CHAPTER ONE

INTRODUCTION

1.0 Introduction

First language acquisition is found to be a remarkable human prodigy for two main reasons. The first is the speed with which it takes place where it is crystal clear that by the time a child celebrates his/her fourth birthday, he/she is an extremely sophisticated language-user. The communicative system which children are able to operate at this early age is found to be unattainable to any other creature, machine or computer (Yule, 2006, p. 149). The second reason is that this speed of acquisition occurs for all children without overt instruction, independently of the great differences in a range of social, cultural and even intelligence factors.

The acquisition of first language is a multiple, interwoven stages process. One crucial dimension in this process of acquisition is the development of the syntactic component of the language where children are observed showing rapid and systematic progress in ordering words into different types of sentences in accordance with the grammatical rules in the particular language spoken by adults in that linguistic community. Around the age of two children are noticed to start the production of their first complex sentences (Hoff, 2009, p. 241). Children's ability to produce adult like negative sentences and questions is relatively a late milestone on their way towards full syntactic development and maturity.

The child's language faculty needs to be practised in its linguistic community by its new young acquirers to ignite and develop or, more precisely, to "grow" next to Chomsky's notification that "language development really ought to be called *language growth*, because the language organ grows like any other body organ" (Chomsky N. , 1983, p. 407).

Playground games, in addition to their contribution in providing fun and guaranteeing conservation of cultural identities, are one of the readymade stages for language performance constructed by language communities in all cultures worldwide throughout ages for the children to utilize. This study tries to identify the syntactic forms used in the language of the playground games performed by Sudanese preschoolers and school age children in an effort to determine the extent of suitability of games identified to the acquisition of the syntax of first language (Arabic in this case) by children.

1.1 Background of the Study

Two millstones spin throughout the study causing every rattle it makes. The first is syntax, which is one of the major components in all linguistic investigations, descriptions and analysis. The other is the regular schedule of syntactic development which is almost the same in all normal children. The following is a discussion of the bones and sinews of the research project, syntax and language development.

1.1.1 Syntax

It is obviously noticed that mature speakers of a particular language are able to produce an infinite number of novel sentences. This capacity of producing and understanding sentences never heard before gives human language one of its most distinguishing characteristics referred to by linguists as the productivity or generativity of language. It is the knowledge of the system of language rather than the knowledge of a list of sentences that enables the speakers of a language to generate such infinite number of sentences (Hoff, 2009, p. 222). Syntax and morphology are the two faces of the coin referred to by the linguistic term ‘grammar’ in its delimited sense (Huddleston, 1984). It enables the speakers of languages, upon acquisition, to practise and display this feature of producing and generating infinite number of sentences.

The present study focuses on the first mentioned component of grammar, the syntax. There seems to be a general unanimity concerning the definition of the study of syntax. Radford (2009), for instance, takes syntax as being the study of the way in which phrases and sentences are constructed out of words. He notes that syntax provides answers to queries about sentences structure as well as the nature of the grammatical operations by which its component words are combined together to form the overall sentence structure. Noam Chomsky (1957) defined syntax as being:

> *"The study of the principles and processes by which sentences are constructed in particular languages. Syntactic investigation of a given language has its goal the construction of a grammar that can be viewed as a device of some sort for producing the sentences of the language under analysis."* (Chomsky N. , 1957, p. 13)

Radford, Atkinson, Britain, Clahsen, and Spencer (2009) studied syntax as being the processes whereby words are combined to form phrases which in turn are combined to form sentences (p. 245). Radford (2004) presents one of the most comprehensive definitions to syntax which reads:

> *Syntax is the study of the way in which phrases and sentences are structured out of words, and so addresses questions like 'What is the structure of a sentence like "What's the president doing?" and what is the nature of the grammatical operations by which its component words are combined together to form the overall sentence structure?"* (Radford, 2004, p. 1)

Matthews (1981) sums the characterizations of syntax:

> *"The term 'syntax' is from the Ancient Greek S'yntaxis, a verbal noun which literally means "arrangement" or "setting out together". Traditionally, it refers to the branch of grammar dealing with the ways in which words, with or without*

appropriate inflections, are arranged to show connections of meaning within the sentence." (Mattews, 1981, p. 1)

Syntax and grammar in general, is described through various approaches originate from various schools of thought in linguistics. These approaches could be summed as:

i. The Traditional approach developed from the Greek,
ii. The Structural approach advocated by Ferdinand de Saussure in his book *A Course in General Linguistics* (1916) and Leonard Bloomfield in his textbook *Language* (1933),
iii. The Generative approach developed by Noam Chomsky in his series of publications such as: *Syntactic Structures* (1957), *Aspects of the Theory of Syntax* (1965), *Lectures on Government and Binding* (1981) and *The Minimalist Program* (1995),
iv. The Functional approach by Michael Halliday explained in his book *An Introduction to Functional Grammar* (1985).

1.1.2 Stages of First language Syntactic Development

There are two approaches for measuring the grammatical development in children. The first approach depends on the different grammatical forms or Syntactic Types the child is able to produce. Literature concerning child's first language acquisition, according to this approach presents the following successive stages:

i. The Pre linguistic Stage: 0-12 months.
ii. The Single Word Stage: 12- 18 months.
iii. Early Multi word Stage: 18-24 months.
iv. Late Multi word Stage: 24-30 months.

The first stage presented in the list above by Hoff (2009) shares a more comprehensive model of the stages of syntactic development according to this approach. She advocates stages shown in table 1.1 below:

Table 1.1: Stages of Syntactic Development

Name of Stage	Age	Characteristics and Examples
Single Word	12-18 mos.	Production of a variety of recognisable single units of utterances.
Two word	18-20 mos.	Combinations of two words like *Andrew book*.
Three word	2-3 yrs	Multiple-word utterances with no function words and bound morphemes such as *Tom go garden*.
Structured Sentence	3-4 yrs	Proceed from simple imperative and active declaratives to questions negatives and multi-clause sentences.

Source: Hoff (2009)

The second approach measures syntactic development not by the syntactic types but by the number of morphemes a child is able to produce in his/her utterances and this is known as the Mean Length of Utterance "MLU". Brown (1973) classifies the syntactic development in children using this approach into five stages shown in table 1.2 below:

Table 1.2: The Five Stages in Syntactic Development.

Stages & Age	MLU	Features
i. 12-26 mos.	1.0-2.0	Single –word utterances.
ii. 27-30 mos.	2.0-2.5	Emerging of grammatical morphemes.
iii. 31-34 mos.	2.5-3.0	Noun Phrase elaboration and auxiliary development
iv. 35-40 mos.	3.0-3.75	Embedding sentence elements.
v. 42-52+	3.75-4.50	Conjoining sentences

Source: Adapted from Brown (1973)

1.2 The Purpose of the Study

Playground games are viewed here from the perspective of first language acquisition as a real life source for child language development. The present study explores syntactic unit found in playground games performed by Sudanese preschoolers and school age children in an effort to determine the significance of these

games namely in the development of syntax in children between four to nine years of age.

1.3 Statement of the Problem

Although engagement in play activities can help increase the child's language skills since the three essential conditions required for learning languages (exposure, motivation and use) are highly guaranteed, these games are neglected by children nowadays. Children play on the whole has been '*neglected, or at least sidelined, in the study of language and language learning'* (Cook 4004, p.4)

Playing has also been argued to have great importance "*not only in child first language acquisition but also in adult language teaching"* (Cook & Newson, 2004). However, the influence of preschool play on language acquisition evokes two issues. The first is "*the difference between peers and adults as partners or facilitators of the development"* (Ervin-Tripp & Susan Moore, 1973).

1.4 Objectives of the Study

The Minimalist Program which is the latest development of the generative linguistics named after Chomsky's (1993, 1995a) books, as it has always been the tradition, is employed in this study to (1) determine the grammaticality of sentences used in the playground games under study; (2) find out what sentence categories are frequently used in these games; and (3) evaluate the suitability and benefit of the games under investigation for the grammatical growth of this age group of children (preschoolers).

1.5 The Research Questions

The whole endeavour of studying the syntactic forms displayed in those playground games identified is in tandem with the developmental stages in children is an effort to provide answers to the central questions of the research. These are:

i. What grammatical unit/s do children use in the playground games identified?

ii. How can these units be categorized?

iii. What is the significance of these particular forms in children's grammatical development?

iv. What justifies the acquisition of the syntactic forms identified at this age and not before it?

1.6 The Limitation of the Study

The study approaches the games identified from a syntactic point of view using a specific syntactic framework subject to detailed discussions in chapter two of the study. The chronological tracing of the processes of syntactic developments, the pedagogical significance, gender variations in performing such games are all out of the limit of this study. Other types of play such as computer games, parental play and individual play are also out of the scope of this study. The study is limited to the confines of the grammatical analysis of those forms performed in the games identified to provide answers to its questions stated in 1.3 above.

1.7 The Significance of the Study

This study gains its importance foremost from the significance of the acquisition of syntax. No individual is considered a model sample representing a certain language unless he/she is able to convey meanings through the "principles and processes of which

sentences are constructed" (Radford, 2009) in that certain language. Moreover, this study claims to fill a gap of studying the significance of games in the literature of first language development. The topic under discussion, playground games, has been the subject of research under the umbrellas of various disciplines such as pedagogy, psycholinguistics and second language acquisition as will be seen in the following chapter of this study. Those include researches in areas such as gender and sociological studies, language disorders, language pedagogy and discourse studies but little, if any, research is done using such an authentic source of data to determine significance for any of the levels in first language acquisition, particularly the syntactic.

1.8 Overview of the Research Report

Five chapters are presented this study. The objectives of the study are discussed in the first introductory chapter. Related literature to the topic the study is reviewed in chapter two along with a discussion of the place of the current study within this body of literature reviewed. Chapter three deals with the research method and design used, namely: data collection strategies, the framework of analysis and data analysis procedures. Discussion on the findings of the study is the concern of the fourth chapter. The research report concludes by presenting a summary of its findings along with a general conclusion in its fifth and final chapter.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

Children's syntactic development as a crucial dimension in the overall language development has always been utilized in the literature of different disciplines and opposing schools of thought in linguistics as a convincing evidence in the claims they propose. The present study, as been mentioned in its introductory chapter, explores this syntactic development in the context of playground games.

The literature related to this study falls into three main areas: the approaches to the study of syntax, studies concerning syntactic development and studies investigating the way or ways in which children play affects the process of their native language development.

2.1 Approaches in the Study of Syntax

Two main approaches are reflected in the literature dealing with the study of syntax. These are, according to their chronological occurrence, the prescriptive approach and the descriptive approach. The following is a review of each.

2.1.1 The Prescriptive Approach

This approach, as its name implies, prescribes how people ought to speak a language (Baskaran, 2005). Prescriptive grammar is defined in the Dictionary of Linguistics and Phonetics (2008) as being *"the grammar that lays down rules of correctness to how language should be used. It categorizes certain language uses as acceptable or unacceptable according to a standard form of the language."*

Famous examples of prescriptive rules include:

i. Don’t split infinitives!
    a. Do not say: I wanted to carefully explain to her why the decision was made.
    b. Say: I wanted to explain to her carefully why the decision was made.

ii. Don’t use double negation!
    a. Do not say: I didn't see nobody.
    b. Say: I didn't see anybody.

iii. Don’t end a sentence with a preposition!
    a. Do not say: A preposition is not a good word to end a sentence with.
    b. Say: A preposition is not a good word with which to end a sentence.

iv. Don’t use who in place of *whom*!
    a. Do not say: Who did you talk to?
    b. Say: Whom did you talk to?

Examples of prescriptive grammar texts include:

i. Angela Burt’s *The A-Z Correct English (2002).*
ii. Milon Nandy’s *Correct English (2002).*
iii. A. J Thomson’s *A Practical English Grammar (1986).*

2.1.2 The Descriptive Approach

Unlike the previous approach of dos and don’ts, descriptive grammar has as its goal to describe what the native speakers of a language do (verbally) when they speak their language. Descriptive linguistics aims at describing the facts of linguistic usage as they are, and not how they ought to be, with reference to some imagined ideal state (Crystal, 2008). Grammar, according to this approach, is an actual linguistic tool for description regardless of the form of the input (Cook *et.al*, 2004).

The descriptive approach to grammar aims at describing the structure of language from its smallest units involving the description of the form and functions of these building blocks of language (Baskaran, 2005, p. 60). The aim of this approach in linguistics is seen as a way to find adequate categories to describe a language. The descriptivist tradition in linguistics argued the complexity of the language system and suggested the study of one subsystem of it at a time. The major subsystems discussed in each and every comprehensive descriptive analysis of language include:

i. Phonology: refers to the sounds of speech and their interactions.
ii. Morphology: refers to the smallest meaningful units and the way they combine to make words.
iii. Syntax: refers to the patterns in which words combine to build phrases and clauses.
iv. Lexicon: refers to the inventory of meaningful units in the language.

Examples of descriptive grammar texts include:

All in all, "*descriptive grammar aims to present the grammar that underlies the actual usage of speakers in that language, while prescriptive grammar aims to tell its readers what grammatical rules they SHOULD follow: the difference is one of goal*" (Huddleston, 1984, p. 47).

Linguists, then shoulder the task of explaining languages as spoken and used by native speakers. Descriptive language explanations seem to one of these groups: those who discard of the interaction between linguistic forms and linguistic functions are the formalists. Functionalists, at the other end of the spectrum, are those who favour a description of language which considers language description as a see-saw with forms and their functions each at an end with language acting as a pivot balancing both. The former holds a syntactocentric perspective which supports the anatomy of syntax,

applying a range of formal devices to describe and explain human language. The later is said to favour a communicative and cognitive perspective to language description dismissing the anatomy of syntax in the description and explanation of the linguistic phenomenon (Van Valin, Robert D., 2004, p. 224).

Haspelmath (2001) narrower classification presents two kinds of linguistic explanation. The first is a theory neutral description of language; the functionalists. The other is the generative theory based approach.

2.1.3 Generative Grammar

The Generative Grammar school in linguistics with its "Universal Grammar" claim being proposed and advocated by Noam Chomsky who is perhaps the best known and the most influential linguist of the second half of the Twentieth Century is a "crucial driving force" in linguistics (Cook *et al*, 2004, p. 1).The aims of linguistics, according to the Generative approach, are summed up in three main questions as in Chomsky (1991a). These are:

i. What constituetes knowledge of language?

ii. How is this knowledge acquired?

iii. How is such knowledge put to use?

However, the question of "*what are the physical mechanisms that serve as the material basis for this system of knowledge and for the use of this knowledge?"* can be traced in the generative literature, as in Chomsky (1988, p. 3).

2.1.4 Language Acquisition in Generative Linguistics

The bases of the Theory of Universal Grammar (UG) are the ideas about language and its acquisition. Language is an independent mental knowledge in the generative point of view (Chomsky 1981). Chomsky has even argued "*The study of language falls naturally within human biology*" (Chomsky, 1976, p. 123) and proposed

a language compartment or module in the human mind/brain labeled as the Language Acquisition Device (LAD) (Chomsky N. , 1957). Language according to this view was what children "knew" not what they say or how they behave. The central idea about language has always been the belief that "*human have a specialized "organ" dedicated to the use and interpretation of language, call it "the Faculty of Language" (FL)"* (Chomsky, 2000, p. 168) or "*Language Acquisition Program*" (Radford, 2009, p. 16). The claim that language is genetically passed down from forebears to children and grandchildren and that it is determined by the Faculty of Language is referred to as the "Innateness Hypothesis". The argument here is that "*since UG provides the basis for learning, it cannot itself be learned. It therefore must be present in the brain prior to language acquisition.*" (Haegeman, 1994, p. 6). Chomsky has even claimed that "*the ability to acquire and use language is a species specific human capacity"* (Chomsky, 1972, p. 102). This point of view is stated by Chomsky in the following interview part:

> *"All through an organism's existence, from birth to death, it passes through a series of genetically programmed changes. Plainly language growth is one of these predetermined changes. Language depends upon a genetic endowment that's on a par with ones that specify the structure of our visual or circulatory systems, or determines that we have arms instead of wings"* (Chomsky, 1983)

This point of view is also clearly declared in:

> "*Whatever evidence we do have seems to me to support the view that the ability to acquire and use language is a species-specific human capacity, that there are very deep and restrictive principles that determine the nature of human language and are rooted in the specific character of the human mind"* (Chomsky N. , 1972, p. 102)

Generative linguistics believes that language acquisition is a shared ability among all human being regardless of the level of intelligence an individual enjoys or deprived of. This belief is stated in:

> *"Even at low levels of intelligence, at pathological levels, we find a command of language that is totally unattainable by an ape that may, in other respects, surpass a human imbecile in problem-solving activity and other adaptive behaviour"* (Chomsky N. , 1972, p. 10)

An absolutely central feature to language acquisition in the eyes of generative grammar is that it being a tacit and involuntary rather than explicit (Radford, 2004, p. 2) human activity in the sense that "*Children acquire...languages quite successfully even though no special care is taken to teach them and no special attention is given to their progress"* (Chomsky N. , 1965, pp. 200-1)

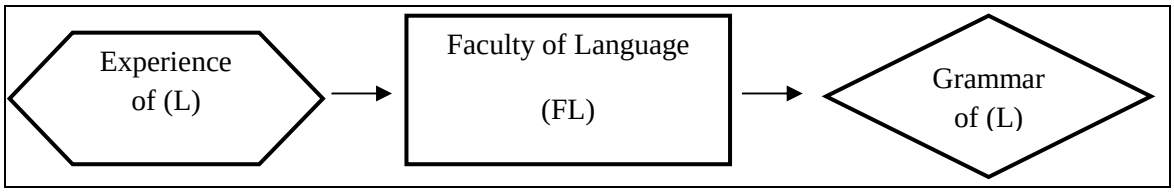
The influence of the nature of the primary linguistic data (PLD) or the child's linguistic experience (Radford, 2009, p. 16) on language acquisition in general and grammatical competence in particular is not denied in the generative tradition; it works hand in hand with the genetic endowment and other principles not specific to the FL. However; it is noticeable that children's attainment far exceeds the information provided by the PLD. This is what is known by the "Plato's Problem" or the problem of the "poverty of the stimulus" (POS) which argues: *"The linguistic input (stimulus) given to a child is not rich enough to account for what she (tacitly) knows"* (Boeckx, 2006, p. 24). The generative tradition argues that children are biologically equipped by a set of principles of grammar construction (Boeckx, 2006, p. 2). Nevertheless; proofs are presented in the literature on both first and second language acquisition supporting the idea of a "critical period" in this acquisition. It is suggested that "*the acquisition of syntax is determined by an innate 'language acquisition program' which is in effect*

switched off (or gradually atrophies) around the onset of puberty" (Radford, 2009, p. 18).

Vivian James Cook & Martin Newson (2004) describe the Faculty of Language in these points:

i. Where the knowledge of language stored in the individual mind.
ii. Common to all human beings.
iii. Independent to other faculties such as mathematics.
iv. Has unique property of its own not shared with other faculties.
v. Unique to the human species, at least in the narrow sense.
vi. Can be thought of as a 'mental organ that 'grows'.

Figure 2.1: First Language Acquisition Process in Generative Grammar



Source: Radford (2009)

The task of linguistics is narrowed in three levels of adequacy in the Generative tradition. Chomsky (1964) classified the three levels of adequacy for linguistic analysis in:

i. Observational adequacy: able to generate all and only grammatical sentences.
ii. Descriptive adequacy: has the capacity to describe every human I-language.
iii. Explanatory adequacy: is able to explain why grammars have their properties.

A crucial Chomskyan claim is the distinction between competence which is the "fluent native speakers' tacit knowledge of their language" and performance which refers to "what people actually say or understand by what someone else says in a given

occasion" (Radford, 2004, p. 2). This distinction was drawn in Chomsky's early works as in

"*Competence is 'the speaker-hearer's knowledge of his language', while performance is 'the actual use of language in concrete situations'* (Chomsky N. , 1965, p. 4)

This has led to the distinction between the externalized language (E-language) and the internalized language (I- language) (Chomsky 1991). Performance, very often, is an imperfect reflection of competence (Radford *et al*. 2009). The conclusion reached is that the grammar of language is a 'theory of the I-language under investigation' next to Chomsky (1986).

Radford (2009) reiterated Chomsky's words "*when we study the grammatical competence of a native speaker of a language like English we're studying a cognitive system internalised within the brain/mind of native speakers of English which is the product of a 'cognitive organ' which is 'shared among human beings and in crucial respects unique to them'* (Radford, 2009, p. 12).

UG tries to find out the defining characteristics of the grammars of languages that can be acquired by human beings. It is a leap from the grammars of a particular I-language to the grammars of all possible human I-languages (Radford, 2004). Chomsky defines UG in:

"*The theory of human I-languages ...that identifies the I-languages that are humanly accessible under normal conditions*" (Chomsky N. , 1986 a, p. 23)

2.1.5 The Description of Syntax in Generative Linguistics

The description of syntax in the generative tradition has witnessed a number of changing ideas each labelled by the name of particular books. Chomsky's *Syntactic Structure* gave birth to the generative notion in linguistics in 1957. The main concern was the explicit, formal description by means of phrase structure rules (Chomsky N. , 1957, p. 26) shown below:

i. *Sentence* $\longrightarrow$ *NP + VP*

ii. *NP* $\longrightarrow$ *T + N*

iii. *VP* $\longrightarrow$ *Verb + NP*

iv. *T* $\longrightarrow$ *the*

v. *N* $\longrightarrow$ *man, ball,etc*.

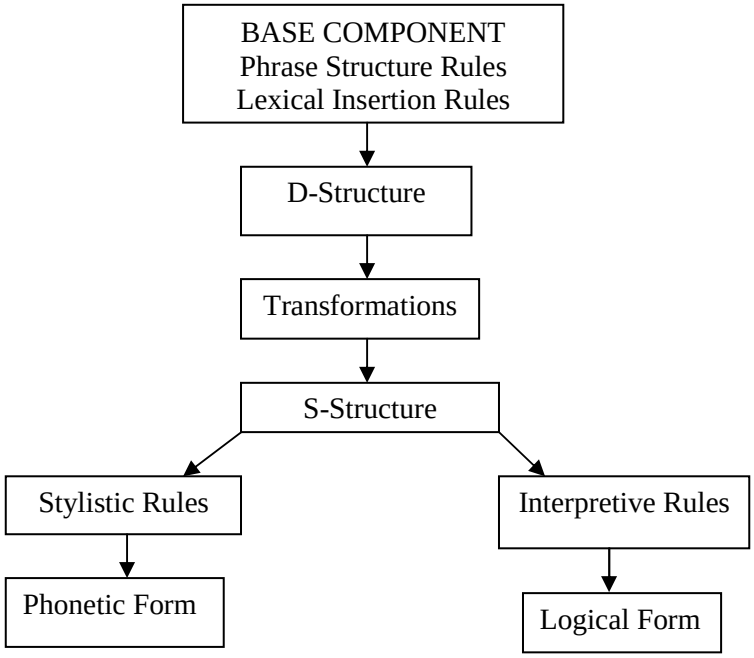
vi. *V* $\longrightarrow$ *hit, took, etc*.

The school is then popular by the "Transformational Generative Grammar" abbreviated "TGG" where the meaningless sentence: "*Colourless green ideas sleep furiously*" was a declaration of the independency of syntax. It made a distinction between the rewrite rules used to produce basic sentences known as "kernel sentences" and the "transformations" applied to them to produce other types of sentences such as negatives or passive sentences.

The introduction of the distinction between competence and performance along with the "Deep" and "Surface" structures of sentences was in Chomsky's 1965 book *Aspects of the Theory of Syntax*; hence the development is labelled as the Aspects Model and later the Standard Theory. The 1970s dates the modification of the Standard Theory into the Extended Standard Theory (EST) with its refinement of rules employed then. EST can be traced in *Remarks on Nominalization* (Chomsky, 1970) followed by *Deep Structure, Surface Structure, and Semantic Interpretation* (Chomsky, 1971), the

seminal paper *Conditions on Transformations* (Chomsky, 1973) and other publications. Figure 2.3 below shows the syntactic components in the EST:

Figure 2.2: Extended Standard Theory



The following is the Government and Binding Model named after Chomsky's *Lectures on Government and Binding* published in 1981. This is followed by "*Some concepts and consequences of the theory of Government and Binding"* published in 1982, *Knowledge of Language* published in 1986 and *Barriers* published in 1986. The GB contributed the "D-structure" and the "S-structure" which fine-tuned and substitute the deep and surface structures presented in the preceding model. Moreover; the model claimed principles which express fundamental properties of FL and parameters enabling languages to vary in grammar introducing into scene the Principles and Parameters (P&P) Theory.

"Grammatical structures are hierarchical" is one of the principles presented in this model of syntactic research. Despite the fact that a phrase such as *"Ahmad taught a lesson"* is composed by a certain number of words ordered linearly, a hierarchical structure is contained. The elements *a* and *lesson* merge to form the unit *"a lesson"*

which in turn combines with *taught* to form *"taught a lesson"* and so on and so forth. Another principle in syntactic theory is the principle which state structural dependency of syntactic operations. This is termed the Structure Dependence Principle which states that hierarchical structures is the bases of syntactic operations. Inversion operation applicable to subject NP and auxiliary in English yes/no questions, for an instance, is accomplished not by swapping the two first words but by moving the whole subject NP which can be more than one word as in the following example:

(1) a. The teacher will teach a lesson.

b. *Teacher the will teach a lesson?

It is the whole NP *"the teacher''* and the auxiliary *"will"* that are inverted to form the question: *Will the teacher teach a lesson?* Rather than only the first two words, as can be concluded from:

(2) a. Ahmad will teach a lesson.

b. Will Ahmad teach a lesson?

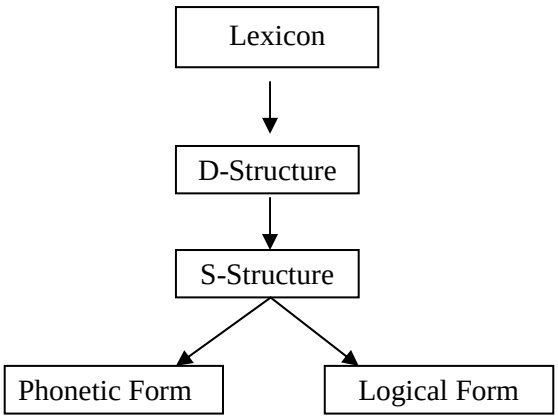
These are universal principles adhered to by all languages. However, there is enough room for language to vary. Not all language share same phenomena. Arabic, for example, can have a subject pronoun dropped as in:

ðahaba ila alssouq.
Go.Past.3ms to the market.Acc.
(Went to the market)

English makes an overt presence of the subjects and says: *(he) went to the market.

Components of the GB theory are presented in what is known as the standard Y-model of grammar (Boeckx, 2008, p. 44) shown below:

Figure2.3: The Government and Binding Model of Grammar



As observed in the figure above the GB consists of four levels of representations:

i. D-Structure (DS).

ii. S-Structure (SS).

iii. Phonetic Form (PF).

iv. Logical Form (LF)

Various modules and theories compose the architecture of the GB Approach. The X-Bar theory is one of those modules. It replaces the "redundant" rewrite rules (Ouhalla, 1999) by the following schema:

i. Specifier Rule: XP ⟶ (YP) X´

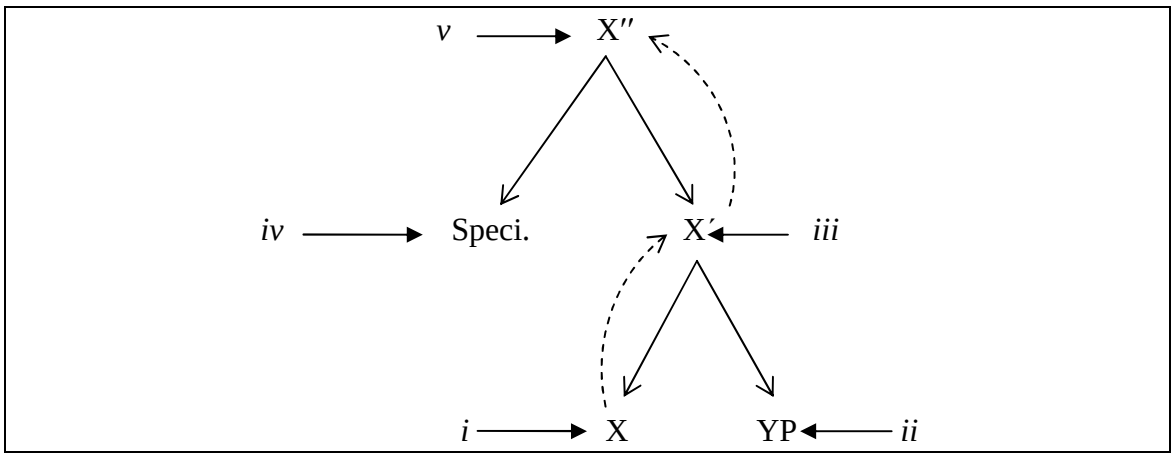
ii. Adjunct Rule: X` ⟶ YP X´

X´ YP

iii. Complement Rule: X´⟶ X (YP)

The following figure illustrates those relations in the X-Bar syntax showing that representations at each syntactic level are projected from the lexicon observing the subcategorisation properties of lexical items (Ouhalla, 1999).

Figure 2.4: Relations and Configurations in X-Bar Syntax.



Source: Cook *et al* (2004)

i. Head: The central lexical category (V, N, etc) around which other elements in the phrase revolve and which can minimally stand for the whole phrase.

ii. Complement: A phrase selected by the head.

iii. Intermediate Projection: The result of head/ complement merger.

iv. Specifier: Various elements such as determiners, possessors, etc. not selected by the head.

v. Maximal Projection: the largest expression headed by X resulted by merging the specifier and the X´

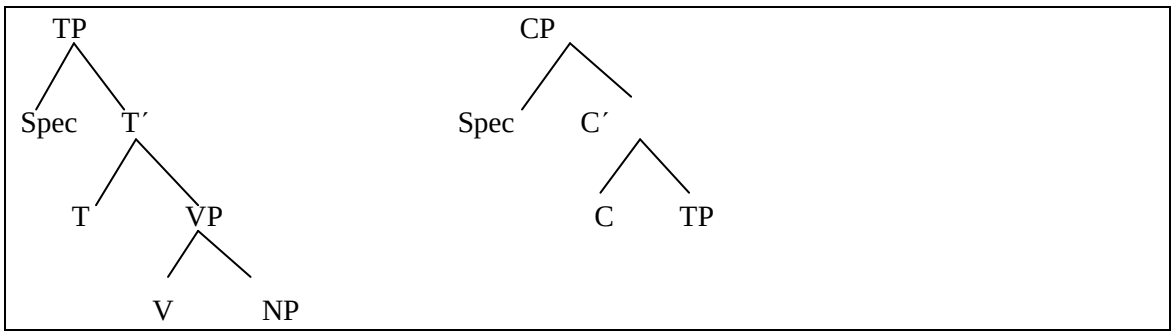
Other developments include functional categories in the representation of phrase structure include the universal linguistic principles of Tense Phrase (TP) and the Complementiser Phrase (CP). These are shown below:

i. TP ⟶ Spec. T´
T´ ⟶ T VP

VP ⟶ V NP

ii. CP ⟶ Spec C´
C´ ⟶ C TP

Figure 2.5: IP and CP Analysis



Source: Radford et al (2004)

Theta Theory is another module which tries to create lexical relations in syntactic representations (Haiden, 2005). It is concerned with the selectional properties (Ouhalla, 1999) of lexical items. The two central issues to the theta theory are: (1) the study of the grammatical relation of the NP to the verb which encodes the thematic relation of the verbs, and (2) the syntactic principle of the Theta Criterion. Theta Theory expresses the role that an argument plays with respect to its predicate by means of theta roles, shortened θ-roles (Pellegrini, 2005). The following is a list of these roles as shown in Haegeman (1994) and Ouhalla (1999):

i. **Agent/ Actor**: the one who intentionally initiate the action expressed by the predicate. For example: *Abubakr wrote a report*. *Abubakr* is the agent who acted on his own volition to have a report written.

ii. **Patient**: the person or thing which undergoes the action expressed by the verb. For example: *Aziz broke the window*. The argument *window* is the patient.

iii. **Theme**: The person or thing moved by the action expressed by the predicate such as *the ball* in *She rolled the ball to her child*.

iv. **Experiencer**: the entity that experiences some psychological state expressed by the verb. It is the argument that feels or perceives the event signified by

the verb. In the sentence *Tasneem loves cartoons*; the argument *Tasneem* is the experiencer of the verb *love*.

v. **Benefactive/ Beneficiary**: the entity that benefits from the action expressed by the verb. In the sentence *Mary buys John a chair,* the argument *John* is the benefactive.

vi. **Goal**: the entity towards which the activity expressed by the verb is directed. In the sentence *Chomsky sent the book to Rodney*, the argument *Rodney* is the goal.

vii. **Source**: the entity from which something is moved as a result of the activity expressed by the verb. In the immediately preceding sentence, the argument *Chomsky* is the source since the *book* was delivered from him.

viii. **Locative**: the place in which the action or state expressed by the verb is situated. In the sentence *Fatimah is studying linguistics at University Malaya;* the argument *University Malaya* is the locative.

ix. **Instrument**: the entity used for the accomplishment of the action expressed by the verb. In the sentence *John opened the package with a cutter*, the argument *a cutter* is the instrument.

x. **Recipient**: a subtype of the thematic relation "Goal" which occurs if the verbs used are, e.g., English verbs: give, award, donate, and receive. In the sentence *Rodney received a letter from Chomsky*, the argument *Rodney* is the recipient.

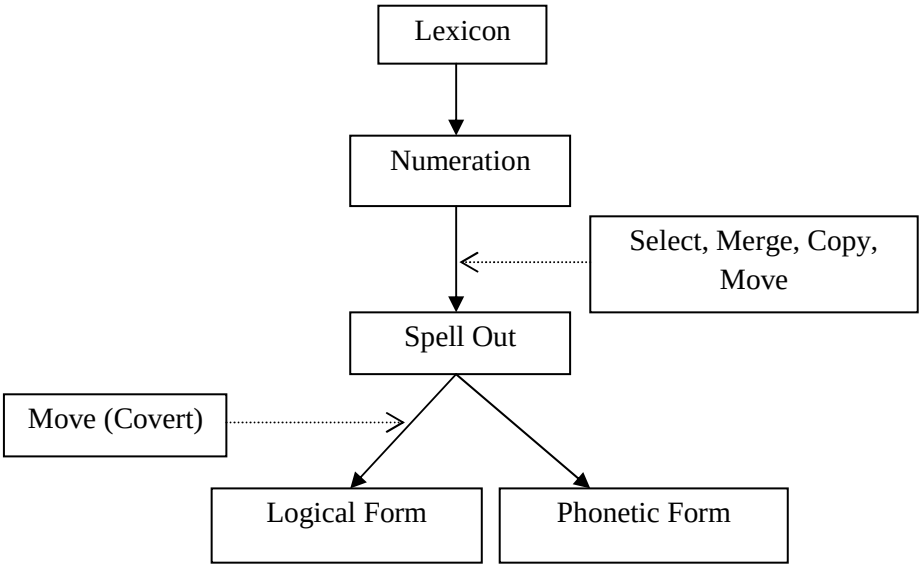
Theta Criterion is a syntactic principle which regulates the relationship between the selectional properties of the lexical item and the syntactic representation. This criterion states that *"each argument bears one and only one θ-role, and each θ-role is assigned to one and only one argument"* (Chomsky, 1981, p. 36)

The year 1993 marks the onset of the recent undergoing development within the Principles and Parameters model; the Minimalist Program (MP) presented in "*Minimalist Program for Linguistic Theory"* (Chomsky, 1993) and '*The Minimalist Program"* (Chomsky, 1995). As its name implies, this is not a new theory but a kind of program taking a step towards simplification which has always been the central objective of generative grammar. Chomsky is trying to present a theory which offers "abstract general principles from the complex rule systems devised for particular languages, leaving rules that are simple, constraint in their operation by these UG principles" (Chomsky, 1995).

The MP assumes that the structures and derivations of Principles and Parameters Theory are essentially correct (Culicover, P.W & Jackendoff, R. , 2005, p. 88). It is not a complete U-turn (Cook et al, 2004) but another version of the PPT (Marantz, 1995:352) that simply eliminates all theoretical devices for sounds (PF) paired to meaning (LF) through a computational system (CS). The PF is phonetic representations showing the sounds of speech in sequence and the LF are semantic representations showing the grammatical aspects of meanings of speech (Cook *et al*, 2004).

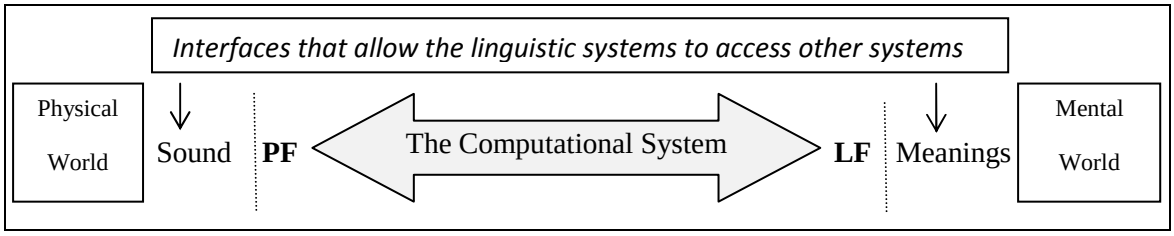
The computational system, according to the MP, depends on the lexicon which is a mental dictionary in the individual's speaker mind containing "lexical entries" for words known by that speaker. The combination of the lexicon and the CS is the heart of Minimalism introduced in this latest development in Chomskian grammar. These minimal operations have altered the previous model of GB into the Minimalist model. Consider the figure below:

Figure 2.6: The MP Model of Grammar



Generative grammar links sentence structure and the properties of the lexical items used, making everything that a person needs to know about a language part of the lexicon. The lexicon along with the UG principles which are embodied in all languages, form the components of the computational system which bridges the gap between the invisible existence of language in humans minds (meanings) and its physical realizations in forms of sounds and symbols of writing (sounds).Generative Grammar believes that "*each language can be regarded as a particular relationship between sounds and meanings*" (Chomsky, 1972, p. 17).

Figure 2.7: The Computational System



Adapted from: Cook *et al* (2004).

The MP first suggests that computation incorporates all the following operations as shown in Adger (2003):

i. **Numeration**: is an unordered set of all the lexical elements that will eventually appear in the phrase.

ii. **Select**: is the formation of numeration via required lexical items from the lexicon.

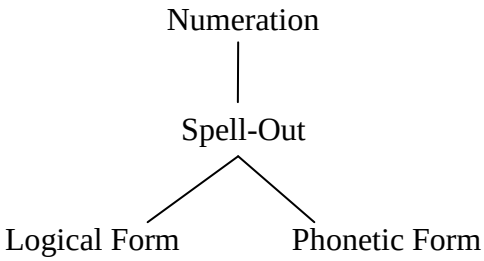
iii. **Spelling out**: is mapping the hierarchical structure onto a linear structure that contains only the features needed for further phonological processing of the phrase.

iv. **Merge:** is to build up larger structures out of smaller ones, with the smallest elements being lexical items.

v. **Move:** is the operation that copies a syntactic object which is in return merged with other objects in the structure.

The ultimate conclusion of the Generative Grammar in its recent MP is that a derivation which successfully reaches LF without violating any of the principles is said to *converge* at LF. If a derivation does not converge, it is said to *crash*. A derivation that crashes is not a well-formed linguistic structure, i.e. it is ungrammatical. The central goal of the Generative tradition of uncovering the most general, indispensable rules is manifested in the latest development of the MP. Syntactic structure is looked at from bottom to up built via a single operation, MERGE. Recursive combination of lexical items is the only considered operation in the process of building up the complete syntactic structure. A crucial point we need to make here is that instead of having different operations throughout the process of syntactic structuring, the MP considers these operations as different hierarchical applications of merge. The result of this is the minimalist Y-model (Boeckx, 2008, p. 45) containing what is schematized in the figure below:

Figure 2.8: The Minimalist Y-model



What is presented so far summarises the major phases in the development the generative school of linguistics since its inception up to the present most radical reformulation witnessed in this development, the Minimalist Program (MP). Different stages are coined next to particular books or articles presented by Noam Chomsky. The table below shows this development along with the titles of the key books or articles.

Table 2.1: Phases in the Development of UG

Date	**Model**	**Key Book/ Article**
1957	Transformational Generative Grammar	Syntactic Structure
1965	Standard Theory	Aspects of the Theory of Syntax
1979	Extended Standard Theory	Remarks on Nominalisation
1981	Government and Binding	Lectures on Government and Binding
1993	The Minimalist Program	A Minimalist Program for Linguistic Theory

Source: Cook et al (2004)

2.2 Relevant Issues in the Syntax of Arabic

Although this research report is refrained from detailed comments on the historical development of the Arabic language, it is found useful (since the data under investigation is in an Arabic vernacular) to acquaint the reader with some relevant issues presented in the literature on both the current situation of Arabic language as well as on the description of its syntax under the umbrella of the syntactic approach discussed in the previous course of our discussion.

Ryding (2005) introduced the discussion on describing the current situation of the Arabic language by presenting an overview of the Arabic language history. This general historical overview divides the development of Arabic in the following successive eras:

i. Proto-Arabic or Old Arabic (OA): Paucity of written evidence for this era, expanding from about the seventh century BC until approximately the third century AD, makes it difficult to determine the nature of the language used then. Apart from the brief rock inscriptions and graffiti found in northwest and central Arabia (Owen, 2006, p. 6), no evidence can be presented to tell detailed descriptions of Old Arabic.

ii. Early Arabic (EA): The period from the third through the fifth century AD is the period of transitional early Arabic. It is the era of interaction between other cultures of the time, the Christian and Jewish.

iii. Classical Arabic (CA): Poetry and highly refined public oral recitation is what characterizes the period starting from the sixth century AD (Holes, 2004, p. 11). This period is privileged by the revelation of the verses of AL-QURAN in the seventh century to the Prophet Mohammad which is in Arabic.

According to Ryding (2005), the period from the end of the eighteenth century onwards which dates the era of modern literary forms of Arabic is referred to as the Modern Standard Arabic (MSA). The author points out that MSA and CA are largely similar in terms of linguistic structures but they differ chiefly in style and vocabulary. The differences between Modern Standard Arabic (MSA) and the Arabic vernaculars spoken in the area expanding from the Arabic Gulf and the Atlantic Ocean in North West Africa including regions such as the Levant, the Arabian Gulf, the western Arabian Peninsula, Western North Africa, Egypt, and the Sudan are stated in:

> *"Vernacular speech is much more flexible and mutable than the written language; it easily coins words, adapts and adopts foreign expressions, incorporates the latest cultural concepts and trends, and propagates slang, thus producing and reflecting a rich, creative, and constantly changing range of innovation. Vernacular or colloquial languages have evolved their own forms of*

> *linguistic artistry and tradition in terms of popular songs, folk songs, punning and jokes, folktales and spontaneous performance art."* (Ryding, 2005, p. 5)

Modern Standard Arabic (MSA) is said to be:

> *"the written norm for all Arab countries as well as the major medium of communication for public speaking and broadcasting. It serves not only as the vehicle for current forms of literature, but also as a resource language for communication between literate Arabs from geographically distant parts of the Arab world"* (Ryding, 2005, p. 7)

The current linguistic situation in the Arab world cannot be given a linguistic term other than "diglossic". Speakers in these linguistic environments are *"fluent in at least one vernacular form of Arabic (their mother tongue), and they understand a wide range of others"* (Ryding, 2005, p. 5).

The syntactic principles of "agreement" and "government" are the two major principles affecting the structure of Arabic phrases and clauses. Agreement is "*where words in a phrase or clause show feature compatibility, that is, they match or conform to each other, one reflecting the other's features*". Government, on the other hand, is a "*syntactic principle wherein certain words cause others to inflect in particular ways*" (Ryding, 2005, pp. 57-58). Arabic simple sentences into:

A) Equational: are those containing no verb for the reason that the Arabic verb 'to be' *(kaan-a)* is not normally used in the present tense indicative; it is understood without being mentioned. Both the subject and the predicate in an equational sentence are in the nominative case. The following shows the structure of Arabic verbless sentences as shown in Ryding (2005):

i. Noun/adjective: *al-Tariiq-u Tawiil-un*

The road [is] long.

ii. Noun phrase/adjective: *al-d3bal-u aLiyatu*

The mountains [are] high.

iii. Pronoun/adjective or adjective phrase: *hiya dhakiyyt-un.*

She [is] intelligent.

iv. Pronoun/ noun: *naHn-u tulab-un*

We [are] Students.

v. Demonstrative pronoun/ noun: *haaðaa daftar-ii.*

This [is] my notebook.

vi. Demonstrative pronoun/ adjective or adjective phrase: *haaðaa jadiid-un.*

This [is] new.

vii. Noun/noun or noun phrase: *ibn-ii Tabiib-un.*

My son [is] a doctor.

viii. Noun/prepositional phrase: *al-salaam-u alay-kum.*

Peace [be] upon you.

ix. Reversal of subject and predicate: *hunaa baytu-naa.*

Here [is] our house.

x. Expression of possession: *ind-ii mushkilat-un.*

I have ('at-me is') a problem.

xi. Existential predications: "there is/there are": *hunaaka awaamil-u kaθiirat-un*

There [are] many factors.

xii. Equational sentence with clause as predicate:

al-masiiHiyyat-u wa-l-Islaam-u asl-u-humaa waaHid-un.

Christianity and Islam [are from] one source

B) Verbal (containing a verb) which displays the following relations as summarised by the author:

i. The subject is incorporated in the verb as part of its inflection:

najah-at.

She succeeded.

ii. The subject may also be mentioned explicitly, in which case it usually follows the verb and in the nominative case. The verb agrees in gender with its subject:

najah-at-i l-hukuumat-u.

The government succeeded.

iii. A transitive verb, in addition to having a subject, also takes a direct object in the accusative case. This object follows the verb and any mentioned subject:

Hazam-at Haqiibat-a-haa.

She packed her suitcase.

iv. The basic word order is thus is thus VSO: Verb–Subject–Object:

ya-hmil-u l-walad-u hagibat-an.

The boy is carrying a bag.

v. Word order may vary to SVO (Subject–Verb–Object) or even VOS (Verb–Object–Subject) under certain conditions:

Ali garaa al-kitab. *Satagaa sayaratu-na al-lis*

Ali read the book. *Stole our car the thief (the thief stole our car)*

Aoun, Benmamoun and Choueiri (2010) focus on the grammatical structures of MSA which they defined as the "*language for writing and for formal speaking and is only acquired at school*". However; examples from different vernaculars are used as data in this book to indicate the variations that exist. These vernaculars are "*what people acquire at home, and thus, they are the native languages of the people in the Arab world*" (Aoun *et al.*, 2010, p. 7)

One of the issues discussed in this book is the morphology of the tense in Arabic language. Tense shows two aspects in Arabic, the perfective and the imperfective forms. These are represented in the following table as shown on page 21 of the book:

Table 2.2: The Morphology of Tense in Standard Arabic

A. PERFECTIVE				
Person	Number	Gender	Affix	Verb + Affix
1	*Singular*	*F/M*	*-tu*	*katab-tu*
2	*S*	*M*	*-ta*	*katab-ta*
2	*S*	*F*	*-ti*	*katab-ti*
3	*S*	*M*	*-a*	*Katab-a*
3	*S*	*F*	*-at*	*Katab-at*
2	*Dual*	*M/F*	*-tumaa*	*Katab-tumma*
3	*D*	*M*	*-aa*	*Katab-aa*
3	*D*	*F*	*-ataa*	*Katab-ataa*
1	*Plural*	*M/F*	*-na*	*Katab-na*
2	*P*	*M*	*-tum*	*Katab-tum*
2	*P*	*F*	*-tunna*	*Katab-tunna*
3	*P*	*M*	*-uu*	*Katab-uu*
3	*P*	*F*	*-na*	*Katab-na*
B. IMPERFECTIVE				
Person	Number	Gender	Affix	Verb + Affix
1	*Singular*	*F/M*	*ʔa-*	*ʔa-drus(u)*
2	*S*	*M*	*ta-*	*ta-drus(u)*
2	*S*	*F*	*ta--- iin(a)*	*ta-drus-iin(a)*
3	*S*	*M*	*ya-*	*ya-drus(u)*
3	*S*	*F*	*ta-*	*ta-drus(u)*
2	*Dual*	*M/F*	*ta- aan(i)*	*ta-drus-aan(i)*
3	*D*	*M*	*ya— aan(i)*	*ya-drus-aan(i)*
3	*D*	*F*	*ta—aa*	*ta-drus-na(i)*
1	*Plural*	*M/F*	*na-*	*na-drus(u)*
2	*P*	*M*	*ta— uun(a)*	*ta-drus-uun(a)*
2	*P*	*F*	*ta—na*	*ta-drus-na*
3	*P*	*M*	*ya— uun(a)*	*ya-drus-uun(a)*
3	*P*	*F*	*ya—na*	*ya-drus-na*

Source: Aoun *et al* (2010)

The authors discussed the issue of sentential negation in Arabic which is of great importance to this report. The particles *lam*, *lan*, *laa*, *laysa* and *maa* are responsible for the realization of negation in Arabic. The following is an exemplification of each particle:

i. alawaladu lam yadrusuu
The boys.NOM Neg.past 3.study.mp

"The boys did not study."

ii. alawaladu lan yadrusuu
The boys.NOM Neg.fut 3.study.mp

"The boys will not study."

iii. alawaladu laa yadrus-un
the boys.NOM Neg. 3.study.mp.Ind.

"The boys do not study."

iv. laa tadrus
Neg. 2.study.imp.

"do not study."

v. laysa fii albayti
Neg.3ms in the house.Gen

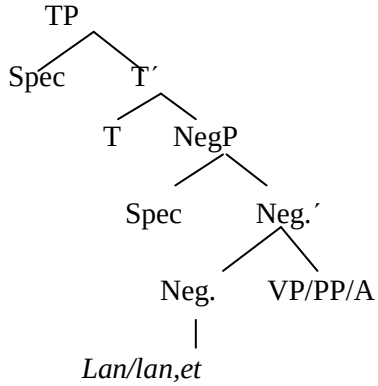
"he is not in the house."

vi. maa ata ahad
Neg. came.3ms one

"no one came."

A very important point mentioned here is that tense is realized on the sentential negative particle rather than on the verb. Consider the representation below:

Figure 2.9: Negation in Arabic



The discussion on the clause structure in Arabic includes the CP layer where two Complementisers are found distinct. The first is "*ʔanna"* which heads finite clause and the other in "*ʔan"* introduces non-finite others (Aoun *etal*. 2010, p. 13). The following exemplifies each respectively:

i. ʔaʕtaqidu ʔanna l-walad-a ya-lʕabu

believe.1s Comp the-child-Acc 3-play

'I believe that the child is playing.'

ii. rafada ʔan ya-drusa

refused.2mp Comp 2-study

'They refused to study.'

2.3 Studies in Syntactic Development

Grammatical development starts to bloom by the age of 18 months where children begin to form two-word phrases (McLaughlin, 1998, p. 301). Children begin to combine more words around the age of two (Guasti, 2002, p. 117).

Real basic types of grammatically appropriate sentences as well as combinations of these into advanced grammatical constructions in child speech is attributed to the acquisition of grammatical morphemes as stated in the landmark study by Roger Brown and his colleagues at Harvard University (1973). This referential longitudinal study collected data from its three participants who were at pre-school age. The main criticism that can be made here is that it is hard to make generalizations from studying data obtained from only three participants or rather two because the study indicated that one of the three participants had to leave after one year in a five year long study.

The data was collected during spontaneous conversations at children's homes. The study suggests the stages of grammatical development according to the Mean Length of Utterance (MLU) discussed in the introductory chapter of this study. Brown's study (1973) focused on the order of mastery of the grammatical morphemes acquired in stage two which are considered responsible for the sophisticated grammatical development. Morphemes to be traced and ordered are selected in the study using a certain criteria as Brown states this in the study by saying that the morphemes "*were not*

chosen either arbitrarily or with knowledge that they would yield the lawful results we shall find but simply because they were the only ones to which our criterion of acquisition was applicable" (Brown, 1973, p. 250). A morpheme is included if it has an identifiable obligatory context, exhibit high frequency of occurrence and has developed gradually in the child's language. The study includes 14 grammatical morphemes known as Brown's 14 grammatical morphemes. Brown and colleagues state that they "*are interested in the acquisition of knowledge, both grammatical and semantic. At what point does the child know how to use a given form and when to use it*?" (Brown, 1973, p. 254)

Brown ranked and presented the order of mastery to the fourteen grammatical morphemes by children acquiring English. These are fine-tuned in McLaughlin's (1998) shown in the table below:

Table 2.3: Order of Acquisition of English Grammatical Morphemes.

Rank	Morpheme	Example
1	Present Progressive inflection	*He eating.*
2	Preposition *in*	*Juice in cup.*
3	Preposition *on*	Sleep on bed.
4	Regular plural inflection	My toys.
5	Past Irregular	I ate cookie.
6	Possessive inflection	Mommy's shoe.
7	Uncontractible copula	Here it is! They were nice!
8	Articles	A boy took the ball.
9	Regular past tense	He walked fast.
10	Regular third person singular	She bakes cakes.
11	Irregular third person singular	He has some. She does, too.
12	Uncontractible auxiliary	Is she reading? You were reading.
13	Contractible copula	Tommy's tall! They are all tall?
14	Contractible auxiliary	She's reading. They are reading.

Source: McLaughlin (1998)

2.4 Studies in Language Development and Play

Researches on children's play and games studied the contribution of these games in these young individuals' social, cognitive and communicative skills development. There seems to be a general agreement on the prominent, positive role games play in the

general development of the language abilities and skills in children. Different researches and studies have approached such contributions from different point of views and perspectives.

Pellegrini, Kato, Blatchford and Baines (2002) discussed the role of games as an important developmental task for preschoolers in their short term longitudinal study. The authors first noted that games were neglected in studies throughout the years before their study and described such abandonment as being surprising indicating the suggestion by the influential theory of Piaget (1956) on games as being an important implication for children's social and cognitive development. A point of great importance is the differentiation made between play and games according to rules governing each. Games are performed principally while play is performed under flexible rules. A sample of ethnically and diverse 30 boys and 41 girls from first grade participated in the study. The group consists of individuals speaking English and others speaking Spanish as first languages. The study can be thought of as a group effort project where, in addition to the authors, four postgraduates interviewed the children under the capacity of research associates. Methods used were explained in details in the study. Those were direct behavioural observations, peer nominations, self reports and teachers and researcher associates rating of children. Describing the frequency, variety and complexity of both genders games as well as examining the extent to which games can be utilized in predicting children's social competence. The concept of "cultural competence" for participants is defined in the study as being the ability of children to form and maintain peer networks and adhering to group norms within organized peer group as well as adjustment to the demands of the school. A crucial point made here is that competence is defined differently in different ages. The comparison conducted showed that boys tend to play more games, variable set of games than girls do especially chase and ball games. Girls play more verbal games than boys. The study

found that facility with games forecast boys' social competence and both boys' and girls' adjustment to first grade in school.

Tse, S. K, Chan.C, KwongS.M and Li, Hui (2006) provided evidence for sex differences in syntactic development from Cantonese-speaking preschoolers in Hong Kong during spontaneous play activities. The study found significant differences in syntactic development such as longer sentence and compound sentence production by girls as well as some sentence type and structures and syntactic complexity.

Gosso Yumi, Moaris and Otta Emma (2007) studied and compared pretended play of the different cultural groups in Brazil. Some 35 boys and 41 girls between the age of five and seven representing the five ethnical groups in Brazil participated in this cross-cultural investigation. The authors observed their participants in natural setting to determine both content and structure of pretend play performed. The study found that pretended play is practiced in all cultural groups but differ in both content and structure but more in content. The study also stated that children from high and mixed socioeconomic status are engaged in more pretended play than others.

Swarup and Gasser (2009) suggest that the role of parents in language acquisition is to initialize the linguistic system of the child in such a way that subsequent interaction with peers results in rapid convergence to the correct language. They emphasis was in the active role of playground games in the process of cultural transmission of language. Yule (2006) explained the notion of “cultural transmission” as the process whereby language is passed on from one generation to the next.

He argued that ‘*while you may inherit brown eyes and dark hair from your parents, you do not inherit their language. You acquire language in a culture with other speakers and not from parental genes’* (Yule, 2006, p. 11)

The effectiveness and practicability of games on children with language impairment also have a considerable contribution to developmental literature. Carter (2001) supported previous developmental studies which suggest that language skills may be increased by engaging in play interactions. Children with autism, who exhibit significant language delays and extremely disruptive behaviors, when confronted with task situations or other interactions in which they would rather not partake are unlikely to engage in interactive toy and game play. The study conducted an investigation and observation on three children (two girls and one boy) between five and seven with autism by graduate or undergraduate students of psychology to assess the effects of choice during language intervention on disruptive behavior. Results indicated that when choice is permitted during language intervention within a play context, disruptive behaviors are considerably reduced, and levels of appropriate social play and pragmatic skills increase, thereby reducing interventionist redirection.

Pedagogically, games practised during recess time in schools were searched to determine their effect on students' attention. Pellegrini, Huberty and Jones (1995) conducted three experiments to determine the effect of recess timing on students' behavior and attention inside the classroom. Children's inattention rates were higher before recessing than after. Children were also socially interactive on the playground after long deprivations.

Pellegrini and Bohn (2005) suggest the positive purpose of recess time in school curriculum and hold a confronting position to the practices of minimizing recess time in schools across North America and the United Kingdom.

The authors supported their emphasis of the importance of recess time by experimental and longitudinal data obtained from Asian schools where children are

given frequent breaks during the school day. This data is framed by the cognitive immaturity hypothesis as in Bjorklund & Green (1992).

School age children and preschoolers are not only skillful in participating in games but are also found inventive game makers. Lennon and Coombs (2006) demonstrated the ability of an eight year old child to create and construct educational games for the topic of dengue fever control. The study revealed the ability of the child to develop functional game related to the topic of the study. Moreover; the study found that the game developed was consistent to the child's cognitive level.

CHAPTER THREE

THE RESEARCH METHODOLOGY

3.0 Introduction

Arrangements used to provide answers to the research questions posed in the introductory chapter in this study are described here. This includes, firstly, the description of the type of data collected as well as the method and strategy of its collection. Secondly, a description of the group of participants who performed the playground games under study. Thirdly, the procedure for data analysis is described. And finally, the framework of analysis that will be used to determine the grammaticality of sentences used in the specimen of data collected as well as their communicative classifications.

3.1Type of Data

Traditional playground games orally and kinesthetically performed by Sudanese children are identified. A share of three games for each gender (three games performed by boys and three games performed by girls) composes this sample of the target games. Games were audio recorded in participants' first language (Arabic), transcribed, and translated into English language for gloss purposes.

3.2 Data Collection Strategy

Both the type of data and the research problem in this research report determine the application of a qualitative method in the process of data collection. Data was collected in the period from August to October 2010 in Arabic schools in Kuala Lumpur where Sudanese children attend and at home where the researcher's own children perform such games. The researcher didn't find any difficulty in obtaining permission to access schools sites since he is known to schools managements. Children were observed

during recess time while performing target games as requested, and during casual play at home.

3.3 The Instrument

The "key" instrument of data collection in this study, as it is the case in all qualitative researches, is the researcher himself (Creswell, 2009, p. 175). Data is collected through the researcher's observations of participants performing the games under investigation in a natural play time while the verbal component of the games is audio recorded using an audio tape recorder.

3.4 Participants

The data under study is a well known cultural practice performed by preschoolers and school age children in northern Sudan. No doubt, the best site for collecting such a data is in its initial cultural context or setting. Nevertheless; and for pragmatic constraints, the researcher compensated for that by employing a focus group consisting of ten Sudanese children studying in some International schools in Kuala Lumpur along with the researcher own two children Mohammed (aged 7) and Tasneem (aged 5) to participate in the process of data collection for this study.

3.5 Considerations of Ethical Issues

Encountering ethical issues during data collection and data analysis procedures seems to be inevitable (Creswell, 2007). This research report is committed to research ethical issues observation and the researcher bears in mind that the population of participants in this study are all children. Participants here are only deployed after an informed consent form is being signed by parents or guardians and obtained. The researcher also made it clear for the participants and their parents or guardians that they are participating in an academic study. The purpose of the study was also explained. Participants and guardians are promised physical safety during the process of data

collection`. Furthermore; game practising is observed by the researcher during recess time only and no child loses a class for the purpose of data collection. They are also made aware that children can voluntary withdraw at any time during the process. The researcher promises availability of findings after the data analysis if any of the guardians is interested.

3.6 Procedure of Games

The six games identified which consist of three games performed by boys and another share of three games performed by girls are described beloe:

i. Name of game: (*Meen Natak):* (Who jumped over you?)

Participants: A group of about ten boys or more.

Procedure: A chaser boy is to lie down on his stomach and another monitor boy should cover his face to ensure inability of sight. Other boys jump over the chaser followed by the monitor's question:

Meen (Who) *Natak* (*jumped over you*)?

The chaser guesses and says a name of a boy in the group.

If wrong, the monitor says:

Kadabn kadib! (It is not. You are wrong!)

And another boy jumps. He will be asked by the same question from the game monitor who says:

Shid warkab (saddle and chase!)

Then, the chase starts. The chaser should catch one of boys to take the role of the chaser. Other chased boys try to reach a certain safety point. If all succeed to reach the

safety point, the chaser is to repeat his role and if the chaser succeeds in catching one, the caught one is the new chaser.

ii. Name of game: *Shileil* (an imaginary name of a boy)

Participants: A leader and a group of boys (five to ten)

Procedure: This game is played in rural areas at night when the moon is full.

The leader shouts out: *Shileil weinu?* (Where is Shileil?)

The group choruses the answer: *Khatafu Adodo*! (Kidnapped by Adodo!)

The leader again asks: *Shileil wein rah?* (Where did Shileil go?)

The group choruses the answer: *Akalu atumsah*! (Eaten by the crocodile)

The leader throws the bone far and the group runs to find it. The leader tries to mislead the group by searching in wrong positions.

When a member of the group finds the bone, he runs fast to return the bone the place where the bone was thrown (called home) before others to become the leader. If this finder is caught by another boy, the bone is given to the later and he is appointed the "new leader" of the game. The game starts over again.

iii. Name of game: *Kam fil Khat?* (How many are there?)

Participants: A group of about ten boys.

Procedure: The group is divided into a leader and a group to guess.

The leader stands about twenty to twenty five metres away from the group.

He chooses a number and shouts out*:"Ho lablab, kam fil khat?"* (Hey group over there, how many are there?)

Members guess and shout out their guess. If the guess is not correct the leader responds in "*kadabn kadib!"* (It is not. You are mistaken). Members in the group are allowed to ask the leader for approximation of his number, for example "more or less? Between which and which numbers?" When one of the member's guess is correct, the leader shouts "*shid warkab!"* (Saddle and ride) The boy catches one from the group members. The later has to carry the winner on back to the leader platform as soon as the guess is confirmed correct. Other members, of course, try to escape. The game starts over again with the new leader.

iv. Name of game: *Salwa ya Salwa*: "Salwa" is a girl's name. "Ya" is for calling.

Participants: More than ten girls are needed.

Procedure: Girls sit in a circle while another girl runs around this circle. The girls in the circle chorus: "*Salwa ya Salwa malik bitabki? Ayza iah? (*Salwa,Salwa! Why are you crying? What do you want?)

She shouts "*ayza sadeekti"* (I want my friend!). Another question comes from the group "*sadeektik meen?"* (Who is your friend?). The girl answers "*sadeekti ....."* (My friend is + name from the group). The game continues with the friend outside. She has to choose a friend other than the one who has chosen her. All the above conversation is produced with a melody.

v. Name of game: "*Al um wa alsagr" (*The mother and the eagle)

Participants: Six or seven girls to play the roles of mother, children and a guest.

Procedure: The guest knocks at the door saying "*kaw, kaw, kaw*" (knock, knock, knock). The mother shouts "*meen filbab?"* (Who is at the door?). The guest answers "*ana alirabi"* (It is the nomad). The mother asks "*ayz aih"* (What do you want?) and he answers "*ayz ganami"* (I want my goats) then the mother denies "*ganamak mafi"* (Your

goats are not here) but the nomad insists *"fi"* (They are here) and she denies *"mafi"* (No, they are not). The claim and denial is to be repeated for several times. The nomad then shouts the names of his goats *"zaroog!"* (Blacky) and a sound imitating goat is uttered from one of the gils behind the mother. Again and again the nomad name and a goat answer his call. At this point the nomad says *"alhes hes ganami"* (The sound is my goats') and the mother tells him *"kadab ya arabi"* (You are lying nomad) repeatedly. The nomad then says *"ana sagran bakhtifa"* (I am an eagle and will snatch) the mother says "ana uman bahjiza" (I am a mother to protect). This conversation is produced with a melody.

vi. Name of the game: *"Ulbat alwan"* (Box of Colours)

Participants: seven girls.

Procedure: a girl is leading five others each given a colour name. Another girl asks the leader *"ayh indik?"* (What do you have?) And the earlier one answers *"ulbat alwan"* (a box of colours) followed by another question *"asmaahum eih?"* (What are their names?) The leader answers *"ma arfa"* (I don't know). Then the other girl shouts names of colours. A *"naam"* (yes) response is expected each time a colour is correctly guessed. Melody accompanies the conversation.

3.7 Framework of Analysis

The present study proposes a formal syntax framework, namely Chomsky's 1993 MP discussed in the previous chapter, for the analysis of the type of sentences used in playground and team games Sudanese preschoolers and school age children are engaged in. The first step taken is to determine the convergence of sentences used in these games. This way, a correct structure doesn't only suggest a correct single sentence but also a dynamic format, in the sense that it represents a way of generating a very large number of sentences with similar structure. This is followed by categorizing

sentences according to their communicative functions into: positives, negatives or interrogative forms to determine frequently used sentence type. Findings are reported in descriptive, narrative forms in this naturalistic study.

CHAPTER FOUR

FINDINGS AND DATA ANALYSIS

4.0 Introduction

Six playground games were identified and audio recorded. The following chapter is a description of the procedure followed by children performing each game. Nonetheless; this research report is not complacent with such descriptions; it leaps beyond that to focus on the grammaticality of the verbal sentences in an effort to provide answers to the research questions stated in a previous course.

4.1. Syntactic Analysis of the Language of Games

The description of games provided above reveals the major fact that all games are built around questions on the first place followed by a series of predictable negative responses to these questions.

Question formation in Standard Arabic and its various dialects is simply a matter of placing an interrogative word at the beginning of a sentence without any inversion in the word order (Ryding, 2005, p. 401). The questions words in Arabic can be classified into two categories; nominal question words and adverbial question words (Aoun *et al*, 2010, p. 129). Consider the tables below for both Standard Arabic and Sudanese dialect question words:

Table 4.1: Question words in Standard and Sudanese Arabic

STANDARD ARABIC			
NOMINAL		***ADVERBIAL***	
mən	Who	*ʔyna*	Where
maaðaa	What	*mata*	When
ʔyya	Which	*kayfa*	How
kam	how many/much	*limaaðaa*	Why
SUDANESE ARABIC			
NOMINAL		***ADVERBIAL***	
meen	Who	*wein*	*Where*
ʃinu/ eih	What	*mitein*	*When*
yatu	Which	*keif*	*How*
kam	how many/ much	*leih/ mal*	*why*

Adapted from: Wahba (1984)

The following illustrates the verbal language used in the game identified in this study along with the analysis of the syntactic structure of each:

1. a. *meen* *nata* *k?*

who.NOM. *jump.Past.3ms.* *you.2ms.Acc*

Who jumped you?

b. *Ahmad.*

PN

c. *kdabn* *kadib*

Lying *liar*

d. *Meen* *nat-a* ----------*k?*

who.NOM. *jump.Past.3ms* *you.2ms.Acc*

(who jumped you?)

e. Majid.

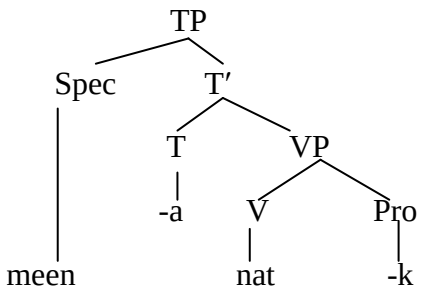
NOM

f. *ʃid* *wə* *arkab*

saddle.imp.2ms *and.con* *ride. imp.2ms*

(Saddle and ride!)

This game is a conversation based on the question shown in (1.a) and (1.d). The verb "*nata*" is in the past by virtue of the "*-a*" morpheme (see table 2.2). It merges with the pronoun "*-k*" to form the TP "*nata-k*". The question word "*meen*" is placed at the beginning of the phrase without altering the word order in the VP forming the question "*Meen nata-k?*



2. a. Shilel wein u?

NP. NOM. where.NOM. he.3ms

Shilel, where is he?

b. Khataf u al dodo!

took. 3ms him.3ms. Acc the.Def. NP. NOM

The Dodo took him

c. Shilel wein rah?

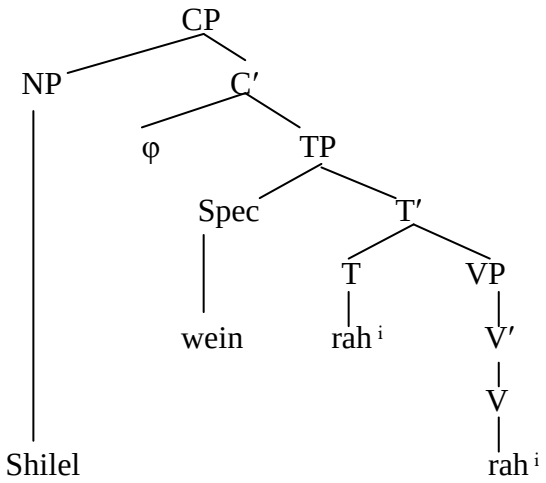
NP. NOM. where.NOM. went. 3ms

e. Akal u al tumsah!

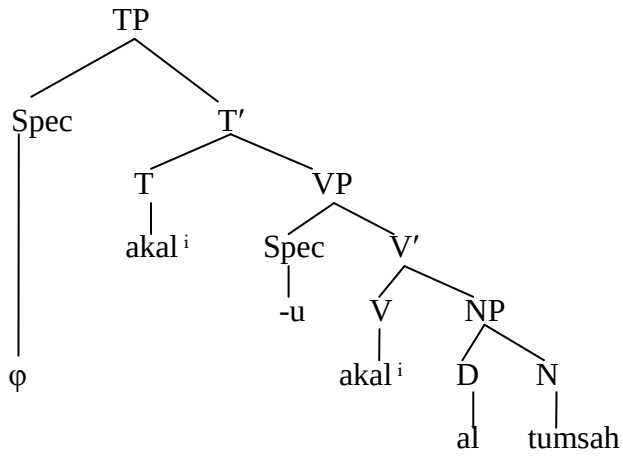
ate.3ms him.3ms.Acc the.Def. crocodile.NOM

The crocodile ate him.

This game is another conversation game oriented by the questions (2. a) and (2.c). The later is formed by the question word *"wein"* and the past verb *"rah"* preceded by the PN *"Shilel"* as a topic.



Two positive sentences with the same structure of VOS are also practised in this game; these are sentences (2. b) and (2. e). They can be represented in:



3. a. *Ho lablab, kam fi al xat?*

Ho.Voc. 3ms.Acc how many.NOM on.prep the.Def line.Gen

Hey Lablab, How many on the line?

b. sabaa.

Seven.

c. kadabn kadib!"

No,no.

d. akbar min?

more than?

e. awaya

yes

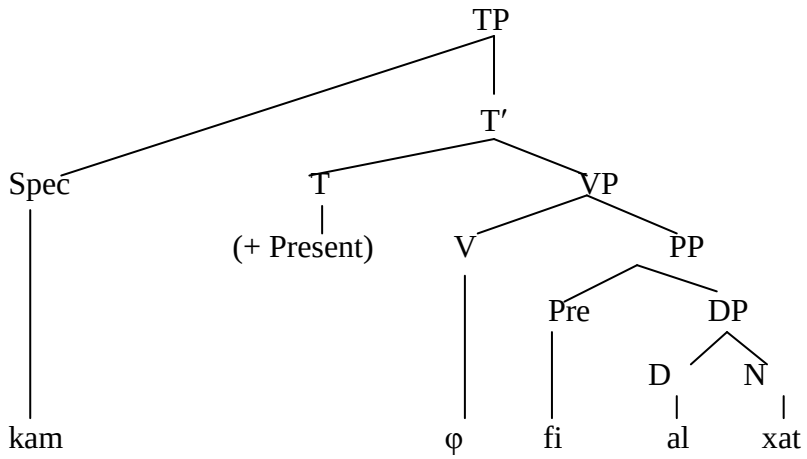
f. aʃarə?

ten?

g. *ʃid w arkab!*

saddle.2ms and.conj ride.2ms

The base for this boys' game is question (3.a) which is uttered at the very beginning of the game. In this question the particle *"al"* merges with the noun *"xat"* to form the NP *"al xat"*, then the preposition *"fi"* merges with this NP to for the PP *"fi al xat"*. The question word *"kam"* is then inserted at the beginning of this PP to form the question *'kam fi al xat"* which reflects the equational sentences in Arabic presented in chapter two of this report (see 2.2). The following TP can be proposed for this question:



4. a. *Salwa ya Salwa malik bi tabki? Ayza ayh*?

Salwa oh Salwa.Nom why.2fs are.Asp cry.Prog.2fs want.2fs what.Acc

Oh Salwa, why are you crying? What do you want?

b. *Ayz a sadeeg-ti*

want me.1fs.Nom friend.1fs.Gen.

I want my friend.

c. *Sadeeg-tik meen?*

friend.2fs.Gen Who.Nom.

Who is your friend?

d. *sdeeg-ti Waffa*

friend.1fs.Gen Wafaa.Acc

My friend is waffa

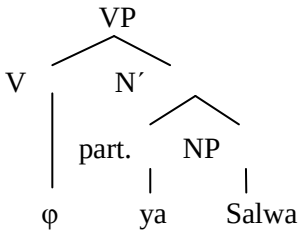
The same conversational atmosphere is maintained in this game practiced by girls. Questions (4.a) and (4.c) form the theme of the whole game. This conversation is special for two features practiced in (4.a). The first is the use of *"ya"*, a calling particle in Arabic which precedes the noun called either for help as in "*ya ALLAH*!" (omitting the preceding VP "help me") or for ordinary calling of people to come, listen or pay attention to what is to be said by the speaker as shown in question (4.a). The complete phrase is:

ismai ya Salwa

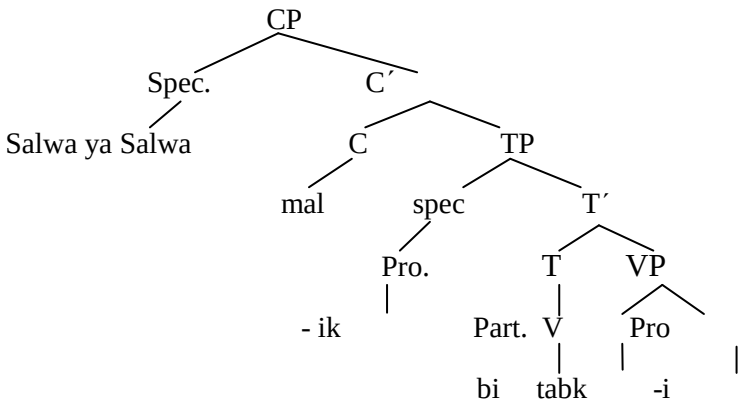
listen.2fs. call Salwa.2fs.Nom

Listen Salwa

The calling phrase in Sudanese Arabic is an equational sentence (see 2.2 above). Verb such as "*ismai*" is omitted and simply understood by both speakers and addresses. Thus the calling phrase is no more the VP with the structure shown below:



The other is the use of the aspectual particle *"bi"* added to verbs indicating the progressive aspect in Sudanese vernacular of Arabic. In this question the question word "*mal"* merges with the *suffix personal pronoun* (Ryding, 2005, p. 301)*"-k"* to form the NP "*mali-k"* and the particle *"bi"* merges with the verb *"tabki"* to form the VP *" bi tabki"*; then the two phrases merge to form TP "*mali-k bi tabki"*. The whole question can be represented in the following CP:



Question (4.c) is also special in moving the question word *"meen"* to the end of the question. In contrast to what is been discussed at the beginning of this section concerning the simple rule of question formation in Arabic, the question word "*meen"* is moved to the end of the question in this example and not in its natural initial position. I believe this is done for the purpose of emphasis.

5. a. meen fi al bab?
Who.Nom at the door. Loca

Who is at the door?

b. ana al irabi

I.1m/fs.Nom the nomad.Nom

I am the nomad.

c. ayz eih?

want.2ms what.Nom?

what do you want?

d. ayz ganami

want.2ms goats.Gen.1ms

I want my goats.

e. ganamk ma fi

goats.Gen.2ms Neg.Present present

Your goats are not present.

f. fi

present.Loca

Here.

g. ma fi

Neg present.Loca.

Not here.

h. kadab ya arabi

lair.2ms indi nomad.Nom

You are lying nomad.

i. ana sagrn ba akhtif a

I.1ms eagle . Indef. will.Asp snatch it.1ms

I am snatching eagle.

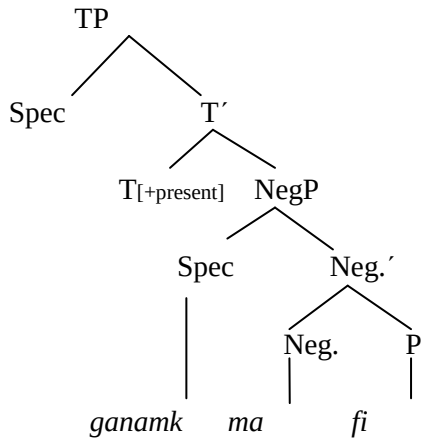
j. ana uman ba ahjiza

I.1ms mother.Indef. will.Asp defend it.1ms

I am a defending mother.

This game contains questions (5.a) and (5.c) which are similar in structure to questions (3.a) and (4.c), respectively. The later confirms the idea of emphasis which was proposed in our discussion in game four above. It also displays sentences containing the aspectual particle *"ba"* indicating future and this similar to our discussion concerning the continuous particle *"bi"* in a previous course in this section. I

should also withdraw the attention of the reader to the particle *"ya"* and its use as a vocative marker in Arabic sentences presented in (5.h) discussed in (4.a) above. This marker is used for calling or asking for help. However; this game is syntactically particular for the reason that it contains the (5. e) which illustrates the structure of present negation in Arabic which is shown below:



6. a. eih ind-ik?

what.Nom have.2fs

What [do] you have?

b. ulbat alwan

box.Nom colours.Nom

A box of colours.

c. asmah-um ayh?

Name.3np.Gen what.Nom

What are their names?

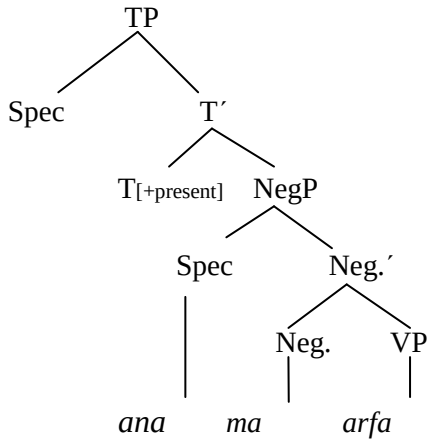
d.ana ma arf-a

I.Nom Neg. know.1fs

I[don't](me not) know.

This game revolves around questions (6.a) and (6.c). They share the same structure of questions presented in the previous games. In addition to these, the game contains the negative sentence (6.d) which, along with sentence (5.e), reveals the

variation of the structure of present negation in Sudanese Arabic where it is possible for the negative particle *(ma)* to precede a verb phrase, a preposition, an adjective or adjective phrase.



4.2 Answering the Research Questions

The analysis above provides the ground from which this research report addresses the research questions stated in its first chapter. The following section provides answers to the research questions stated

4.2.1 The first Research Question

The first question this research report asks is:

What grammatical unit/s do children use in the playground games identified?

The games identified show that children make use of the ultimate unit syntax can accommodate and deal with; the sentence. Games are not built around other lower units in the hierarchy of syntax, i.e. phrases and words. Moreover; instances of reduction of certain elements in sentences such as the subject, verb and verb "to be"/"*kæn*" are detected to be practised by children in actual performance of the games.

4.2.2 The Second Research Question

This research question reads:

How can these units be categorized?

The grammaticality of the most prevailing communicative sentence types is determined by using the framework of analysis stated and discussed in chapter two. Sentences converge and no sentence crashes in reaching the LF intended by its PF. Although all communicative types of sentences were detected in all games, "WH" questions and negative sentences are found to be the backbone in each and every game without which no game can be performed.

4.2.3 The Third Research Question

The study presents and tries to answer a third question:

What is the significance of these particular forms in children's grammatical development?

It is clear that no conversation is expected to take place in the absence of the questions and negative sentences. The term "conversation" is defined in the Cambridge Advanced Learners Dictionary as being a *" talk between two or more people in which thoughts, feelings and ideas are expressed, questions are asked and information is exchanged"*- http://dictionary.cambridge.org/define. This is what children are able to practise in the games under investigation. The practise of questions and negatives enables performers to take turns in conversations by playing the roles assigned in the particular game and consequently in other real life communicative contexts. Moreover; performers of such games display the ability of producing, using and in some occasions modifying these forms to fit a particular situation in a particular game.

4.2.4 The Fourth Research Question

A final question put forward by this research report is the question which reads:

i. *What justifies the acquisition of the syntactic forms identified at this age and not before it?*

Literature on language development suggests that children are able to produce questions and negatives quite late because they acquire auxiliary verbs late in their life. While this is true for English, it is not a logically sufficient reason to explain the situation in children acquiring Arabic (or may be other languages). It was noted in chapter two of this study that question formation in Arabic is only a matter of placing an appropriate question word at the beginning of a sentence and that a negative is formed by the appropriate use of a negative particle. There is no room for auxiliary verbs here. This supports the claim of language growth defended by Chomsky. It is by this age that the genes of language growth, supported by the external data and the universal principles governing this growth, bloom at this age enabling children to acquire and use the question words and negative particles needed to construct questions and negative sentences, respectively.

CHAPTER FIVE

SUMMARY AND CONCLUSION

5.0 Introduction

A summary of the procedures and findings of the study is presented in this final chapter along with a conclusion which conceptualises these findings. Moreover, points out of the limitations of this study are recommended for further research practice for the linguistic interest they evoke.

5.1 Summary

Playground games performed by Sudanese children are noticed to encompass both kinetic and verbal activities. This study approaches the second component of these games qualitatively in an effort to achieve the aims of the study. It presents a general review of syntax and the stages of its growth in children as reflected in the developmental literature. This review also presents findings of previous studies on play and language development as well as a presentation of some issues in the syntax of Arabic relevant to the topic of the study. A central part in this review is the discussion on the generative school of grammar which presents the concept of innateness as an explanation of the process of first language acquisition on one hand and ideas about the description of syntax on the other hand. The study reviews the different historical phases the theory has undergone concerning ideas about the description of syntax since the late fifties up to the early nineties of the previous century.

The Minimalist Program (MP) of this school of grammar developed in 1993 is adopted as a framework of analysis in this study. The study introduced the syntactic operation of merger which regularise syntactic analysis presented in this framework of analysis.

Three points constitute the objectives of the study. These are:

i. Determine the grammaticality of sentences used in the playground games under study.

ii. Find out what sentence categories frequently used in these games.

iii. Evaluate the suitability and benefit of the games under investigation for the grammatical growth of this age group of children

The research questions the study answers are:

i. What grammatical unit/s do children use in the playground games identified?

ii. How can these units be categorized?

iii. What is the significance of these particular forms in children's grammatical development?

iv. Why are children able to produce these forms at this age and not before it?

After the audio recording of games, sentences in each game are analyzed to determine grammaticality of each. This shows the following findings:

i. Complete, full sentences are used in the games.

ii. All types of sentences (positives, negatives and questions) are used. Nevertheless; "WH" questions and negatives are found to be the governing and the most essential types of sentences in each and every game.

The study finds the use of questions and negative sentences is particularly significant since children are found to start using them at preschool age which is the age of the games performers. Moreover; the study supports the innateness explanation of

first language acquisition and argues that children are able to negate and ask questions at this age the same way they are able to jump, kick and run.

5.2 Conclusion

This study is carried out in both home and school contexts where participants practise these games as a central component of their casual group play activity. These games are looked at in this study as a readymade specimen of language practised and performed by children rather than a sample of language produced by children. The study evaluates the language in these games from two aspects; the first is the grammaticality of sentences used and the second is the suitability of these games for the syntactic development of the age group of performers.

The first dimension in the evaluation of these games is accomplished by the use of the Minimalist Program of the generative grammar as a framework of analysis. Games are found to contain grammatically accepted sentences that succeed in reaching logical forms and violate no linguistic universal in their phonetic forms (consider figure 2.7 and the discussion that precedes).

On the other end of the spectrum, the suitability of the games is determined by looking at the type of sentences used and their match with the expected syntactic development presented in the review of the literature of child language development. Question word questions seeking information about objects, actions, agents and location as well as negative sentences are not only found to be the prevailing sentence types used in the games but also the type of sentences that carry the theme of each game. A revisit to tables 1.1 and 1.2 will remind the reader that this type of sentences is only acquired and start to develop at the age of four and this suggests suitability of the games under study for the group age of performers which is composed of preschoolers and school going age children.

The study concludes, in light of the findings it reaches, that games under study play a positive and supporting role in the development of syntax in children. They appropriately fit the agreed upon syntactic capacity of the population of the intended performers. These games can be thought of as a digestible token of grammar practice or a good experience of language, next to Radford (2009), for preschool and school going age children.

5.3 Recommendations for Further Research

This study acts as a testimony for the significance of the playground games performed by Sudanese children as a real life practice that support the natural development of syntax as a major component in the process of acquiring Arabic as first language. These games can be a good source of research for generative studies to proof or deny the universal principles claim advocated by the theory of UG. The analysis of data in this research report encountered sentences without overt presence of tense markers the thing which may suggest that there neither a TP nor a VP projections and consequently implies that the TP and the VP are not universal linguistic principles as stated in the generative tradition.

More researches can be carried out in other cultures and communities where similar games are practised by children acquiring other languages to determine and generalize the contribution of these games in the development of syntax as well as the development in other linguistic domains such as the development of morphology for an instance.

The linguistic library can also be enriched by carrying out researches utilizing the same playground games as a source of data for areas such as language therapy, pedagogical linguistics, spoken discourse analysis and genre analysis.