

University College of Women for Arts, Science and Education Ain Shams University

Theta Theory as an Interface between Syntax and Semantics: A Comparative Study between English and Standard Arabic

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Abstract

This study investigates the role of θ -theory as a mediator between meaning (semantics) and sentence structure (syntax). It addresses the question of how much syntax θ -theory subsumes. In other words, does the meaning of the verb dictate the structure of the sentence? It explores how θ -theory links syntax and semantics. Another aim of the thesis is to clarify the interaction between θ -theory and other modules of the grammar, such as Case theory and Control theory. Those aims are achieved through investigating NP-movement in raising and in passivization, the unaccusatives and secondary predication (small clauses).

In relation to the previous goals, this study investigates two different hypotheses against the perspective of the Principles and Parameters framework on the previously mentioned syntactic structures. The first hypothesis is that of Edwin Williams (1994). Williams assumes that NP-movement can be accounted for without syntactic rules; instead, he tries to account for it only in terms of θ -role assignment relations. But the current study demonstrates, through applying Williams' theory versus Chomsky's 1981 theory to Standard Arabic sentences, that the interaction between θ -theory and Move α is indispensable to account for NP-movement. Moreover, the study proposes that the syntactic manifestation of thematic roles as theorized in Chomsky's theory also captures the behavior of the internal structure of the unaccusatives and secondary predication (small clauses) in Arabic. On the contrary, Williams's hypothesis fails to account for the Arabic data. That leads to the conclusion that Standard Arabic adds more pieces of evidence to support the fact that θ - theory and Move α are independent sub-modules in syntactic theory. This is shown through the analysis of Arabic small clauses, raising and unaccusative structures.

The thesis also argues against Norbert Hornstein's assumption (1999) that PRO-constructions can be replaced by NP-movement as it fails to work for Arabic syntax. The study provides four arguments against his hypothesis. Thematically, and according to the Principles and Parameters framework, PRO and its antecedent carry two distinct θ -roles, whereas a moved NP and its trace carry just one θ -role. In embedded clauses with infinitive verbs in English there can never be a lexicalized subject but in Arabic there can be one, and Hornstein's assumptions cannot account for that behavior of Arabic syntax. The second argument against Hornstein's theory depends on Agr facts. PRO behaves like a full pronoun as it is assigned a θ -role and agrees also with the following verb in SA sentences. The third argument depends on the correlation made by his hypothesis between control and raising on one hand and unaccusativity on the other hand. His theory leads to a correlation between control and unaccusatives. Unaccusatives are tightly linked to raising unaccusatives trigger raising due to the lack of Case. However a similar link cannot be built in SA due to crucial differences in the θ -grids of verbs involved in raising if compared to those in control and unaccusatives.

Θ-theory was first introduced as an autonomous module in Chomsky's framework in the early 1980s (Chomsky 1981) to regulate the argument structure of predicates. It relates the predicate-argument structure (a component of the lexicon) to syntactic representations. Before that, the Standard Theory

(Chomsky 1965) claimed that three aspects of a lexical entry determined its syntactic behavior. The three aspects are: (i) the syntactic category label of the lexical entry, (ii) an abstract rule feature (if any exists), and (iii) its subcategorization features and semantic selection. Subcategorization operates in terms of syntactic categories and semantic selection operates in terms of semantic categories called thematic roles (θ -roles).

Later, a correspondence relation was found between θ roles and syntactic categories in which syntactic categories serve as the structural realization of specific θ -roles. The structural realization of the AGENT θ -role, for instance, will typically be an NP, and that of a PROPOSITION will be a clause. This indicates the crucial relevance of semantic (thematic) categories to syntax. The relationship between the thematic properties of a lexical entry and their syntactic representations is regulated by the θ -Criterion (which is a syntactic principle). Hence, the module of θ -theory was introduced in Chomsky's framework. The lexical entry of a predicative head is now thought to contain a representation of its predicate-argument structure. The argument structure of a predicate provides a description of the set of arguments required by the predicate and the θ -roles which each fulfills in relation to the predicate. Thus, it was proven that the predicate-argument structure subsumes both the syntactic (subcategorization) and semantic (θ -roles) features of a lexical item.

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Abbreviations

Here is a list of the abbreviations used in the thesis.

Agr	Agreement
acc	accusative
AP	Adjective Phrase
DS	Deep Structure
ECM	Exceptional Case-Marking
GC	Governing Category
gen	genitive
LF	Logical Form
MP	Minimalist Program
NOC	Non-Obligatory Control
nom	Nominative Case
NP	Noun Phrase
OC	Obligatory Control
PF	Phonetic Form
PP	Prepositional Phrase
PrtP	Participle Phrase
PS	Phrase Structure
P&P	Principles and Parameters
Spec	Specifier
SS	Surface Structure
UG	Universal Grammar
VP	Verb Phrase
1,2,3	First, second, third persons
d	Dual
f	Feminine
m	Masculine
p	Plural
S	Singular

List of Phonetic Symbols

The consonant Example

/b/ bent (girl)

/t/ tufaħa (apple)

/d/ dob (bear)

/t/ ta?ir (bird)

/d/ dofdaς (frog)

/k/ kitab (book)

/g/ gamal (camel)

/q/ qalam (pencil)

/?/ ?arnab (rabbit)

/m/ maktab (desk)

/n/ nagm (star)

/r/ ragul (man)

/f/ farawlah (strawberry)

/ð/ ðayl (tail)

/s/ suburah (board)

/z/ zarafah (giraffe)

/s/ su:rah (picture)

/z/ zarf (envelop)

/x/ xaru:f (sheep)

/ɣ/ ya:li: (expensive)

/ħ/ ħuṣa:n (horse)

 $\langle \varsigma \rangle$ cayn (eye)

/h/ hadeyah (present)

/l/ luçbah (toy)

/w/ walad (boy)

/y/ yad (hand)

Vowels

/a/ short mid unrounded vowel

/i/ short high front unrounded vowel

/u/ short high back rounded vowel

/a:/ long mid unrounded vowel

/i:/ long high front unrounded vowel

/u:/ long high back rounded vowel

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Chapter One

Introduction

Chapter One

Introduction

This study investigates the role of θ -theory as an interface between syntax and semantics. A distinction must be made here between structural semantics and pragmatics. The former deals with semantic phenomena which are syntactically constrained (structure-oriented). The latter deals with meaning as affected by extra-linguistic factors. This study is concerned with structural semantics. The thesis takes the form of a comparative study between English and Standard Arabic (SA).

Arabic presents an interesting case for θ -theory. Unlike English, Arabic permits the subject of a finite clause to remain unexpressed, i.e. it allows implicit external θ -roles because it is a pro-drop language. The pro-drop parameter is one of the parameters which are postulated to explain cross-linguistic variation. This property of Standard Arabic as a pro-drop language is investigated along with other basic differences between English and Standard Arabic with respect to predicate-argument structure.

1.1 The Languages of the Data

The languages which are investigated in this thesis are (Modern) English and (Modern) Standard Arabic. Standard

Arabic or Literary Arabic is the standard and literary variety of Arabic used in writing and in formal speech. The modern standard language developed from Classical Arabic of the Qur'an and early Islamic (7th to 9th centuries) literature. Modern Standard Arabic is the literary standard across the Middle East and North Africa. Most printed material in the Arab world, including most books, magazines, newspapers, official documents and reading primers for small children is in Standard Arabic.

On the other hand, Colloquial Arabic refers to the many regional varieties derived from SA and spoken daily. SA or Literary Arabic is the official language of all Arab countries and is the only form of Arabic taught in schools. It is used by educated Arabic-speakers to communicate in formal situations. It is also used in instances in which educated Arabic-speakers of different nationalities engage in conversation but find their dialects mutually unintelligible.

1.2 Organization of the Thesis

This study is divided into four chapters. The first chapter introduces the thesis with the aims of the study and the languages used in the analysis. It also provides a list of the abbreviations mentioned throughout the thesis. Furthermore, it presentes an overview of the framework used in the study. The present study is carried out within the framework of Chomsky's Principles and