembles verbs in its syntactic distribution. Consider the examples in (26a) and (26a) with the given surface structure representations in (b) for a full verb such as *ištra* (bought). Assuming TP to be specified for the features [+D] and [+V], in which [+D] is a feature that encodes tense and EPP, while [+V] is a feature by which tense merges with verbs. Following Benmamoun (2000), for an SVO word order as in (26a) below, represented in (26b), I assume T to be specified for [+D], a feature that can be checked by moving the subject to [Spec, TP] to check EPP [11]. Therefore the subject moves. In contrast, when T is specified for [+D] and [+V], the verb is primarily attracted by the [+V] feature; however, the [+D] feature can also be checked by the verb since it carries agreement features, yielding a VSO word order (See Benmamoun, 2000 for more details). This explains why the verb but not the subject moves. Other linguists argue that SVO and VOS word orders involve focus (Jackendoff, 1972); thus, SVO word order involves movement of the subject into the specifier of a Focus Phrase (FP) that immediately dominates TP; while VSO word order is derived by moving the verb to the head of that FP.

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[11] Alternatively, Chomsky (1995) assumes the D-features in T in an SVO word order to be strong as to attract the subject to move. In contrast, in a VSO word order the D-features in T are too weak to attract the subject. Therefore, the verb moves to T while the subject remains in situ.

26) a. ʕali ištara   bait   (SVO)
    Ali bought a house.
    "Ali bought a house"

b.   TP
        /   \
      DP   I'
     ʕali $_i$ /   \
              T   VP
          [past, +D]   /   \
                    Spec   V'
                     t $_i$ /   \
                        ʔištara   DP
                                 /\
                                bait
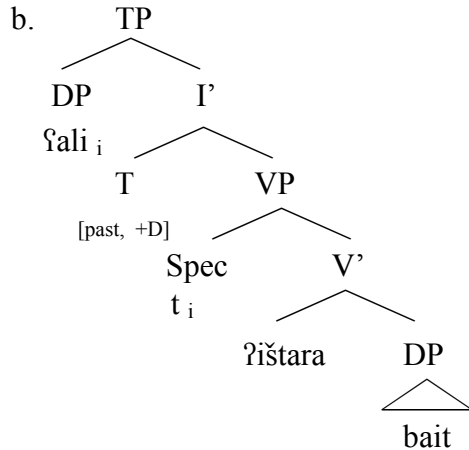
c. ʔištara   ʕali bait   (VSO)
    bought Ali a house
    "Ali bought a house"

d.   TP
        /   \
      DP   I'
             /   \
        T+V$_{agr}$ VP
      [past, +V, +D]   /   \
        ʔištara $_i$ Spec   V'
                     ʕali   /   \
                        t $_i$ DP
                                /\
                               bait
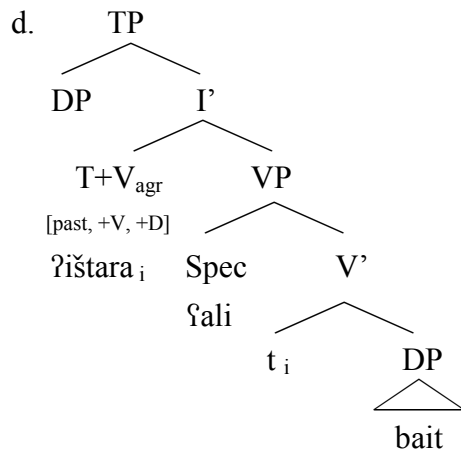
Eid (1993: 141) observes that the verb shows agreement features with the subject through

pronouns while it shows agreement features with the object through cliticization. For

example, in (27a&b) below, an OVS word order is made possible because agreement

features with the preposed object *il-bait* "the house" is shown on the verb *ištara* (bought)

and the preposition *fii* through the cliticized object pronoun –*h* [12]. Recall from the literature review section above that inflected prepositions license pro-drop by virtue of hosting a pronominal clitic that spells out agreement features in T, hence the subject can be dropped, as in (27c) .

27) a. ʔil-bait   ištara-h   ʕali   (OVS)
       the-house bought-it   Ali
       "The house, Ali bought it" or "Ali bought the house"

   b. ʔil-bait   fii-h awlaad
      the-house in-it boys
      The house, there are boys in it.

   c. (ʔana) ʕind-i floos
      I   at-me money
      I have money

Now consider the examples in (28). A definite NP can precede the auxiliary verb *kaan* (was). If *fii* were a definite NP, we would expect it to be able to precede the auxiliary, contrary to fact, as in (28c). Recall that an indefinite subject must be adjacent to *fii* in order for it to be licensed. This seems to be the case in the examples in (29). The sentences that are grammatical are the ones in which existential *fii* precedes the associate NP, suggesting that *fii* is contributing to the licensing of the indefinite NP. That position is usually occupied by verbs as we have seen in the examples above. *Fii* in those examples can not be a determiner since DPs in SA can only have one determiner or a weak quantifier at most in the Spec of DP (29e). Hence (29a and c) are ungrammatical because the subject NP *kitaab* (a book) is an indefinite NP that is in initial position and

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[12] This object pronoun is also known as a resumptive pronoun.

that is not licensed. Alternatively, (29a) in SA can be expressed either as an existential

sentence as in (29b), by marking the subject with the definite article *il-* (the) or by

topicalizing the locative expression so as to read as *ṭ-ṭaawlah ʕali-ha kitaab* (the table, a

book is on it). Obviously, analyses that assume ECs to involve locative inversion

(Hoekstra & Mulder, 1990; Moro, 1994) do not account for the fact that *fii* is engaged in

licensing the associate NP in the overt syntax.

28) a. kaan-it   mariyam fi-l-maktab   (SA)
         was-3Fs   Mary   in-the-office
         "Mary was in the office"

     b. mariyam kaan-it   fi-l-maktab   (SA)
        Mary   was-3Fs in-the-office
        "Mary was in the office"

     c. * fii   kaan-it muškil-ah   fi-s-sijjarah
        there was-3Fs problem-3Fs in-the-car
        "there was a problem in the car"

29) a. *kitab   ʕala ṭ-ṭawla
        book.Indef on the-table
        A book is on the table

    b. fii   kitab   ʕala ṭ-ṭawla
       There book.Indef on   the-table
       There's a book on the table

    c. *kitab   fii   ʕala ṭ-ṭawla
       book.Indef there on   the-table
       There's a book on the table

    d. #fii   ʕala ṭ-ṭawla   kitab
       There on   the-table book.Indef
       There's a book on the table

e. fii   baʕð   il-kutub   ʕala ṭ-ṭawlah
There some the-books on   the-table
There are some books on the table

For the indefinite NP in existential constructions to be licensed, it must be Case-marked and lexically governed by a governor. This requirement is exclusive to indefinite NPs. To satisfy the θ-Criterion, we assume a small clause structure in which predication relation is established between the subject and the predicate. The subject is assigned a theta-role by the predicate, as in (30). However, the subject, being a VP-internal subject violates the Case Filter. Adopting Chomsky's (1986) proposal that lexical government is not blocked by small clauses boundaries, we assume that existential *fii* is inserted as a verbal head that selects for a small clause and that Case marks and lexically governs the argument NP. We must assume that *fii* is an expletive predicate in order to circumvent Burzio's generalization on lexical verbs, that if a verb assigns Case to its object, it must also assign a θ-role to its subject. Treating *fii* as a lexical verb is not born out as has been discussed earlier. NP movement is blocked by *fii*. Another assumption is that *fii* does not move to T because T is not specified for [+V] feature. However, in a copular EC such as (kaan fii kitab ʕala ṭ-ṭawalah) *There was a book on the table*, T is specified for [+V] feature, therefore *kaan* − a genuine verb − moves to T to check that feature together with agreement features of *pro*. In addition, moving *kaan* rather than *fii* to T follows from locality conditions: *kaan* is closer to T than *fii* is. This analysis meets the requirements of θ-Criterion, Case-Filter and the indefinite NP restriction in existential constructions. Existential *fii* licenses indefinite NPs in sentence initial positions, as we have seen earlier.

30)

```
            VP
           /  \
          e    V'
              /  \
             V    SC
            fii   /  \
              SUBJ    PRED
              └──→    (AP, PP)
             Case  ┌────────┐
                  └─ θ-role ┘
```
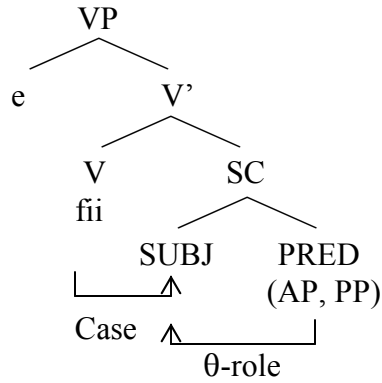
For constructions in which a definite subject NP is in initial position (31), the same structure is assumed. However, the verbal head is empty; allowing the definite VP-internal subject to raise to [Spec, TP] to get Case from INFL (31b).

31) a. il-kitab   ʕala ṭ-ṭawlah
       The-book on   the-table
       The book is on the table.

b.

```
            TP
           /  \
      SUBJ i    I'
        ↑      /  \
      ┌─ I    VP
      Case │  /  \
             V'
            /  \
           V    SC
           e   /  \
             ti    PRED
             ↑    (AP, PP)
           └─ θ-role ┘
```
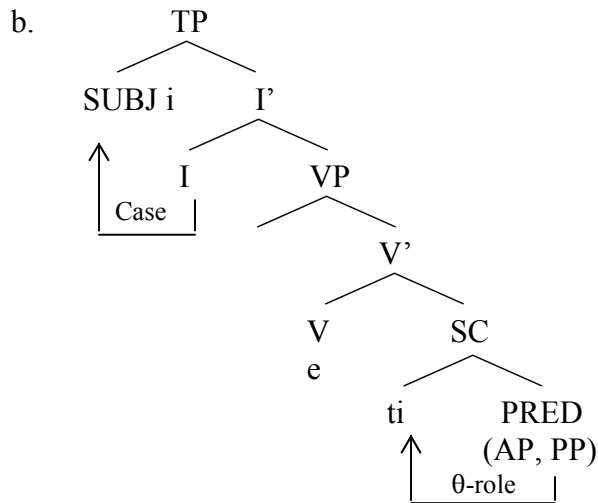
Based on those analyses, sentence (32a) below is ungrammatical under an existential reading. I assume that *fii-h* in this sentence is not existential *fii* that Case-marks and

lexically governs indefinite NPs, as was discussed earlier. Rather it is an inflected preposition, a PP that has moved from its base position to the front of the sentence, probably into a Topical Phrase (32b). The definite subject *ir-rajjal* (the man) has moved from its VP-internal subject position to T. (32c) gives evidence that *fii-h* is not involved in licensing the indefinite NP *radʒal* "a man", hence the ungrammaticality of the sentence.

32) a. fii-h ir-radʒal illi gil-t   la-k   ʕan-h   (deictic)
       In-it the-man that said-1Sg to-2Sg about-3Sg
       There's the man that I told you about.

   b. ʔir-radʒal illi gil-t   la-k   ʕan-h   fii-h
       the-man that said-1Sg to-2Sg about-3Sg in-it
       There's the man that I told you about.

   c. *fii-h radʒal illi gil-t   la-k   ʕan-h
       in-it a man that said-1Sg to-2Msg about-3Sg
       There's the man that I told you about.

4.5.2 Definiteness Effects

    In verbless predicative sentences, sentences without a verb, the subject usually precedes the predicate, provided that the subject is definite (33)[13]. However, the predicate may precede the subject in yes/questions, accompanied by a rising intonation, as in (34).

33) a. Sami ṭiwiil
       Sami   tall
       "Sami is tall"

---

[13] "Predicative sentences" is used as a cover term to refer to copular constructions that have either an equative or a predicative reading. Copular sentences, with either an equative or a predictive reading, have the same structure. The difference between both readings is not structural (See Abdel-Ghafer, O (2004) for more details).

b. ʔil-walad fi-l-makatab.
   The boy in-the-office
   The boy is in the office

c. ʔir-radʒal ṭabiib
   the-man   physician
   The man is a physician.

d. *walad   ṭaweel
   boy.Indef tall
   A boy is tall.

e. *walad   fi-l-maktab
   boy.Indef in-the-office
   A boy is in the office.

34) a. wasiim   hu?
    Handsome he
    Is he handsome?

b. hu wasiim?
   He handsome
   Is he handsome?

 c. miriið̣ ħasan?
    Sick   Hassan?
    Is Hassan sick?

d ħasan mariið̣?
   Hassn sick
   Is Hassan sick?

 e. fi-l-maktab   hu?
    In-the-office he
    Is he in the office?

 f. hu fi-l-maktab?
    He in-the-office
    Is he in the office?

 g. ṭabiib   hu?
    Doctor he
    Is he a doctor?

h. hu ṭabiib?
   He a doctor
   "Is he a doctor?"

   Fii seems to be involved in licensing the indefinite NP at PF. Without *fii*, the indefinite NP can not be licensed, hence the ungrammaticality of the sentence, as in (35). In contrast, English existential *there* is not involved in licensing the indefinite NP (its associate) at PF.

35) a *walad   fi-l-maktab
       boy.Indef   in-the-office
       A boy is in the office.

   b. fii   walad   fi-l-maktab
      there   boy.Indef   in-the-office
      There is a boy in the office.

Recall that indefinite subjects can not precede the verb or their predicate in declarative equative sentences. However, they can occur after the predicate. The examples show that *fii* makes it possible for an indefinite subject to occur before its predicate. What that suggests is that existential *fii* is involved in licensing the indefinite subject via Case-assignment.

36) *radʒal   fi-l-maktab
     man.Indef   in-the-office
     A man in the office.

As shown in (37), the indefinite subject can occur after the predicate. When the locative DP moves to the front of the sentence, the preposition must take on a pronominal enclitic that spells out agreement features (ɸ-features) as the moved DP, as in (37 b and c). To say "a man is in the office" in SA one simply says *fii Rajjal fi-l-maktab*, which is an

76

existential sentence, or, alternatively, prepose the PP as in (37a) or topicalize the locative

NP as in (37b)

37) a. fi-l-maktab   radʒal
     in-the-office man.Indef
     A man is in the office.

  b. ʔil-maktab fii-h   radʒal.
     The-office in-it.3Msg. man.Indef
     A man is in the office.

  c. il-maktabah fii-ha   banaat
     the-library in-it.3Fsg. girls.Indef
     Girls are in the library.

Existential *fii* in Saudi Arabic is allowed to float around the sentence with the

restriction that it may not follow the indefinite NP, for licensing reasons, as has been

discussed earlier (38). (38c) is less acceptable probably because existential *fii* is

redundant. However, a controlled grammaticality judgment task must be done in order to

determine the acceptability of sentences such as in (38c)

38) a.fii   walad   fii-l-bait   (SA)
     there boy.Indef in-the-house
     There is a boy in the house?

  b. fii   fi-l-bait   walad   (SA)
     there in-the-house boy.Indef
     There is a boy in the house?

  c. # fi-l-bait   fii   walad   (SA)
     in-the-house there   boy.Indef
     There is a boy in the house.

  d. *fi-l-bait   walad   fii   (SA)
     in-the-house boy.Indef there
     There is a boy in the house?

e. *walad   fii   fii-l-bait   (SA)
    boy.Indef there in-the-house
    There is a boy in the house?

This freedom of *fii*'s floating around may vary across dialects. For example, while it is

not acceptable to prepose a PP in an existential sentence in SA as in (39c), preposition of

a PP in an EC is acceptable in PA (39c).

39) a.fiih   walad   be-d-daar   (PA)
    there boy.Indef in-the-house
    There is a boy in the house?

   b. fiih   be-d-daar   walad   (PA)
    there in-the-house boy.Indef
    There is a boy in the house?

   c. be-d-daar   fiih walad   (PA)
    in-the-house there boy.Indef
    There is a boy in the house?

   d. * be-d-daar   walad   fiih   (PA)
     in-the-house boy.Indef there
    There is a boy in the house?

   e. * walad   fiih be-d-daar   (PA)
    boy.Indef there in-the-house
    There is a boy in the house?   (Mohammed, 1998)

Topicalization of PPs in SA is not acceptable even in sentences that contain a full verb,

such as in (40)

40) a.*fi-l-bait   daxal samiir
    in the house entered Sameer
    In the house, Sameer entered.

The Definiteness Effects have more applications in Arabic than in English. While they

are irrelevant in determining whether a definite or an indefinite NP is allowed in the subject position of a sentence, they stipulate that only definite subjects are allowed to occur before the verb or before their predicates, unless they are introduced by a licensor such as existential *fii*, as has been discussed earlier. However, the types of DP's that are excluded from the English ECs are also excluded from the existential constructions in the SA. The examples below show that if the associate NP is modified by a demonstrative pronoun, the sentence has a list reading (41a), and if it occurs in a construct state, the sentence is unacceptable (41c). (41c) is ruled out because the associate NP, although unmarked for definiteness, is definite by virtue of being a member in a construct state.

41) a. *fii-h   illi   gaaʕdiin fi-l-faṣl
        in-3Ms Dem. sitting   in the classroom
        There are those that are sitting in the room.

   b. fii   ṭullaab gaaʕdiin fi-l-faṣl
      there students sitting   in the classroom
      There are students sitting in the classroom.

   a. *fii axu   ʕali fi-l-maktab
        there brother.gen Ali in the office
        There is Ali's brother in the office.

   b. fii ʔixuaan fi-l-maktab
       there brothers in the office
       There are brothers in the office

   c. *fii marjam fi-l-ħafla.
        there Mary   in the party
        There is Mary in the party.

Recall that DPs that are headed by strong quantifiers such as *every*, *each, both, most, any,* non-negative exceptive determiners such as *every/all ....but* are not allowed in English ECs. Those DPs are also excluded from SA ECs.

42) a. *kaan fii   kil   ṭaalib ħaziin
        was   there every   student sad
      There was every sad student.

   b *kaan fii   killin min il mudaris-ain   fi l maktab
      was   there both   of   the teacher-Dual in the office
      There were both teachers in the office.

   c. *kaan fii   muʕðam il mudaris-iin fi l maktab
        was   there most   the teacher-Pl in the office
      There were most teachers in the office.

Like English, SA seems to allow those DP's that are allowed in the construction without any restrictions; namely, those that are headed by 'intersective' determiners such as indefinite articles, cardinal determiners, cardinal comparative phrases such as "*as many books as*", *many, few, no*, and *no…but*:

43) a. kaan fii   kethiir min al ajdʒiba li-s-suʔaal
        was   there many of   answers   to-the question
       There were many answers to the question.

   b. ma   kaan fii   ʔaħad ɣeer ʕali fi-l-faṣl
      Neg was there one   except Ali in-the-classroom
      There was no one except Ali in the classroom.

As shown in (45a) below the rightmost NP in construct states is the one that can carry the definite marker (Benmamoun, 2000: 141). Therefore, (44 a) is ruled out because the first NP (the leftmost NP) can not carry the definite marker. (44 b) and (44 c) provide further evidence that it is the rightmost member of a CS that can be marked for (in)definiteness. *Ighawa* 'coffee' can be definite or indefinite while the modified noun *riiħat* 'smell' can only be indefinite, something which explains why (44 a) is unacceptable.

80

44) a. * ʔir-riiħat   il-ighawa
        the-smell.Gen the-coffee
        The smell of the coffee.

   b. riiħat   ighawa
      smell.Gen coffee
      Smell of coffee.

   c. riiħat   il-ighawa
      smell.Gen the-coffee
      Smell of the coffee.

The examples below show that because the DPs following the existential *fii* are

indefinite, they are allowed in the existential construction.

45) a. kaan-at   fii   riiħat ighawa fii-l-maktab
       was-1Sg.Fem there smell coffee in-the-office
       There was the smell of coffee in the office.

   b. kaan fii   ibu   ṭaalib fi-l-maktab
      was there father student in-the-office
      There was a father of a student in the office.

   c. kaan fii   ʔibu   aħad ut-ṭullaab   fi-l-maktab
      was there father one   the-students in-the-office
      There was a father of one of the students in the office.

       Like English, in SA, when the argument of the postpositional DP is modified by the

definite article *il-* 'the' the construction becomes unacceptable:

46) #kaan fii il-ʔibu   ʔiṭ-ṭaalib   fi-l-maktab
      was there the father the-student in-the-office
      There was the father of a student in the office.

 In the example below, the DP *iT-Tyuur* 'the birds' is allowed in the construction only

because it is modified by the quantificational DP *anwaaʕ* "kinds". In the word *iṭ-ṭiyuur* the lateral approximant /l/ of the definite determiner is assimilated into the following emphatic postalveoplar sound /ṭ/ to get [iṭ].

47) kaan fii   anwaaʕ iṭ-ṭiyuur fi-s-soog
    was   there kinds   the-birds in-the-market.
    There were the kinds of birds at the market.

The predicate restriction does not apply to the EC's in SA. The DP in the simple present or past clauses and the postpositional DP in the derived EC's are both predictive phrases. This can be explained by the fact that a noun precedes its modifier both in EC's and non-EC's. No change in word order is involved.

48) a.ʔil-walad ṭaweel.
      the-boy   tall
      The boy is tall.

    b. fii   walad   ṭaweel
       there boy.Indef tall
       There is a tall boy.

This concludes the restrictions that license DPs in the existential constructions both in English and Saudi Arabic.

4.5.3 Past Tense and Agreement

     In past tense sentences with auxiliary *kaan*, the lexical verb may not precede the auxiliary (49), hence obeying the Head Movement Constraint. In PA, existential *fii* has been shown to disobey the Head Movement Constraint. *Fii* and inflected prepositions in

that dialect exhibit freer word order than verbs in that they may follow or precede the copula *kaan* (was). (49) show that the lexical verb cannot precede the auxiliary. Because the auxiliary is closer to T than the lexical verb is, the auxiliary raises to combine with T. Existential *fii* and inflected prepositions in SA, as well as in Tunisian Arabic, seem to obey the Head Movement Constraint as they always follow the copula *kaan* (was) (or the present tense copula *kuun* "be"), as shown in (50). The assumption is that *kaan* raises to T to check agreement features against *pro*.

49) a. sammie kaan ja-ktib   risaalah
       Sammie was 3Ms-write letter.Indef
       Sammie was writing a letter.

   b. kaan sammie   ja-ktib   risaalah
      was   Sammie 3Ms-write letter.Indef
      Sammie was writing a letter.

   c. * Sammie ja-ktib   kaan risaalah
       Sammie   3Ms-write was   letter.Indef
       Sammie was writing a letter.

50) a. kaan fii   muškila   fi-s-siyarah
       Was there problem.Indef in-the-car
       "There was a problem in the car"

   b. *fii   kaan muškila   fi-s-siyarah
       there was   problem.Indef in-the-car
       There was a problem in the car.

   c. ʔaħijanan   ti-kun fii   mašaakil   fi-s-siyarah
      Sometimes 3F-be   there problems.Indef in-the-car
      Sometimes there are problems in the car.

   d. *aħiyanan   fii   ti-kun mašaakil   fi-s-siyarah
       Sometimes there 3F-be   problems.Indef in-the-car
       Sometimes there are problems in the car.

The copula in past tense existential constructions inflects differently across the different dialects. For example, in PA, according to Mohammed (1999), the copula can have impersonal agreement when it checks its features against *fii*. It also can have full agreement when it checks its features against the post-copular NP, as in (21) above, reproduced in (51). In Tunisian Arabic, *kaan* can have default agreement features when *pro* and the associate NP have different indices. However, when *pro* and the associate NP have the same indices, *kaan* agrees with *pro* thus shows the same agreement features as the associate NP, as shown in (52). These agreement patterns, Halila argues, are due to free indexing.

51) a. fii   kaan / kaanen   xams   bagaraat   be-d-daar
      there   was.Msg./ were.3F.Pl. five   cows   in-the-house.
      There were five cows in the house.

52) a. kaan-it / Kaan   famma   talvza   fu:q T-Tawla
      was-3Fs / was.3Msg. there   TV.3Fs on   the-table
      There was not a TV on the table.

    b. [TP pro i[T' kaan i [VP famma NP j   (PP)]]]

    c. [TP pro i[T' kaan i [VP famma NP j   (PP)]]]

However, in SA existential constructions, *kaan* is always inflected for third person masculine singular, regardless of what features show on the associate NP (53). The assumption then is that the third person singular agreement features that appear on *kaan* are those of *pro* and that the mechanism of free indexing is not operative in SA ECs.

53) a. kaan   fii   tuffaaħah   hina
      Was.3Ms   there apple.3Fs.Indef   here
      There was an apple here.

b. *Kaanat fii tuffaaħah hina
   Was-3Fs there apple.Indef here
   There was an apple here.

c. kaan fii kitab ʕala aṭ-ṭawlah
  Was.3Ms there book.Indef on the-table
  There was a book on the table.

d. kaan fii ϴalaϴ kutub ʕala ṭ-ṭawlah
  Was.3Ms there three books.Indef on the-table
  There were three books on the table.

4.5.4 Negation

Existential *fii* patterns with verbs in that it is negated with the verbal negation

morpheme *ma*, rather than with the nominal negation morpheme *miš*. As shown in (54),

fii as well as inflected prepositions host *ma-*, while non-verbal categories, such as nouns,

adjectives and prepositional phrases and non-finite verbal categories such as participials

host *miš*.

54) a. ma / *miš fii kitab ʕala iṭ-ṭaawla
    Neg there book.Indef on the-table.
    "There is no book on the table."

  b. ʔiṭ-ṭaawla ma / *miš ʕalee-ha kitab.
    the-table Neg on-it book.Indef
    "The table, there is no book on it."

  c. ʔil-kitab *ma / miš ʕala iṭ-ṭaawla
    the-book Neg on the-table.
    "The book is not on the table"

Let us consider the derivation of an existential construction such as (55) represented in

(56). The predicate *mariiḏ̣* "sick" merges with the argument NP *walad* "a boy" to meet

its s-selectional features. The argument NP *walad* enters into an agreement relation with

the predicate *mariið*, projecting an AgrP in which *walad* agrees with *mariið* in ɸ-

features (abstractly). The indefinite argument NP has a Case feature that must be

checked. The assumption is that *fii* is inserted to assign an abstract Case to the indefinite

NP *walad* , which is an instance of an Exceptional Case Marking (ECM). *Pro* is inserted

in [Spec, TP] to check the features in T. It is assumed that indefinite NPs must meet the

equirements of lexical government. *Fii* satisfies this requirement by functioning as a

lexical governor and as such it blocks NP movement to [Spec, TP] to get Case.

55) fii/ *Ø walad   mariið
    there   boy.Indef sick.ms
    "There's a sick boy"

56)
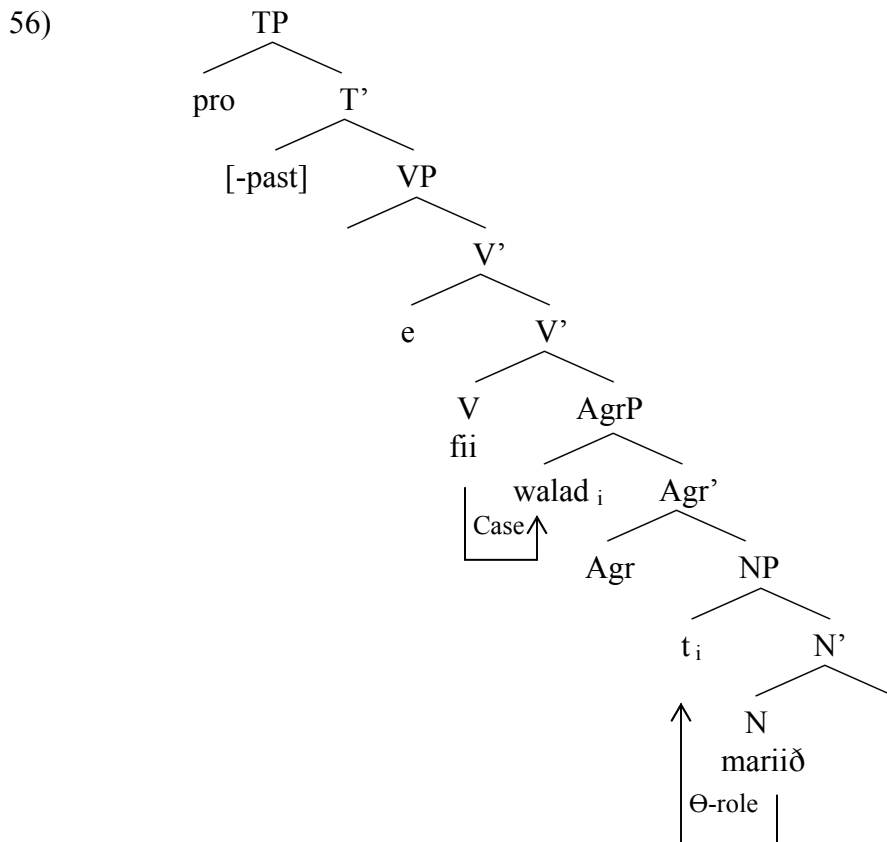
In a construction in which the argument NP is definite, the same derivation proceeds as presented above except that we have to assume VP is headed by a lexically empty verb. This empty verb neither Ɵ-marks nor does it Case-mark the VP-internal NP (Halila, 992). The assumption then is that this NP (definite or indefinite) gets it Ɵ-role from its predicate. However, this indefinite NP must be in a Case marked position to get Case. Therefore, it raises to [Spec, TP] to get Case from T. Notice that the definite NP-movement forms a legitimate A-chain [il-walad, t_i, t_i]. The first trace is in a ɸ-marked position while the head is in a Case-marked position.

57)
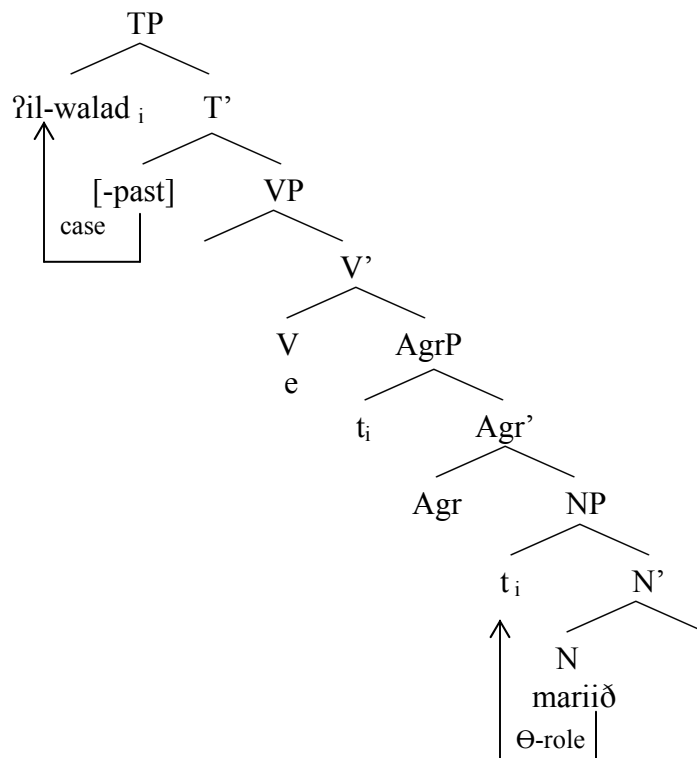
Assuming a null copula analysis will yield the correct present/past readings in predicative sentences. In copular existential constructions, we assume two VPs. One (the topmost) is headed by the copula and the other one headed by *fii*. T in such constructions is specified

for [+V] (as will be discussed in some details in the following section). It follows then that the copula raises to check that feature and default agreement features of *pro* in [Spec, TP] since it is closer to T.

58)

```
                TP
              /    \
           pro      T'
                  /    \
              kaan j     VP
         [+past, +V, 3msg]  \
                            V'
                          /    \
                         V      VP
                         t j      \
                                  V'
                                /    \
                               V      AgrP
                              fii    /    \
                               walad i    Agr'
                              Case ↑     /    \
                                       Agr     NP
                                             /    \
                                           t i      N'
                                           ↑      /    \
                                                 N
                                               mariið
                                            Ө-role
```
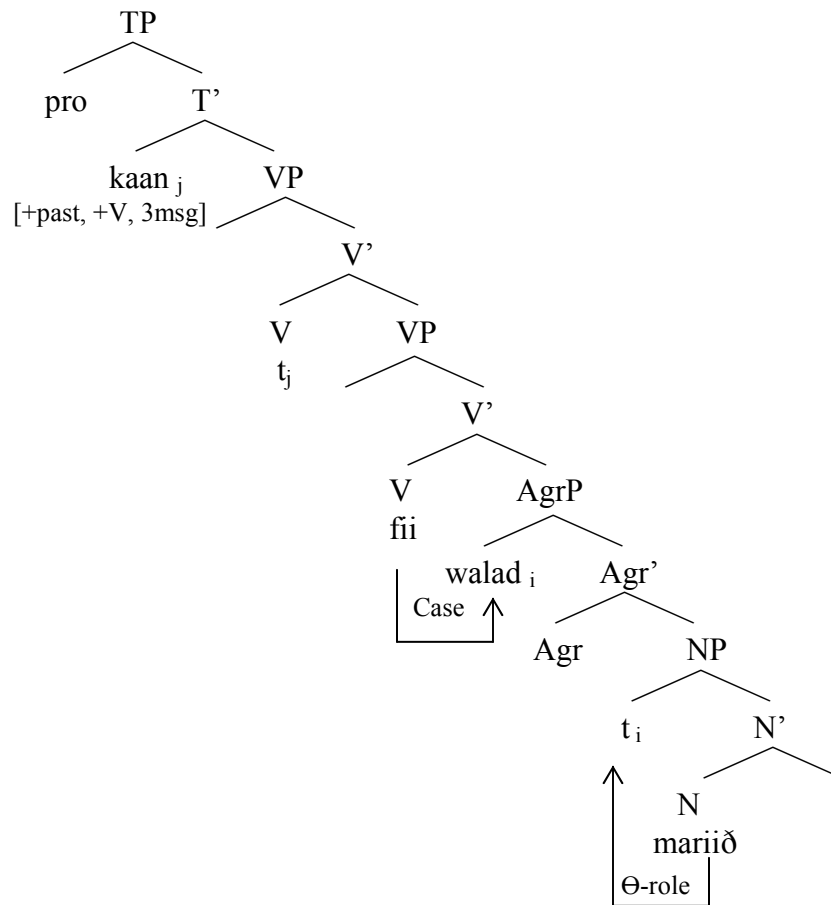
4.5.5 Possession

To express possession in English, a full verb such as"*have*" is used. In contrast, SA lacks a lexical possessive verb like English *have*. Instead, SA utilizes two constructions to express possession: i) construct states (59 a&b) and ii) the inflected prepositions *l+cl*, *ʕind-cl* and *maʕ-cl* (60 a-f). A construct state may contain the noun that refers to the possessed object and a pronominal clitic that refers to the possessor (59 a) or it may

contain the word *ħagg* "right" and a pronominal clitic that refers to the possessor (59 b).

The examples below show that possessive constructions are subject to definiteness effects. Recall that the first member in a construct state can not be definite and that an indefinite subject can not be in initial position of the sentence as shown in (59). As shown in (60) definiteness effects restrict indefinite NPs from occupying the initial position of a sentence. The inflected prepositions *l+cl* and *ʕind+cl.* seem to interact with definiteness effects differently. While *l+cl* allows definite nouns in subject positions in possessive sentences, *ʕind+cl* does not allow definite NPs in subject positions unless the sentence is locative. Definite NPs seem to be incompatible with *ʕind+cl* under possessive reading. Therefore, in (60 d) the construction is acceptable only under locative reading, with an interpretation such as "I have the book with me" or "The book is in my possession". But that does not necessarily mean I own the book. While in contrast, (60c) means "I HAVE a book" or the "the book is mine". When possession in not at issue, the inflected preposition *maʕ-cl* is used, in which case, it expresses accompaniment (61). However, *maʕ-cl* is sometimes used to indicate possession.

59) a. haða *(il)-kitaab-i
      this   book-1Sg.
    "This is my book"

    b. (*ʔil)-kitaab *(il)-ħagg-i
        the-book   right-1Sg
        "The book is mine" lit. "The book is my right" meaning "I have rights to the book"

60) a. (*ʔil)-kitaab l-i
      the-book   for-1Sg
      The book is mine

b.*l-i　　　il-kitaab
　　　for-1Sg　the-book
　　　The book is mine

　　c. ʕind-i　*(il)-kitaab
　　　at-1Sg　a book
　　　"I have a book"

　　d. (*ʔil)-kitaab ʕind-i
　　　the-book at-1Sg
　　　"I have the book"

61) a. Q- ʔis-sijjarah haaði, min-hi　la-h?　　　　　(Possession)
　　　　The-car　　this,　who-3Fs for-3Ms
　　　　"Whose car is this?"

　　　A- l-i　　　/*ʕind-i /*maʕ-i
　　　　For-1S
　　　　"Mine"

　　b. Q- ʕind-ak /*l-ak　sijjaarah?　　　　　(Possession)
　　　　At-2Ms　　　a car
　　　　"Do you have a car?"

　　　A- ʕind-i　/*l-i/*maʕ-i
　　　　At-1S
　　　　"Yes, I do"

　　c. Q- maʕ-ak sijjaarah?　　　　　　(Accompaniment)
　　　　with-2Ms　a car
　　　　"Do you have a car with you?"

　　　A- iy, maʕ-i　　/*ʕind-i/ *l-i　sijjaarah
　　　　Yes, with-1S　　　　　a car
　　　　"Yes, I do"

However, the choice between either *ʕind+cl* (at) or *l+cli* seems to be determined by a

number of factors. For example, if the possessor is non-human, *l+cl* is exclusively used

(62).

62) a. ʔiṭ-ṭair la-h/*ʕinda-h/*maʕ-ah janaaħ-ain
       the-bird for-3Ms.   wing.Dual
     "The bird has two wings"

   b. ʔiṭ-ṭawlah la-ha/*ʕind-ha/*maʕ-ha arbaʕ irdʒool
      the-table   for-3Fs.   four   legs
     "The table has four legs"

If the possessor is human and the possessed is something tangible, *ʕind+cl* (at) or *l+cl*

can be used; however, they have different distributions.

63) a. ʔis-sijjaarah l-i
          the-car   for-me
        "The car is mine"

    b. ʔis-sijjaarah ʕind-i
        the-car   at-me
        "The car is with me/ in my possession"

    c. *l-i   sijjaarah
       for-me a car
       "The car is mine"

    d. ʕind-i sijjaarah
       at-me   a car
       "I have a car"

If the possessor is human but the possessed is a quality or something abstract, *ʕind+cl* is

used.

64) a. ʕind-ah/ *l-ah iš-šadʒaaʕah
       at-3Ms   the-courage
     "He has the courage"

   b. ʕind-i/ *l-i il-ħamaas
      at-1S   the-motivation
     "I have the motivation"

c. ʕind-i fikrah / muškilah / ʔaħaasiis / waaṣṭah
   at-1S   an idea / a problem / feelings / a connection
"I have an idea / a problem / feelings"

However, if the possessed is an abstract noun that refers to a type of relationship to something or to someone, *l+cl* is usually used.

65) a. l-ah   ʕalaaqah   b-il-muškilah
      for-3Ms a relation   with-the-problem
   "It/he has something to do with the problem"

   b. l-i   maSlaħah fi-il-maouTHooʕ
      for-1S an interest in-the-matter
   "I have an interest in the matter"

If the possessed is a noun that refers to kinship such as "uncle, cousin, children, a friend, or a wife" ʕind+cl is used.

66) a. ʕind-ak ʕum / aṭfaal?
      At-2Ms uncle / children
   "Do you have an uncle / children?"

We have seen earlier that inflected prepositions pattern with verbs in that they license pro-drop and support the verbal negation morpheme *ma* rather than *miš*. Those possessive prepositions behave like verbs by virtue of being inflected as they carry agreement features spelled out in the form of a pronominal clitic, pro-drop is allowed. In addition, they support *ma-* rather than *miš*. In (67) below, *l+cl, ʕind+cl,* and *maʕ+cl* are all negated with *ma* rather than *miš*, in contrast to simple (uniflected) prepositions.

67) a. ʔiṭ-ṭair ma/ *miš la-h   janaaħ-ain
      the-bird Neg   for-3Sg.Masc. wing.dual
      "The bird does not have two wings"

   b. ʔiṭ-ṭawlah ma/*miš la-ha/*ʕind-ha/*maʕ-ha arbaʕ irdʒool
      the-table   Neg   for-3Sg.Fem.   four legs
      "The table does not have four legs"

   c. ma/*miš   l-i   ʕalaaqah / maṣlaaħah
      Neg   for-me   a relationship / interest
      "I do not have a relationsip/an interest."

   d. ma/*miš ʕind-i waaṣṭah
      Neg   at-me connections
      "I do not have connections."

   e. ma/*miš ʕind-i /#l-i/ #maʕ-i aṭfaal
      Neg   at-me   children
      "I do not have children."

   f. ma/*miš maʕ-i   sijjaarah
      Neg   with-me car.Indef
      "I do not have a car with me"

68) ʔir-radʒal ʕind il-baab
    the-man   at   the-door
    "The man is at the door"

While inflected prepositions start out as heads of PPs (69a&b), existential *fii* starts out as

a verbal head then both move in a head-to-head movement to T.

69) a. ma   ʕindi aṭfaal
       Neg at-me children
       "I do not have children"

b.
```
                    TP
                  /    \
               pro      T'
                      /    \
                    T        NegP
                   /\       /    \
          ma-ʕind i-i j   tj      Neg'
                                 /    \
                               tj      VP
                                      /  \
                                     V'
                                   /    \
                                  V      VP
                                        /  \
                                       V    PP
                                           /  \
                                         DP    P'
                                       aṭfaal / \
                                             P   clitic
                                           ʕindi  i j
```
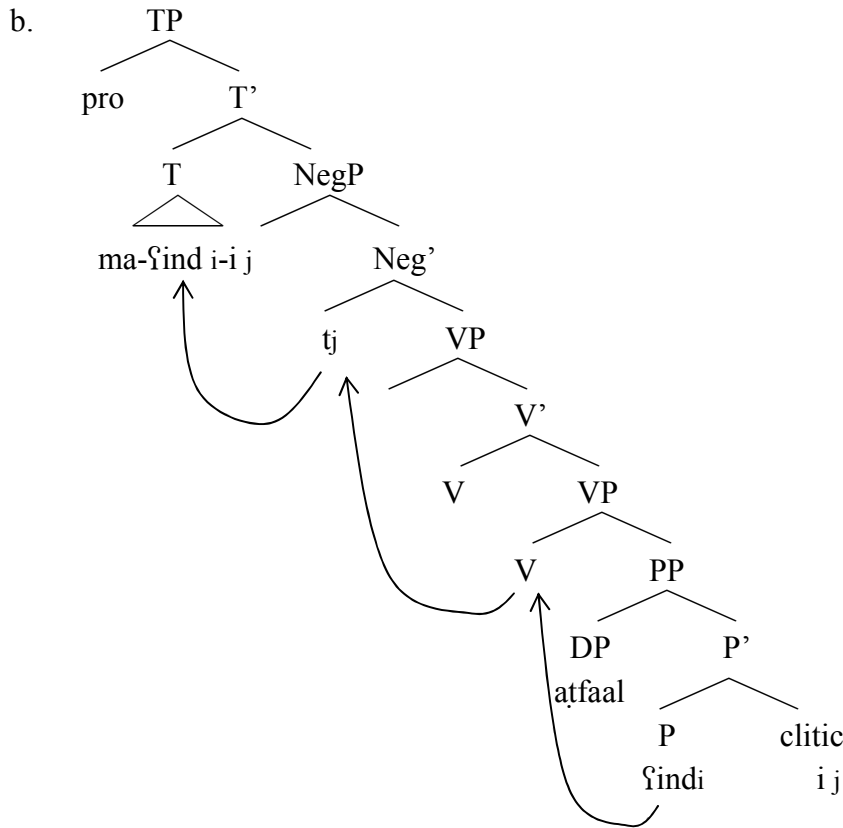
I assume that those prepositions move out of PP taking the clitic with them to T in order to check person features in the latter. In contrast, plain prepositions (uninflected prepositions) do not have to move to T, so they remain inside PP. Person features in T are checked against an overt NP subject. The behavior of possessive "inflected" prepositions and existential *fii* as verbal heads provides evidence that the dialect has elements that belong to a closed class type of verbs.

4.6 Conclusion:

In this chapter, I reviewed the literature on the syntax of ECs in different dialects of Arabic and also described ECs in the Saudi dialect of Arabic (SDA). The grammatical category of existential *fii* is controversial due to its different distributions across the

different dialects of Arabic. I have shown that *fii* in SA resembles verbs in its distribution. It is abe to host the verbal negation morpheme, and it does not allow a gap in the second conjunct. Moreover, in past and future existential sentences in which a copula is present, *fii* can only follow the copula, hence obeying the Head Movement Constraint, just like any other verb. In addition, *fii* licenses indefinite NPs in sentence initial position. Those observations strongly suggest that *fii* is an expletive verb that is inserted to license indefinite NPs in sentence initial positions. It is an expletive verb in that it does not have any other morphological realizations nor does it show agreement features.

Table 4 summarizes the differences between English and Arabic ECs with respect to the element that introduces existence, word order constraints and definiteness effects constraints, licensing mechanisms and different analyses. While both languages exhibit the same definiteness effects on the associate NP and basic word order, other differences are observed. First, English existential *there* is an NP while *fii* is a VP. Hence, different licensing mechanisms will be involved in both languages. Second, *be* is required in English past and present ECs. It must carry Tense and agreement features with the indefinite DP. In contrast, no copula is required in Arabic ECs (at least not in present tense ECs). Third, *be* is not restricted in English ECs since it also appears across different constructions. *Fii* is restricted in Arabic ECs, it does not appear in other constructions and it does not carry agreement features with the indefinite DP. Fourth, while clausal and constituent negation can be used in English ECs, only clausal negation (*ma-*) can be used in Arabic ECs. Fifth, several licensing mechanisms are associated with *there*, *be* and the associate NP. In contrast, the two licensing mechanisms observed for *fii* are Case assignment and lexical government.

These differences will make important implications for the acquisition of ECs in both languages, as we shall see in Chapters Five and Six.

Table 4: ECs components in English and Arabic.

ECs Components In Adult Grammar	English	Arabic
Word order	There+Be+Indef. DP	Fii+Indef. DP.
Existential element	There (NP)	Fii (VP)
Copula	Be in ECs and other constructions.	• None in imperfective (*kaan* in perfective). • *Fii* is restricted in ECs only.
Definiteness	Applicable – indef. DPs required	Applicable – indef. DPs required
Negation	Clausal *not* / constituent *no*	Clausal *ma-*
Licensing mechanisms	• *There*-insertion (EPP) • *There* licenses the associate NP at LF • Move α (Case Filter, Agreement features on *be*) • Procrastinate (FI) (Chomsky, 1995).	• *Fii* is a verb: to Case-mark and lexically govern the Indef. DP. (Eid, 1993; Halila, 1992). • *Fii* licenses the associate NP at PF

Chapter Five

The Acquisition of English ECs

5.1 Introduction:

Major differences between Arabic and English ECs include interactions of three interrelated aspects of the languages: word classes, word order and verb agreement systems. While existential *there* is needed in Spec IP to satisfy the EPP among other things, existential *fii* is projected within VP to license the indefinite NP. English ECs have a word order of NP, VP, and an idefinite NP and optianl PP or AP. Arabic ECs have a word order of VP, NP and optianl PP or AP. The existential verb or the copula in English ECs shows number agreement with the indefinite NP. Arabic ECs lack a copula. The licensing mechanisms are also different. Existential *there* licenses the indefinite NP at LF by sharing Case and checking verb agreement with it. The indefinite NP, on the other hand, licenses *there* by giving it proper interpretation. Existential *fii* licenses the indefinite NP by assigning structural Case to it and by functioning as a governor to it. What that suggests is that the acquisition of *fii* is linked to the acquisition of verbs while *there* to the acquisition of nouns. As far as I know, there are only two studies that have been conducted to examine the acquisition of English ECs: Schafer & Roeper (2000) examined the acquisition of *there* but ignored the acquisition of *be* while Becker (2000) examined the acquisition of *be* but ignored the acquisition of *there*. The other studies that I came across were ones that focused on other components of ECs. Kirby and Becker (2007) examined the acquisition of deictic/anaphoric *it* and expletive *it* and Abu –Akel & Bailey (2000) the acquisition of definiteness and the articles.

In section 5.2, I shed some light on the findings reported in the studies that have been done on the acquisition of existential *there*, existential *be*, and definiteness and articles. I describe the study that I conducted on the acquisition of English ECs and then present my findings in section 5.3.

5.2 Previous Studies on the Acquisition of *There*, *Be,* and Definiteness

5.2.1 Robin J. Schafer & Thomas Roeper (2000):

Schafer & Roeper (2000) examined the files of nine children in the CHILDES database (MacWhinneyandSnow1990) and found that deictic use of *there/here* emerges before existential (expletive) *there* and before anaphoric (or locative) *there*. They found that anaphoric (locative) *there* with a referent in the discourse appeared after existential *there* (Table 1). In other words, the deictic use of *there* emerged before existential *there* and the existential use of *there* emerged before anaphoric *there*. They argue that understanding of the relationship between an expletive *there* and its associate will facilitate or triggers understanding the relationship that holds between anaphoric *there* and its referent.

Table 1: First occurrences of deictic, expletive and anaphoric there for 9 children.
Schafer & Roeper's (2000)

Name	File Range	Deictic	Expletive	Anaphoric
May (Higginson)	0;11 – 0;11	--	--	--
June (Higginson)	1;3 – 1;9	1;6	--	--
Naomi (Sachs)	1;3 – 5;1	1;8	2;5 (R)	2;11 / 2;8
Eve (Brown)	1;6 – 2;3	1;6	1;10	2;2
Peter (Bloom)	1;9 – 3;1.	1;9	2;3	2;4
April (Higginson)	1;10 – 2;11	1;10	2;9	2;10 (R)
Mark (MacWhinney's diary)	2;1 – 4;3	2;1	3;4	3;10
Adam (Brown)	2;3 – 4;10	2;3	3;5	3;0 / 2;10 AAE it
Sarah (Brown)	2;3 – 5;1	2;3	3;1	3;5

R=repeated from previous adult utterance

5.2.2 Susannah Kirby & Misha Becker (2007):

Evidence that the acquisition of deictic words occurs before acquisition of expletive words comes from Kirby and Becker (2007). They found a different line of development for deictic/anaphoric *it* and expletive *it* from deictic and existential *there*. They examined the occurrences of NP *it* in sentences such as *here it is* and the occurrences of the expletive *it* as in *it's raining* in the files of four children (Adam, Eve, Peter and Nina), taken from the CHILDES database. NP *it* is anaphoric if it follows an anaphor in the discourse, but it is deictic if it refers to a referent in the discourse. All the children in their study produced both uses of *it* from early on. However, expletive use of *it* did not show up in their speech until 2 to 7 months later. In other words, both referential uses of *it* (deictic/anaphoric *it*) appear before expletive *it*. They found that expletive *it* was omitted in the earliest files of Adam, Eve and Nina before it appeared, and that the children used deictic/anaphoric *it* quite productively from their earliest files (Table 2). They claim that referential items (deictic/anaphoric) are acquired before expletive items. They propose that the acquisition of referential *it* serves as a trigger for the acquisition of expletive *it*. Children notice that expletive *it* do not co-occur with any deictic or anaphoric referent; thus they reanalyze expletive *it* as a subtype of referential *it*.

Table 2: Age of appearance for referential *it* and expletive *it*. (Kirby & Becker, 2007)

Child	Deictic/Anaphoric	Expletive (First Emergence)
Adam	2; 3	2; 6
Eve	1; 6	1; 11
Nina	1; 11	2; 1
Peter	1; 9	2; 4

5.2.3 Abu-Akel, A & Bailey, A. (2000)

Abu–Akel & Bailey (2000), in their discussion of the relationship between specificity and definiteness, note that definite NPs can make specific reference (1) and non-specific reference to things (2). Similarly, indefinite NPs can do the same thing. In (3a), the indefinite NP in the EC can only make a specific reference to a particular "hammer", while the NP "hammer" in (3b) may refer to a hammer in specific as well as any member in the class "hammer".

1) The man is at the door.

2) a. The world's deserts.
   b. The Lama lives in Peru   (Abu–Akel & Bailey, 2000)

3) a. There's a hammer in that drawer.
   b. I struck the nail with a hammer.

Abu–Akel & Bailey showed that children start by using DPs deictically. They examined the files of 17 children taken from the Wells corpus of CHILDES archives (Wells, 1981; MacWhinny & Snow, 1990) and showed that children used the articles *a* and *the* correctly at the beginning of their multi word stage and that the rate of article omissions declined as they grew up. They observed that between the ages 1; 6 and 2; 00 children used indefinite DPs predominantly and that by age 2; 3 they started marking DPs for specificity using both indefinite and definite articles (Table 3). They conclude that at the age 2; 3 children do not rely on the context to denote specificity anymore. They also claim that before that age, children use DPs deictically, just like demonstratives. The authors use omission errors of the articles in their data as evidence for an optional stage

in early child's grammar. Thus, they argue in favor of the Full Clause Hypothsis proposed by Hyams (1992) and Wexler's (1992, 1994) Optional Infinitive Stage.

Table 3: Grammatical and Ungrammatical DPs. (Abu–Akel & Bailey, 2000)

Age in months	Aggregate # of Grammatical DPs (Indef/Def.)	
1;6	28/1	(n=13)
1;9	27/9	(n=14)
2;00	67/30	(n= 15)
2;3	91/76	(n=16)
2;6	106/81	(n=16)
2;9	104/99	(n=17)
3;00	123/113	(n=17)
3;3	182/147	(n=16)
3; 6	202/162	(n=16)
4;10	254/255	(n=17)

5.2.4 Becker (2000):

Becker draws on her account for the provision and omission of *be* in child grammar based on Carlson's (1977) distinction between stage-level (SL) and individual-level (IL) properties. Stage-level predicates assign temporary/non-inherent properties to the subject while individual-level predicates assign permanent/inherent properties to the subjects. Based in this distinction, SL predicates are associated with locatives while IL ones are associated with nominal predicates.

Becker adopts Chierchia's (1995) arguments that existential constructions are incompatible with IL predicates, but they are compatible with SL predicates. Only SL predicates are allowed in the coda of an existential construction, as shown in (4). Chierchia argues that in an IL predicate the generic operator that binds the variable in the predicate is a strong determiner that causes the predicate to be incompatible with an existential coda.

4) a. Dogs are mammals.   (Generic only)
   b .Dogs are in the park.   (Generic or existential)
   c. There are dogs Chihuahuas.
   d. *There are dogs in the park.

Becker's focal interest was *be* production in nominal predicates and locative predicates in child language. She examined the files of five English-speaking children, namely Nina, Peter, Naomi, Adam and Eve, covering two months of *be* production (for Nina and Eve) and three months (for Peter). The Table 4 below shows that children used overt *be* in ECs more than in DCs, 76.1% of the time against 61%, respectively. She also found that the children used overt *be* in nominal predicates more than in locative predicates, 65% of the times against 31.8%, respectively. She proposes that children use and omit copula *be* at different rates based on the construction types that they occur in. Her findings show that children used *be* in nominal predicative contexts more than in locative predicative contexts. She concludes that children are more likely to drop *be* in locatives than in nominal predicates. She also examined briefly *be* production in ECs and DCs in the files of those children and found that the children's production of *be* is more in existential constructions than in deictic constructions.

Table 4: Average Rate of Overt *be* in Children's Locative Predicative (Becker. 2000).

Child/age range	existential	Deictic	Nominal pred.	Locative predicates
Nina 2;0-2;2	88.9% (15)	56.8% (40)	74.1% (143)	14% (115)
Peter 2;0-2;3	87.1% (31)	67.2% (58)	81.2% (401)	26.7% (90)
Eve 2;1-2;3	52.4% (21)	59.1% (22)	39.8% (206)	54.8% (33)
Avrg. %	76.1%	61%	65%	31.8

As far as the licensing of the associated NP is concerned, Becker follows Lasnik (1995) and Belletti (1988) by arguing that the associated NP in existential constructions

gets an inherent partitive Case from *be*. Inherent partitive Case of the associated NP is checked in the same manner as unaccusatives check Case (Lasnik: 618). Based on this analysis, Becker assumes that *be* is overt in English child ECs because it is needed to license the associated NP.

5.3 The Acquisition of Finiteness in English Child Language:

5.3.1 Introduction:

In this section, I describe and present my findings on the acquisition of existential, deictic and auxiliary-*be* constructions in English. In order to track the initial emergence of existential *there* and existential *be*, deictic *there* and deictic *be*, and auxiliary-*be*, the files of Eve (Brown, 1973), Nina (Suppes, 1973) and Peter (Bloom 1970), taken from the CHILDES database (MacWhinney & Snow, 1985) were examined. Those files were also examined by Becker (2000), though for an average of 2 months of development for each child. Based on the data gathered from those files, I argue that copula *be* in existential constructions (ECs) and deictic constructions (DCs) follows different trajectories of acquisition from those in auxiliary–*be* constructions. I show that existentials are not acquired at the same time as DCs; DCs appear before ECs. *Be* production in existentials is not as productive as *be* in deictic or even as in auxiliary–*be* constructions. I show that there is a reason to believe that children might be using *be* in existentials as a lexical morpheme while they might be using *be* in deictic constructions as inflection. Based on the production data I argue that what licenses the post-copular DP (the associate NP) in ECs is existential *there* not *be*, thus maintaining Chomsky's Case transmission mechanism in ECs. I also show that the omission of *be* in ECs can not be explained by

Rizzi's (1994) truncation approach. As will be discussed later, the truncation operation targets functional projections below CP, and it stipulates that when a projection is truncated, all higher projections must be missing or truncated as well. However, the data presented in this paper show that children often truncate *be* in existential, deictic and auxiliary–*be* constructions but they do not truncate the subject (expletive *there* in ECs, deictic *there/ here* in DCs and NPs in auxiliary-*be* constructions). In other words, the subject is somehow licensed although INFL is truncated.

The structures under investigation are ones in which copula *be* and auxiliary–*be* are obligatory in the adult grammar. There are two available allomorphs of *be*: the inflected forms of *be* and the uninflected form (*be*). The examples in (5) below show those allomorphs in three constructions under investigation: existential constructions, deictic constructions and auxiliary-*be* constructions.

5) a. There was a rabbit in Wellfleet   (Nina 2;9)   [Existential with *be*]
   b. There no squirrels.   (Eve 1; 11) [Existential without *be*]
   c. There's the spare tire!   (Peter 2; 2) [Deictic with *be*]
   d. There baby monkey.   (Nina 1; 11) [Deictic without be]
   e. I'm gonna get a button.   (Peter 2; 1) [Auxiliary–*be* with *be*]
   f. Bunny dancing.   (Eve 2; 1)   [Auxiliary–*be* without *be*]
   g. There be no more.   (Eve 2;2)   [Existential with infinitive *be*]
   h. Nope # they be going for a walk.   (Peter 2;10) [Auxiliary–*be* with infinitve *be*]

Children omitted *be* in DCs and ECs less often than in auxiliary–*be* constructions. Omission of *be* across different constructions at different rates has been documented in Becker (2000) where she examined *be* acquisition in nominal and locative predicative constructions. She showed that children are more likely to omit *be* in locative predicates than in nominal predicates. However, her data covers an average of 2 months of

development for each child. In contrast, I track the development of copula *be* in existential, deictic and auxiliary–*be* from the earliest files available up to the age 2; 3 for Eve (her last available file) and 3; 1 for Nina and Peter. I also attempt to control what defines child existential and deictic constructions, something that is not well-defined in Becker's study. We will see how drastically the data changes based on how we define a child construction. I will appeal to Becker's (2000) data on the other types of constructions on the children shared in both studies, namely, Nina, Peter and Eve.

5.3.2 The Files:

As shown in Table 5, the files under examination in the present study for Nina and Peter extend from ages 1; 11 to 3; 1 and from 1; 9 to 3; 1, respectively. Nina's files for ages 1; 12, 2; 6, 2; 7, 2; 8 and 2; 12 are not available in the CHILDES archives, but they cover a total of 12 months of development. Peter's files for ages 1; 12, 2; 11, 2; 12, and 3; 00 are not available either, but they cover 15 months of language development. Eve's available files extend from ages 1; 6 to 2; 3, with the file for age 1; 12 being unavailable, yielding data over 10 months.

Table 5: Background on the data under investigation

Child	Source	Ages	MLU at eginning ages	Files
Nina	Suppes 1974	1;11-3;1	1.66	nina01 - nina53
Peter	Bloom 1970	1;9-3;1	1.19	peter01 - peter20
Eve	Brown 1973	1;6-2;3	1.68	eve01 - eve20

5.3.3 The Method

The difference between an EC and a DC sometimes can be a difference in place of stress (Lakoff, 1997: 470), as shown in (6). With absence of stress annotation in the

database, and since the interpretation of some utterances is only retrievable in context, I controlled for what defines child existential and deictic constructions by reading through the context in which each utterance appeared before I set out to analyze the data, a procedure that is not well-defined in Becker's study (2000: 164).

6) a. THERE's an ape flirting with Harriet. [Deictic]
   b. There's an APE flirting with Harriet.   [Existential]

The counts of overt *be* and environments where *be* was missing were conducted in a semi-automated method using the software Eluent Find. Different regular expressions were used to identify the different environments where *be* appeared and where it was lacking in existential, deictic and auxiliary-be constructions. For example, to identify finite *be* in existential environments, the search software was set to look for combinations of *there* with the different overt allomorphs of *be* (is, 's, are, 're, was, were, be), each individually. The same procedure was repeated for deictic environments requiring a form of *be*. In order to distinguish between existential and deictic utterances, I read through the contexts for each utterance, and judgments on what could be an existential or a deictic construction were based on the type of evidence found in the context. The search software was used to look for existential *there* in declaratives and yes/no questions 'i.e., *is there anymore*?' for deictic *there/here* in declaratives. The utterances that were included in the count are ones that are complete and intelligible. Repetitions were excluded.

5.3.4 Description of the Period of Acquisition:

Before I delve into describing English child existential and deictic constructions, I describe the developmental period in which those constructions emerge. The period in which children start using the lexical components of existential and deictic constructions conform to Brown's (1973) Stage I (Specifically late Stage I and early Stage II). Brown marks the onset of Stage I using MLU (Mean Length of Utterance) measures[14]. It begins when the MLU rises above 1.0, which marks the beginning of multi-word utterances, and ends at MLU 2.0 (p. 58). This period features accelerated vocabulary growth and stable use of word order and some semantic roles (Brown, 1973). According to Brown, children at that stage have at their disposal eleven combinations of semantic relations. Those semantic relations include (i) Nomination, where children respond to questions such as 'What's this?' or 'What's that' with words such as 'this' 'that' 'here' or 'there' without pointing, (ii) Recurrence, indicated by the child's mention of a referent already seen and indicated by use of words of quantification such as 'more' and 'another.', and (iii) Demonstrative and Entity, indicated by the child's use of demonstrative and deictic use of 'there' and 'here' with pointing. Syntactically speaking, children's grammar at early Stage I is limited to two-word strings [S → (Modifier)+(Noun)] such as 'red one' [S→ (Quantifier)+(Noun)] such as 'more juice' and [S→ (Noun)+ Verb)] such as 'mommy go'. Towards late Stage I, children start producing three-word strings so that (M)+(N) could be embedded in an NP as in 'there red one'; locatives or deictic could co-occur with NPs 'there my crayon', for example. During this three-word stage, children also start producing copular constructions and acquiring some grammatical morphemes. It is at this

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[14] The MLU is the number of morphemes that the child produced in a file divided by the number of utterances the child produced. This gives an estimation of the length of the utterances that a child produces.

point that children exhibit unstable use of many aspects of their grammar. They drop copulas as in '*there a man*', drop auxiliaries as in '*Eve writing*', drop subjects as in '*is some more*', and drop articles as in '*There's kitty*'. This stage also features absence or unreliable production of verbs and articles. Brown (1973) reported stable usage of the articles for the children Eve, Adam and Sarah between ages 2; 8 months and 3; 5 months. The criteria that Brown used to draw an estimation of the acquisition of the semantics of the articles were based on the time of stable usage, and comparisons of their verbal and non-verbal contexts of their use.

ECs and DCs basically have the same formula: *there* [be [NP [XP]]]. However, findings of acquisition studies show that deictic contexts appear earlier and are more productive than existential contexts. As Clark and Sengul (1978) note, children begin by pointing at things with their fingers very early. When they enter their one- and two-word stage, they use deictic terms as they point at things to pick out locations for objects and events for their listeners. As their deictic utterances grow more complex, the children then gradually, in some contexts, learn to do without pointing or gestures. The deictic words that first appear include *this*, *that*, *here* and *there*.

5.3.5 Child Existential Constructions:

Kearns (2000) identifies four types of *there+be* constructions in adult grammar: (i) Basic existential *there be* that states the existence or non existence of whatever the post-copular NP refers to, (ii) Presentational *there be* that introduces new entities into the discourse, (iii) Task *there be*, presenting new tasks or events to be done in the near future and (iv) List *there be*, giving a list of entities that have a common feature (pp. 82-84).

Only the types (i) and (ii) can have an existential reading and that are to be found in the files on Nina, Peter and Eve.

(7) Existential *There BE*:
   There's money in here.   [Peter 2; 5]

(8) Presentational *There BE*:
   And there's gonna be a Christmas tree and presents.   [Peter 2; 10]

A child existential construction maybe: (i) one that contains existential *there* with overt *be* followed by an indefinite NP and an optional locative or (ii) one that contains existential *there* but lacks a form of *be* followed by an indefinite NP and an optional locative, provided that the utterance is not accompanied by pointing and provided that *there* does not refer to the location of whatever the associate NP refers to.

Before the acquisition of *be*, children state the existence of some entity by using the other components that constitute existential constructions. They either apply *there* + Quantifier (more/no) as in (9) and (10), apply *there*+NP+(locative) as in (11) or apply Quantifier + NP + (locative) as in (12). However, I did not include cases as in (12) in the count as either a deictic construction or as an existential construction since they may also be locative sentences, as in '*more presents are in there*'.

(9) Eve 1; 10
   CHI: There more .
   MOT: There certainly is more than two

(10) a.There no more de(se) .   [Eve 1; 11]
      b.There no pictures.   [Eve 2; 1]

(11) There a mommy right there   [Peter 2; 1]

(12) Nina: More presents in there.
     LIN: No # no more presents.   [Nina 2; 1]

The task of differentiating a deictic construction from an existential construction becomes difficult when the difference is only in stress, as has been mentioned in Lakoff's discussion. The examples in (13) below do not differ in form, but they differ in stress.

(13) a. There more [Eve 1; 10] existential.
     b. There one.   [Eve 2; 00] deictic

Since stress is not indicated in the Archives, and sometimes pointing is not indicated by the investigators, evidence from the context had to be looked for to be able to distinguish existential from deictic.

Evidence for an existential interpretation could be a preceding or a following confirmation utterance with existential *there*, as in (14). The mother's preceding utterance provides evidence that *there* is existential. Recall from Lakoff's discussion earlier that existential *there* is the grammatical subject of the sentence. Therefore, existential *there* but not deictic *there* can exist in tag questions. Use of negation is also evidence that the construction is existential and not deictic (15).

(14) a. Nina 2; 00
        MOT: There's a hole in that puzzle # isn't there?
        CHI: There's another hole

    b. Eve 1; 10: [speaking of pencils]
       CHI: There more +/.
        MOT: There certainly is more than two.

110

(15) a. There's not any wheels # in here.   (Peter 2;7)
      b. Because I can't because there no pictures. (Eve 2; 1)
      c. And there's no more space.   (Nina 3; 1)

It is quite common for children to use double locatives in one sentence to refer to the same location. For example, Nina in (16) used double locatives in both sentences. The second sentence in (16) contains two types of *there*: the first one is deictic while the other one is locative. However, not every double-locative is a deictic construction. There are cases where the first *there* could be existential and the other *there/here* is locative as in (17). The utterance in (17) is existential as it contains the negative marker *no*.

(16) Nina 2; 11
      CHI: Here's the white one right up there.
      CHI: There's the white one there.

(17) Peter 3; 1
      There's no thing right here

There are yet other cases where evidence can only be found in the context. For example, Nina's utterance in (18) could be equally existential and deictic if taken out of context. However, the mother's following question with *where* is the evidence that Nina's sentence is deictic not existential. It seems from the context that the rabbit was located somewhere where Nina but not her mother could see it. Nina was trying to locate the rabbit for her mother. The result is that the first *there* in *there's a rabbit there* is deictic and the other *there* is locative, both referring to the same location.

(18) Nina 2; 2:
    CHI: There's a rabbit there.
    MOT: Where is the rabbit?

    The utterance in (18) above could have possibly been existential if the utterance was not followed by a question with *where* and if the locative was *here* instead of *there*. In (19) below, *there* is existential. If it was deictic, then the sentence would be semantically anomalous as *there* contradicts with *here* in meaning. The mother's following negated utterance gives extra evidence that Nina's sentence is existential.

(19) Nina 3; 1
    CHI: And there another page in here?
    MOT: They're no more pictures.

5.3.6 Child Deictic Constructions

    I found two types of deictic constructions in the files of Nina, Peter and Eve. The first type is one that does not involve using a form of copula *be* because copula *be* is not required, but instead *there* or *here* may combine with a noun, forming a vocative utterance (20a), which I will call *deictic vocatives*, or the construction may contain a full verb (20b & c). The other type either contains or may lack a form of copula *be* where *be* is required (20d-h).

(20) a Nina 2;4: [Nina holds a spoon up to the doll's mouth]
      MOT: you're going to give your dolly some jello?
      CHI: here doll.
    b. Peter 2; 0: sit there.
    c. Nina 1;11: there it goes.
    d. Peter 2;2: there's the spare tire.
    e. Eve 2; 2: here's another one.

f. Eve 1; 9: here two beads.
g. Nina 2; 9: there she is!
h. Nina 2; 1: there him.

The deictic constructions that were included in the count were of the second type, where *be* is required. Excluded from the count are deictic vocatives (20a) and those constructions that involve using a full verb such as *go*, *sit* or *come*, and those that do not require the use of *be* (20b). I give examples of deictic constructions under investigation in (21) and the basic deictic formulas in (22).

21) Types of deictic constructions under investigation:

 a. There's the spare tire. (Peter 2; 2)
 b. There my crayon box. (Eve 2; 3)
 c. Here another scratch. (Nina 2; 5)
 d. There she is!   (Nina 2; 9)
 e. There's a bolt.   (Peter 2; 3)

22) Formulas for copular deicitc constructions:
 a. *Here / There + ['s, is, are] + DP*
 b. *Here / There* + DP
 c. *Here / There* + Pron + *be*

Cases in which *there* and the copula were omitted were not included in the count simply because they could be locatives, as in (23). Cases where the child's utterance was followed by a true existential or a deictic construction were also discarded, as in (24) and (25). Eve's utterance in (24) could be equally interpreted as a locative sentence '*Milk is in there*' or as an existential sentence '*There's milk in there.*' The same is true of Nina's utterance in (25).

(23) Peter 1; 10: Piece in there # in there.

(24) Eve 1; 9:
   CHI: Milk in there.
   MOT: There is milk in there.

(25) Nina 2; 0:
   Nina: More puppets in there?
   MOT: No # there's no more puppets in there.

Deictic *there* refers to the location of whatever the post-copular NP denotes. Evidence for deictic *there* could be a preceding or a following question with *where* as in (26). Recall that when the location is at issue, that what is negotiated is the location of an object, then we are dealing with deictic use of *there*. Another piece of evidence for deictic *there* could be a confirmation or an expansion (elaboration) utterance with *here* or deictic *there* in inverted pronoun + *be* sentences (*There it is*) as in (27). Inversion of the type as in (27) is only possible in deictic constructions. Evidence for deictic *there* could be indicated by the action of the child or the parents, as in (28) in which case the action is drawing.

(26) a. Nina 1; 11
     MOT: Where's the baby monkey?
     CHI: There baby monkey.
     CHI: Baby monkey there

   b. Nina 2; 9: [Nina picks up a cowboy and an Indian]
     CHI: Where's the cowboys?
     CHI: Oh # there's a # there's two cowboys # Mommy.

(27)   Peter 2; 8
     CHI: There it is .
     CHI: There's letter # in the soup.
     CHI: There goes.

(28)   Peter 2; 8
       CHI: There's a feet .
          [Peter is drawing another "foot"]
       CHI: There are two feets.

 Children understand the notions of 'far' and 'near' from an early age. Eve used *there* and

here in non-copular constructions before the age 1;7. In many places, Eve used deictic

there to refer to far objects and used *here* to refer to near objects in copular constructions

starting from age 1;7, as shown in (29).

(29) a. Eve 1; 7:
      CHI: There Mommy.
      COL: Yes.
      COL: Mommy's gone upstairs but she'll be right back.

   b. Eve 1; 8:
     MOT: What is that tinker+toy doing in there?
     MOT: It doesn't belong in there.
     CHI: There more

   c. Peter 1; 9: [Finding another train car and attaching more of them]
     CHI: Here more.
     PAT: Here more?
     CHI: Here more.
     PAT: Here's another piece of the train.

5.3.7 Acquisition Data

5.3.7.1 Production of BE in ECs and in DCs

   Table 6 below provides production of *be* in both existential and deictic

constructions based on my definitions of what child existential and deictic constructions

are, and based on the types of evidence found for each construction.

Table 6: average production of *be* in child existential and deicitc constructions

Child / age range	Deictic Constructions		Existential Constructions	
	Missing *be* (n)	Overt *be* (n)	Missing *be* (n)	overt *be* (n)
Nina 1;11-3;1	15.% (45)	84.8% (346)	11.7% (2)	88.2% (8)
Peter 1;9-3;1	21.8% (87)	78.1% (308)	18.8% (11)	81.1% (26)
Eve 1;6-2;3	62.1% (25)	37.8% (16)	63.6% (5)	36.3% (2)
Average %	32.9%	66.9%	31.3%	68.5%

The pattern of *be* production in both constructions is quite similar. The older children (Nina and Peter) used *be* more frequently: 66.9% of the time in deictic constructions and 68.5% of the time in existentials. Eve frequently omitted *be* in both contexts. The rate of *be* omission is about the same. Those figures are strikingly different from Becker's, shown in Table 7. She found that children used overt *be* in ECs more than in DCs, 76.1% of the time against 61%, respectively. She also found that the children used overt *be* in nominal predicates more than in locative predicates, 65% of the times against 31.8, respectively. However, she points out that her coding method is not controlled enough as to yield clear-cut judgments on what a child EC and DC could be. Considering the smaller age range of the subjects in her study, she found more tokens of *be* in existential constructions than I did. For example, I found five existential constructions that contained overt *be* in the 45 files of Nina that cover 12 months, ranging from the age 1;11 to 3;1, while Becker found fifteen in 6 files ranging from ages 2;00 to 2;2. The huge difference in the number of tokens must be due to the coding method that she used to distinguish existential from deictic constructions. She suggests that a more controlled experiment is required to determine if a child's existential constructions are existential rather than instances of deictic constructions. She coded as existential constructions utterances that simply began with *there* and had an indefinite post-copular NP as the associate of *there*, and coded as deictic constructions utterances that began with *here* or *there* but had a

definite post-copular NP. Utterances that began with *there* and had an indefinite post-copular NP she coded as ambiguous as they could be either existential or deictic constructions. Those utterances are ones that have the same form but differ in stress, as mentioned above. In this study, I found many pieces of evidence from the context that helped distinguish existential from deictic *be* in the files. What I counted as DCs she might have counted as existential, hence the higher rate of *be* production in her data.

Table 7: Average Rate of Overt *be* in Children's Locative Predicative (Becker. 2000).

Child/age range	existential	deictic	Nominal pred.	Locative predicates
Nina 2;0-2;2	88.9% (15)	56.8% (40)	74.1% (143)	14% (115)
Peter 2;0-2;3	87.1% (31)	67.2% (58)	81.2% (401)	26.7% (90)
Eve 2;1-2;3	52.4% (21)	59.1% (22)	39.8% (206)	54.8% (33)
Average. %	76.1%	61%	65%	31.8

To screen out tokens of *be* in EC and DC, I broke up the data by the month for the children shared in both studies, namely, Nina, Peter and Eve. The figures in Tables 8a, 8b and 8c, for the three children, show that existential contexts are not productive in the children's early grammars. Peter is the child with the most existential contexts both in this study and in Becker's. Existential contexts appear around the age 2 years for Nina and Peter. For Nina, they first appeared with overt *be* at the age 2 years. In contrast, for Peter, the first existential context appeared with a missing *be* at the age 2;1 and the first one to appear with an overt *be* was at the age 2;3. Existential contexts for Eve appeared earlier, as early as 1;10. Table 8c shows that Eve made her first existential context at the age 1;10 with a missing *be* while contexts with overt *be* did not show until the age 2;3. It is clear from Nina and Peter's data that *be* continues oscillating between presence and absence until 3;1. It is hard to determine a time of acquisition with low tokens of occurrence. However, it is reasonable to say that *be* in existential constructions is

117

acquired sometime around the age 2;3. Becker found 15 inflected forms of *be* in ECs from ages 2;0 to 2;2 for Nina. I found only 2 in that age range. For Peter she found 31 from ages 2,0 to 2;3. I found only one. She found 21 infected forms of *be* in ECs for Eve from ages 2;1 to 2;3. I found only two.

Table 8a: Nina's existential obligatory contexts with *be*.

	1;11	2;0	2;1	2;2	2;3	2;4	2;5	2;9	2;10	2;11	3;0	3;1
Nina	0	1/1	3/3	0	0	0	0	2/3	0	0	0	2/3

Table 8b: Peter's existential obligatory contexts with *be*.

	1;9	1;10	1;11	2;0	2;1	2;2	2;3	2;4	2;5	2;6	2;7	2;8	2;9	2;10	3;1
Peter	0	0	0	0	0/1	0/0	1/1	0/1	3/3	0/0	2/2	4/7	3/7	8/10	8/8

Table 8c: Eve's existential obligatory contexts with *be*.

	1;6	1;7	1;8	1;9	1;10	1;11	2;0	2;1	2;2	2;3
Eve	0	0	0	0	0/1	0/2	0	0/1	0/1	2/2

Table 9 summarizes the differences of overt *be* rates in existential constructions in both studies. Recall that different coding methods were used in both studies. Therefore, what I counted as a DC, based on the evidence that I found in context, Becker might have counted as existential, hence the higher rate of ECs in her data. While I argue that production of ECs in child early grammar is less frequent than DCs, Becker argues that they are both productive and acquired at the same time.

Table 9: Children's Average Rate of Overt *be* in Existential in both studies.

child	Age range	Existentials (n)	Existentials (n) (Becker 2000)
Nina	2;0 - 2;2	100% (4)	88.9% (15)
Peter	2;0 - 2;3	50% (1)	87.1% (31)
Eve	2;1 - 2;3	50% (2)	52.4% (21)
Average. %		66.6%	76.1%

Contrary to existential contexts, deictic contexts appear earlier and are quite productive. As Clark and Sengul (1978) noted, children begin pointing at things with their fingers very early. When they enter their one- and two-word stage, they use deictic terms as they point at things to pick out locations for objects and events for their listeners. As their deictic utterances grow more complex, the children then gradually, in some contexts, learn to do without pointing or gestures. The deictic words that first appear include *this*, *that*, *here* and *there*. The production data that I reviewed shows clearly that children in their early grammar rely heavily on context when they pick out objects. However, they later on learn that *there* and *here* could be used non-deictically. The adults in the production data use expressions such as '*Here Peter*' when some action is completed, when handing something to the child or in order to draw the child's attention to something. Expressions such as '*there you go*' in which *there* is not used to refer to any location might suggest to the child that *there* is not always used deictically, and hence provide an introduction to the expletive/existential use of *there*.

The figures in Table 10 below show that *be* also oscillate between presence and absence in deictic constructions until age 3;1. Table 10a for Nina shows that deictic contexts with an overt *be* are as frequent as contexts with a missing *be*. However, contexts with overt *be* for Nina appear more productively starting in her earliest file, at age 1;11 and onward. In contrast, overt *be* for Peter (Table 10b) is much less productive than Nina's from his earliest file, age 1;9, onward up to the age 2;0. Stable production of deictic constructions with overt *be* is at the age 2; 1. Eve's data in Table 10c show that deictic contexts with a missing *be* are far more frequent than contexts with overt *be* up to the age 1;10. The Table also suggests that children start producing deictic contexts

without *be* then gradually start producing *be*. This becomes clearer if we compare Eve's

figures with Peter's up to the age 1;10. As shown in Table 10c for Eve below, four deictic

contexts with a missing *be* appear as early as 1;7, and only one with an overt *be* appeared

at 1;9. Those utterances are not instances of "telegraphic speech" because they were not

imitated utterances (Brown & Fraser, 1963, as cited in Brown, 1973). Stable production

of deictic constructions with overt *be* for Eve begins at the age 2;0. Deictic constructions

of the type *there/here* + pronoun + *be* (i.e., *there it is*) are very rare in the production data

and did not appear until age 2;0 (for Eve and Peter). Most of those cases are imitated

utterances. Peter produced six of those, while Nina produced five sentences of that

particular deictic type, starting from age 2;9. It seems from the data that acquisition of *be*

in deictic constructions occurs around age 2;0.

Table 10a: Nina's deictic obligatory contexts with *be*. (shade boxes mark the beginning of stable production over 50%)

	1;11	2;00	2;1	2;2	2;3	2;4	2;5	2;9	2;10	2;11	3;00	3;1
Nina	16/19	8/10	24/36	14/16	47/50	17/21	46/57	17/22	51/52	27/28	49/50	32/32

Table 10b: Peter's deictic obligatory contexts with *be*.

	1;9	1;10	1;11	2;00	2;1	2;2	2;3	2;4	2;5	2;6	2;7	2;8	2;9	2;10	3;1
Peter	1/2	1/5	0/1	1/2	11/18	11/17	19/26	10/11	56/58	15/16	47/50	37/72	19/25	39/49	40/42

Table 10c: Eve's deictic obligatory contexts with *be*.

	1; 06	1; 07	1; 08	1; 09	1; 10	1; 11	2; 00	2; 01	2; 02	2; 03
Eve	0/0	0/4	0/2	1/2	0/6	0/0	3/4	1/5	6/11	5/7

As shown in Table 11 below, use of *be* in DCs, within the age range specified by Becker,

is more productive than the use of *be* in ECs. Recall that, as in the case with ECs, the

higher rate of *be* production in DCs in Becker's could be explained in terms of her coding

method. Why is *be* in deictic constructions more productive than *be* in ECs? Is it because

of the semantic distinction between existential *there* and deictic *there*? Is the productive use of deictic *be*, being semantically empty, attributed to its need to attach to an element that has semantic content?

Table 11: Children's Average Rate of Overt *be* in DCs in both studies

Child	Age range	Deictic Expression (n)	Deictic expressions (n)(Becker 2000)
Nina	2;0 - 2;2	74.1% (46)	56.8% (40)
Peter	2;0 - 2;3	75.4% (43)	67.2% (58)
Eve	2;1 - 2;3	52.1 (12)	59.1% (22)
Average %		67.2%	61%

Only two cases of missing existential *there* with overt *be* were found. In each case, the utterance was repeated after one that contained *there*:

(30) Missing existential *there*:

    a. MOT: There was a green one.
       CHI : Was a green one. [Eve 1; 10]

    b. CHI: There was monkeys.
       CHI: Was monkeys climb on that # balloon. [Nina: 2; 1]

Why are null expletives rare? Cardinaletti (1990) answers by saying that expletives and quasi-argument drop is most unlikely because they fill A-positions and can not be topicalized (75-84). Infinitive verbs have been attested in finite contexts in child English in previous literature. While full verbs occur in the infinitive quite frequently, infinitive *be* in finite contexts is quite rare across different constructions. Table 12 below, taken from Phillips (2000), shows the rate of inflicted versus uninflected main verbs in declaratives and wh-questions for Adam (Brown 1973: CHILDES). It shows that the child used infinitive verbs 60% of the time in declaratives against 57% of the time in wh-questions. Becker (2000) also reports high rates of infinitives in three children, in Table

13. Although the age range for those children is only 2 and 3 months (for Nina and Peter, respectively) and 5 months (for Naomi), the data clearly show that full verb infinitives in child early English are quite frequent.

Table 12: Rate of finiteness on main verbs for Adam. (Phillips, 2000)

Adam 2;3-3;1	Inflicted V	Uninflicted V	% Inflicted
Declaratives	134	203	40%
Wh-questions	69	92	43%

Table 13: finiteness on main verbs for Nina, Peter and Naomi (Becker 2000)

	Inflected	Uninflected	% Uninflected
Nina 2;0-2;2	56	282	83%
Peter 2;0-2;3	178	117	40%
Naomi 2;0-2;5	61	49	45%

Infinitive *be* in obligatory contexts in child early grammar is not expected[15]. In the files of Nina, Peter and Eve, with wide age ranges that extend from the age 1;6 to the age 3;1, only two cases of infinitive *be* in existential contexts were found (31 a&b), and only one case of perfective *be* '*been*' in a deictic construction, shown in (31c).

(31) a. There be no more.   [Eve 2; 2]   [Existential]
     b. Sue # there be that's [//] Sue # there be # a little bit more. [Eve 2; 2] [Existential]
     c. There's been bend.   [Peter 2; 3:]   [Deictic]

Eve's use of infinitive *be* exclusively in an existential context and Peter's use of perfective *be* in a deictic context might suggest that children are using *be* as a full 'lexical' verb in existential constructions but as an inflection in deictic ones. When *be*

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[15] Adult African American Vernacular English (AAVE) has two options available for *be*: null *be* (i.e.; *She sick*) and uninflected *be* (i.e., *It be right there*). I assume that the children who contributed to the language corpus in this study were learning Standard American English (SAE) and were not influenced by AAVE.

appears as inflection, it does so as an inflected form only "i.e., there's". This might be evidence that children are using existential *be* as a verb, and using deictic *be* as inflection. This will give the deictic and existential forms a different status in the children's grammar. This will tie the acquisition of deictic *be* to inflection acquisition while existential *be* to lexical acquisition, in which children first learn the paradigmatic variants of *be* as separate lexical items, and then later on they realize that *be* has different realizations of the same morpheme (Ingram, 1985a as cited in Ingram, 1989).

The children showed two different lines of development for *be* in both ECs and DCs. What is uniform, however, is that *be* is missing in both constructions. The pattern in which children use *be* suggests that they are in transition and they are trying to control some syntactic operations involved in copula acquisition.

5.3.7.2 Production of *Be* Contractions:

The three children in this study used both contracted and uncontracted forms of *be* in both constructions. Table 14 clearly shows that contracted forms of *be* are more productive than uncontracted forms in both constructions (See also Cleave and Rice, 1997). Contracted forms of *be* are phonetically dependent on some other preceding elements, something which led Pinker (1984) to consider them as unanalyzed forms in early child grammar. In contrast, uncontracted forms of *be* are independent morphemes that are not phonetically attached to other morphemes. Steady production of uncontracted *be* might suggest that the children are not using it as a routine.

Table 14 also shows that third person allomorph of uncontracted *be* 'is' were supplied more significantly than the other uncontracted forms. It appears from the figures

in the Table below that contracted 3rd person be ('s) seems to be integrated in children's grammar before ('re). The few occurrences of *there're* are very rare and are imitated, as shown in (32). The only correct provision of contracted plural ('*re*) for Peter occurred at the age 3;1 in a deictic construction (33). Contracted plural ('*re*) for Nina was supplied twice in deictic constructions at ages 2; 10 and 3; 1. No tokens of ('re) were found in Eve's files.

(32) a. Peter 2; 5 There's leaves.

    b. Peter 2;6:
      PAT: There're three cows.
      CHI: There're three cows.

(33) Peter 3; 1:
     There're people going.

Brown (1973) also found that the three children in his study supplied the third person contracted form of both copula *be* and auxiliary–*be* more accurately than the other morphemes.

Table 14: Contracted vs. uncontracted forms of *be* across three children in both ECs and DCs

	Deictic constructions						Existential constructions					
	Contracted	Uncontracted					Contracted	Uncontracted				
		is	are	am	was	were		is	are	am	was	were
Eve	15	1	0	0	0	0	2	0	0	0	0	0
Peter	296	10	2	0	0	0	20	2	1	0	2	1
Nina	315	19	8	0	0	0	5	1	0	0	2	0

Brown (1973) distinguished copulas from auxiliary–*be* in three children based on his observation that auxiliary–*be* in obligatory contexts developed more slowly than the copula (p: 264-265). He noted that the acquisition of copula and auxiliary–*be* is most

puzzling as they do not develop steadily and as they keep appearing and disappearing in obligatory contexts. He tracked the development of 14 morphemes across three children including copula *be* and auxiliary–*be*. He found that uncontractible copula *be*, those forms that do not have a contractible counterpart in the adult grammar (i.e. *There it is*), was acquired before the other forms of *be*, ranking number 7. Uncontractible auxiliary–*be* is acquired next at number 12, then contractible copula, 13, and finally the contractible auxiliary at 14.

The criterion of acquisition according to him is when the morpheme appears in obligatory contexts 90% of the time. We should remember that the frequency at which each morpheme appears varies across children and that Brown did not mention the frequency of use for each morpheme.

Two questions arise about contractibility at this point: i) when do children produce the contracted forms of *be* for deictic and existential constructions? And ii) When do they produce the uncontracted forms of *be* for both constructions? Tables 15a, 15b and 15c below show the first emergence for contexts, contracted and uncontracted *be* in existential and deictic constructions across the three children. The Tables show that deictic contexts appear before existential ones, and that contracted forms of *be* appear in deictic constructions before they appear in the existential ones for all three children. Uncontracted forms of *be* in both constructions emerge around the age 2. Eve did not produce any uncontracted forms of *be* in existential contexts. Eve's production of uncontracted copula reached an average level of 80% in stage V, roughly corresponding to age 2;3. Brown (1973) points out that Eve's last three morphemes by stage V (age 2;3), that did not reach the 90% percent criterion, were uncontractible auxiliary–*be*,

contractible copula and contractible auxiliary–*be*. Those same morphemes did not attain criterion for Adam and Sarah by stage V, either (p. 272). Brown did not specify in which constructions those tokens of *be* appeared. It maybe that the tokens of uncontracted forms of *be* in the count for Eve were ones in constructions other than existential. Adam acquired uncontracted copula sometime between the ages 2; 11 and 3; 2 while Sarah between 3; 1 and 3; 8 and Eve after 2; 3 (p. 339).

Table 15a: First emergence of *be* in deictic and existential constructions for Nina:

Nina	Context	Contracted	Uncontracted
Deictic	1;11	1;11	1;11
Existential	2;0	2;0	2;0

Table 15b: First emergence of *be* in deictic and existential constructions for Peter:

Peter	Context	Contracted	Uncontracted
Deictic	1;9	1;10	2;0
Existential	2;1	2;5	2;3

Table 15c: First emergence of *be* in deictic and existential constructions for Eve:

Eve	Context	Contracted	Uncontracted
Deictic	1;7	1;9	2;0
Existential	1;10	2;3	0

The data suggest that deictic use of *be* is different from existential use of *be*, and that uncontracted forms of *be* for both deictic and existential constructions are also different. The data also shows that *be* in deictic constructions emerge before *be* in existential constructions. The Tables above show that the acquisition of *be* in existential constructions is delayed until after the age 2 years while existential *there* and deictic *there* and *here* as components that make up existential and deictic constructions are available as early as age 1;10. One hypothesis to make here is that there are two processes of *be* acquisition.

5.3.7.3 Definiteness:

So far, we have seen that existential *there* and deictic *there/here* are available from early on, and that *be* is missing in existential and deictic constructions. How about knowledge of definiteness and plural on the post-copular NP? The children in this study showed unstable use of the articles in their early files. They omitted both *a* and *the* in obligatory contexts and they also supplied them correctly. However, they displayed knowledge of the pragmatic functions of articles. In many cases the child used an article correctly then right afterwards omitted it, as in (34), and in other cases, the child omitted the article after it had been used by the parent, as in (35). The examples in (36) and (37) show that the child may use or omit the article when referring to some object in an immediate context.

(34) Nina 1; 11:
    CHI : Here's a kitty cat.
    CHI : Here kitty cat
    MOT: Here's a kitty

(35) Nina 1; 11:
    MOT: Where's the baby monkey?
    CHI : There baby monkey.
    CHI : Baby monkey there.

(36) Peter 1; 10: [Peter taking pen and paper to Mother]
    CHI : Here's a penny. (Meaning 'a pen')
    MOT: Pencil.

(37) Nina 1; 11:
    MOT: Do you want to find the cow?
    CHI : Here's cow.
    MOT: No # that's a horse.

The literature has shown that children omit articles frequently in obligatory contexts in their early grammar (Brown, 1973; Hyams & Wexler, 1993; Hoekstra & Hyams, 1995). Children first learn by observing objects that they can see and touch. They frequently refer to observable objects by pointing or gesturing. Thus the referent is almost always something in the concrete world. A lot of times they refer to things specific to them. Schafer and deVilliers (2000) showed in a study conducted on children from ages 3; 6 to 5; 5 that children acquire specific indefinite articles (where the referent is only specific or known to the speaker- the child) before they use the definite article *the* appropriately. Although their subjects are older than the ones in this study, the study shows that children acquire the specific use of indefinite articles before the specific use of definite articles. The fact remains that children used articles optionally in their early grammar. This study shows that yet another component that constitutes existential and deictic constructions is also missing.

Children seem to have the semantic knowledge of plural and singular as early as Stage I. They use *more* and the numeral *two* to refer to more than one and used nouns in agreement with determiners such as *a*, *these* and *those* (Brown, 1973: 331). The acquisition of plural morphemes ranked fourth in Brown's 14 morphemes. *Be* in deictic and existential constructions has to agree with the post-copular NP in number. The production data shows that the three children supplied subject-verb agreement correctly most of the time. Examples of subject-verb agreement errors are shown in (38) below. No subject-verb agreement errors in either construction were found in Eve's data, while Peter and Nina made a few. Most of those errors appeared at a later age than Eve's last file (at age 2;3). Most of Peter's errors appeared beyond the age 2;5. He made one error at age

2;1 and another one at age 2;3. He made ten errors at the age 2;5. On the other hand, Nina made one error at the ages 2;0, 2;3 and 2;5. She made two errors at age 2;9 and six at the age 2;10. Table 16 shows that the children made more subject-verb agreement errors in DCs than in ECs. This is expected as the overall tokens of DCs are much higher than ECs. The higher the number, the more likely that errors will appear.

(38) a.There's girls.   (Peter 2; 3)
     b. Here's a pliers   (Peter 2; 5)
     c. There's two cowboys. (Nina 2; 9)

Table 16: subject verb agreement errors in DCs and ECs

	DCs (n) (t=total)	ECs (n) (t=total)
Nina	6.9% (26) (t=346)	27.2% (3) (total=11)
Peter	9.1% (31) (t=308)	13.3% (4) (t=30)

Ingram (1989) argues that children seem to acquire a structure-independent agreement rule before a structure-dependent one in forming Wh-questions. The structure-independent agreement rule instructs children to inflect the verb to agree with a preceding noun. Therefore, sentences (39a) and (39b) below, taken from Ingram (p. 67), are acceptable to children, while (39c) and (39d) are not. However, children do not seem to apply a structure-independent agreement rule in DCs and ECs. One reason could be that the copula is always preceded by *there* or *here*, NPs that are underspecified for number features (Hazout, 2004). I assume that children know that *there/here* are not like the other NPs that have number agreement features. Therefore, they are forced to look for a candidate NP following *there*/*here* to check number agreement features against. I argue here that children seem to be using a structure-dependent rule in ECs and DCs by which children inflect *be* to agree in number features with the post-copular NP. It seems that

129

children are figuring out that those two constructions are not like any other construction. However, it might be the case that children are applying the structure-dependent agreement rule in ECs and DCs by the time they are using the structure-independent agreement rule in other constructions, hence the confusion that yields the figures for subject-verb agreement errors in Table 16 above. The subject-verb agreement errors are minimal and probably are due to performance factors.

(39) a. *Which balls are the boy throwing?
b. *Which ball is the boy throwing?
c. Which balls is the boy throwing?
d. Which balls are the boys throwing?

The children's acquisition of the different components of deictic and existential constructions with the exception of *be* and the articles contradicts the lexical-syntactic Integration Hypothesis (Cohen Sherman & Lust, 1995). Cohen Sherman and Lust conducted a study on children's comprehension and production of control constructions, ones that contain PRO. They showed that children exhibited knowledge of the different components that make up control complements by the age of 3 years, not only in comprehension but also in production. The children in their study failed to distinguish clearly between subjects and object control verbs. They allowed PRO to be controlled by the verb regardless of its control type. They conclude that children take longer to acquire the lexical knowledge of control complements and that they know the components of ontrol constructions individually, but they do not know how to "integrate" them syntactically. It takes them awhile to integrate syntactic and lexical knowledge in control constructions.

The data show that children acquire lexical knowledge of existential and deictic constructions from an early age. However, *be* in both constructions is missing from an early age. It is not a matter of putting the words into sentences. As we have seen earlier, they have the concept that underlies existential and deictic expressions. Their knowledge of existential interpretation is demonstrated by their use of existential *there* with another locative to state the existence of an object. The parents' many confirming and expanding utterances of the child's utterances provided evidence that the child understood the existential as a concept. They also know how to state the non-existence of an object by using negated existential constructions. On the other hand, the children seem to have the knowledge of the pragmatic functions of deictic *there/here* well before the age of two. The examples shown above indicate that children use *there/here* to refer to things both exophorically (referring to things from the immediate context) and endophorically (referring to things from the discourse).

5.3.7.4 Auxiliary–be constructions:

The children in this study exhibited productive use of the different inflected forms of auxiliary–*be* and all its allomorphs (is, 's, are, 're, am, 'm). Production of progressive *be* "being" (40a-c), perfective *be* "been" (40d), infinitival *be* "be, to be" (40e) is rare**:**

(40) a. Eve 2;0:
     CHI: Fraser being silly.
     CHI: You being silly.

   b. Eve 2;0: [wipes up some juice that Eve had spilled on couch]
     CHI: <While me> [/] while me being sitting on it.

   c. Peter 3;1: I'm being silly.

d. Eve 2;2
    CHI: Sing # I been working on the railroad.
    MOT: We'll sing that after lunch.

e. Eve 2;3
    CHI: We be coming down, Gwowia.

The types of auxiliary–*be* constructions that were included in the count were overt and covert forms of auxiliary–*be* in progressive constructions (both in the present and in the past tenses), declarative, interrogative and passive constructions (both present and past tenses), and constructions containing '*gonna*'. Excluded from the count were instances of ellipsis where evidence of otherwise could not have been obtained from the discourse. Examples of ellipsis each with evidence and without evidence are given in (41). Also excluded are repeated sentences as in (42)

(41) a. Peter 1; 9:
    PAT: Peter # do you hear Jennifer?
    CHI: Crying.   [Not ellipsis - see following utterance]
    PAT: She's crying # yes.

  b. Eve 2; 00:
    COL: Do you know [//] do you want to know where she put the pudding?
    CHI: Putting yesterday put the pudding.   [Ellipsis]

  c. Sarah 2; 11
    MOT: What do you do down (a)t the beach?
    CHI : Playing.   [Ellipsis]

  d. Nina 2; 00:
    MOT: What is this rabbit doing ?
    Nina: Eating.   [Not ellipsis]

(42)   Nina 2; 00:
    MOT: Is Ari sleeping?
    CHI: Ari sleeping.

Cases where the perfect participle forms of the verb were used in non-passive contexts were not counted, as in (43). "Finished" is an adjective in that context. Among the other children, Peter was particularly the only one who used perfect participle forms of verbs frequently as adjectives.

(43) Peter 2; 00:
    CHI: All finished .
     LOI: It's not all finished yet.

Excluded from the count are gerunds of the type shown in (44b). Gerunds are analyzed as bare TP/IPs that do not require auxiliary–*be* (Pires, to appear). They are excluded because they are not c-selected by the auxiliary–*be*, as is the case in auxiliary–*be* constructions. The structures in (45) represent both an auxiliary–*be* construction and a gerund construction respectively:

(44) a. Baby's crying # upstairs.   [Peter 2;1]
     b. I see it coming.   [Peter 3;1]

(45) a. Baby's crying # upstairs.

   b.   IP
           ╱────────╲
        DP   I'
        baby   ╱────╲
              I   VP
             's   ╱────╲
                  Spec   V'
                         ╱────────╲
                      V   VP
                    ('s)   ╱────╲
                             VP   DP
                           crying   upstairs

133

c. I see it coming.

d.
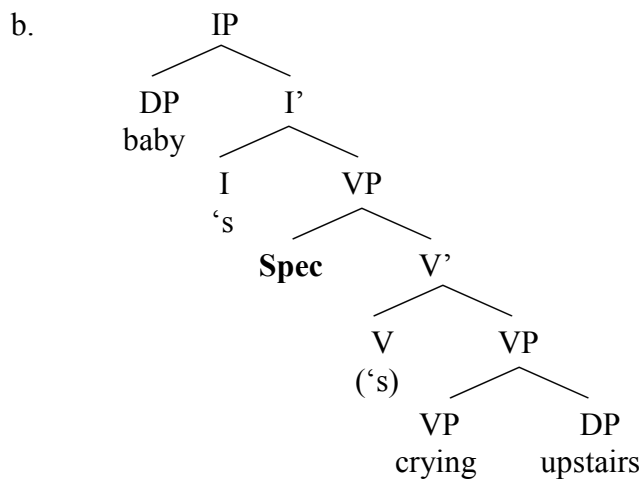
```
                    IP
              _____|_____
            DP            I'
            I          ___|___
                      I       VP
                          ____|____
                        Spec      V'
                             _____|_____
                           V     DP      CP
                          see   /__\    __|__
                               it i    C'
                                    ___|___
                                   C      IP
                                      ____|____
                                    NP        I'
                                    |      ___|___
                                    t_i   I      VP
                                               /__\
                                              coming
```
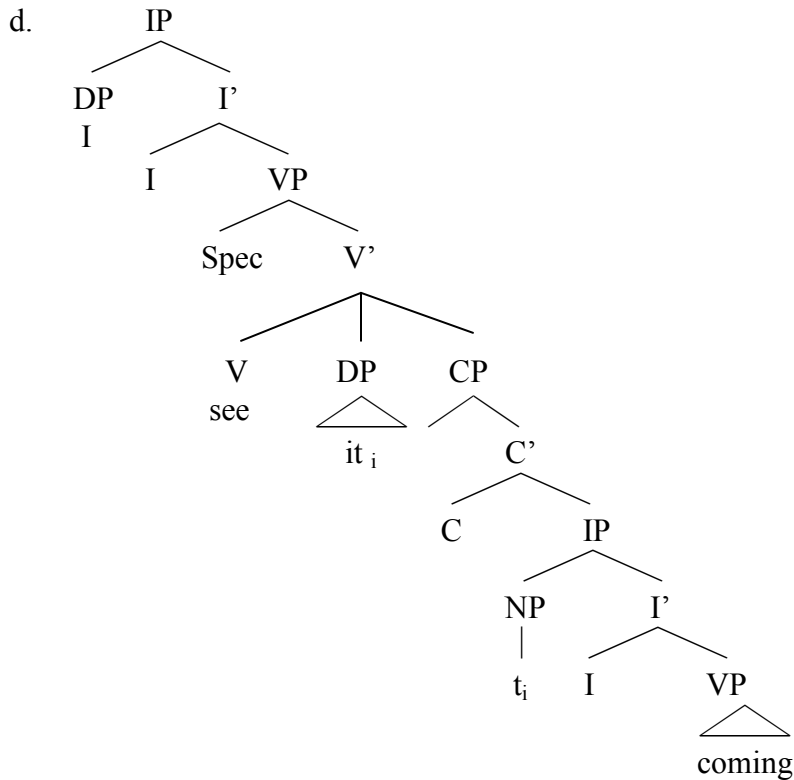
The children omitted auxiliary–*be* in different environments. They dropped it in declarative affirmative sentences (46a), in sentences with negation (46b), and in questions (46c). They also dropped it along with the subject in questions as in (46d), and in declarative sentences as in (46e, f).

(46) a. Eve 1; 7:
  MOT: What are you doing Eve?
  CHI: I banging.

  b. Nina 2; 4:
   CHI: I not going a bed

  c. Eve 2; 3:
   CHI: Where he going?

  d. Eve 1; 8:
   CHI: What doing # Mommy?

e. Peter 2; 2: [pushing a car around]
   CHI: Going to Nana's house to see Nana.

f. Nina 2; 3:
   CHI: Gonna visit the horse.

Progressive constructions without auxiliary–*be*, which Brown calls "the primitive progressive", were the first among the 14 morphemes to be acquired. He ranked constructions with uncontractible and contractible auxiliary–*be*, which he calls "the full auxiliaries", number 12 and 14, respectively. The production data in this study confirms this observation. The figures for auxiliary–*be* in Table 17 below show that the children have productive use of auxiliary–*be* and also show a higher rate of *be* omission across the three children. The children omitted *be* in obligatory contexts 56.8% of the time. The higher rate of auxiliary–*be* omission might have to do with the presence of the morpheme –*ing*. It maybe that children depend on the verb +*ing* to mark progressive. The rate of *be* production in both DCs and ECs is higher in comparison to auxiliary–*be* production. Although the overall number of tokens for *be* in ECs is low compared to *be* in DCs on the one hand, and to auxiliary–*be* on the other hand, the fact remains that children seem to be acquiring *be* through a mechanism that allows them to identify *be* in ECs separately as a distinct form of *be*.

Table 17: Production of and omission of *be* in existential and deictic constructions.

Child / File Range	Auxiliary-*be* Constructions		Deictic Constructions		Existential constructions	
	Missing *be* (n)	Overt *be* (n)	Missing *be* (n)	Overt *be* (n)	Missing *be* (n)	overt *be* (n)
Nina 1;11-3;1	52.2% (835)	47.7% (762)	15.% (45)	84.8% (343)	11.7% (2)	88.2% (7)
Peter 1;9-3;1	26.3% (287)	73.6% (804)	21.8% (87)	78.1% (308)	18.8% (11)	81.1% (26)
Eve 1;6-2;3	90.6% (368)	9.3% (65)	62.1% (25)	37.8% (16)	63.6% (5)	36.3% (2)
Avrg %	56.3%	43.5%	32.9%	66.9%	31.3%	68.5%

Table 18a below shows that contexts of auxiliary–*be* missing *be* appeared first in Eve's earliest files, and remained far more frequent than contexts with overt auxiliary–*be* until her last file, at age 2;3. Her production of auxiliary–*be* did not reach the criterion of acquisition (more than 50%) even until the age 2;3. Peter's omission of auxiliary–*be* in Stage I is quite frequent, but it becomes even more frequent as he enter his Stage II. Peter dropped auxiliary–*be* eleven times by the end of Stage I (age 2;0), but he dropped it even more as he entered Stage II. If we compare auxiliary–*be* production up to the age 2;3 across the three children, Tables 18b and 18c, we will see that its production has not yet reached the criterion of more than 50%. However, it reaches criterion starting from ages 2;4 and 2;5 for Nina and Peter, respectively, and onward, suggesting that it has been acquired. Therefore, it is reasonable to claim that auxiliary–*be* is acquired at around the age 2;5. It is important to note that auxiliary–*be* omission continues up to the age 3;1.

Table 18a: Production of auxiliary-be for Eve.

	1;6	1;7	1;8	1;9	1;10	1;11	2;0	2;1	2;2	2;3
Eve	1/4	0/6	0/15	0/42	3/34	0/0	7/51	11/84	28/135	15/54

Table 18b: Production of auxiliary-be for Peter.

	1;9	1;10	1;11	2;0	2;1	2;2	2;3	2;4	2;5	2;6	2;7	2;8	2;9	2;10	3;1
Peter	0/2	0/0	0/3	1/6	6/43	6/21	21/53	52/74	76/110	93/130	147177	134/158	54/65	135/159	79/90

Table18c: Production of auxiliary-be for Nina.

	1;11	2;0	2;1	2;2	2;3	2;4	2;5	2;9	2;10	2;11	3;0	3;1
Nina	4/70	4/93	22/66	25/126	36/138	13/73	74/184	61/117	136/189	84/115	120/173	99/147

Brown (1968) links the acquisition of the category Aux (*does*, *did*, *be*, and modals) to the acquisition of subject-Aux inversion and Wh-movement. Before these two constructions emerge by stage III, use of Aux is considered to be a memorized routine or

"non-transformational". Kuczaj and Maratsos (1983) argue that children acquire Aux in declaratives separately from Aux in Yes-No questions before they realize that both instances are of the same category Aux. They based their argument on the observation that their subject Abe showed knowledge of the different distributions of Aux in declaratives but not in yes/no questions. This observation led them to conclude that Aux in declaratives is acquired before Aux in questions. This could be true of Nina and Peter but not of Eve. Auxiliary–*be* in wh-questions appeared about the same time as auxiliary–*be* in declaratives for Eve. In contrast, auxiliary–*be* in questions did not appear until ages 2;2 and 2;3 for Nina and Peter, respectively, while it appeared in declaratives in their earliest files. In sum, the production data show that ECs are not as frequent as the other constructions in child early grammar. The pattern of *be* acquisition in ECs is different from *be* acquisition in DCs and from auxiliary– *be* acquisition. The rate of auxiliary– *be* omission is higher than the rate of *be* omission in ECs and DCs. We have seen that children use an over *be* in ECs and DCs more than they omit it, while they omit auxiliary–*be* more than they use it. The omission and provision of the copula and auxiliary–*be* clearly suggests that children are following two different developmental paths of acquisition. Hypothesis two would be that children are using auxiliary–*be* at different times than copula *be*.

5.3.7.5 Null Subjects in ECs, DCs and Aux-*be* constructions:

For a long time child language researchers have been puzzling over the occurrence of Root Infinitives (RIs) – infinitives in main clauses – in early child language. Two major hypotheses have been proposed to explain RIs, exemplified in (47):

Underspecification of tense approaches (See, Hoekstra and Hyams 1995; and Wexler 1994, 1999) and the truncation model (Rizzi, 1993, 1994).

(47) a. Eve 1; 8:   Oh tape run fast.
     b. Peter 2; 00: Tape go round.
     c. Peter 2; 1: [looking around for egg]
                     CHI: where egg # go.

In a structural representation, tense specification is encoded in the node T. Therefore, copula *be*, auxiliary-*be*, *do*, modals, the past tense morpheme –*ed*, and the third person present morpheme –*s*, are all hosted under T. The assumption is that when the tense feature in T is underspecified, the morpheme that spells it out gets omitted and the infinitive forms of the lexical verb shows up. The Underspecification of tense account is compatible with sentences that have lexical verbs as main verbs. However, copular and auxiliary–*be* sentences in which *be* and auxiliary–*be* is omitted can not be explained by a framework based on an Underspecification of tense account. Copula *be* and auxiliary–*be* almost never occurs in the infinitive form (to be). I found only two instances of infinitive *be*, given in (48).

(48) a. Nope # they be going for a walk.   [Peter 2;10]
     b.We be coming down, Gwowia .   [Eve 2; 3]
        Gloria, you be sittin(g) on the chair ?

The omission of *be* and auxiliary–*be* can not be explained by Rizzi's truncation model, simply because the truncation operation does not target projections in the middle of the structure. If copula *be* or auxiliary–*be* is truncated from the middle, why is the subject not truncated as well? A detailed discussion of Rizzi's model will follow.

Much of the literature has reported evidence that children drop subjects in their early grammar (Hyams and Wexler, 1993; Valian, 1991) and that the rate of null subjects in infinitive sentences is much higher than in finite ones (Guasti, 2000: 164). Rizzi (1994) argues that children seem to be selective when they drop subjects and that subject drop in child grammar seems to be constrained by distributional conditions. For example, he examined Eve's files and found 12 cases of null subjects out of 191 wh-questions where the Wh-word is not the subject, while in contrast, he found over 50% of null subjects in declaratives in Adam's first 10 files (p. 152, 153). Subject drop, he concludes, tend to occur in the first position of the sentence. Null subjects with auxiliaries and modals in English are rare. According to Plunkett and Stromqvist (1991) children tend to drop subjects with auxiliary verbs less frequently than with lexical verbs. It has also been shown that subjects with modals were dropped less frequently than subjects with lexical verbs, 5% against 11% (Valian, 1991). Valian (1990) reports 1% to 6% null subjects with modals in declarative sentences. Phillips (1996: 593) observes that Eve supplied null subjects in inflected and uninflected verbs at the same rate, while Adam's rate of null subjects in uninflected verbs is a little higher. Based on this he argues that finiteness has no effect on the omission or provision of subjects in early English grammar. Adam dropped the subject from copular constructions only 11.4% of the time, but he dropped it from finite lexical verbs 41% of the time. Eve, on the other hand, did not show null subjects in copular construction at all, but she dropped the subject from finite lexical verbs 26% of the time (Schutze and Wexler, 1996b, as cited in Hamann, 2002: 236).

Subject drop in existential and deictic constructions is almost nonexistent. It is important to note here that it is hard to tell if *there/here* is dropped in an existential and

deictic construction in early child grammar. That is simply because a construction with *there/here* omission could be confused with a locative or a nominal predicative construction. For example, an utterance such as (*is mommy*) could either be a deictic construction (*There is mommy* or *Here is mommy*) or a simple predicate nominal construction interpreted as (*She is mommy* or *This/that is mommy*). To be able to tell which is which, a controlled study needs to be conducted. In (49) and (50) below, there is evidence that what is missing in the child's utterances is neither deictic nor existential *there* but a demonstrative, hence a predicate nominal. However, none of the tokens of ECs or DCs that I have come across and have included in the count had a null subject, except for Nina and Eve's utterances in (30) above. That being said, I conclude that existential-and-deictic-*there* omission is very rare in children's early grammar.

(49) Peter 2; 5:
  PAT: Mm # that's a big chair.
  CHI: Is a big chair # this [!!] is a chair # where's a table?

(50) Peter 2; 8: [Pat pointing to arrow Patsy drew]
  PAT: That's an arrow.
  CHI: Is a car.

In contrast, null subjects in auxiliary–*be* constructions are not confused with other constructions. The presence of a verb plus *–ing* gives it away. The subject position in auxiliary–*be* constructions is specified for ɸ-features and must check its nominative Case against INFL. However, Schutze and Wexler (1996a) found that children mark subjects with either nominative or accusative Case, hence deviating from the adult grammar. Gruber (1967) argues that the accusative Case is the default Case in child infinitive

sentences. Schütze (1997) observes that children mark the subject in infinitive and null copula constructions for both nominative and non-nominative Case, while they almost always mark subjects of a finite copula and a finite main verb with nominative Case. The production data confirm just that.

In Table 19 below I provide Case distributions and subject types in auxiliary–*be* constructions across the three children. Nina and Peter dropped the subject in null auxiliary–*be* constructions a little over 50% of the time. They used overt subjects marked for nominative Case 23% and 37% of the time respectively. Subjects marked for accusative Case in null auxiliary–*be* constructions are rare across the three children. Interestingly enough, Eve's data goes in quite the opposite direction in terms of subject provision. She used nominative subjects 62.5% of the time while she dropped the subject 5.4% of the time. In contrast, the pattern of Case and subject provision is strikingly more uniform across the three children in overt auxiliary–*be* constructions. They marked the subject for nominative Case 82.2%, 75.7% and 73.6% of the time for Nina, Peter and Eve, respectively. Null subjects and overt subjects in accusative Case in overt auxiliary–*be* constructions are very rare. The data confirm Schütze's observation above. There seems to be a connection between finiteness and overt subjects on the one hand, and between finiteness and nominative Case on the other. Recall from Phillips' (1996) mentioned earlier that Eve supplied null subjects in inflected and uninflected verbs at the same rate. However, Eve did not supply a null subject in overt auxiliary–*be* constructions.

There is also another interesting pattern of subject provision. The children supplied pronominal subjects in both overt and missing auxiliary–*be* contexts more than non-pronominal ones. Non-pronominal subjects include common nouns, proper names, and

demonstratives (i.e., *those sliding down*). In contrast, Becker shows that children used pronominal subjects quite productively (more than 50% of the time) with all of the different types of predicate nominals. However, she showed that pronominal subjects were supplied almost exclusively in nominal predicates more than in adjectival and locative predicates. Based on this observation, she argues that the use of pronominal subjects has to do with finiteness, hence the higher rate of overt *be* in predicate nominal.

Table (19): subject type with missing be versus overt be in Auxiliary be constructions.

	Auxiliary-*be* Constructions							
	Missing auxiliary-*be*				Overt auxiliary-*be*			
	Nom (Pron) (n)	Acc (Pron) (n)	NP (n)	Null (n)	Nom (Pron) (n)	Acc (Pron) (n)	NP (n)	Null (n)
Nina	23.7% (198)	5.7% (48)	18.3% (153)	52.2% (434)	82.2% (627)	0	17.3% (132)	0.3% (3)
Peter	37.6% (108)	0	9.4% (27)	52.9% (152)	75.7% (609)	0.1% (1)	23.6% (190)	0.4% (4)
Eve	62.5% (230)	2.4% (9)	29.6% (10)	5.4% (20)	73.6% (28)	2.6% (1)	23.6% (9)	0% (0)
Avrg %	43%	2.7%	19.1%	36.8%	77.1%	0.9%	21.5%	0.2%

In contrast, existential and deictic *there* is almost always present whether or not *be* is omitted, suggesting that the licensing mechanisms for subjects in those two constructions are different. Since *there* is never dropped but *be* is, I assume that the associate NP in ECs and DCs is licensed through Case transmission from *there*, following Chomsky's proposal.

5.3.7.6 Becker's Analysis:

Becker draws on her account for the provision and omission of *be* in child grammar based on Carlson's (1977) distinction between stage-level properties- ones that apply to stages- and individual-level properties that apply to individuals. Stage-level predicates

assign temporary/non-inherent properties to the subject while individual-level predicates assign permanent/inherent properties to the subjects. Based in this distinction, SL predicates are associated with locatives while IL ones are associated with nominal predicates. Becker argues that SL predicates contains a functional layer Aspectual Phrase (AspP) and that an Event argument is projected as the complement of the head of that AspP (Asp°). This Event argument is lower than SpecIP but higher than the subject which is projected within the VP shell. The head Asp contains the feature [+temp] which licenses tense and renders overt *be* redundant. In contrast, IL predicates do not contain an Event argument, but instead a thematic argument that occupies SpecIP. No AspP is projected, hence the obligatory presence of *be*. Therefore, in (51) the meaning of a SL predicate is realized by the presence of the Event argument and AspP but not the presence of *be*. *Be* functions as the spell out of finiteness, which she defines as INFL being bound by T_{op} in CP. Becker argues that non-finite *be* has two non-finite forms: (i) uninflected overt form (*be*) and (ii) the null form (p. 13). She assumes that there is a single copula *be* and that the differences between SL and IL predicates are only structural.

(51) The man is in the kitchen.

Becker adopts Chierchia's (1995) arguments that existential constructions are incompatible with IL predicates, but they are compatible with SL predicates. Only SL predicates are allowed in the coda of an existential construction, as shown in (52). Chierchia argues that in an IL predicate the generic operator that binds the variable in the predicate is a strong determiner that causes the predicate to be incompatible with an

existential coda. What that means is that an AspP with an Event argument in SpecAspP is projected as the complement of *there+be* in existential constructions.

 (52) a. Dogs are mammals.   (Generic only)
      b. Dogs are in the park.   (Generic or existential)
      c. *There are dogs Chihuahuas.
      d. There are dogs in the park.

As far as the licensing of the associated NP is concerned, Becker follows Lasnik (1995) and Belletti (1988) by arguing that the associated NP in existential constructions gets an inherent partitive Case from *be*. Inherent partitive Case of the associated NP is checked in the same manner as unaccusatives check Case (Lasnik, 1995: 618). Based on this analysis, Becker assumes that *be* is overt in English child ECs because it is needed to license the associated NP. However, we have seen that *be* can be dropped in ECs and in DCs but *there* can not be dropped in either construction. Therefore, I maintain that the associated NP in ECs is licensed through Case transmission from *there*, as originally proposed by Chomsky (1986, 1993). Chomsky treats existential *there* separately from deictic *there*. The principle merge-over-move that simply inserts *there* in the derivation is more complicated than deictic *there*. Existential *there* seems to be analyzed as inflectional while deictic *there* is analyzed as lexical. This analysis is quite the opposite to one that assumes existential *be* as lexical and deictic *be* as inflection. The higher rate of overt *be* and the prohibition against null subjects in ECs and DCs must be due to a mechanism of some sort that is specifically operative in both constructions.

5.3.7.7 Truncation Account (Rizzi, 1993/1994):

Rizzi's (1993/1994) Truncation Account has been originally proposed to account for null subjects and RIs in child early grammar. The truncation account assumes CP to be the root of all adult clauses whether finite or non-finite. However, in child grammar the projection of CP is optional. The child can truncate CP, thus IP becomes the root of the clause. When IP is truncated, VP becomes the root. However, CP must be present if there is material that requires it (ex. a *Wh*-word in root questions). The truncation operation applies from the top down, targeting functional projections below CP as shown in (53). When a projection is truncated, all higher projections must be missing. When a projection is activated, the lower projections must also be activated. In other words, the structure can be truncated anywhere and is limited by the material that has to be accommodated. Therefore, it assumes a slow and sequenced build-up of functional projections. What is crucial is that the truncation operation does not target projections that are in the middle of the structure. For example, in (53) NegP can not be removed without removing all of the higher projections AgrSP and CP.

(53) CP > AgrSP > NegP IP > AgrOP > VP

The predictions that the truncation approach makes is that if the structure is truncated down to the level of AgrP, which is projected below TP but above VP, then the result will be a RI (a bare verb in English) with an overt subject in Spec AgrP, as in (54a). If the structure is truncated down to the level of VP, then we get a RI (bare verb) with a null subject in Spec VP, as in (54b). If IP is present, but CP is not, then the result is a finite clause with a null subject in SpecIP, as in (54c & d). If CP is activated, only

overt subjects are licensed in SpecIP, as in (54e). How about missing projections in the middle of structures such as (54f)?

(54) a.Oh tape run fast.   [Eve 1; 8]
    b. Eating a carrot.   [Nina 1; 11]
    c. Is hiding in the water. [Nina 2; 10]
    d. Was racing.   [Peter 2; 8]
    e. There's money in here.   [Peter 2; 5]
     f. There __more.

To capture cases of finite null subjects (54c & d), Rizzi uses the diary-drop register described in Haegeman (1990) as a model for his approach. Subjects can be dropped in adult grammar. Those subjects can be either non-thematic, 1st person or 2nd person:

(55) a. Sounds like fun!
    b. Had a great time last night!
    c. Wanna eat?

The Empty Category Principle (ECP) or the "null constant" in Rizzi's terminology violates the Identification Requirement that non-pronominal elements must be identified by an antecedent sentence-internally. Rizzi reformulates the Empty Category Principle to make it possible for empty categories or null subjects in finite contexts to be identified via discourse. His reformulation of ECP reads as follows:

(56) "An empty category [-p] must be chain connected to an antecedent if it can."

What that means is that if CP is truncated, as indicated by the shaded box in (57) below, the "null constant" (NC) in SpecIP can no longer be licensed by a higher position.

However, this NC occupies the topmost position and can get its interpretation through discourse. It can get discourse-linked (D-linked). Similarly, if both CP and IP are truncated, empty subjects in SpecVP can not and does not have to be licensed by a higher position, so empty subjects will surface with infinitives. A clause-internal mechanism is no longer needed. The finite verb in this case could be a lexical verb, copula *be* or auxiliary–*be*.

(57) __was racing. [Peter 2; 8]

```
        CP
       /  \
         C'
        /  \
      C     IP
           /  \
         DP    I'
         NC   /  \
            I     VP
           was   /  \
              Spec   V'
                     |
                     V
                   racing
```
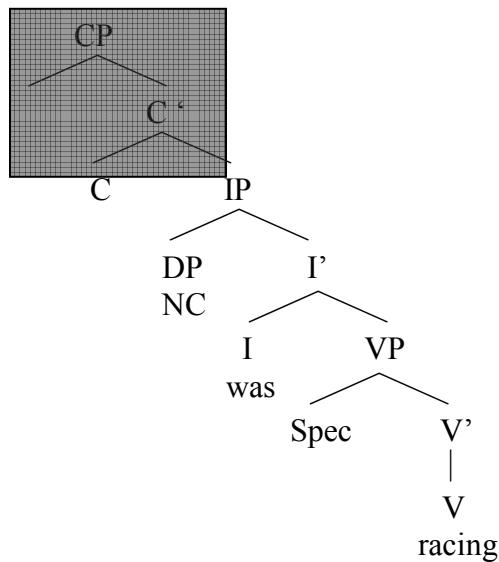
Based on this analysis, NCs are not predicted in wh-questions because CP is projected to host the fronted *wh*-word thus serves as the root of the clause. In other words, the projection of CP is driven by the fronted wh-word. Because of the projection of CP, root infinitives can not occur. The wh-element is not the proper identifier of NC. However, null subjects in wh-questions exist in Peter's and Eve's early grammar. Out of Eve's 60 tokens of wh-questions containing auxiliary-be, 8 contain null subjects (58). Valian (1991) found a very low percentage of null subjects in wh-questions (9 null subjects out

of a total of 552 wh-questions). Roeper and Rohrbacher (2000) also showed that out of Adam's 327 wh-questions, 115 contained a null subject, constituting 35% of the questions. The examples in (58) are problematic for the truncation approach.

(58) a. What doing?   [Eve 1; 8]
    b. What doing up there?   [Peter 2; 4]

A question to ask here is, in the case of echo questions, in which the *wh*-word remains in situ, is CP also activated so that the sentence can be interpreted as a question or so that the wh-word can raise to CP? Can CP be activated for interpretative reasons?

    Rizzi uses the diary drop register as an "escape hatch". The reformulation of ECP and the incorporation of the diary drop register as to make null subjects in finite contexts survive goes against the essence of the truncation approach in its original version. Stipulating two different kinds of subjects in finite and non-finite contexts within a single theory takes away its explanatory and predictive power.

    What predictions does the Truncation make about the acquisition of copula *be* and auxiliary–*be*? In an existential construction such as Peter's in (59), represented in (60), in which both *be* and *there* are present, the CP system is activated together with all other projections below it. Existential *there* is inserted in the subject position in Spec IP and is licensed by the higher projection CP. The prediction then is that root infinitive could not occur, hence a finite form of *be*. Also, a null subject could not occur.

(59) There's money in here. [Peter 2; 5]

(60)

```
              CP
           /      \
          C        IP
               /       \
             DP          I'
            there      /    \
                      I      VP
                          /      \
                         V        V'
                        is      /    \
                               V      SC
                              is    /    \
                                  DP      PP
                                  money   in here
```
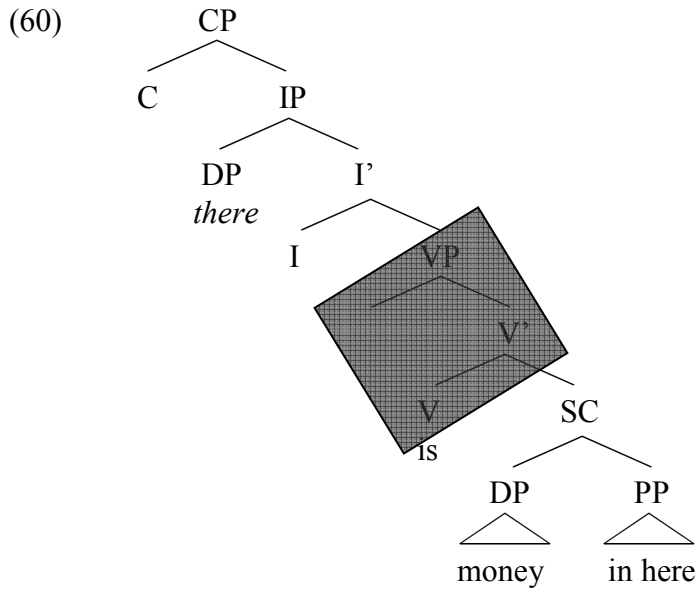
However, what is not predicted are cases of null *be* and null auxiliary-*be* with overt subjects. The fact that children produced sentences with non-null expletive subjects with finite *be* in existential constructions and in other constructions suggests that children at this point have already acquired CP. The presence of *there* in Spec IP in (59) indicates that CP is activated. What that means is that all lower projections must also be activated. Recall that projections in the middle of the structure can not be truncated. The examples in (61) show that the projection that hosts *be*, whatever it is, is omitted from the middle of the structure, hence violating the truncation principle. In (61a), CP system is activated, functioning as the root of the clause, and existential *there* is inserted in Spec IP. However, VP is truncated, hence the omission of *be*. In (61d), VP, in which auxiliary-be is base-generated, is truncated, while CP and IP are not. In (61c) the CP system is activated to host the *wh*-word *what*, then the subject moves out of the Spec of VP to Spec IP. Auxiliary-BE needs to raise above Spec IP in order to invert with the subject, specifically to C, but then again VP is truncated, resulting in auxiliary-be omission.

(61) a. There more.   [Eve 1; 10]
     b. I getting my chair. [Peter 2; 4]
     c. What he doing?   [Nina 2; 10]

In (62) below I assume that copula *be* has been truncated. However, according to the predictions of the truncation approach, existential *there* must also be truncated. Why can truncation only cut off copula *be* but not existential *there*? This is obviously not a case of 'null constant'. That is because the 'null constant' analysis only accounts for null subjects in finite clauses. NCs are licensed by discourse. They have semantics in them, hence the stipulation that they get D-linked. In contrast, existential *there* is empty semantically. It does not need to be D-linked. It is only a grammatical element. Why is a null subject allowed in (57) but not in (62)? Activation of a projection within the truncation approach follows from structural economy, that projections are activated by morphological materials. However, we have seen that NCs in finite clauses survive because they get interpretation from the discourse. In contrast, expletives are empty semantically. They can not be D-linked. If we assume that positions projected for interpretation, as is the case with existential constructions, can not be cut off by truncation, then we could say that existential *there* is licensed because it is in a position needed for interpretation. However, this contradicts the notion of 'truncation' as outlined earlier. How could we explain cases of non-null-subjects with missing copula? Why do children sometimes drop copula *be* and sometimes use it? The truncation approach can not explain the different rates of null *be* and overt *be* across the different constructions including existential and deictic constructions. There must be some other mechanism responsible for the omission of VP in non-null-subject constructions.

(62) a. There another page in here. [Nina 3; 1]

b.
```
              CP
             /  \
            C    IP
                /  \
              DP    I'
             there /  \
                  I    SC
                      /  \
                    DP    PP
                   /\    /\
          another page  in here
```
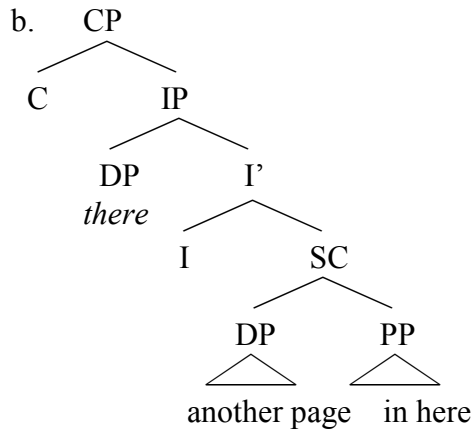
Since the associated NP raises to Spec IP and attaches to existential *there* at the LF, I assume that the truncation operation does not target material that is needed at the LF component for interpretive reasons. In other words, the associated NP is not subject to truncation when it attaches to existential *there* at the LF interface of the derivation. This stipulation follows from the assumption that Full Interpretation must be met for the derivation to survive.

5.3.8 Conclusion:

In this chapter I have shown that the acquisition of *be* in existential constructions follows a different pattern of development than deictic *be* and auxiliary–*be*. Existential contexts appear later than deictic ones and are much less productive. The components that make up both existential and deictic constructions appear from early on but they are used deictically before they are used to state the existence of objects. Children's use of infinitive *be* exclusively in existential contexts might suggest that children are acquiring it as a lexical verb rather than an inflectional morpheme. I also showed that contracted

forms of *be* in both constructions are more productive than uncontracted ones, hence confirming Cleave and Rice (1997). I maintain Chomsky's Case transmission mechanism that what licenses the post-copular DP in existential constructions (the associate NP) is existential *there* not *be*, hence the unlikelihood of null expletives in ECs.

Also I showed that the truncation operation does not target elements needed for interpretation at the LF component of the derivation. Another observation is that the distribution of Case and subject provision in overt auxiliary–*be* constructions is more uniform than in null auxiliary–*be* constructions. The children marked the subject for nominative Case most of the time while null subjects and subjects in accusative Case in overt auxiliary–*be* constructions are very rare. This suggests that there maybe a connection between finiteness and overt subjects on the one hand, and between finiteness and nominative Case on the other.

Overt expletives in null *be* existentials and overt subjects in null auxiliary–*be* constructions are problematic for the truncation approach since the truncation operation does not target projections in the middle of structures. I also have showed that the incorporation of the diary-drop register in the truncation approach as to allow null subjects in finite clauses to survive is an escape hatch that contradicts the spirit of the approach.

Chapter six

The Acquisition of ECs in Spoken Arabic

6.1 Introduction:

Spoken Arabic (with its various vernaculars) offers an interesting case for language acquisition research. Although they are less inflectional compared to Classical Arabic, they are still highly inflected compared to English and many other morphologically impoverished languages. In this chapter, I attempt to answer the following major questions: (1) when do children start producing ECs? (2) Do they distinguish between ECs and other related constructions, such as possessives, deictics and locatives? (3) When do children acquire existential *fii*? (4) When do they acquire definiteness? (5) What type of negation do they use to negate *fii*? (6) Are there any other ways with which they express existence? (7) What kind of difficulties do they have in producing adult-like ECs? (8) How should Arabic child ECs be represented? (9) What implications does the acquisition of child ECs make for the syntactic and the acquisition theories? To respond to these questions, I examine data taken from Omar (1973) on Egyptian Arabic, Smadi (1979) on Jordanian Arabic, Al-Buainain (2003) on Qatari Arabic, Al-Jenaie (2008) on Kuwaiti Arabic, and report findings from Al-Akeel (1998) on the acquisition of comprehension of Saudi Arabic. I show that children learning Arabic start to produce ECs around the age 2;1 and that they are able to distinguish ECs from other related constructions such as possessives with inflected prepositions, locatives and deictics. Like English, Arabic ECs in child grammar are not productive. The children used existential *fii* as a routine embedded in the verbal negation complex *ma-fii-(š)*, as in (1). Therefore,

only negated ECs (NECs) could be found in the data. No tokens of affirmative ECs (AECs) could be found up to the age 3;6. The children had difficulties marking the post-*fii* DP as indefinite. They supplied and omitted the definite article *ʔl* and thus violated definiteness effects on DPs. Their violation of definiteness effects and word order constraints is also shown in their verbal predicates and construct states (CSs). They did not restrict the preverbal position to definite DPs and they violated adjacency constraints (word order) in construct states. This is evidence that they treated NECs as verbal predicates. In addition, the use of definite DPs and indefinite DPs in those NECs suggests that the children have not yet acquired adult-like ECs and that they were using *ma-fii-(š)* to express existence and location.

How should Arabic child ECs be represented? Based on the available data I define Arabic child ECs as consisting of negated existential *fii* (a stative verb) and an indefinite NP that is followed by an optional locative. I propose that child NECs contain a non-adult like projection (NEG$_{EC}$P) with the routine *ma-fii-(š)* projected in the head (NEG$_{EC}$').

1) **a. Sara [2;4]** (Al-Jenaie, 2008)
   *ma fii   sayyart-i
   Neg there car.Fsg-1Sg
 = ma fii   sayyarah
    "There is no my car."   (Kuwaiti Arabic)

  b. **Wafaa [3;0]** (Omar, 1973)
    Ma-fii-š   taltæ:ta
    Neg-there-Neg three
    "There are not three"   (Egyptian Arabic)

As we have seen in Chapter Four, the element that imparts an existential reading in Arabic ECs belongs to a different grammatical category from that of the element that is

found in English ECs. Based on this distinction, the licensing mechanisms are different in both languages. The data show that Arabic Child ECs are unproductive and are different from the adult ones. Only ten tokens of ECs that involve the use of existential *fii* and Kuwaiti existential *aku* were found in the speech of two children learning Kuwaiti Arabic (Al-Jenaie, 2008) and only five tokens of Egyptian ECs are reported in Omar (1973). The data also show that the children experienced difficulties acquiring *fii* and the definiteness constraints on the post-*fii* NP. These 15 tokens of *fii* all appeared in negated existential constructions (NECs) and tokens of affirmative existential constructions (AECs) are not to be found in the data. Tokens of AECs could not be found up to the age of 3;6. No errors of negating *fii* with *miš* could be found nor does any study report any errors, either. What these findings suggest is that *ma-fii-š* is used as a routine in early grammar.

The difficulty that is associated with the acquisition of *fii* is "disentangling" it from *ma-fii-(š)*. It has been reported in the acquisition literature that the problem that faces children acquiring Semitic languages such as Arabic and Hebrew is how to "disentangle" roots from inflections (Peters, 1983). De Villiers and De Villiers (1985: 62), speaking of function words that come out incorporated in the words that precede them, argue that those units or routines are errors of inappropriate segmentation of the input. However, the children acquiring Arabic and even those acquiring Hebrew are able to identify stems from inflections from an early age. Berman (1981 a, 1981 b) found that Hebrew-speaking children between 2 and 3 years were able to distinguish stems and the different inflectional markers (person, number, gender and tense). Several acquisition studies show that the children learning Japanese, an agglutinative language in which tense, aspect voice, mood and negation are suffixed to the verb, experienced degrees of difficulties

155

acquiring the markers for rejection, non-existence, prohibition and denial (Clancy, 1985). In particular, those two-year old children confused the marker for non-existence with the marker for rejection. The data at hand suggest that it could be the case that the children learning Arabic indeed face the problem of "disentangling" *fii* from the routine *ma-fii-š*. I assume that in order for the children to fully acquire *fii*, they need to learn that *fii* is not a syllable in the routine *ma-fii(-š)*. The reason why *fii* does not appear in affirmative sentences could be because the children have not yet analyzed *fii* as a stand-alone morpheme that is used to express or affirm the existence of objects. The acquisition of *fii* in affirmative constructions is expected to occur when the children have learned that *fii* is not a syllable in a morpheme, but rather a separate morpheme by itself. In other words, it is only when children start to reanalyze *ma-fii* as consisting of two separate morphemes rather than as a morpheme consisting of two syllables. Only then are tokens of *fii* expected to appear in affirmative sentences and only then can the acquisition of *fii* be said to have come to completion.

The difficulty that is associated with the acquisition of definiteness is that the children need to distinguish between definite and indefinite NPs and that only indefinite NPs can appear in ECs. The data coming from Omar (1973) and Al-Jenaie (2008) clearly show that the children have difficulties marking the post-*fii* NP for definiteness appropriately. The NPs in early grammar are either definite (marked with *ʔil* "the") or unmarked (no *ʔil* marking). In other words, the children do not contrast definite NPs with indefinites in ECs as well as in other constructions. The children produce unmarked NPs that are marked as definite or indefinite in the adult utterance. The use of definite NPs in NECs is evidence for the locative use of ma-fii (and ma-ku) in early grammar. The

children used it in negated locative constructions to refer to the disappearance of objects.

With respect to negation, the children seem to rely on distributional learning strategies in distinguishing the distributions of the different negation morphemes *la*, *miš* and *ma-* [16]. The type of errors that they make provides evidence that the acquisition of the negation system is a slow and a prolonged process. Given the small number of tokens of ECs in the data, the exclusive use of *fii* in negated constructions and definiteness errors all make it difficult to determine whether or not the children have truly acquired ECs at this point. Thus, a more controlled experimental study should be done.

In what follows, I examine the acquisition of the pieces that form NECs: *fii*, *definiteness*, *word order* and *negation* in data taken from the above-mentioned studies. In section 6.2, I give background information about the sources of the data that will be examined. In section 6.3, I examine the acquisition of definiteness effects in construct states and verbal predicates to see if children overgeneralize definiteness constraints and word order constraints to ECs. In this section, I also examine production of locatives, demonstratives, possessives and interrogatives. The acquisition of negation with reference to acquisition studies done on Arabic negation (Smadi, 1979; Al-Buainain, 2003 and Al-Jenaie, 2008) will be discussed in section 6.4. Section 6.5 examines the acquisition of existential constructions based on the available data from Omar (1973) and Al-Jenaie (2008).

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[16] In this chapter, I refer to *la* (or *la ʔ*) as discourse negation when said in response to a previous utterance. However, I refer to it as clausal negation when it negates verbs in imperatives as in *la t-ru:ħ* "Don't go!" I refer to *miš* and its variants *mu* and *mob* as constituent negation such as in *miš hina* "not here". Finally, I refer to *ma-(š)* as clausal negation that negates propositions.

6.2. Sources of Data:

There is a scarcity of published research on the acquisition of most aspects of Arabic. To date, to the best of my knowledge, there are no full-fledged diary studies or spontaneous data collections of Arabic-speaking children that have been made available or that have been published. In addition, no Arabic acquisition corpus exists in the CHILDES database. However, what are available are a few careful acquisition studies that document various aspects of spoken Arabic. The data within those studies are spontaneous conversations between the child and an adult either at home or in nurseries. My analysis of Arabic child ECs is based on published and unpublished data as follows. First and perhaps the most extensive acquisition study on Arabic is Omar's (1973). In an elicited imitation study, she tracked the development of the phonological system, negative and interrogative constructions, the plural of nouns and the gender of adjectives in 37 Egyptian children ranging in age from 6 months to 15 years. A great deal of my analysis is based on the data that she gathered from four of the children ranging in age from 2;3 to 3;6. Her data together with Al-Jenaie (2008) will be used as a reference point for what Arabic child ECs look like at a later age and to what extent ECs conform or deviate from the adult grammar. Her analysis of the negation system is also helpful in painting a picture of how children acquire the three negation morphemes and how they interact with ECs.

The second large-scale acquisition study that provides important insights into Arabic child grammar is that of Smadi (1979). In a longitudinal study, he tracked the development of negation and interrogation in Jordanian Arabic in the spontaneous speech of his daughter Iqbal starting at the age of 1; 6 to 3 years. I have leaned heavily on

Smadi's data because it reports complete transcriptions of four sessions of the child's utterances beginning from age 1;7 to 2;9. The ages and MLU's of the child for each session are reported in Table 1. Reference will be made to the child's syntactic-semantic elements, negation system, locative and deictic constructions and verbal inflections. His findings confirm those made by Omar (1973) in that the children seem to follow the same line of acquisition for negation at different ages. The discourse negation marker /la/ (with its variants /laʔ/, /laʔah/) appeared first in the one-word stage (at age 1;7). In stage II (at age 1;9), the nominal negative morpheme *mu* (the equivalent of /*miš*/) started to appear.

The verbal negation /ma-š/ was acquired after the age of 2;2 at MLU 2;37, though it appeared before without *ma-*. /*Ma-š*/ first appeared missing *ma-* in session 1 (age 1;7). /š/ was simply suffixed to the verb, as in (2). Smadi observes that *ma-š* and *-š* combined solely with verbs. Note that *ma-(š)* does not combine with nouns or adjectives in the adult grammar.

2) Igbal: 1;9
  a. ʔadd-itt-i-š   Mona
     bite.Perf.-3Fsg.-1Sg-Neg Mona
     = (ma-)ʔað-itt-ni-š   Mona
     "Mona did not bite me."

Table 1: Iqbal's Ages and MLU's in Four Sessions (Smadi, 1979)

Session	Age	MLU
Session 1	1;7.5	1.22
Session 10	2;17	2.39
Session 20	2;5.5	3.7
Session 30	2;9.21	3.59

The third study is Al-Buainain (2003). Her study is mainly concerned with the acquisition of negation and interrogation in Qatari Arabic. Although her data do not include any data on Arabic ECs, I will refer to it to discuss child locatives, spatial deixis, possessives and definiteness. The subjects in Al-Buainain's study were her own children whose ages ranged from 1; 6 to 9 years. She found that the children went through developmental stages in their acquisition of negation and interrogation, although those stages may overlap. The discourse negation *la:* (No) was acquired first at around age 1; 8. It was sometimes used inappropriately with verbs, locatives and nouns (3).

3) Early use of the discourse negation marker /*la ?*/
  a. la+N
    *la: ħali:b
    Neg milk
    = mob ħalib
    "No milk." (I don't want milk)

  b. la+V
    *la: raħ
    Neg went
    = ma-raħ
    "Didn't go."

  c. la+Loc
    *la: ?ihnih
    Neg here
    = mob ?ihnih
    "Not here."   (Al-Buainain, 2003)

With the emergence of the verbal negation *ma-* and the nominal negation *mob* (the variant of *miš* in other dialects) in Stage two, the children seem to realize that the free form *la:* can not be used to negate verbs or locatives. Earliest emergence for *ma-* was in

stage I (age 1;10) though the child mispronounced *ma-* as *ba-*, as shown in (4)[17]. The children showed unstable use of *ma-* and *miš*. They sometimes used those two negation markers interchangeably, as we shall see in section 6.5 under Negation.

4) ba-bi
   Neg-want
   I do not want
   = ma-abi   (Al-Buainain, 2003)

The fourth study is Al-Jenaie (2008). I have had access to unpublished data collected by Al-Jenaie. Her data is important in that it provides us with the contexts in which those utterances appeared. To track the development of negation in Kuwaiti child language, she collected spontaneous speech samples from four children (Sara, Osama, Ahmed and Bader) whose ages ranged from 1;7 to 2;6. Like the other dialects of Arabic, Kuwaiti Arabic also has three negation morphemes: *la*, *mu* (a variant of *miš*) and *ma-*. She found that the children went through the same developmental stages and that all forms of negation appeared at the earliest age (2;0), though at different rates. The discourse negation morpheme appeared first, followed by *ma-* then finally *mu*. Out of a total of 17881 utterances in the files of the four children, 1105 were negative sentences, constituting 6% percent.

The fifth study is Al-Akeel's (1998), a more structured experimental study whose purpose was to examine the acquisition of language comprehension by Saudi children. Al-Akeel was interested in getting data to assess the developmental patterns, rate and order of acquisition of a few selected morpho-syntactic structures that included preposition phrases, complex commands, negated adjectives, negated present continuous,

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[17] The verbal suffix -*š* is not used in the dialects of the countries in the gulf region.

comparatives, and verb inflections. Al-Akeel also examined the morpho-syntactic structures in the speech of the fathers to their young children. To collect his data, Al-Akeel conducted two studies: (i) a Child Directed Speech task (CDS) that tested the children's production of vocabulary, structure and function and (ii) a language comprehension task (using object and picture sub-tests) that tested the comprehension of twenty-one morpho-syntactic structures using sixty three pictures and six miniature toys. The structures that were tested using objects were prepositions and possessives. The CDS was conducted on 12 fathers conversing with their children whose ages ranged from 2;4 to 5;6. Those conversations were tape-recorded. The picture comprehension test was conducted on 120 Saudi children ranging between 3;0 and 6;0 years of age and were 60 boys and 60 girls attending three nursery schools.

Table 2 below summarizes the information about the nature of each study, the range of ages of the children and on what dialect of Arabic each one has been done.

Table 2: Summary on the sources of data discussed in this chapter

Study	Purpose of Study	Dialect	Age Range	Method
Omar 1973	Phonology, Negation, Interrogation, Nouns and Adjectives	Egyptian	6 months to 15 years	Imitation
Smadi 1979	Negation and Interrogation	Jordanian	1; 6 to 3 years	Spontaneous
Al-Buainain 2003	Negation and Interrogation	Qatari	1; 6 to 9 years	Spontaneous
Al-Jenaie 2008	Negation	Kuwaiti	1;7 to 2;6.	Spontaneous
Al-Akeel 1998	Acquisition of language comprehension	Saudi	2;4 to 5;6	Comprehemsion

A final note to make in this section concerns the differences that exist among the dialects with respect to ECs, demonstratives, deictic and locatives which seem to revolve

around word choice and pronunciation. For example, existential *fii* is used in ECs in the different dialects in the gulf countries. However, the Kuwaiti dialect has another existential element, *-aku*. My Kuwaiti consultants tell me that both of these existential elements can be used in affirmative and negative ECs and that *aku* tends to be used more in tribal communities while *fii* is used in urban ones. Tunisian Arabic uses *famma* /ϴ*amma* (equivalent of *fii*). The word for the locative "here" in Jordanian is *hon*, in Kuwaiti it is *ehni*, in Saudi and Egyptian *hina*. The word for locative 'there' in Jordanian is *honik*, in Saudi, Kuwaiti, Qatari and Egyptian it is *ihnak*. The word for the demonstrative (this) in Jordanian is *hai* (for singular feminine) *had* and *hada* (for singular masculine), in Kuwaiti, Saudi and Qatari, it is *haði* (for singular feminine) and *haða* (for singular masculine). Kuwaiti *ka* seems to osciliate in meaning between a demonstrative "this" and a deictic "here". The demonstrative for (this) in Egyptian is *di* (for singular feminine) and *da* (for singular masculine). For possessives with inflected prepositions, there are no major differences except for some variation in pronunciation.

6.3 Definiteness:

6.3.1 Introduction:

There are two major factors in Arabic morpho-syntax that have implications for the acquisition of Arabic ECs: definiteness in DPs and perfectiveness in VPs which are both marked in the adult grammar. Definiteness is marked by the presence of the definite article /ʔil/. The definiteness effects on DPs in Arabic have more applications than in English. For example, word order constraints come from definiteness constaints in verbal predicates and in CSs. They manifest themselves in word order variations in verbal

163

predicates such that only definite DPs can occur preverbally whereas both definite and indefinite DPs can occur post-verbally, as in (5). Definiteness is also exhibited in construct states (CSs) in which it is the rightmost NP that can carry the definite marker, as in (6).

(5) a. ʔil-walad ʔakal tuffaħa
  the-boy ate apple.Indef.
  The boy ate an apple

 b. ʔakal ʔil-walad tuffaħa
  ate the-boy apple.Indef.
  The boy ate an apple

 c. ʔakal walad tuffaħa
  ate boy.Indef apple.Indef.
  A boy ate an apple

 d. *walad ʔakal tuffaħa
  boy ate apple.Indef.
  A boy ate an apple

6) a. muftaħ ʔil-bab
  key the-door
  The key of the door

 b. *ʔil-muftaħ ʔil-baab
  the-key the-door
  The key of the door

A rigid word-order in which existential *fii* must precede an indefinite NP that is followed by an optional locative are the pieces that form Arabic ECs in the adult grammar. These are the features of the adult grammar that the children need to control in order to produce adult-like ECs. The data at hand show that the children omitted the definite article *ʔil* (*il*)

"the" in obligatory contexts and that they did not produce it as modelled by the adult. The difficulties in acquiring definiteness constraints result in difficulties in acquiring word order constraints and ECs as well.

The language acquisition literature on English has shown that the children omit articles frequently in obligatory contexts in their early grammar (Brown, 1973; Hyams & Wexler, 1993; Hoekstra & Hyams, 1995). In the study that I conducted on the acquisition of English ECs (outlined in section 5.4, Chapter Five) I showed that the three children (Peter, Nina and Eve) showed unstable use of the articles in their early files. They omitted both *a* and *the* in obligatory contexts and they also supplied them correctly. However, they displayed knowledge of the pragmatic functions of articles. In many cases the child used an article correctly and then right afterwards omitted it, as in (7), and in other cases, the child omitted the article after it had been used by the parent, as in (8). The examples in (9) and (10) show that the child may use or omit the article when referring to some object in an immediate context.

(7) Nina 1; 11:
 CHI : Here's a kitty cat.
 CHI : Here kitty cat
 MOT: Here's a kitty

(8) Peter 1; 10: [Peter taking pen and paper to Mother]
 CHI : Here's a penny. (Meaning 'a pen')
 MOT: Pencil.

(9) Nina 1; 11:
 MOT: Do you want to find the cow?
 CHI : Here's cow.
 MOT: No # that's a horse.

(10) Peter 2; 8
   CHI: There it is .
   CHI: There's letter # in the soup.
   CHI: There goes.

Abu –Akel & Bailey (2000) also observe that children learning English, between the ages 1;6 and 2;0, used indefinite DPs predominantly. However, by age 2;3 they started marking DPs for specificity using both indefinite and definite articles.

   In what follows I examine how definiteness effects impose constraints on word order in CSs and in verbal predicates, how they manifest themselves in ECs, possessives, locatives with plain and inflected prepositions, and interrogatives.

6.3.2 The Article /ʔil/

   I examined the available data on Arabic child language for NPs and found out that the children had difficulty marking NPs for definiteness. They leave DPs referring to new and old referents in their immediate context unmarked. Some of the NPs found in constructions other than NECs in the child grammar, such as locatives and possessives were unmarked (for definiteness) even though they were contexts in which definite NPs should have been used in the adult grammar; which suggests that definite NPs in early Arabic child grammar are not consistently marked. From an acquisition point of view, it is easier to leave nouns unmarked than to mark them as definite. This might explain why most nouns appear unmarked in early Arabic child language. I examined Manal's, Wafaa's and Sanaa's (Omar, 1973) utterances and found the following. Manaal always left NPs unmarked when she was modeled with NPs that were marked for definite and indefinite. As shown in the utterances in (11), she omitted quite a few function words that

166

include the definite article *ʔl*, verbs, prepositions, the negative marker *miš* and a Wh-word.

11) Manaal [2;8] (Omar, 1973)

Model Utterance	Child's Imitation
a. ʕayz-a ħalawa	a′. hawawa
want-2fsg candy	candy
"You want a candy?"	Candy
b. šuf-i l-bissa	b′. bissa
See.Imper-2fsg the-cat.fsg	cat
See the cat	(The) cat
c. Fein il-bissa	c′. bissa
Where the-cat.fsg	cat
Where's the cat?	(The) cat
d. ʔabu-ya fi-l-ɣeṭ	d′. ʔabu-ya ɣeiṭ
father-1sg. in-the-field	father-1sg. field
my father is in the field	my father (is) (in) (the) field
e. umm-i miš ʔabu-ya illi fi-l-beit	e′. ʔabu-ya beit
mother-1sg Neg father-1sg who in-the-house	father-1sg house
My mother not my father is in the house	My father (is) (in) (the) house

Most of the imitations of the second child, Wafaa (age 3;0), were complete utterances. She supplied the definte article as modeled except for (12a) in which she omitted it in initial position. This might suggest that the child had not yet acquired the definiteness constraints for topic NPs in initial position. In (12c) she omitted the NP *umm-i* "my mother" that was in Topic position but repeated the rest of the utterance starting with the nominal negation *miš*. In (12d) she did not omit the Topic but she switched the word order such that the utterance starts with the nominal negation *miš* although *ʔabu-ya miš*

fi-l-beit would have been an acceptable sentence. What (12 c and d) suggest is that Topic projection is missing. It could be that the child was "truncating" or having difficulties projecting NPs in topic positions even though she was successful in marking NPs as definite. What (12 c and d) also show is that it might as well be the case that the child is in a stage where she prefers to start with negative markers.

12) Wafaa [3;0] (Omar, 1973)

	Model Utterance	Child's Imitation

a. ʔil-mayya   suxn-a
  the-water   hot-fsg.
  the waster is hot

a′.mayya suxn-a
  water hot-fsg.
  water (is) hot

b. ʔabu-ya   fi-l-ɣeiṭ
  father-1sg. in-the-field
  my father is in the field

b′.ʔabu-ya   fi-l-ɣeiṭ
  father-1sg. in-the-field
  my father (is) in the field

c. umm-i   miš ʔabu-ya   illi fi-l-beit
  mother-1sg Neg father-1sg who in-the-house
  My mother not my father is in the house

c′.miš ʔabu-ya   fi-l-beit
  Neg father-1sg in-the-house
  not my father (is) in the house

d. ʔiš-šuɣl miš sahl
  the-work NEG easy
  The work is not easy

d′.miš   sahl ʔiš-šuɣl
  NEG easy the-work
  Not easy (is) the work.

Although Sanaa's (age 3;6) omissions were minor and her imitations were more accurate compared to the other two children, she still omitted the definite article in quite a few uttrances. The data in (13) show that she omitted *ʔl* in the adjective *ʔl-kari:m* "the Holy" and in the noun that it modifies, as well. She also omitted it in (13b) along with the preposition *fi* "in". In (13c) she did not omit the definite article in the noun *ʔl-beit* "in the house". However, she omitted the first subject *ummi* "my mom", opting to start the

sentence with the negative morpheme *miš*, just as Wafaa did in (13 c&d) above. This is

interesting since the child Igbal in (Smadi, 1979) started using *mu* (Jordanian variant of

miš) exclusively in initial position before she started using it in middle positions. The

children seem to prefer using negative markers in initial position in their early grammar.

Finally, in (13e) Sanaa omitted *ʔil* in the noun *ʔin-nas* "the people", thus starting the

sentence with an indefinite subject.

13) Sanaa [3;6] (Omar, 1973)

      Model Utterance   Child's Imitation

a. ʔil-qurʔan ʔil-kari:m   a′. qurʔan kari:m
   the-Quran the-Holy   Quran Holy
   The Holy Quran   (the)Holy Quran

b. ʔabu-ya   fi-l-ɣeiṭ   b′. ʔabu-ya   ɣeiṭ
   father-1sg. in-the-field   father-1sg. field
   my father is in the field   my father (is) (in) (the) field

c. umm-i   miš ʔabu-ya ʔilli fi-l-beit   c′. miš ʔabu-ya   ʔilli fi-l-beit
   mother-1sg Neg father-1sg who in-the-house   Neg father-1sg who in-the-house
   My mother not my father is in the house   "Not my father who is in the house."

d. ʔil-wad ʕa-yiħibb   ʔis-sukkar   d′. ʔil-wad ħibb sukkar
   the-boy Prog.-3.Pres.-love the-sugar.   the-boy like sugar
   "The boy likes sugar"   The boys likes (the) sugar

e. ʔin-nas   ʕam-yi-šrab-u   šay kul   yom   e′. nas kul yom ʕam-yi-šrab-u šay
   the-people Prog.-3.Pres.-drink-Pl. tea. every day   people every day Prog.-3.Pres.-drink-
   The People drink tea everyday.   Pl. tea.
                              People everyday drink tea.

Table 3 below shows the eleven NPs that Igbal (Smadi, 1979) produced in session 10

(age 2;0). The use of proper nouns and possessives in items (c, d, e, g, j, and k) are

evidence that her utterances are full sentences. Out of those eleven NPs, 5 were left unmarked, three were proper nouns and the remaining three NPs were marked for possession, shown in Table 3. None of these utterances appeared with a definite subject in sentence initial position, an observation that suggests that Igbal was unable to project definite subject NPs in topic initial position.

Table 3: Igbal's production of NPs in session 10 (Age 2;0) (Smadi, 1979)

Child's Utterance	Gloss	NP Marking for Definiteness	Adult Form
a. had šiit	This is a tape	Unmarked	haða šriiṭ
b. had ʔabayih	This is a cart	Unmarked	haði ʕarabayiah
c. had Muna	This is Mona	Proper noun	haði Muna
d. hada ʔabat-ik	This is your cart	Possessive	haði ʕarabit-ik
e. ha Muna	This is Mona	Proper noun	hai Muna
f. hada ħamar	This is red	Unmarked	haða ħamar
g. hada ʔunu-h	These are his eyes	Possessive	haði ʕyun-uh
h. ha tab	This is a dog	Unmarked	haða kalb
i. hada ʔaw	This is a dog	Unmarked	haða kalb
j. had tummu-h	This is his mouth	Possessive	haða thummu-h
k. had ʔibbal	This is Igbal	Proper noun	haði ʔqbaal

Session 20, age 2;5, features the emergence of many types of DPs. It also marks the beginning of Igbal's ability to distinguish between definite and indefinite DPs. Independent pronouns and DPs in reversed word orders appear in this session. Igbal used the independent subject pronouns *ʔana* / *ʔani* "I" and *hi*/ *hiyyi* "she" a few times in sentence initial positions. The independent pronoun for 2ⁿᵈ person (singular and plural) and 3ʳᵈ person (plural) never showed up in Igbal's data. Those only appeared as dependent pronouns (on verbs, nouns and prepositions). The independent pronoun for 3ʳᵈ person singular *hu* / *huwwi* "he" did not appear until session 30 (age 2;9). An instance of

a Construct State appeared for the first time in this session (item 22) in Table 4 below, which I reproduce in (14) for ease of reference. The child left the rightmost NP unmarked, thus deviating from the adult grammar.

14) *taːħ   baːb
     key.Indef. door.Indef
     =muftaaħ ʔil-baab
     "The key of the door."

If we exclude NPs that can not be modified by *ʔl* such as proper nouns, pronouns and NPs that are marked for possessive from Igbal's utterances in session 20 (age 2;5), we will find that she produced 32 NPs, given in Table 4. Twenty eight NPs appeared in full utterances while the remaining 4 appeared as phrases (items 6, 10, 11 and 22). The child omitted 2 prepositions (items 4 and 22) and a verb (item 20). Out of those 32 NPs, she appropriately used the definite article *ʔl* in 6 NPs (thus marking them as definite) but she omitted it in 9 NPs in obligatory contexts. On the other hand, she appropriately omitted *ʔl* in 17 NPs (thus, marking them as indefinite). Because I do not have access to the complete conversations between the child and the adult, I relied on the gloss of the child's utterances provided by the author as contexts for most of those utterances. The author's gloss for 10 NPs, in (2, 24, and 27) are ambiguous between a definite and an indefinite reading. That is so because those NPs are modified with the demonstrative *hai* (this) that can also be modified by the definite article *ʔl*. For example, while it is not acceptable to say "These the books are yours" in English, it is acceptable to say *hai ʔl-kutub ʔla-k* "These the books are yours" in Arabic. It is said that when a demonstrative is

followed by an indefinite NP, the construction is a complete sentence in which the demonstrastive is the subject and the indefinite NP is the predicate, as in item 17 and 21. In contrast, if the demonstrative is followed by a definite NP, the construction is not a complete sentence, but rather a phrase. However, the only construction with a demonstrative that is followed by a definite NP showed up in the following session (session 30) at the age 2;9. In item 24 below, Smadi's gloss for the utterance included the demonstrative *these* while the child's utterance never contained a demonstrative. To reach an agreement on whether or not these three cases are ones in which a definite NP must be used, I checked my interpretations with two other speakers of Arabic. The three of us agreed that all three cases are contexts for definite NPs. In item 2, the position after the PP *ʔila-k* is one where the demonstrative and the following noun can only be an NP but not an IP. Thus, to get an NP reading the noun must be definite but not indefinite. The same is true of item 27.

The data in Table 5 show that the child used the definite article in obligatory definite contexts 40% of the time (6 tokens) while she omitted it in obligatory definite contexts 60% of the time (9 tokens). She omitted it in obligatory indefinite contexts 100% of the time (17 tokens). The 6 tokens of *ʔl* in obligatory contexts are all ones in which *ʔl* is sandwiched between a mispronounced preposition and is assimilated into the following initial sound of the NP (items 5, 6, 8, 9, 10, 11). Four of those involved assimilation errors (items 5, 8, 9 and 11). Moreover, no tokens of *ʔl* in its unassimilated form could be found in session 20 (age 2;5). It could be the case that the child is producing those instances of Prep+ʔil+NP as routines. The data suggest that Igbal had not

yet mastered the acquisition of the definiteness effects on NPs in this session and that the age 2;5 is not conclusive for the acquisition of definiteness. I assume that the acquisition of definiteness can be said to be mastered when the child uses *ʔil* at least 50% of the time and when he/she uses it in its assimilated and unassimilated forms.

Table 4: Igbal's production of NPs in session 20 (Age 2;5) (Smadi, 1979)

Child's Utterance	Gloss	Adult Form	Context
1. ʔanam had	this is a pencil	hað ʔanam	Indef.
2. ʔila-k hai ʔanam?	Is this pencil yours?	ʔila-k hai ʔil-galam?	Def
3. maʕ-i-š ʔanam	I do not have a pencil.	maʕ-i-š galam	Indef
4. hai ʔuttub ʔanam hon	Do we write with a pencil here?	hai, nu-kttub bi-l-galam hon?	Def
5. ʔana duħ ʔa-d-dassih	Do I go to the school?	ʔana ʔaruuħ ʕa-l-madrassih?	Def
6. maʕ ʔin-nas	With the people	maʕa ʔin-nas	Def
7. maʕ tarik bas ʔakkab fi-h	I ride in the bus with Tariq	ʔarkab maʕ ṭarik fi-l-baaṣ / ʔarkab fi-l-baaṣ maʕ ṭarik	Def
8. ʔadda-k ʔaddin-i ʔa-d-dasih	You want to send me to the school	badda-k t-waddin-i ʔa-l-madrasih	Def
9. ʔadda-k ʔaddi muna ʔa-d-dasih	You want to send Mona to the school	badda-k t-waddin Muna ʔa-l-madrasih	Def
10. ʔi-b-bas	In the bus	fi-l-baas	Def
11. ʕa-k-kaawih	On the table	ʕala-ṭ-ṭaawlih	Def
12. ʔatat luz	I ate rice	ʔakl-t ruz	Indef
13. luʕbi-h nami-t	Did a doll sleep?	naami-t ʔil-luʕbih?	Def
14. Hi waʕa-t hek ʕa-xxaddih	She fell down this way on the pillow	hi wagaʕi-t hek ʕa-l-maxaddih	Def
15. Hada ton	This is a pant?	haða banṭaloun	Indef
16. Taʕmii-ha laban	Feed her milk	ṭaʕmii-ha laban	Indef
17. Hai ħummus	This is chick peas	haða ħummus	Indef
18.Taʕmii-ha lamun	Feed her lemon	ṭaʕmii-ha lamuun	Indef
19. Baba, ʔaddi saħin	Papa, I want a dish	baba, baddi ṣaħin	Indef
20. ʔani lamun	I want lemon	ʔani baddi lamun	Indef
21. Hai bisseh	This is a cat	hai bisseh	Indef
22. Taaħ bab	A key of a door	muftaaħ ʔil-baab	Indef - Def
23. Hai kawih	This is a table	hai ṭaawlih	Indef

24. ʔili-k kutub	These books are for you	ʔili-k ʔil-kutub / ʔil-kutub ʔili-k / hai ʔil-kutub ʔili-k	Def
25. Hai ħabil	This is a rope?	hai ħabil?	Indef
26. ʔani kab bas	I ride a bus	ʔani ʔarkab ʔil-bas	Def
27. ʔani kab hai bas	I ride this bus	ʔani ʔarkab hai ʔil-bas	Def
28. Hai walad	This is a boy	haða walad	Indef
29. Hai binit	This is a girl	Hai binit	Indef
30. ʔiššab may	I drink water	ʔišrab may	Indef
31. Whai saalih	This is a sink	w-hai ɣassaalih	Indef
32. ʔani ħammam sabun	I bathe with soap	ʔani ʔa-tħammam bi-ṣ-ṣabuun	Def

Table 5: Igbal's production of *ʔl* in session 20 (Age 2;5) divided between definite and
    Indefinite contexts.

	Definite	Indefinite
Used	6 (40%)	0
Omitted	9 (60%)	17 (94%)
Total	32	

Once again, if we exclude NPs that can not be modified by *ʔl* from Igbal's

utterances in session 30 (age 2;9), we will find that she produced a total of 25 NPs, given

in table 6. For the first time, Igbal appropriately used *ʔl* in its unassimilated form in a

definite context only once (item 9); something which might suggest that she is starting to

reanalyze *ʔl* as a separate function word. However, she used it inappropriately in an

indefinite context once (item 4) for the first time, as well. She omitted *ʔil* six times in

obligatory contexts (items 3, 8, 13, 14, 17 and 20). Finally, she left 17 NPs unmarked (as

indefinites) in obligatory indefinite contexts. She is still having difficulties with

definiteness effects. As Table 7 shows, she used the definite article in obligatory definite

contexts 14.2% of the time (1 tokens) while she omitted it in obligatory definite contexts

85.7% of the time (6 tokens). She omitted it in obligatory indefinite contexts 94% of the

time (17 tokens).

Table 6: Igbal's production of NPs in session 30 (Age 2;9) (Smadi, 1979)

Child's Utterance	Gloss	Adult Form	Context
1. t-akul ʔatata	She's eating potato	t-akul baṭṭaṭa	Indef
2. Hadol wlad	Are those boys?	hadol wlad?	Indef
3. ʔana ħib ʔatata	I like potato	ʔana ʔ-ħibb ʔil- baṭṭaṭa	Def
4. Baba, hadol ʔan-nas	Papa, are those people?	Baba, hadol nas?	Indef.
5. tarik walad	Tariq is a boy	Tarik walad	Indef
6. had bebi	This is a baby	Had ṭuful	Indef
7. Had šambu muna	This is Mona's shampoo	Had šambu muna CS	Indef
8. Sabun ʔilli	The soap is for me (mine)	ʔill-i ʔiṣ-ṣabuun / ʔiṣ-ṣabuun ʔill-i	Def
9. ʔana ruħ ʕa-l-ʔaddaseh	I go to the school	ʔana ʔ-ruħ ʕa-l-madraseh	Def
10. Baba, min had taʔiyyih	Papa, whose cap is this?	1. taʔiyyit min haði? 2. haði taʔiyyit min? 3. Le-min ʔiṭ-ṭaʔiyye haði? 4. haði ʔiṭ-ṭaʔiyye le-min?	CS= 1st NP Indef
11. Badda-k šari waħad	You want to buy one	Badda-k t-ištari waħad	Indef
12. Had binit	This is a girl	Hadi binit	Indef
13. Kibirih hi binit	Big is the girl	Kibireh hi ʔil-binit / ʔil-binit kibireh	Def
14. Mama, bas hi ħib tanon	Does mama like only the pants?	Mama, bas hi t-ħib ʔil-banṭaloun?	Def
15. šari-ha waħad	You buy her one	t-ištari ʔil-ha waħad	Indef
16. Hada sajjil	This is a tape recorder	Hada musajjil	Indef
17. 18. Dawa šan tum had	The medicine is for the mouth of this one	ʔi-d-dawa ʕašan tum had CS	Dawa=Def Tum=Indef
19. Hada fustan ʔa-mama?	Is this dress for mama?	1. Haða ʔil-fustan le-mama? 2. Haða fustan mama?	Indef
20. Sura ʔili-k?	Is the picture for you?	ʔiṣ-ṣura ʔili-k? / ʔili-k ʔiṣ-ṣura?	Def
21. hu surah had?	Is this a picture?	Hi surah hadi?	Indef
22. Min had fustan?	Whose dress is this?	1. fustan min haða?	CS=1st NP Indef

		2. ʔil- fustan haða le-min?	
		3. le-min ʔil- fustan haða?	
		4. haða ʔil- fustan le-min?	
		5. haða fustan min?	
23. Tanon wu fustan hi labis	She is wearing a pant	hi labis-eh banṭaloun wu fustan	Indef
24. Hi labis tanon	She is wearing a pant	Hi labis-eh banṭaloun	Indef
25.Hi ʕind-ha-š fustan	She does not have a dress	Hi ʕind-ha-š fustan	Indef

Table 7: Igbal's production of *ʔl* in session 30 (Age 2;9) divided between definite and indefinite contexts.

	Definite	Indefinite
Used	1 (14.2%)	1 (5.5%)
Omitted	6 (85.7%)	17 (94.4%)
Total	25	

6.3.3 Construct States

Recall in Chapter 4, CSs are defined as complex genitive NPs consisting of two NPs merged together to form a constituent. The first NP (the possessed) must be indefinite while the second NP (the possessor) must carry (in)definiteness, as in (15). The two key features of CSs are adjacency (word order) requirements and definiteness percolation or inheritance of the rightmost NP. Igbal produced one token of a CS in session 20 (age 2;5) in which she marked the second member of that CS *baab* "door" as indefinite. Igbal's language in session 30 (age 2;9) features the emergence of 5 CSs, two of which appeared in Wh-questions. These constructions are an important piece of evidence that will show us the sort of difficulties that Igbal runs into in the acquisition of definiteness as well as forming Wh-questions with CSs.

15) fustan   Mona
    dress.Indef.sg. Mona
    Mona's dress.

Igbal, in session 30 (age 2;9), produced 5 CSs (items 7, 10, 17, 19 and 22) in Table 6 above. If we examine these utterances closely, we will see a pattern. First, with the exception of item (17), they all involve the use of a demonstrative which functions as the subject of a CS with which it is predicated. In item (17), the demonstrative does not serve as the subject of the sentence, but rather as the second member in the CS tum had "the mouth of this". Second, the rightmost NP in these CSs are NPs that do not take *ʔil* - proper nouns Mona and mama (items 7 and 19), a demonstrative had "this" (item 17) and WH-words min "who" (items 10 and 22). However, what these examples reveal is that the child seems to have acquired a new type of possessive using CSs of the form [S → (Dem)+(CS)]. While she seems to be using CSs in declaratives (items 7 and 17) and Yes/No questions (item 19) without any problems, she experiences difficulties using CSs in WH-questions (items 10 and 22). The error that the child makes is sandwiching the demonstrative between the two NPs, members of the CS, which is a constituent. In item (10) the two members of the CS are *taʔiyyih* "cap" (the possessed) and the WH-word *min* "who" (the possessor) forming a constituent. In item (22), the two members of the CS are fustan "dress" (the possessed) and the WH-word miin "who" (the possessor) forming a constituent, as well. WH-words are not nouns that take the definite article *ʔil*. In (16d) I adopt an analysis for Semitic CSs proposed by Ritter (1991) and Benmamoun (2000) and apply it to Wh-in situ with CSs. These questions are formed by leaving the CS containing the Wh-word in situ. To form Wh-questions with a CS, the whole of the CS containing the WH-word must be moved to Focus inside CP. Extracting only the WH-expression and moving it out of the CS will result in a violation of "complex NP Island" constraint, hence the ungrammaticality of the question in (16 c). Igbal seems to have activated a CP

projection by virtue of fronting a WH-word from its base-generated position into Focus in CP. However, while she seems to have succeeded in forming a Wh-question in items (10 and 22), she violated the complex NP Island" constraint. Take Igbal's utterance in item (22) *miin had fustan? as an example, reproduced in (17a) and represented in (17b) below. She extracted the wh-expression miin "who" out of the complex NP Island which happened to be a CS and moved it to Focus inside CP, a movement that is not permitted in the adult grammar. An acceptable question would either be one in which the CS is left in situ as in (16 a) or one in which the CS has been moved as a whole and fronted to CP as in (16b). Omar (1973) also observes that the children in her study made errors placing the question word in the sentence (134-135). In conclusion, what those 5 tokens of CSs reveal is that the child, at the age 2;9, has not fully acquired definiteness effects nor has she acquired word order (or "adjacency") in CS that is exhibited in her violation of the Complex NP Island constraint.

16) Adult CS
  a. haða   fustan   miin?   [Wh-word in situ]
     This.msg. dress.Indef.msg who
     Whose dress is this?

  b. fustan   miin haða?   [Fronted Wh-word]
     dress.Indef.msg who this.msg.
      Whose dress is this?

  c. *a. miin haða   fustan?
       who this.msg. dress.Indef.msg
    = fustan miin haða
      Whose dress is this?

d.

FP
  F'
[+Q, -WH]   TP
      Spec   T'
      haða
            T   VP
               Spec   V'
                     V   DP1
                           D'
                     D   NumP
                     fustan
                     "dress"   miin_j   Num'
                               "who"
                                     Num   NP
                                      i
                                           AP   NP
                                                DP2   N
                                                t_j   t_i

Construct State

Possessed NP

Possessor NP

179
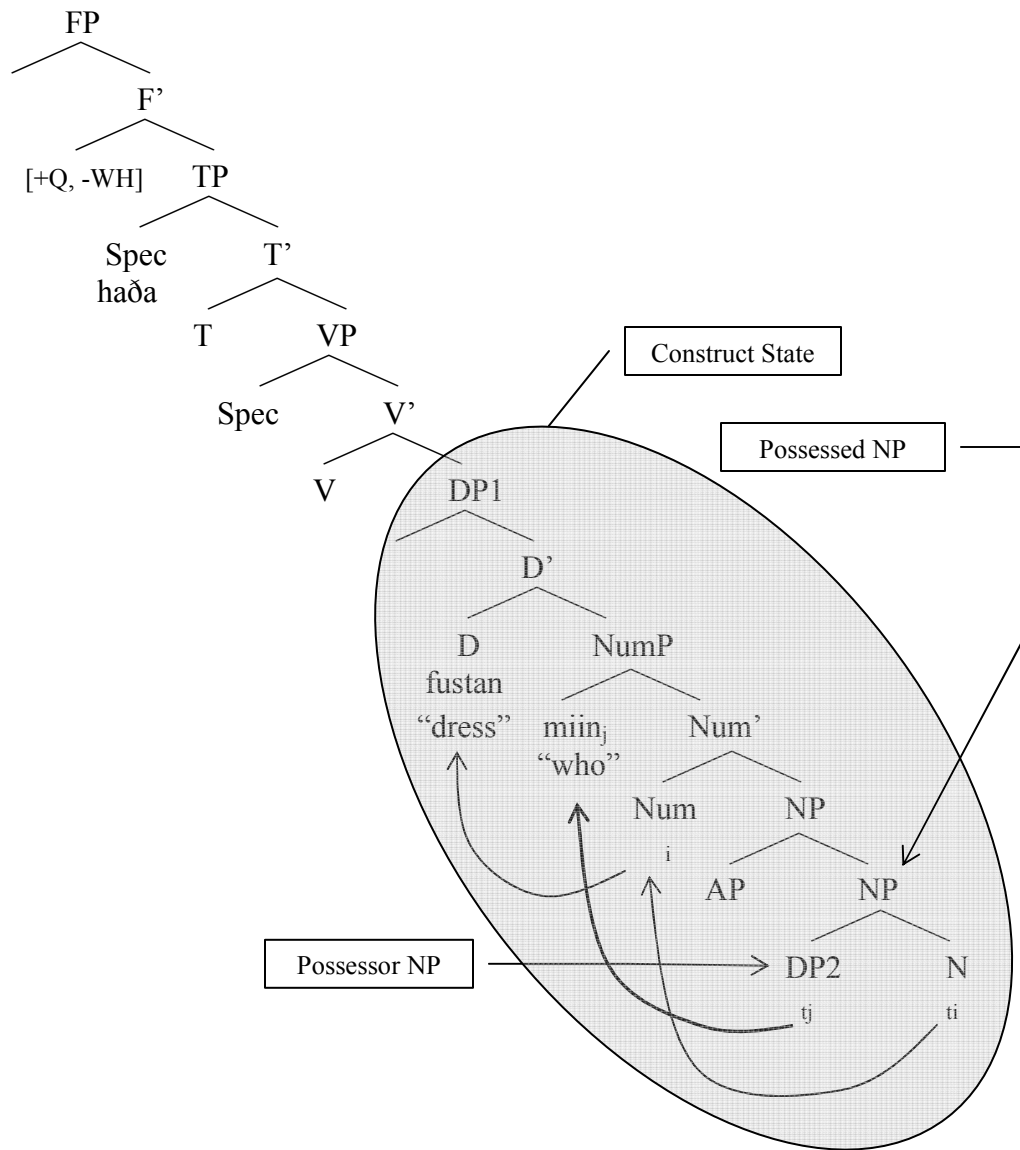
17) Child CS:
   a. *miin had   fustan?
      who this.msg. dress.Indef.msg
      Whose dress is this?

   b.
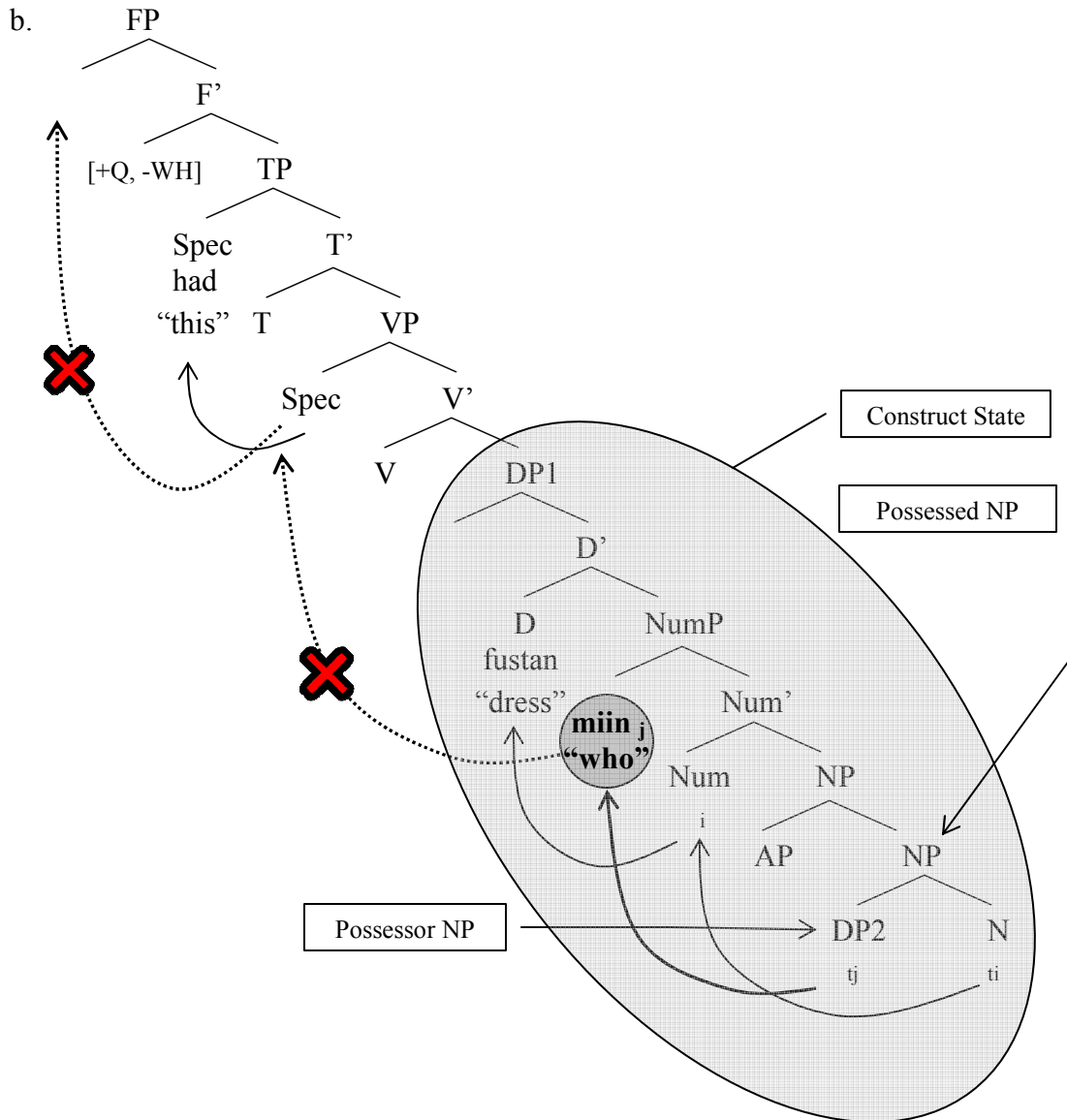
Based on the few examples reported in the spontaneous data in Al-Buainain (2003), it seems that the children have not acquired definiteness in their two-word stage or three-word stage. Her children left NPs unmarked, as shown in (18).

18) Two-Word stage:
  a. jebi   koeh
    bring ball
   "Bring ball"

  b. ʔitin-i: hala:wah
    give-me candy
    Give me candy

  c. ʔifteħ sta:reh
    open   curtain
    open   curtain

  d. *ko:leh wein
    ball where
    =ʔil korah wein
    Where ('s) (the) ball?

  e. *asad   guey
    lion.Indef strong
    = ʔil-asad guey
    "(The) lion is strong"   (Al-Buainain, 2003)

6.3.4 Word Order

According to Osama (2004) in an SV word order, the subject is not a subject but rather a topic and the subject is the agreement morpheme that shows on the verb (p. 144). In contrast, in VS word order the subject stays in [Spec, VP]. It has been observed in the syntax literature that the dialects of Arabic have a rigid word order due to absence of Case marking and reduced feature agreement. As a result, word order is reduced to VSO and SVO in which the (S)ubject shows up as a pronominal clitic spelling out agreement on the verb and TopicSVO in which the topic is an NP or an independent subject pronoun and the subject is a pronominal clitic spelling out agreement on the verb.

Suject agreement morphemes appear as suffixes on the verb in perfective aspect

181

(VS) but show up as prefixes on the verb in imperfective aspects (SV), as in (19).

However, there are a few exceptions. There are a few elements in the language that are

ambiguous between being verbs and modals, such as /bad/ "want" and /wid/ "would

like". These appeared frequently in Igbal's language. They are like perfective verbs in

that they take suffixes to show agreement in φ-features with the subject. They are not like

imperfective verbs in that they do not take prefixes to show agreement with the subject.

However, they are like modals in that they are followed by another verb that is always

imperfective (in the infinitive), as in (20). The nouns *Muna* and the independent pronouns

hu "he" and *ʔana* "I" in (20 a, b, and c) are all topics. Another note that is worth

mentioning here is that a suject agreement morpheme does not appear as a suffix on

perfective verbs if the subject is 3rd person masculine singular, as in (21).

19) a. naam-it
    slept-3Fsg
    She slept

   b. ti-naam
    3Fsg-sleep
    She sleeps

20) Igbal [2;5]
   a. Muna bidd-a   Ø-salli   maʔa-hum
     Mona want.3Fsg pray.Imperf   with-3Pl
     "Mona wants to pray with them."

   b. bas hu   biddu   Ø-ʔʔud
     but 3Msg want-3Msg   sit.Imperf
     "But he wants to sit down."

182

c. wa ʔana badd-i Ø-ʕallim
   and 1Sg want-1Sg learrn
   "And I want to learn."

21) Igbal [2;9]
   a. raħ-Ø maʕa-hum
      went with-3Pl
    "He went with them."

   b. muna kas-at raas-ha
      Mona broke-3Fsg head-3Fsg
      "Mona broke her head."

   c. laʕb-u
      played-3Pl
      "They played."

A question to ask here is what is the word order in Arabic child grammar? Brown (1973) predicts that children will have already acquired word order in Stage II. The data from Smadi (1979) shows that Brown's prediction is borne out. Generally speaking, Igbal observed word order constraints with minimal mistakes. We have already seen how she violated word order constraints in CSs above. As regards word order constraints on predicates, she showed unstable production of SV and VS word orders. Most of her utterances in session 10 (age 2;0) are ones in which a demonstrative is the subject of the utterance (S→ Dem+NP). She used two unaccusative verbs in VS word order: one with a topic (S→Topic+V+S) (22a) and the other without a topic (S→V+S) (22b). What this suggests is that she was unable to project definite DPs in initial position at the age of 2;0. Topics in SV or VS word orders are either NPs or independent pronouns while the subject is the agreement morpheme that shows on the verb.

22) Igbal [2;0]
    a. hi   naam-it   Topic+V+S
      3Fsg slept-3Fsg
      "Did she sleep?"

    b. naam-it   fouʔ   V + S
      Slept-3Fsg upstair
      "She slept upstairs."

In session 20 (age 2;5) Igbal switched the order of the demonstrative and the DP in an utterance (23) such that it began with the DP. However, she failed to mark the DP as definite.

23) Igbal [2;5]
    ʔanam   had
     pencil.Indef.Msg this.Msg
     "This (is) a pencil."

Igbal's language in session 20 (age 2;5) features excessive production of predicates both in perfective and imperfective as well as production of topics. Her production of subject agreement morphemes is unstable. For example, she used a subject agreement morpheme in (24a) but omitted it in (24 b and c) in imperfectives. She also used it in perfectives as in (24 d and e). Her use of an independent pronoun together with a subject agreement morpheme on the verbs is evidence that she is starting to project a left periphery (topic) system although not constantly.

24) Igbal [2;5]
    a. *hai ʔu-ttub   ʔanam hon
      this 1pl.-write.Imperf. with-the-pencil   here
     = hai, nu-kttub   bi-l-galam hon?
     "Do we write with a pencil here?"

b. *ʔana -duħ   ʔa-d-dassih
   1Sg. –go.Imperf.   to-the-school
   =ʔana ʔa-ruuħ ʕa-l-madrassih?
   "Do I go to the school?"

c. ʔani   -kab   bas
   1Sg. ride.Imperf   bus.Indef
   "I ride a bus."

d. *luʔbih   nami-t
   doll.Fsg.Indef.   sleep.Perf.-3Fsg
   = ʔil-luʔbih   nami-t
   "Did a doll sleep?"

e. Hi   waʕa-t   hek   ʕa-xxaddih
   3Fsg. fall.Perf.-3Fsg like this   on-pillow
   "She fell down this way on the pillow."   (Smadi, 1979)

As shown in Table 8, out of 34 utterances with predicates, she omitted subject agreement

morphemes in 15 utterances. She projected topics in 21 utterances. She omitted the topic

in SV word order 4 times and omitted it in VS word order 6 times. She omitted the topic

together with the subject agreement morpheme 3 times.

Table 8: Igbal's word orders in session 20 (age 2;5) (Smadi, 1979)

Word Order	Top AgrS+V	Top V+AgrS	Top Ø+V	AgrS+V	V+AgrS	Ø.V
Tokens (n)	3	6	12	4	6	3
Total (n)	34					

If we exclude production of topics from the count and split production of predicates

between VS and SV, we find that out of the 34 predicates that she produced, 12 were VS,

7 SV and 15 predicates had subject omission, as shown in Table 9. She has a preference

for the VS word order over the SV word order.

185

Table 9: Igbal's production of VS and SV word orders in session 20 excluding topics
        (age 2;5) (Smadi, 1979)

Word Order	VS	SV	ØV
Tokens (n)	12	7	15

Igbal continues to omit subject agreement morphemes in session 30 (age 2;9). As shown

Table 10, out of 34 tokens, she omitted them 16 times. She did not project any topics in

SV word order while she projected 9 topics in VS word order.

Table 10: Igbal's word orders in session 30 (age 2;9) (Smadi, 1979)

Word Order	Top AgrS+V	Top V+AgrS	Top Ø+V	AgrS+V	V+AgrS	Ø.V
Tokens (n)	0	9	13	3	6	3
Total (n)	34					

Once again, if we exclude production of topics from the count and split production of

predicates between VS and SV, we find that out of the 34 predicates that she produced,

15 were VS and 3 were SV, as shown in Table 11. There is still preference for VS word

order over SV word order at the age 2;9.

Table 11: Igbal's production of VS and SV word orders in session 30 excluding topics
        (Age 2;9) (Smadi, 1979)

Word Order	VS	SV	ØV
Tokens (n)	15	3	16

6.3.5 Locatives and Demonstratives:

    The bulk of Igbal's (Smadi, 1979) utterances in her word-combination stage express

"location", "demonstration and entity" and "nomination" from as early as 1;7. She used

different variants of demonstratives ('*hai*', '*hadi*' and '*hada*') to express those semantic

notions, as in (25). The utterances in (25 a, c and d), without the demonstrative, could be possible contexts for existential constructions with *fii*, depending on the context in which they are said.

25) Igbal [1;7]
   a. ha   minit
      this a girl
      "This is a girl.'

   b. hai mama
      this mama
      "This is mama."

   c. had may
      this water
      "This is water."

   d. hada kuku
      this a bird
      "This is a bird."

   e. *hai ʕadd-i   hon
      this bite.Perf.-1Sg. here
      =haði ʕaḏ-it-ni   hon
      "This bit me here."

As shown in Table 12, Igbal relied heavily on the use of demonstratives in two-word combinations to refer to the locations of objects, or to introduce and nominate new ones in the discourse. Out of 64 multi-word utterances, 48 involved the use of a demonstrative either as a subject or as an object. The low number of tokens of demonstratives in session 10 is most likely because the file is small compared to the other files. Most of those utterances are complete and well-formed in the adult grammar. Locatives are not frequent in Igbal's (Smadi, 1979) speech at the age 1;7. The locative *hina* (or *hon*) "here", appeared twice in word combinations, given in (26). It appeared as an adjunct to a verb in

both cases. Contexts of locatives with plain prepositions appeared twice, missing the preposition, shown in (27). The production of *hon*, in general, increases in session (10), (20) and (30).

Table 12: Igbal's (Smadi, 1979) productions of demonstratives, locatives, deictics and possessives by the session

| | Age | MLU | Demons (n) | Locatives with *hon* (n) | Possessives (n) | |
					NP+cl Prep+NP	Inflected Preps.
Session 1	1;7	1.22	48	2	10	0
Session 10	2;0	2.39	18	0	6	0
Session 20	2;5	3.7	36	8	12	10
Session 30	2;9	3.59	39	4	16	6

26) a. Igbal [1;7]
   dab-at   hon
   fall.Perf.-1Sg   here
   I fell down here

  b. Igbal [1;7]
   ʔad-uh   hon
   sit-Imperf.-3Msg here
   "Sit here."   (Smadi, 1979)

27) Igbal [1;7]
   a. hu   ʔib-baalih
     3msg.   the-trash
    "It is in the trash."

   b. daʕ it-taawlih
     ?   the-table
    "(On) the table."   (Smadi, 1979)

The errors that the child made were ones of gender agreement between the demonstrative and the following NP. Deictics and locatives of the type [S→ NP+Loc)] and [S→ Loc+ NP] where Loc is *hon* "here" are very few. I could only find one token in

Igbal's data at the age 2;5 (MLU 3.7) given in (28). I found three examples of inverted

locatives: two with proximal *minni* (meaning 'from here') and *ʔhni* "here" and one

example of distal *ʔhnak* "there" in Al-Jenaie (2001). All appeared at different ages, as

shown in (29)[18]. These inverted locatives show that children have learned different ways

of expressing location and that the locative is not always confined to sentence-final

position. Children acquiring English have also been shown to have the ability to locate

objects using both plain locatives (i.e; Eve [1;9]: *Milk in there*) and inverted locatives

(i.e.; Nina [1;11]: *There baby monkey*) from an early age. The data suggest that early

child Arabic deictics with locative *hina* (and its variants) and inverted locatives are not

productive and occur late.

28) Igbal: 2;5
   hon ʔanam-i
   here pen-1st Sg
   Here's my pen   (Smadi, 1979)

29) a. Ahmed: 2;5
    menni   ʔ-ṭob   b-il- mayy
    from here 3M- fall in- the- water
    "Here it dives into the water"

   b. Bader [2;2]
    Adult: ween ye- rooh-oon?
          where 3- go.Imperf- 3Pl.
          'Where do they goT
    Bader: ihnak raah- aw
          there go.Perf.- 3Pl.
          'They went'

---

[18] Kuwaiti *minni* could be a blend of the preposition *min* "from" and the locative *ʔhni* "here".

c. Bader [2;1]
  *hada ya-bči   rooħ   ihnak
   this   3M.-cry.Imperf. go.Imperf. there
  = ʔilli ya-bči   ye-rooħ   ihnak
   "The one who cries should go there."

d. Osama [2;1]
   ehni[Prep] fi'C[T] bab.
   here open door

e. Osama [2;4]
   Adult: yalla   taʕal   šoof   il- gisa!
          Come on come.Imperative see.Imperative the- story
          'Come see the story! '
   Osama: b-a-soof   sayyara ihni
          fut- Is. Imper- see car   here
          'I am going to see the car here.   (Al-Jenaie, 2001).

The child Sara (Al-Jenaie, 2001) used the word *ka* followed by an NP in response to questions with *wein* "Where?" and to refer to things in her environment, as in (30). It seems that *ka* may function as a demonstrative based on the Al-Jenaie's gloss. In one short session, in a few utterances, Sara left the NP that followed *ka* unmarked while she marked it for definite just once. The only two NP subjects that appeared in this particular session she left them unmarked, given in (31).

30) Sara [2;3]:
   a. Sara: ka   hya   sayyara.
           This   3Fsg.   car.Sg.Indef.
            'this is a car'
   b. Adult: wein   sayyart-ich?
           Where car.Sg.Indef-2Fsg.
            "where is your car?"

      Sara: ka   hi
           here   3Fsg.
            "Here it is"   (Al-Jenaie, 2001)

190

31) Sara [2;3]:

   a. Adult: shono ye-sawi   ?il-arnab?
               What   3Msg.Imper-do the-rabbit
               "What does the rabbit do?"

     Sara: arnab ye-sawi   hada
            rabbit 3Msg.Imper-do this.Msg.
            "The rabbit is doing this"

  b. Adult: haði   sayyart-i.
            This.Fsg   car-1Sg
           "This is my car"

     Sara: sayyara ṭaħ-at
            Car.   fell.Perf-3Fsg.
            "The car fell down"   (Al-Jenaie, 2001)

Omar (1973) reports one example of a negated demonstrative with *miš* and the demonstrative *di* "this", given in (32) and one example of a negated locative with *mǐš* and *hon* "here", produced by Sanaa (age 3;6), given in (33)[19]. She used the demonstrative/deicitc *ka* quite productively to refer to and introduce new referents. It appear that those children have acquired the adult-like phrase structure rule [S → (Dem.)+(Noun)] in which the demonstrative functions as the subject of the sentence and the use of a copula is not needed. The sentences of this type in which the subject is an independent pronoun are very few.

32) (Omar, 1973)
   miš di
   Neg this.Fsg
   Not this.   (Egyptian Arabic)

---

[19] Omar (1973) does not specify which of the two children Manal (age 2;8) or Wafaa (age 3;0), who produced the construction in (32).

33) Sanaa [3;6] (Omar, 1973)
   miš hina
   Neg here
   "Not here."   (Egyptian Arabic)

   What Halila (1992) terms "predicative prepositions" (uninflected prepositions) are not productive in Igbal's speech. A homophone of existential *fii* is the preposition *fii* "in". Igbal omitted this preposition at different ages. The preposition *maʕ* (with) appeared quite productively and in a couple of contexts she substituted the preposition *fii* with *maʕ*. The preposition *fii* was one of the function words that were omitted from early on (Al-Buainian, 2003). Omar (1973) observes that it was omitted in Manal's speech at the age 2;8 (34). However, Wafaa at the age 3;0 did not omit it. Interestingly enough, the third child Sanaa omitted it at the age 3;6. The children in (Al-Jenaie, 2001) had problems with locatives with the preposition *fii* as well. For example, Sara at the age 2;5 in an utterance used an inflected preposition correctly (35a). In another utterance she omits the preposition (35b). Al-Akeel (1998) on the other hand, reporting on the acquisition of Arabic comprehension by Saudi children, found that the children comprehended the prepositions *fii* "in" and *ʕala* "on" at the age 3;0. The ages at which those prepositions appeared are considered to be late in comparison to the English prepositions "in" and "on". The preposition *in* was comprehended by 94% of the children around the age 1;9 while *on* was comprehended by 72% of the children around the age 2;3 (Clark, 1973).

34) Manaal [2;8] (Omar, 1973)
   a. *ʔabu-ya   ɣeiṭ   (Missing a preposition and an article)
      father-1Sg. field
      My father (is) (in) (the) field
      =ʔabu-ya fi-l-ɣeiṭ

192

b. ʔabu-ya   beit   (Missing a preposition and an article)
   father-1Sg   house
   My father (is) (in) (the) house

35) Sara [2;5]:
   a. eh   ni- lab   fii- ha
      yes I Pl.-play.Imperf in- 3Fsg
      'Yes, we play with it'

   b. *ni- lʕab   sandoog
      lpl.-play.Imperf box
      "We play with the box."
      = ni-lʕab   fi-ṣ-ṣandoog   (Al-Jenaie, 2001)

The data on demonstratives and locatives that come from the children who produced

NECs show that demonstratives, locatives and NECs are all distinct constructions that

have their own pragmatics. However, what the data show is that locatives and in

particular ECs, as we shall see in the following section, are not productive and their

acquisition might be delayed due to difficulties with definiteness effects.

6.3.6 Possession:

    Igbal produced very few possessives. She could express possession using three

different constructions. The first involves the use of CSs as we have seen earlier. (36) is

an example. The second is of the type Prep+cl (inflected prepositions), using *maʕ*+cl,

ʕand+cl and *ʔl*-cl. *Maʕ*+cl and *ʕand*+cl solely appeared negated with the verbal negation

(*ma*)-*š* (37) while (*ʔla*+cl) always appeared in the affirmative (38). The third type

involves the use of the preposition /la/, mispronounced as /ʔa/, prefixed to the possessor

NP, as in (39). Since no tokens of negated possessives with *ʔla+cl* could be found, it is

unclear how the child would have negated them. My Jordanian consultants tell me that

ʔla+cl is negated with *miš* (or its variant *mu*) in the adult grammar, rather than with the

verbal negation marker *ma-š* (40).

36) Had šambu   muna
      this shampoo.Indef Mona
      "This is Mona's shampoo."

37) a. Igbal [2;5]
        Maʕ-i-š   ʔanam
        With-1ˢᵗSg-Neg   pen.Msg.Indef.
        I don't have a pen.

    b. Igbal [2;9]
       hi ʕand-ha-š̌ fustan
       3Fsg at-3Fsg-Neg dress.Indef.Sg
       She does not have a dress.

38) Igbal [2;5]
    a. ʔila-k   hai ʔanam?
       to-2Sg   this pencil.Indef.Msg
       Is this pencil for you (yours)?

    b. hai ʔila-k   tabih
       this to-2Sg. ball.Indef.Fsg.
       Is this ball for you (yours)?

39) Igbal [2;5]:
     hada ʔa-muna
     this   for-Mona
     "Is this for Mona?"

40) a. ʔil-kitaab mu / *ma   ʔil-i
        the-book   Neg   to-1Sg
        "The book is not mine."

194

Igbal did not produce any AECs or NECs. However, she produced a few possessives (with inflected prepositions) in the negative and in the affirmative, starting from the age 2;5 (MLU 3.7). Recall from Chapter Four that ECs with fii and inflected prepositions have been both given a similar analysis in that they behave as verbal head by virtue of hosting the verbal negation ma-(š) rather than the nominal negation miš (or mu and mob). To negate those possessives, Igbal used the verbal negation morpheme -š (without *ma-*), just like she negated other verbs (41). My Jordanian consultants tell me that in northern Jordan, where Igbal was born and raised, negation with and without *ma-* are both possible in the adult grammar. Negating verbs require morphophonemic changes to the verbs and stress shift as well. Negating possessive inflected prepositions on the other hand require the use of a pronoun that agrees in person and number with the possessor. Existential *fii* does not take on any pronominal clitics nor does it require the NP that follows to undergo any morphophonemic changes.

41) Igbal: 2; 9
   a. muna bid-ha-š   ruħ maʕ-i
     Mona want-3Fsg-Neg go with-1Sg
     "Mona does not want to go with me"

   b. hi ʕind-ha-š   fustan
     she at-3Fsg-Neg   dress.Indef.
     She does not have a dress.'

   c. hi   bid-da-š
     She   want-3Fsg-Neg
     "She does not want.'

Plain prepositions and inflected prepositions have different functions and different distributions from existential *fii*. For one thing, the NP that follows plain prepositions is

not subject to the same definiteness effects observed on NPs that follow existential *fii*.

Both definite and indefinite NP are allowed after plain prepositions (42). In addition,

plain prepositions can only be negated with *miš* (43). On the other hand, inflected

prepositions are different in that they host a pronominal clitic that carries feature

agreement with the NP (44). Existential *fii* can never host a pronoun. The contexts in

which these prepositions and inflected prepositions appear can never be possible contexts

for existential *fii*. Possible contexts for existential *fii* could be locatives beginning with

locatives *hina* "here" or *ihnak* "there".

42) Igbal [2;5]
   a. maʕ ʔin-nas
     with   the-people
     "With the people."

  b. ʔana duħ   maʕ ṭaarik
     1Sg.   go.imperf. with Tariq
     Do I go with Tariq?

43) *ma / miš maʕ ʔin-nas
    Neg   with   the-people
    Not with the people

44) a. Igbal [2;5]
    *maʕ tarik bas   ʔa-kkab   fi-h
     with   Tariq bus.Indef.Msg 1Sg-ride.Imperf   in-3Msg
    = ʔa-kkab   fi-l-bas   maʕ tarik
    = ʔa-kkab   maʕ tarik fi-l-bas
    "I ride with Tarik in the bus."

  b. ʔila-k   hai ʔanam?
    to-2Sg this pencil.Indef.Msg
    "Is this pencil for you (yours)?"

6.3.7 Interrogation:

Wh-in situ questions of the type [S → (Noun)+(where)?] are rare. I could only find one instance in Igbal's speech at the age 2;9, (45) and another one in Al-Buainain (2003) (46). The unproductive use of this type of question could be due to its markedness and low frequency in the adult grammar. Unfortunately, with the absence of full-fledged spontaneous speech production data with context on Arabic, it is difficult to compare and contrast adult production of question types with those of the child. However, the only spontaneous speech production data with context on Arabic that is available comes from Al-Jenaie (2001). The conversation is between the investigator and the child Sara at the age 2;3. Although it is a short conversation, it reveals something about the frequencies of adult question types. For this purpose, I analyzed the question types produced by the adult in this short conversation and found that out of a total of 13 question-type utterances, 7 were with wh-words in initial position, 5 were Yes/No questions and only one Wh-in situ question, shown in Table 11. The child did not produce any question type. Yes/No questions with declarative sentences are identical to declarative statements but only differ in intonation. They do not require any transformations, subject-auxiliary inversion or any change in word order.

45) Igbal: 2;9
    baba,   had   ʔeš
    Papa, this.Msg. what
    Papa, what is this?   (Smadi, 1979)

46) [Age: 2;1]
    *ko:leh wein
     ball   where
    =ʔil-korah wein?
    Where's (the/a) ball?   (Al-Buainain, 2003)

197

Table 13: Frequency of Question type in the adult grammar in one session (Age; 2;3) (Al-Jenaie, 2001)

Question Type	Fronted Wh-Questions	Yes/No Questions	Wh- in situ
Utterances	Adult: shono ye-sawi il-arnab? What 3m-do the-rabbit What is the rabbit doing?	Adult: yalbis hidoom-ah? 3m-wear clothes-3msg He is wearing his clothes?	Adult: ow hatha shono? And this.msg what And this (is) what?
	Adult: shono ye-sawi il-arnab? What 3m-do the-rabbit What is the rabbit doing?	Adult: ind-ah shambo? at-3msg shampoo He has shampoo?	
	Adult: shono yakil? What 3m-eat What is it eating?	Adult: sayyarti hathi? car.Indef.fsg-1sg this.fsg. This is my car?	
	Adult: ween ye-hett-ah? Where 3m-put-3msg. Where is it putting it?	Adult: xaliss-at? Finished-fsg. It is finished?	
	Adult: shono ye-sawi hatha id-dob? What 3m-do this the-bear What is this bear doing?	Adult: sayyarti? Car.Indef.fsg-1sg My car?	
	Adult: ween sayyart-ich Where car-2fsg Where is your car?		
	Adult: ween ttah-at? Where fell down-3fsg Where did it fall?		
Total	7	5	1
	13		

Table 13 above clearly shows that Fronted Wh-Questions and Yes/No questions are more productive than echo questions in the adult grammar. Are Wh-in situ questions also unproductive in child grammar? How frequent are Fronted Wh-Questions? How frequent are Yes/No questions? To answer these questions, I examined Igbal's speech (Smadi, 1979) for the production of these question types and found that she produced a total of 82 questions. As shown in Table 14, out of these 82 questions, 4 were Wh-in situ questions,

27 were questions with fronted wh-word and 51 Yes/No questions with declaratives with rising intonation. Wh-in situ questions are not productive and appear at a later age (2;9) in Igbal's grammar. Questions with question words in initial position and Yes/No questions with declaratives with rising intonation were already in use at the age 1; 7. These simply consisted of no more than two words and the NP was always left unmarked. At the age 2;5 (session 20) she produced 18 declaratives with rising intonation and only two wh-word questions. Some of her questions at this session consisted of more than two words such that the NP was modified by a demonstrative (47) and in some other questions a full verb was used (48). At the age 2;9 (session 30) her questions were even more complex since they contained negation (49) and embedded questions (50). The NP in some of these questions was marked for definite. Igbal also produced questions with possessives (51). She still had difficulties appropriately marking NPs for definiteness. The utterance in (51 b) is unacceptable because the subject NP is indefinite. As we have seen earlier, the child experienced some difficulties forming questions with CSs but not forming questions without CSs (52).

47) Igbal [2;5]
    *ʔila-k   hai ʔanam
    To-2Sg. this pencil
    =ʔila-k hai il-ʔanam
    Is this pencil for you?   (Smadi, 1979)

48) Igbal [2;5]
    ʔana duħ   ʔa-d-dasih?
    1Sg. go.Imperf   Prep-the-school
     Do I go to school?   (Smadi, 1979)

199

49) Igbal [2;9]
    šuf-t-ha-š
    see.Perf.-2Sg.-3Fsg.-Neg
    Didn't you see her?   (Smadi, 1979)

50) Igbal [2;9]
    šuf   hadol šu   bu-saw-u
    see.Imperative these what Prog-do.Imperf.-3Pl.
    See what those are doing?   (Smadi, 1979)

51) Igbal [2;9]
    a. Had ʔil-i
       This to-1Sg
       Is this for me?

    b. *Sura   ʔil-ik
        picture.Indef.Sg to-2Sg
        =ʔiṣ-ṣura ʔil-ik?
       "Is the picture for you?

52) Igbal [2;9]
    a. Min had?
       Who this
       Who's this?

    b. Min hadol
       who these
       Who are they?

    c. Hada ʔeš   ʔa-šar-ha?
       This what on-hair-3Fsg
       What is on her hair?

    d. * min had fustan
         who this dress.Indef.Sg
         = fustan min had
         = had fustan min
         Whose dress is this?

Table 14: Frequency of Question types in the Igbal's grammar (Smadi, 1979)

Question Type Session (Age)	Fronted Wh-Questions	Yes/No Questions	Wh- in situ
Session 1 (1;7)	4	6	0
Session 10 (2;0)	3	6	0
Session 20 (2;5)	2	18	0
Session 30 (2;9)	18	21	4
Total By Q-Type	27	51	4
Overall Total	82		
Percentage	32.9%	62.1%	4.8%

Omar (1973) found that Yes/No questions are the first type of interrogation to appear in her children's speech. She observes that this type of interrogation appeared by the age 2;0 and that they used question words at the age 2;8.

The data on the acquisition of interrogation show that Fronted Wh-Questions and Yes/No questions are frequent in child early grammar. Difficulties in acquiring definiteness effects on NPs are still observed at the age 2;9.

The data on demonstratives, possessives and locatives seem to confirm Brown's observations (1973) that early child grammar features excessive use of demonstratives and nomination. Igbal's (Smadi, 1979) demonstratives are more productive than either her locatives or possessives. Her possessives of the type NP+*cl* are more productive than ones that involve the use of inflected prepositions. The children experienced difficulties with definiteness effects across different constructions.

The implications that the data have for child language acquisition are that i) a child learning Arabic will have difficulties acquiring definiteness effects on NPs across different constructions including ECs and CSs and that ii) while children were able to form simple Wh-questions (without CSs), they might have difficulties forming Wh-

questions with CSs due to the definiteness and word order (adjacency) constraints inside those CSs.

6.4 Negation:

Much research work has been done on the acquisition of the negation system in Arabic. Omar (1973), Smadi (1979), Al-Jenaie (2008) and Al-Buainain (2003) all report a rather unified line of development for the acquisition of negation system in Arabic. This line of development seems to conform to that observed for English. Klima and Bellugi (1966), Bellugi (1967) and Bloom (1970) all argue that the children learning English go through three stages in the acquisition of negation. The first stage is marked by the emergence of the earliest form of negation, the discourse negation morpheme "no". The children use *no* and *not* either followed or preceded by a proposition. McNeill (1970) argues that Neg+S(entence) or S(entence)+ Neg is a universal rule that marks the beginning of the acquisition of negation. Bloom (1970) argues that the discourse *no* is anaphoric in that it is used to negate a previously said utterance and that what follows *no* is an affirmative sentence. The second stage is when the children use the negation morpheme with verb stems and other modals, such as "don't" and "can't". The third is when they show mastery of all rules of negation so that those negation morphemes are used separately from auxiliary verbs. A unified line of acquisition of negation is also observed cross-linguistically. Wode (1977) investigated the acquisition of negation in a longitudinal study across different languages (Bulgarian, lativian, Russian, English, German, and Swedish) and other unrelated languages. He found a rather unified sequence of acquisition for negation that he classified in four stages: Stage I: one word negation,

Stage IIa: anaphoric negation, Stage IIb: non-anaphoric negation, and Stage III: intra-sentential negation (p. 92-101).

The sequence of the development of the negation system in Arabic corresponds to that of English outlined above. Omar (1973), Smadi (1979), Al-Jenaie (2008) and Al-Buainain (2003) all report a rather unified line of development for the negation system with *la* appearing first, then *miš* (Jordanian and Kuwaiti *mu*, and Qatari *mob*) followed by *ma-(š)*. Based on the data, it appears that acquisition of the negation system varies across the children. For example, Omar (1973) did not find any negatives in the speech of children younger than 2;8. The age 2;8 is when most of the acquisition of morphology starts to appear. The multi-word stage for her children appears very late compared to the children learning English. For the children in Smadi (1979) and the four children in (Al-Jenaie, 2001), *laʔ* appears much earlier than the age 2;8. It appeared anaphorically, not a part of the sentence, first as a one word negation appearing alone and followed by a proposition. Omar (1973) observes that the first emergence of the discourse negation morpheme *laʔ* and the nominal negation morpheme *miš* was at the age 2;8, followed by *ma-š* at 3;6. The child Manaal (age 2;8) on an occasion responded to another child saying *laʔ, laʔ, bitaʕti* "No, no, mine!" In a few other occasions, she also replied to adult questions with *laʔ*. Omar contends that Wafaa (3;0), in an attempt to negate the adult's sentences in (53), used *laʔ* inappropriately. Unfortunately, Omar does not provide the intended meaning of the child's responses in the adult grammar, nor does she provide the frequency of those errors. However, I would interpret Wafaa's response in (53a) as either involving the use of *miš* or *ma-š* in the adult grammar. Since the adult's utterance

contains a verb, the use of *ma-š* is a greater possibility. Either way, the child used *laʔ* inappropriately. The same situation is true of the child's utterance in (53b). In (53c), however, the targeted negation morpheme is *miš* since the adult's question is a locative with *hina* "here".

53) Manaal [2;8]
  a. Adult: huwa raaħ ʔil-ɤeiṭ
    3Msg. went.Msg the-field
    He went to the field

    Wafaa: *ʔil-ɤeiṭ laʔ
         the-field no
      = miš fi-l-ɤeiṭ OR   ma-raaħ-š   ʔil-ɤeiṭ
        Neg in-the-field / Neg-went.3Msg-Neg the-field
        "Not in the field." / "He didn't go to the field."

  b. Adult: ʔil-bit   di ḍarab-it-ik?
        the-girl.Sg this hit.Perf-3Fsg-2Sg
        (Did) this girl hit you?

    Wafaa: *hiya laʔ
         She no
       = laʔ, hiya ma-ḍarab-it-ni-š
         Neg, 3Fsg Neg-hit.Perf-3Fsg-2Sg-Neg
        "She didn't hit me."

  c. Adult: ʔumm-ik   hina
        mother-2Sg. here
        (Is) your mother here?

    Wafaa: *ʔumm-i   laʔ
        Mother-1Sg Neg
        My mother no!
      = laʔ, ʔumm-i   miš hina
        Neg mother-1Sg Neg here
        "No, my mother (is) not here."

These tokens appeared in these children's speech much later than English ones and even later than the children in Smadi (1979) and (Al-Jenaie, 2001). Smadi (1979) shows that *laʔ* was the first form of negation to appear in Igbal's speech. It first appeared at the age 1;7 (MLU 1.22). I analyzed the sample sessions that he includes in his dissertation and found that Igbal used *laʔ* 4 times in session 1 (age 1;7), once in session 10 (age 2;0) (54a), twice followed by a proposition in session 20 (age 2;5) (54 b,c) and once followed by a proposition in session 30 (age 2;9) (54 d). Unfortunately, Smadi does not report the frequency of *laʔ* or any of the other negation morphemes in his study nor does he report any errors in the use of each negation morpheme. However, he reports inflection errors on the verbs negated with *laʔ* and the omission of *ma-* in the discontinuous verbal negation morpheme *ma-š* as we shall see later.

54) Igbal's production of *laʔ* (Smadi, 1979)
   a. [age 2;0]
     laʔ muna
     Neg Mona
     No, Mona

   b. [age 2;5]
     laʔ hi   dʒiʕaneh
     Neg 3Fsg hungry
     No, she is hungry.

   c. [age 2;5]
     laʔ šuf-t-ha- š
     Neg saw-1Sg-3Fsg-Neg
     No, I didn't see her.

d. [age 2;9]
    laʔ ʔa-ššaħa-u   mu
   Neg 1Sg-take off-3Msg Neg
   No, I am not to take it off, isn't it?

Al-Buainain (2003) reports the earliest emergence of the verbal negation *ma-* which was incorrectly pronounced by the child as *ba-* at the age 1;10, shown in (55). Al-Buainain shows that before the emergence of *ma-* and *miš*, the children inappropriately used the discourse negation marker *laʔ* to negate different grammatical categories in their early word-combinations. They used it with locatives and nouns in place of *mob* (variant or *miš*) as in (55a and b) and with verbs in place of *ma-* as in (55 c). Unfortunately, she neither provides the frequency of those utterances nor the exact ages at which these utterances appeared. She also observes that this confusion continues on until about the age 6 (56).

55) (Al-Buainain, 2003)
    ba-bi
    Neg-want
    I do not want   (Qatari Arabic)

56) Inappropriate use of *laʔ* in early word-combinations in the Qatari dialect (Al-
    Buainain. 2003)

   a)* la ʔihne
       Neg here
     = miš (or mu) ʔihne
        "Not here."

   b) *la ħaliib [the child does not want milk]
       Neg milk
     = miš ħaliib
        "Not milk."

c) *la   raaħ
    Neg went.msg.
 = ma   raaħ
    "He did not go."

57) Inappropriate use of negation (Al-Buainain, 2003) :
    a. *mob ʔ-lʕab   [4;9]
       Neg   1sg-play
     = ma ʔ-lʕab
       "I am not playing." / "I am not going to play."

    b. *la: ma   ħelo   [5; 4]
        Neg, Neg good/sweet
      = la: miš (or mob) ħelo
       "No, not good"

    c. *mob šef-na:-h   [6;0]
       Neg saw-1st.pl.-him
      = ma šef-na-h
       "We didn't see him."   (Qatari Arabic)

With respect to comprehension of *miš* and *ma-* in the Saudi dialect, Al-Akeel

(1998: 231-232) tested the children's comprehension of *miš* by showing them pictures of

the car is not red in which *miš* is followed by an adjective and tested their comprehension

of *ma-* in which *ma-* is followed by a verb by showing them pictures of *the man is not

eating*. He found out that they comprehended *miš* + Adj. better than *ma*-V. Since the test

with negated adjectives was passed by all age groups and the test with negated verbs was

failed by the youngest age groups, Al-Akeel proposes that negated adjectives develop

before children are 3;0 years (p. 229-232).

Al-Jenaie (2008) reports excessive production of *laʔ* in the speech of four children in her study. Out of a total of 1105 negated utterances throughout the sample period the four children produced 357 tokens of *laʔ*, constituting 32%. She also observes that the children used *laʔ* at the same time they used negated forms with *ma-* and *mu*.

The nominal negation morpheme *miš* (and its variants *mu* and *mob*) appeared second according to Smadi (1979). Omar (1973) observes that *miš* appeared frequently in Manaal (2;8), Wafaa (3;0) and Sanaa's (3;6) speech overlapping with *laʔ*. Jordanian *mu* starts to appear at the age 2;0 with an MLU of 2.56 for Smadi's child. Smadi observes that *mu* exclusively appeared in initial position of the sentence. The child used it appropriately to negate locatives, adjectives and NPs, as in (58).

58) Igbal (Smadi, 1979)
    a. [2;0] MLU 2.56
       mu   hon
       NEG here
       Not here

    b. [2;0]
       mu   šaaṭi-h
       NEG good-3fsg
       She is not good

    c. [2;2] 2;2   MLU 2.37
       mu   hai
       NEG this.3fsg
       Not this

    d. [2;3] 2;3 MLU 2.58
       mu   ħib
       NEG milk
       Not milk

Al-Jenaie (2008), once again, reports excessive use of constructions of the type ma-XP and mu-XP with the former type being more productive. For the four children in her study, *mu* and *ma-* were already in use in the beginning of the sampling period which took place at different ages from 1;7 for two children, 1;11 and 2;0 for the other two. They used *ma-* to negate verbs, possessive *ʕind-i* (an inflected preposition) and existential *fii / ku*. They used *mu-* to negate locatives *hina* 'here' and *hnak* 'there', adjectives *zain* 'nice', a possessive with *ħagg* 'mine', and a demonstrative *ha:ða* 'this'. As shown in Table 15 below, the constructions of the type ma+XP, where XP is a VP containing a full verb, existential *fii* or *ku* or possessive inflected prepositions, are the most common. As shown in Table 15, those appeared 61% of the time in the speech of the four children in her study. The anaphoric *la* appeared 32% of the time while mu+XP 6%. Most of 61% of the form *ma+XP* appeared in Stage III (2;4 to 2;6). Like Omar's (1973), only NECs could be found in Al-Jenaie data.

Table 15: Production of the negative morphemes in the files of 4 children taken from (Al-Jenaie, 2008).

Negative form	Total (across four children)	Percentage
la	357	32%
ma+XP	679	61%
mu+XP	69	6%
Total	1105	%

Table 16 breaks up the production of those different negation morphemes by almost two-month stages. It shows that all negation morphemes were already in use in the beginning of the recordings. The frequency of *laʔ* decreases from 45% across the four children in Stage I to 24% in Stage III. In contrast, the frequency of *ma-* and *mu* increases from 52%

and 2% in Stage I to 67% and 8% in Stage III, respectively. The Table also shows that the

frequency of *ma*-XP is much higher than the frequency of *mu*-XP.

Table 16: The frequency of the negative morphemes by the stage in the speech of 4
Kuwaiti children taken from (Al-Jenaie, 2008).

Child	Stage I Sara (1;11- 2;1) Osama (2;0-2;1) Bader & Ahmed (1;7-2;1)			Stage II All children (2;2-2;4)			Stage III All children (2;4-2;6)		
	laʔ	**ma**	**mu**	**laʔ**	**ma**	**mu**	**laʔ**	**ma**	**mu**
Sara	6	12	-	41	32	6	39	40	27
Osama	23	25	3	10	24	4	31	33	5
Bader	30	23	-	39	76	6	55	174	3
Ahmed	20	31	1	47	68	2	16	141	12
Number	79	91	4	137	200	18	141	388	47
% of stage	45%	52%	2%	39%	56%	5%	24%	67%	8%
% of database	7%	8%	4%	12%	18%	1.6%	13%	35%	4%
Total (n)	174			355			576		
% of database	16%			32%			52%		

Igbal (Smadi, 1979) at age 2;1 (MLU 2;51) started to use negated imperatives for

the first time although without making the necessary morphophonemic changes to the

verbs and without marking the verbs for non-perfective. /t-/ shows up as a prefix to mark

subject agreement and non-perfective in the adult grammar, as in (59). Imperfective

forms of negated imperatives start to appear shortly after. This time the child correctly

supplies /t-/, as in (60). The production of non-imperatives (58) a little earlier than

imperatives (59) and (60) and that they overlap at later ages is evidence that the

production of negated imperatives emerge around the age 2;3.

59) Igbal [2;3 - 2;4]
   a. *la   ʔizzal-i
      NEG get down-2fsg
  = la t-inzal-i
      "Don't get down."

b. *la   ʔittaħ
   NEG   open
= la   ti-fitaħ
   "Don't open (it)"

60) a. Igbal [2;2]
   muna, la   t-tuli-ha
   Mona NEG   2.Imperf.-get-3fsg (it)
   "Mona, don't get it."

   b. Igbal [2;3]
   la   t-ruħ-i
   NEG   2.Imperf.-go-3fsg
   "Don't go."

   c. Igbal [2;7 / 2;8]
   la   t-tuli-ih
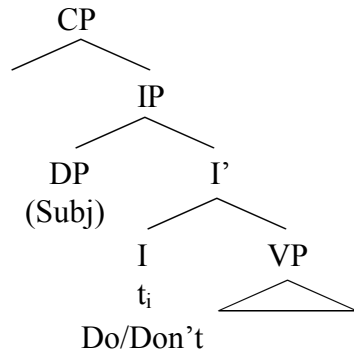   NEG 2.Imperf. -get-3msg (it)
   "Don't get it."

   d. Igbal [2;9]
   la   t-ṭaʕmi-ha
   NEG 2.Imperf-feed-3fsg
   "Don't feed-3fsg"

Igbal's negated imperatives have important implications for the language acquisition theories. These constructions could be evidence that Igbal has started to project a CP system around the age 2;3. In Chapter Five above, we have seen that the projection of CP is optional in early child grammar. One mechanism by which CP is activated is wh-movement to form wh-questions (61). Another mechanism that triggers a CP projection is I-to-C movement (Koopman, 1984; Chomsky 1986) in negated imperatives (Potsdam, 1998), as in (62). Thus, these constructions have a structure as in (63) in which the subject can either be overt or covert (*Don't you go in there!* Vs. *Don't go in there!*).
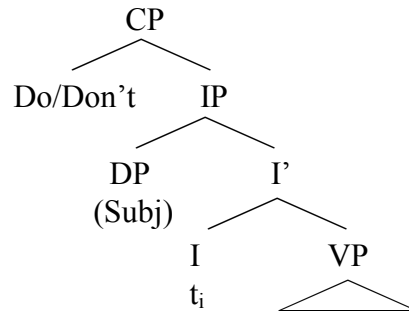
61) a. What doing?　　　　[Eve 1; 8]
　　b. What doing up there? [Peter 2; 4]
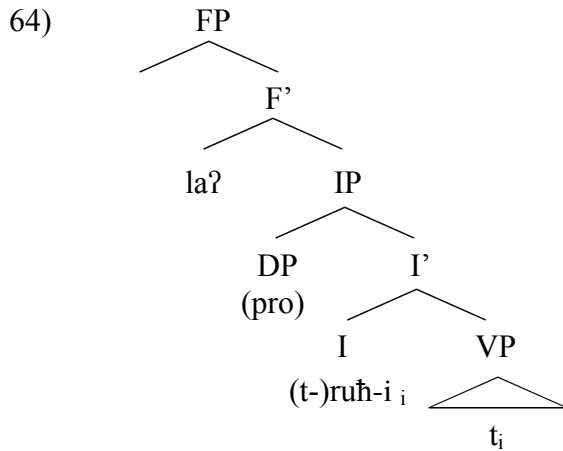

62) a. You don't be late!
　　b. Don't (you) forget!

63)　a. Non-Inverted Negatives　　　　　　b. Inverted Negatives

```
        CP                                      CP
       /  \                                    /  \
          IP                              Do/Don't   IP
         /  \                                       /  \
      DP      I'                                 DP      I'
    (Subj)   /  \                              (Subj)   /  \
           I      VP                                  I      VP
           tᵢ    /__\                                 tᵢ    /__\
        Do/Don't
```

On the basis of the available data so far, the assumption then is that Igbal is acquiring two

rules for negation: one for verbal and nominal (*ma-š* and *mu*) in in which these are

projected as heads of NegP and the other one for negated imperatives (64) in which the

imperative negative *la* triggers a Focus in CP. The non-perfective and agreement marker

/t/ is optional in Igbal's early grammar. The implications that these observations have for

the acquisition of Arabic ECs are that the children overgeneralize /laʔ/ for verbal or

clausal negation but not for EC negation. This supports the notion that they are producing

NECs as frozen forms or routines.

64)

```
                FP
               /  \
                   F'
                  /  \
               laʔ    IP
                     /  \
                   DP    I'
                  (pro) /  \
                       I    VP
                   (t-)ruħ-i ᵢ  △
                               tᵢ
```

Up to this point, the acquisition of Jordanian negated imperatives has not yet been completed since it is missing -*š*. The next stage features more linguistic developments in that *ma-š,* anaphoric negation and *mu* in medial positions start to appear, at the age 2;2. The first emergence of the discontinuous negation –*š* appeared sometime between ages 1;9 and 1;10, shown in (65) (Smadi; 1979: 136). The first emergence of a correct *ma-š* was made by Igbal at the age 2;2 although she mispronounced the verb (66). She also produced a a few other tokens of *ma-š* at later ages (2;8 and 2;9) (67).

65) a. ʔidd-i-š   ʔana ʔi-ššab
    want.Imperf-1Sg-Neg 1Sg. 1Sg.drink.Imperf.
    "I don't want to drink."

   b. ʔidd-i-š   hada
     want.Imperf-1Sg-Neg this
     "I don't want this."

   c. ħibbu-š   ʕarabi
     like.Imperf-Neg Arabic
     "I don't like Arabic."   (Smadi, 1979)

213

66) Igbal [2;2]
    ma-ddaʕi-š
    Neg-went out-Neg
    "He did not go outside."   (Smadi, 1979)

67) Igbal [2;8, 2;9]
    a. ma-dalli-š   ʔahwa
      Neg-remain-Neg coffee.Indef
      "There is no coffee left."

    b. ma-dalli-š   xubiz
      Neg-remain-Neg bread.Indef
      "There is no bread left."

    c. ʔana ma-šaafi-š
      1sg. Neg-know.Imperf-Neg
      "I don't know."   (Smadi, 1979)

To Smadi, Igbal's omission of ma- and her use of -š exclusively with verbs (but not with

pronouns) could not be explained since *ma-š* is commonly used to negate both verbs and

pronouns in the adult language. He observes that she continued to negate verbs using -š

without *ma-* throughout the sampling period up to the last recording (p. 136-143). /š/ on

the other hand, can also be omitted from the negation complex *ma-š* in the adult grammar

in the dialects that use *ma-š*. The omission of -š has been labeled differently in other

literature: "emphatic negation" for Jordanian Arabic (AbulHaija, 1989) and "categorical

negation" for Moroccan and Egyptian Arabic (Brustad, 2000). "Categorical negation" is

called so because it negates a whole category including all members within that category

rather than individuals. Jaradat (2007) explains further that emphatic negation is personal

in that it reflects the speaker's point of view while categorical negation is not personal. It

seems that the use of *ma-* (with *-š* omission) is marked since it co-occurs with certain words that have been shown to be negative polarity itmes (NPIs) to express oaths, denials and challenges. Jaradat (2007) recorded real life conversations of adults and found that out of 30 tokens of verbal negation 10 appeared without *-š*. He observes that those 10 tokens were examples of categorical and emphatic negation. Categorical negation appeared with NPIs and the particle *wala* "at all" and emphatic negation was used to express challenge and denial (p. 114-115)

I analyzed the 4 sessions of Igbal's speech in Smadi (1979) looking for tokens of verbal negation and found the following. She negated one verb using *-š* in session 1 (age 1;7), (68) negated three inflected prepositions in session 20 (age 2;5) (69) and negated six verbs and one inflected preposition in session 30 (age 2;9) (70). Note that the four sessions that are included in Smadi's dissertation do not cover his whole recordings.

68) Igbal's production of the verbal negation ma-(š) in session 1 [age 1;7]
   a. ʔadd-itt-i-š   muna
      bit.3Fsg-1Sg-Neg Mona
      "Mona didn't bite me."   (Smadi, 1979)

69) Igbal's production of the verbal negation ma-(š) in session 20 [age 2;5]
   a. [2;5]
     maʕ-i-š   ʔanam
     with-1Sg-Neg pencil.Indef.Sg
     "I don't have a pencil"

   b. [2;5]
     maʕ-i-š
     with-1sg-Neg
     "I don't have."

c. [2;5]
   maʕ-i-š
   with-1Sg-Neg
   "I don't have."   (Smadi, 1979)

70) Igbal's production of the verbal negation *ma-(š)* in session 30 [age 2;9]
   a. muna bid-ha-š   ruħ   maʕ-i
      Mona want-3Fsg.-Neg go.Imperf. with-1Ssg
      "Mona does not want to go with me."

   b. hi   badd-a-š
      3Fsg. want-3Fsg.-Neg
      "She doesn't want."

   c. hi   ʕind-a-š   fustan
      3Fsg. at-3Fsg.-Neg dress.Indef.Sg
      She does not have a dress

   d. hi   šafi-š   salli
      3Fsg. know-Neg pray.Imperf
      She doesn't know how to pray

   e. ʔani šafiš   šu   ʔism-u
      1Sg know-Neg what name-3Msg.
       I don't know what his name is

   f. šuf-t-ha-š
      saw-2Sg-3Ffsg-Neg
      Didn't you see her?

   g. laʔ   šuf-t-ha-š
      Neg saw-1Sg-3Fsg-Neg
      No, I didn't see her

The fact that Igbal continued omitting *ma-* in her early ages, that she negated possessive *ʕind+cl.* (an inflected preposition) using *-š* only and that she started using *ma-š* more often at a later age (2;8 / 2;9) is evidence that she did not complete the acquisition of *ma-š* before 3;0. The delay of the acquisition of *ma-(š)* is also supported by findings from Al-

Akeel's (1998) comprehension study, referred to above.

6.5 Acquisition of Arabic ECs

Two-word combinations in Arabic child grammar start to appear sometime before the age of two. The utterances then are by and large similar to those observed in other languages. We have seen in Chapter Five that child English ECs start to appear in a period that corresponds to Brown's (1973) late Stage I and early Stage II (from ages 1; 10 to 2;1). Children in Stage II are predicted to have already acquired word order and a few basic semantic relations (Brown, 1973). This is the stage in which the earliest emergence of Arabic ECs start to appear, at around the age 2;1.

It is not always the case that Arabic child utterances are instances of reductions or truncations of some utterances. Many child utterances are actually complete sentences in the adult grammar. Child ECs, demonstrative constructions, possessives and uninverted locatives of the type [S→ (Noun)+ Loc/PP)] are complete utterances due to the fact that those constructions do not require the use of an auxiliary or a copula, elements that are required in the English counterparts. However, the omission of some functional words such as prepositions, articles, future and progressive markers on the verb has been attested in the acquisition literature (Omar, 1973; Smadi, 1979; Al-Jenaie, 2001, Al-Buainain, 2003). While existential *there* is needed to meet the requirement of the EPP in English ECs, existential *fii* is not required to meet that requirement in Arabic existentials. *BE* is not restricted in English ECs since it also appears across different constructions. It is base-generated as the head of VP then moves to Tense. It must carry agreement features with the indefinite DP. In contrast, the equivalent of *BE* in Arabic is not required,

at least not in present tense constructions. The use of *fii* is restricted in Arabic ECs and it does not carry agreement features with the indefinite DP. It is base-generated as the head of VP to license the indefinite DP. Rigid word order constraints and the same definiteness effects on the DP are observed in ECs in both languages. Finally, negation in ECs is treated differently by children learning English and Arabic. While both negated and affirmative ECs appear in the speech of children acquiring English, only negated ECs appear in the speech of children acquiring Arabic.

6.5.1 Predictions Based on Abu–Akel & Bailey (2000)

According to Abu–Akel & Bailey (2000), children start using indefinite DPs predominantly, and then as they grow up, they learn not to rely on the context to specify referents, and therefore they start using both indefinite and definite articles. Schafer and deVilliers (2000) also showed in a study conducted on children from ages 3;6 to 5;5 that children also acquire specific indefinite articles (where the referent is only specific or known to the speaker- the child) before they use the definite article *the* appropriately.

However, one thing to note is that Arabic definiteness effects work differently. An NP is made indefinite simply by omitting the definite article *ʔl* "the". Arabic lacks indefinite articles. What that means is that Arabic present tense ECs will contain fewer function words than their English equivalents: no copula, no indefinite articles and no agreement features. In addition, if we assume *fii* is the verb in present tense ECs, the indefinite NP does not have to show overt agreement with it. The assumption then is that *fii* is an expletive verb that does not inflect for agreement features nor does it carry tense morphology.

218

Based on the data presented so far, I define ECs in early child Arabic as ones that contain *fii* followed by an indefinite NP and a locative (71) , and ones that contain empty *fii* (*fii* omission) followed by an indefinite NP and a locative (72). In section 6.3 above, we have seen how children had difficulties acquiring definiteness effects on DPs and word order in CSs and verbal predicates. The predictions that I make for the acquisition of Arabic ECs, based on the discussions earlier, are that i) the children acquiring Arabic will have difficulties observing definiteness effects on the post-fii NP and that ii) they will use different word orders. I predict that the child will use ECs with and without *fii* and locatives as in (72) to refer to an object in a location. What that suggests is that children's early ECs without *fii* will resemble simple locative constructions which are also verbless (73). The difference is that (72) is ungrammatical in the adult grammar while (71) is grammatical. However, (72) can be interpreted as both an ECs with *fii* omission and as a locative sentence in which the child failed to mark the subject for definiteness (73). That is to say, they will use indefinite NPs to refer to specific and non-specific referents, confirming to the predictions of Abu–Akel & Bailey (2000).

71) fii   asad   fi-l-gafas
     there lion.Indef in-the-cage
     "There's a lion in the cage"

72) *asad   fi-l-gafas   (EC with *fii* omission)
     lion.Indef in-the-cage
     "There's a lion in the cage"

73) *asad   fi-l-gafas   (Simple locative)
     lion.Indef in-the-cage
     "A lion in the cage"

6.5.2 Predictions Based on Schafer & Roeper (2000) and Kirby and Becker (2007).

Schafer and Roeper found that expletive *there* occurred one to four months before the emergence of the anaphoric use of *there* (Table 1 above). The latest age of acquisition for expletive *there* was by the child Adam (Brown, 1973: CHILDES). Kirby and Becker, on the other hand, found that children produced expletive *it* 2 to 7 months after they produced deictic and anaphoric pronoun *it*. The latest age of acquisition for expletive *it* was shown by the child Adam at 2;6. Becker (2000) reports that contexts of deictic and expletive *there* appeared at different times between the ages 2;0 and 3;4 for five children taken form the CHILDES database (MacWhinney and Snow 1985).

Unlike English in which existential *there* contrasts with deictic *there/here* (Lakoff, 1997), existential *fii* does not contrast with any deictic element in the language. *Hnak* (deictic/locative *there*) is used endophorically (referring to a locative in the discourse) and exphorically (referring to a locative in the context). However, *fii* can also be used accompanied by an act of gesturing at things in the immediate context, in which case, it is deictic. I predict that children will use *fii* deictically more frequently than existentially in their early ages; thus conforming to the aforementioned studies.

6.5.3 Production of Arabic Child ECs

In what follows, I show that Arabic child ECs are unproductive and that the children who produced the 15 NECs had difficulties marking the post-fii NPs for definiteness. An examination of the available data shows that Arabic ECs are not productive and that the children have certain difficulties acquiring *fii* and definiteness effects on NPs. I could only find 15 tokens of ECs in the data. The unpublished data that

Al-Jenaie (2008) shared with me contain 10 tokens of ECs from two out of four children in her data that range from the ages 1;7 to 2;6, given in (74). The remaining five tokens are found in Omar (1973) on Egyptian, given in (75) and (76). What is interesting is that all of those 15 utterances are NECs. No AECs could be found.

Not all of the ten tokens of Kuwaiti NECs are adult-like. The data suggest that some of the children might use *ma-fii-(š)* as a tool to express disappearance or the unavailability of things in their immediate context. The use of definite NPs in these constructions is evidence for the locative use of *ma-fii / ku.* In (74a) both the adult and the child Sara are talking about where the adult's apple could have been. What is at issue is not the existence of a certain indefinite object or the introduction of a new entity into the discourse but rather the location of a definite object that is not new. NPs that are marked for possessive are excluded from ECs. Osama in (74b) wanted to say something like *haða mu ʔihne* "this is not here". Instead, he used Neg-*fii* in place of Neg DP. The word *ʔes-saʕa* in the dialects of Arabic is the word for "the time" and for "the clock and the wrist watch". While the adult in (74c) was referring to "the time", the child was referring to "the clock" that was there in context. In (74d), the child makes a word order mistake simply because she was attempting to use a negated locative with *mu ʔihne* "not here", as was Osama in (74b), but instead used *ma-fii*. Sara's first utterance in (74e) is an adult-like EC. However, her second utterance is not. She omits the indefinite NP but keeps the locative *daxil* "inside". In (74f), Sara marks the post-*fii* NP as definite. She was either referring to the adult's car or her own. Osama's NEC in (74g) is an adult-like utterance except that his use of a demonstrative in the "coda" of an EC is not adult-like. The

assumption then is that he meant to use a locative *ehni* or that the demonstrative is a separate utterance. Osama's utterance in (74h) was said in response to a question with *wein* "where" about where his jacket might have been. Ma-ku is followed by a possessive pronoun *mali* "mine" which is not allowed in ECs. It seems like he was trying to say something like *mali mu ʔihne* "mine is not here" referring to his jacket. His utterances in (74i &j) are adult-like. Table 17 shows that five of those NECs contain existential *fii* and the remaining five contain existential *aku*. No contextual differences could be found between using *fii* and *aku*.

Table 17: Production of Kuwaiti Arabic child ECs.

Child	2;0	2;1	2;2	2;3	2;4	2;5	2;6
Sara	*Fii* x 1	0	0	*Ku* x 2 *Fii* x 1	*Fii* x 1	0	0
Osama	0	*Fii* x 1	0	0	*Ku* x 1 *Fii* x 1	*Ku* x 1	*Fii* x 1

74) The ten NECs in the speech of two Kuwaiti children:

a. **Sara [2;0]:**
  Adult: wein   tefaħt-i   ana?
          Where   apple.Fsg-1Sg 1Sg.
          "Where is my apple."
  Sara ma fii
          Neg there
          "There is not."

b. **Osama [2;1]**
  Osama: *hada   ma fii   ehni
          This.Msg. Neg there here
          = haða   mu   ʔihni
          "This is not here."

c. **Sara [2;3]**
  Adult: es-saʕa   čam   elħein sara?
          the-clock how much now sara
          "What time is it?"

Other lines then she replied:

Sara: *ma fii   esaʕah   čam (referring to the clock rather than the time)
      Neg there the-clock how much
      "There is no clock."

d. **Sara [**2;3]
  Adult: wein   daʔera   kabeeraʔ
       Where circle.Indef. Fsg big.Fsg
       "Where is a big circle?"
  Sara *aʔera   ma ku.
       circle.Indef.Fsg Neg there
      = ma-ku   daaʔera
      "There is no a circle."

e. **Sara [**2;3]
  Sara: ma   ku   bahar
       Neg there sea.Indef.
       "There is no sea."
  Adult: aku   waħd-a   daxil
       There one.Indef.-Fsg inside
       "There is one inside."
  Sara *ma ku   daxil
       Neg there inside
      = ma ku waħd-a daxil
      "There is (nothing) inside."

f. **Sara [**2;4]
  Adult: ka   sayyart-i.
       Here car.Fsg.-1Sg
       "Here is my car."
  Sara: *ma fii   sayyart-i
       Neg there car.Fsg.-1Sg
      = ma fii   sayyarah   (NEC)
      = ma-ʕind-i   sayyarah   (Poss)
      = sayyart-i   mu ʔihni   (Neg Loc.)
      "There is no my car."

g. **Osama [**2;4]
  Adult: wein ʔil-walad   ʔilli ʕind-ah sayyart-een?
       Where the-boy.Sg that at-3Msg car.F-Dual
       Where is the boy who has two cars?

Osama: ma fii   sayyarteen haδi
       Neg there car.F-Dual   this.Fsg
       "There aren't two cars."

h. **Osama [2;4]**
   Adult: wein   ʒakeet-ikʕ
           Where   jacket-2Sg
           Where is your jacket?
    Osama: *ma   ku   mali   ma ku.
             Neg there mine, Neg there
          = mali   mu   ʔihni
            "There isn't mine, there isn't."

i. **Osama [2;5]**
   Adult: wein eš-šhampoo?
           Where the-shampoo
           "Where is the shampoo."
   Osama: ma   ku   shampoo
            Neg there shampoo
            "There is no shampoo."

j. **Osama [2;6]**
   Osama: ma fii sayyara
            Neg. there car.Indef.Fsg.
            "There isn't a car."

The NECs reported in Omar (1973) are all adult-like except for (76b) in which the child

used *ma-fii-š* and marked the NP as definite to talk about her mother's disappearance,

instead of using a negated locative such as *mama miš hina* "Mom is not here" or *miš hina*

mama "Mama is not here." The late production of NECs and the absence of their

affirmative counterparts in Omar's data might suggest that it could be the case that the

acquisition of ECs is delayed until at least the age 3;6. It appears that the children in Al-

Jenaie (2008) were using *ma-fii* and *ma-ku* to express both non-existence and

disappearance. Berman (1985: 268) shows that Hebrew children in their one-word stage

used the negative existential morpheme *ʔeyn* for different purposes. They used it to

express non-existence, disappearance and completion, depending on the context. They also used *day* "enough" to express desire for a game to stop or to protest.

75) Wafaa's ECs [3; 00]

    a. Ma-fii-š   talæ:ta
        Neg-there-Neg three
        "There are not three"

    b. Ma-fii-š   tæ:ni
        Neg-there-Neg more
        "There is no more"

    c. Ma-fii-š   ħadd
        Neg-there-Neg anybody
        "There is nobody"   (Omar, 1973)

76) Sanaa's ECs [3; 6]

    a. Ma-fii-š   tæ:ni
        Neg-there-Neg more
        "There is no more"

    b. *Ma-fii-š   mama
         Neg-there-Neg mama
        = mama miš hina
        "There is no mama" for 'mama is not here'   (Omar, 1973)

Based on Al-Jenaie's (2008) and Omar's (1973) data, given in (74), (75) and (76), I define Arabic child ECs syntactically as ones that contain existential fii (or *ma-fii-(š)* if negated) followed by an indefinite NP. A locative or a CP in the coda of child ECs are not an option at this point. Could it be that there are more contexts for ECs in which children dropped existential *fii* or *aku*? Sentences with indefinite subjects and a locative are possible contexts for ECs. However, these sentences are rare, as we have seen in

section 6.3 above. The examples in (77-79) are all possible contexts for existential *fii* depending on the context in which they appear. All of these utterances are unacceptable because of the restrictions on indefinite subject NPs in sentence initial position. It is only by inserting existential *fii* as a verbal head that these subject NPs will be licensed and the utterance will be acceptable. It could be the case that the difficulty in properly marking the post-*fii* NP for definiteness is linked to the difficulty of disentangling *fii* from the verbal negation *ma-(š)*. The children need to understand that existential *fii* is needed to structurally govern and Case-mark an indefinite NP and that it is a stand-alone morpheme separate from the negation marker. At this point, those requirements have not yet been acquired.

77) a. Wafaa [3;0]
    *mayya   suxn-a
     Indef.water hot-Fsg.
     =ʔil-mayya suxn-a
     "The waster is hot."

   b. Sanaa 3;6
     *nas   kul   yom   ʕam-yi-šrab-u   šay
      Indef.people every day   Prog.-3.Pres.-Pl. tea.
      =ʔin-nas ʕam-yi-šrab-u šay kul yom
      "People drink tea everyday."   (Omar, 1973)

78) a. Igbal [2;5]
    *luʕbih   nami-t
     Indef.doll.Fsg slept-3Fsg
   = naami-t ʔil-luʕbih? / = ʔil-luʕbih naami-t?
     "Did (a/the) doll sleep?"

   b.Igbal 2;9
    *Sabun   ʔil-i
     Indef.soap for-1Sg

  = ʔil-i ʔiṣ-ṣabuun / = ʔiṣ-ṣabuun ʔill-i
    "The soap is for me (mine)."

  c. Igbal [2;9]
   *Dawa   šan tum   had
    Indef.medicine for Indef.mouth this
  = ʔi-d-dawa ʕašan tum had
    "The medicine is for the mouth of this one."

  d. Igbal [2;9]
   *Sura   ʔili-k?
    Indef.picture   for-2Sg
  = ʔiṣ-ṣura ʔili-k? / = ʔili-k ʔiṣ-ṣura?
    "Is the picture for you?"   (Smadi, 1979)

79) a. Sara [2;3]
  *arnab   ye-sawi   hada
  Indef.rabbit.Msg 3Msg.Imper-do this.Msg.
  =ʔil-arnab ye-sawi hada
   "The rabbit is doing this"

  b. Sara [2;3]
   *sayyara   ṭah-at
   Indef.car.Fsg   fell.Perf-3Fsg.
   =ʔil-sayyara ṭaħ-at
   "The car fell down"   (Al-Jenaie, 2001)

Although Smadi (1979) provides full-fledged spontaneous speech samples of his daughter (at ages 1;7, 2;0; 2;5 and 2;9), they do not contain any tokens of ECs. Al-Buainain (2003) and Al-Akeel (1998) do not report any EC production, either.

The unproductivity of this particular construction is not surprising. In the study that I conducted on the acquisition of English ECs, outlined in Chapter 5 section 5.4, I examined 93 files of three children Nina, Peter and Eve (ages 1;6 to 3;1), taken from the Childes archives. Out of a vast, full-fledged language production that extends from the ages 1;6 to 3;1, I could only find 54 tokens of ECs (both affirmative and negative ones).

For the sake of comparison, I reproduce the frequencies of English child ECs in Table 4 in chapter 4 in Table 18.

Table 18: Production of English child ECs.

Child / age range	Existential Constructions	
	Missing *be* (n)	Overt *be* (n)
Nina 1;11-3;1	11.7% (2)	88.2% (8)
Peter 1;9-3;1	18.8% (11)	81.1% (26)
Eve 1;6-2;3	63.6% (5)	36.3% (2)
Total (n)	(18)	(36)
Avrg %	31.3%	68.5%

For the purposes of comparing the frequency of ECs in Arabic child grammar and Arabic adult grammar I analyze a spontaneous Adult speech production sample taken from Jaradat (2007) in which eight adults spoke Jordanian Arabic in a casual conversational setting. Results of the analysis are given in Table 19. It shows that existential *fii* was used 9 times, out of which 8 was produced by one speaker. All 9 tokens appeared in affirmative sentences and one token appeared in past tense with the copula *kaan*. 3 different variants of the verbal negation *ma-(š)* were used. *Ma-* was used 5 times, *-š* 5 times and *ma-š* 4 times. The negative imperative morpheme *laʔ* was used 7 times. The nominal negation *miš* was used 8 times. The nominal negation *mu*, variant of *miš*, was never used. What the Table shows is that existential *fii* is frequent in the adult grammar and that all three realizations of the verbal negation *ma-(š)* are used in the Jordanian adult grammar. What this means is that the child Igbal (Smadi, 1979) could have been probably exposed to all three uses of the verbal negation morpheme *ma-(š)*. If we take that to be the case, then the question is why did *-š* emerge before *ma-* and *ma-š*. One possible

hypothesis is that the acquisition of suffixal morphemes is easier than prefixal ones. Recall that Igbal (Smadi, 1979) at age 2;1 started to use negated imperatives for the first time without marking the verbs for non-perfective with /t-/ which shows up as a prefix to mark subject agreement and non-perfective on verbs. Igbal did not have problems marking verbs for perfective with suffixal morphemes at the same age. She marked DPs for possessive with suffixal pronouns and produced accusatives with suffixal pronouns from as young as 1;7. However, a careful study is needed to test whether or not that is true.

Table 19: Frequencies of existential *fii* and the different negation morphemes in the adult grammar.

Existential *fii*	Possessives with Inflected Preps.	Negation Markers					
		Verbal Neg.				Nominal	Conjunction *la*
		Ma-	-š	Ma-š	laʔ	miš	
9	4	5	5	4	7	8	2

The child Igbal (Smadi, 1979) produced very few contexts that contained an indefinite NP subject followed by a possessive PP. However, those contexts do not provide strong evidence for the use of ECs since they are very few, ambiguous and isolated from context. The pieces of evidence that the children are not producing adult-like ECs at this stage are, first, the lack of the contrast between NECs and AECs. Second, there is lack of definiteness. Based on the data above, there is no contrast between definite and indefinite NPs. The children marked a few of them as definite while leaving others unmarked. Third, the children produced a few contexts for the preposition *fii* but not for existential *fii*. Igbal (Smadi, 1979) produced contexts of the preposition *fii* as early as the age 1;7 (session 1). The examples in (80) show the child's attempts to use the preposition *fii*. All

of those utterances are complete ones except for (80b). The child omits the preposition in

(80a), mispronounces it in (80b), uses an incorrect word order in (80c), and substitutes it

with the preposition *maʕ* in the phrase *maʕ safinih* "with a ship" in (80d). These are

contexts in which a preposition but not existential *fii* can be used. (80a) has a pronoun

sitting in the subject position that enters into a predication relation with a PP locative

containing an NP marked as definite with the definite article *ʔl*, mispronounced by the

child as an assimilated /b/. The same situation holds for (80b) where the locative NP is

marked with an assimilated definite article /b/. The adult equivalent for (80c) would be

something like *ʔ-akkab fi-l-baas maʕa Tarik* "I ride in the bus with Tariq" or something

like *ʔ-akkab maʕa Tarik fi-l-baas* "I ride with Tariq in the bus." By all means, these

contexts are not ones where existential *fii* can exist. Only a preposition can be

sandwiched between two NPs entering into an entity-location type of relation.

(80) a. Igbal [1;7]
      hu   ʔib-balih
      3Msg. the-trash
      "It is in the trash."

   b. Igbal [2;4]
      ʔi-b-baas
      ?-the-bus
      "(In) the bus."

   c. Igbal [2;4]
     *maʕ tarik bas ʔ-akkab fi-h
     with tarik bus 1Sg-ride in-it
   = ʔa-rkab maʕ ṭarik fi-l-baaṣ / = ʔa-rkab fi-l-baaṣ maʕ ṭarik
     "I ride in the bus with Tarig."

d. Igbal [2;9]
 *ʔani ruħ   maʕ-hum   maʕ safinih
  I   go.Imperf with-them with ship.Indef.Fsg.
 =ʔani ʔa-ruħ   maʕ-hum   ʕala-ʔis-safinih
  "I go with them in a ship."

In Chapter Five we have seen how children experienced degrees of difficulties because of the complexities associated with every element that form ECs and DCs. Let us now examine the complexities that are associated with the elements that form Arabic ECs. Existential *fii* is solely used to express existence and to allow indefinite DPs in preverbal positions. Thus, it is an existential verb. Syntactically speaking, Arabic ECs are not complicated. No copula is needed in present tense ECs. Existential *fii* does not have to carry agreement features with the NP or to carry tense features. However, the data do not show that children are treating *fii* as a verb. This is so since all of the 15 tokens of *fii* appeared negated, something which might suggest that they were using it as a unit. In addition, with the absence of AECs against which to contrast those NECs, it is hard to to tell whether or not those children were truly using *fii* as a verb. Note there are not any homonyms, in the adult grammar, with which *fii* contrasts except for the preposition *fii* (or *fi*) "in" which has a different function, different distribution and is acquired much later (at the age 3;0). What that means is that the children face difficulties learning the requirements of *fii* as a verb-type element that licenses an indefinite NP because they first use it embedded in a negation morpheme. In other words, they face the difficulty of "disentagling" *fii* from the negation complex as well as disentangling verbs such as *ma-abi* "want", *ma-ye-siir* "it can't be", *ma-agdar* "I can't", as reported in Al-Jenaie (2001, 2008) and their equivalents in the other dialects. In addition, they have difficulties with negation. I represent early child NECs as in (81) below. I assume that the children project

231

the whole string "ma-fii" as a unit in NEC head of NECP - a non-adult category- rather than projecting *fii* separately in VP. In other words, they have not yet analyzed *fii* as a verb separate from the negation morpheme *ma-š*. What children need to do is fully acquire NEGP and then generalize it to ECS.

81)

NEG$_{EC}$P
    NEG$_{EC}$'
   ma-fii   VP
       e   NP
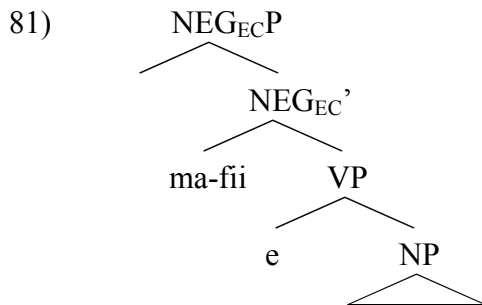
6.6 Conclusion:

To examine the acquisition of Arabic ECs, I have analyzed data from different spoken varieties of Arabic. The results show that Arabic ECs are not productive and that the children experienced difficulties acquiring those constructions. Those difficulties arise from definiteness constraints and word order constraints that are also observed in CSs and verbal predicates. The children started using NECs exclusively probably up to the age 3;6. The data show that existential *fii* is first used as a routine with the verbal negation marker *ma-(š)*. No AECs could be found in the data. No errors in the use of negation with ECs could be found. The children produced negation errors with verbs and nouns, but not with NECs. This is further evidence that they produced NECs as frozen forms rather than productive constructions. Following Peters (1983), I assume that the children face the problem of disentangling the existential morpheme *fii-* from the verbal

negation complex *ma-(š)*. The children who produced those NECs did not observe definite constraints on DPs and the use of definite DPs in ECs is evidence for the locative use of *ma-fii*. As shown in Table 20 below, similarities and differences are observed in English and Arabic child ECs. First, *be* is optional in English child ECs and DCs. The children produced both affirmative and negative ECs. In contrast, Arabic children only produced negated ECs. In a couple of utterances, the indefinite DP preceded *fii*. Second, the children learning English used *there* in ECs and DCs and they also contrasted *there* with *here*. The children learning Arabic used *fii* (and Kuwaiti *–ku*) in NECs. Arabic DCs are not contratsted with ECs. Third, the children learning English used indefinite and definite DPs in *there*+(*be*) constructions. Constructions with definite DPs are bound to be interpreted as DCs. Children learning Arabic also used indefinite and definite DPs in *fii* constructions. However, while constructions with indefinite DPs are interpreted as ECs, ones with definite DPs are ungrammatical. Fourth, while English children produced affirmative and negative ECs, Arabic children only produced negative ECs. Fifth, English children used both clausal and constituent negation markers in ECs, Arabic children only used the clausal negation marker. Finally, English children omitted *be*, suggesting that existential *there* is what licenses the associate DP not *be*. Thus, I assume that Chomsky's Case transmission mechanism is operative from early on. Arabic children almost always used *fii* followed by a DP. There is no evidence in the data to support *fii* omission.

Table 20: Child ECs components in English and Arabic.

ECs Components In Child Grammar	English	Arabic
Word order	There+(Be)+Indef. DP (EC) There+(Be)+Def. DP (DC)	• Fii+Neg+Def / Indef. DP. • Indef DP+fii+Neg
Existential element	There (NP)	*Fii* / *ku* (VP)
Copula	Optional *be*	None in imperfective
Definiteness	• Applicable – indef. DPs required in ECs. • Def. DPs yield DCs	• Applicable – indef. DPs required to yield ECs • Def. DPs yield ungrammatical constructions.
Negation	Clausal *not* / constituent *no*	Clausal *ma-*
Licensing Mechanisms	• *There*-insertion (EPP) • *There* licenses the associate NP at LF • Move α (Case Filter, Agreement features on optional *be*) • Procrastinate (FI) (Chomsky, 1995).	• *Fii* is a verb: to Case-mark and lexically govern the Indef. DP. (Eid, 1993; Halila, 1992). • *Fii* licenses the associate NP at PF.

The Analysis of the other constructions (possessives, locatives with inflected prepositions, interrogatives and plain prepositions) shows that those NECs are unique constructions in early Arabic grammar and that the children seem to understand the pragmatic uses of NECs as exhibited in their use of NECs to express the disappearance or unavailability of objects in their immediate contex. The omission and provison of Topics with verbal predicates suggests that the child Igbal (1979) was projecting a left periphery and that she was going through a truncation stage.

Chapter Seven

Summary and Conclusions

7.1 Summary and Conclusion

In this dissertation I examined the acquisition of ECs in English and Arabic. It set out to answer the following major questions: (1) when do children start producing ECs? (2) Do they distinguish between ECs and other related constructions, such as possessives, deictics and locatives? (3) When do children acquire existential *there* and existential *fii*? (4) When do they acquire definiteness? (5) What type of negation do they use to negate *fii*? (6) Are there any other constructions with which they express existence? (7) What kind of difficulties do they have in producing adult-like ECs? (8) How should English and Arabic child ECs be represented? (9) What implications does the acquisition of child ECs make for the syntactic and the acquisition theories?

Before I set out to respond to those questions, I conducted a typological study of ECs, In Chapter Two, for the sole purpose of establishing a clear understanding of what syntactic and morphological similarities might hold among different languages. The results of this study showed that languages could be classified into three categories with respect to how ECs are derived and how definiteness effects manifest themselves on DPs. The first category includes languages that use a nominal element (a dummy subject or an expletive) and a copula such as English, German, Dutch and Italian. The second category includes languages that require an existential verb such as Turkish, Hebrew, Arabic, Chinese and two Mayan languages. Included in the third category are languages that neither require a nominal element nor an existential verb but rather use word order,

contextual support and differences in semantic and pragmatic properties of the constituents in sentences to achieve existential readings. A few Examples are Russian, Finnish, and Japanese.

In Chapters Three and Four, I review the literature on the syntax of English ECs and Arabic ECs. The results of the review show that the syntax of ECs in the adult grammar in both languages is controversial and challenging to the current syntactic theories and have important implications for the acquisition theories. While it is unanimously agreed among linguists that English existential *there* is an NP, the nature of Arabic existential *fii* is controversial due to its variable syntactic behavior across the different dialects of Arabic. However, I argue for a verbal analysis for *fii* based on the facts that *fii* hosts the verbal negation *ma-*(š) and that it requires the following NP to be subject to definiteness constraints across the different dialects. The pieces that form these particular constructions in the adult grammar are different in both languages. As a consequence, the licensing mechanisms are also different. A piece of implication that these distinctions make for the acquisition theory is that while the acquisition of existential *there* is linked to the acquisition of nouns, the acquisition of *fii* is linked to the acquisition of verbs. In Table 1, I compare adult English ECs to adult Arabic ECs with respect to the element that introduces existence, the different pieces that form ECs, observed constraints, licensing mechanisms and different analyses. In comparing English ECs to Arabic ECs, we find that while existential *there* is needed to meet the requirement of the EPP in English ECs, existential *fii* is not required to meet that requirement in Arabic existentials. *BE* is not restricted in English ECs since it also appears across different constructions. It is base-generated as the head of VP then moves to Tense. It

must carry Tense and agreement features with the indefinite DP. In contrast, the equivalent of *be* in Arabic is not required, at least not in present tense constructions. The use of *fii* is restricted in Arabic ECs, it does not appear in other constructions and it does not carry agreement features with the indefinite DP. It is base-generated as the head of VP to license the indefinite DP. Rigid word order constraints and the same definiteness effects on the DP are observed in ECs in both languages. Finally, negation in ECs is treated differently by children learning English and Arabic. While both negated and affirmative ECs appear in the speech of children acquiring English, only negated ECs appear in the speech of children acquiring Arabic.

Table 1: ECs components in English and Arabic.

ECs Feautures In Adult Grammar	English	Arabic
Word order	There+Be+Indef. DP	Fii+Indef. DP.
Existential element	There (NP)	Fii (VP)
Copula	Be	None in imperfective (*kaan* in perfective)
Definiteness	Applicable – indef. DPs required	Applicable – indef. DPs required
Negation	Clausal *not* / constituent *no*	Clausal *ma-*
Licensing mechanisms	• *There*-insertion (EPP) • *There* licenses the associate NP at LF. • Move α (Case Filter, Agreement features on *be*) • Procrastinate (FI) (Chomsky, 1995).	• *Fii* is a verb: to Case-mark and lexically govern the Indef. DP. (Eid, 1993; Halila, 1992). • *Fii* licenses the associate NP at PF.

To respond to the above questions, I conducted two acquisition studies: the first one, outlined in Chapter Five, examined the acquisition of English ECs and the second one, outlined in Chapter Six, examined the acquisition of Arabic ECs. In the first study I

analyzed the files of Eve (Brown, 1973), Nina (Suppes, 1973) and Peter (Bloom 1970), taken from the CHILDES database (MacWhinney & Snow, 1985). The results of the analysis show that existentials are not acquired at the same time as DCs; Existential contexts appear later than deictic ones and are much less productive. I showed that the earliest token of an English ECs appeared at the age 1;10 although missing *be*. The earliest emergence of an EC with *be* appeared at 2;0. In contrast, the earliest emergence of a DC missing *be* appeared at 1;7 and with *be* appeared at 1;9. The components that form both existential and deictic constructions appear from early on but they are used deictically before they are used to state the existence of objects. While children showed understanding of the pragmatic uses of ECs and DCs, they had difficulties acquiring *be* and definiteness constraints on the associate DP in ECs. Acquisition of *be* in existential constructions follows a different pattern of development than deictic *be* and auxiliary–*be*. Although the rate of provision and omission of *be* in both ECs and DCs is about the same, the use of *be* in existentials is not as frequent as *be* in deictic or as in auxiliary-*be* constructions. Constructions of the type There+(*be*)+Indf. NP could be ambiguous between an EC and a DC. To control for the coding method of what a child ECs and DCs might be, I examine the contexts of each token of *there* looking for evidence for each construction. I show that contexts of DCs where *be* is obligatory emerged 2 to 4 months before contexts of ECs. The children in this study showed unstable use of the articles in their early files. They omitted both *a* and *the* in obligatory contexts and they also supplied them correctly. By using pieces of evidence in context, I show that they have the knowledge of the pragmatic functions of articles. No tokens of definite DPs in NECs could be found in the data. The children produced a few negated ECs, but the majority

were affirmative. The acquisition of ECs has implications for the acquisition theory. The findings confirm Cleave and Rice (1997) in that contracted forms of *be* in both constructions are more productive than uncontracted ones. Contra Becker (2000) who argues that what licenses the associate DP in ECs is *be*, I argue that it is *there* that licenses the associate DP. Thus, I maintain Chomsky's Case transmission mechanism. The evidence is the children's omission of *be* in overt expletives. Overt expletives in null *be* existentials and overt subjects in null auxiliary–*be* constructions are problematic for the truncation approach (Rizzi, 1993, 1994) since the truncation operation does not target projections in the middle of structures. I also have showed that the incorporation of the diary-drop register in the truncation approach as to allow null subjects in finite clauses to survive is an escape hatch that contradicts the spirit of the approach.

In the second study I analyzed data taken from different acquisition studies on spoken varieties of Arabic. I examine the data for production of existential *fii*, the definite article /ʔil/, the different negation morphemes /laʔ/, /miš/ and /ma-(š)/, and word order in verbal predicates. The findings show that the children learning Arabic had difficulties producing adult-like ECs in Arabic. To begin with, like English, Arabic ECs are not productive. Only 15 tokens for NECs could be found in the data. The earliest emergence of an Arabic EC appeared at the age 2;1. Like English, the children learning Arabic experienced difficulties acquiring those constructions. Those difficulties arise from (i) failure in reanalyzing *fii* as an existential verb separate from the verbal negation marker *ma-(š)*, (ii) the definiteness constraints and (iii) word order constraints that are also observed in CSs and verbal predicates. Those tokens of ECs are all negated with the verbal negation marker *ma-(š)*. No AECs and no errors in the use of negation with ECs

239

could be found. The data show that existential *fii* is first used as a routine with the verbal negation marker *ma-(š)*. I assume that for the children to acquire adult-like ECs they need to disentangle the existential morpheme *fii-* from the verbal negation complex *ma-(š)*. It is noteworthy that the children extended the discourse negation form *la* to contexts of propostional negation, but did not produce such extensions with ECs. This is further evidence that negation was unproductive for the child ECs. They restricted the definite article *ʔl* to definite contexts, but produced possessed DPs incorrectly in 3 of the 15 NECs, violating the definiteness constraints. In other words, children's mastery of the acquisition of ECs will be signaled by their ability to produce AECs and by observing definite constraints on DPs.

My analysis of Igbal's data (Smadi, 1979) at the age 2;5 shows that the child used the definite article in obligatory definite contexts 40% of the time (6 tokens) while she omitted it in obligatory definite contexts 60% of the time (9 tokens). She omitted it in obligatory indefinite contexts 100% of the time (17 tokens). She still had difficulties with definiteness at the age 2;9. She used the definite article in obligatory definite contexts 14.2% of the time (1 tokens) while she omitted it in obligatory definite contexts 85.7% of the time (6 tokens). She extended the article to one indefinite context (5.5%). She omitted it in obligatory indefinite contexts 94% of the time (17 tokens). The use of definite DPs in ECs is evidence for the locative use of *ma-fii*.

The Analysis of the other related constructions (possessives, locatives with inflected prepositions, interrogatives and plain prepositions) showed that NECs are unique constructions in early Arabic grammar and that the children seem to understand

the pragmatic uses of NECs as exhibited in their use of *ma-fii-(š)* to express the disappearance or unavailability of objects in their immediate context. It is not clear form the data whether or not the children truncated *fii*. The child Igbal (1979) projected a left periphery by virtue of using Topics in verbal predicates. However, the observation that she omitted Topics suggests that she might have been going through a truncation stage.

In Table 2, I summarize the features of child English ECs and child Arabic ECs. In comparing the acquisition of English ECs and the acquisition of Arabic ECs, we find that children learning both languages produced ECs from an early age. The difficulties that the children learning Arabic had with ECs is different from the difficulties that the children learning English had with English ECs. First, while existential *there* contrasts with deictic *there*, existential *fii* does not contrast with any homophone in the language. What this means is that the children learning English have the burden of distinguishing the subtle differences between the deictic and the existential uses of *there* on the one hand, and realizing that deictic *there* contrasts with deictic *here*, while existential *there* does not. Second, the use of a definite DP in English *there*-constructions yields a deictic use of *there* while the use of a definite DP with *fii* yields an unacceptable construction. Third, the children learning English have the burden of acquiring *be* and what it entails (contraction, tense and number agreement). The use of *be* is not restricted to ECs since it can appear in other constructions as well. The children learning Arabic do not have to acquire all those requirements since the use of a copula is not needed in present tense. Fourth, the children learning English have to learn to contrast definite DPs with *the* with indefinite DPs with *a* / *an*. The children learning Arabic do not have to worry about indefinite DPs since indefiniteness is marked simply by omitting the definite article *ʔil*.

Fifth, the children learning both languages treated the negation markers differently. The children learning English produced both NECs and AECs. In contrast, the children learning Arabic only produced NECs. The verbal negation marker *ma-š* plays a major role in the acquisition of Arabic ECs since it comes embedded in it.

There is a noticeable difference between the English and Arabic children in the observation of the definiteness constraints for ECs. Children learning English appear to observe this constraint in their initial productions of ECs while children acquiring Arabic violate this constraint for possessed DPs *ma- fii sayyarti* "There's no my car". It might be the case that children acquiring Arabic have more difficulty acquiring this constraint than children learning English. The other possibility is that the ambiguity of the English distinction between ECs and DCs obscures the difficulty that children have with this constraint in English. Thus, the Arabic data shed new light on the acquisition of definiteness.

Table 2: Child ECs components in English and Arabic.

ECs Feautures In Child Grammar	English	Arabic
Word order	There+(Be)+Indef. DP (EC) There+(Be)+Def. DP (DC)	• Fii+Neg+Def / Indef. DP. • Indef DP+fii+Neg
Existential element	There (NP)	*Fii* / *ku* (VP)
Copula	Optional *be* (Past and present)	*kaan* is used in perfective.
Definiteness	• Optional – indef. DPs required in ECs. • Def. DPs yield DCs	• Indef. DPs required to yield ECs • Def. DPs yield ungrammatical constructions.
Negation	Clausal *not* / constituent *no*	Clausal *ma-*

7.2 Recommendations for Further Research

7.2.1 Further Research Questions about English Child ECs.

In the first study that I conducted on the acquisition of English ECs, I set the search software to look for existential *there* in declaratives and yes/no questions 'i.e., *is there anymore*?' but not in Wh-questions. I have not found any tokens of ECs in Yes/No questions. It could be the case that these constructions are more complicated and thus are expected to be acquired at a later age, beyond the end age in this dissertation. Therefore, another study is needed to examine the production of ECs in Wh-questions and Yes/No questions at older ages in the Childes database (in files beyond the age 3;1). A careful, well-designed elicitation study might also be an option to examine children's production of ECs in Wh-questions and Yes/No questions.

Another area of further research is children's agreement errors in ECs, DCs and other copular constructions. In this dissertation, I only presented a few examples of subject-verb agreement errors since it is beyond the scope of my research. I did not find any subject-verb agreement errors in either ECs or DCs in Eve's data. However, I found a few errors in Peter's and Nina's files at a later age than Eve's last file (at age 2;3). Most of Peter's errors appeared beyond the age 2;5 while most of Nina's were made at age 2;9 and 2;10.

7.2.2 Further Research Questions about Arabic Child ECs.

Recall that only NECs could be found in the data. Therefore, one of the most important questions to raise here is do children learning Arabic ever produce AECs? If, yes, when do they start producing them? Do they observe definiteness constraints on DPs

or do they violate them in AECs as well? If they never produce AECs in early grammar, how do they affirm the existence of objects, if not by affirmative locatives? These are questions I have not been able to address in this dissertation due to the limited data at hand.

Another area of research concerns the acquisition of locatives and possessives, both negated and affirmative. What I found in this dissertation were no more than a few examples across different acquisition literature and Igbal's data in Smadi (1979).

A third question for further research is about the acquisition of Construct States (CSs). These constructions are unique in the language due to the constraints that they involve: adjacency (or word order) and definiteness effects. In this dissertation I found 5 tokens of CSs in Igbal's (Smadi, 1979) data in which the second member was always a DP that never takes the definite article *ʔil* such as proper names, demonstratives and Wh-words. In other words, what I have shown in this dissertation is that children were able to express possession using CSs only with DPs that are definite by default. The question is do children learning Arabic observe definiteness constraints in CSs?

A fourth question is about the acquisition of all three types of questions discussed in this dissertation: Wh-questions, Yes/No questions and Wh-in situ questions. What I have shown is that Wh-Questions and Yes/No questions are more productive than Wh-in situ questions in the adult grammar. I have also shown that the child Igbal (Smadi, 1979) produced 82 question-types out of which 4 were Wh-in situ questions, 27 were questions with fronted wh-word and 51 Yes/No questions (with declaratives with rising intonation). Wh-in situ questions are not productive and appear at a later age (2;9) in Igbal's grammar. However, those question-types involved the use of verbal predicates and

copular constructions. Questions arise with respect to the frequency of each question type and to what extent do children observe definiteness effects, word order constraints, and production of Wh-questions with CSs. A careful study needs to be done in order to respond to these questions and to examine to what extent the Truncation approach is relevant in the production of Arabic questions. In order to respond to the four questions above more data need to be gathered or a careful elicitation study should be conducted.

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