

Yazd University
Faculty of Language and Literature
English Department

**A Thesis Submitted in Partial Fulfillment of the Degree for Master of
Arts in
Teaching English as a Foreign Language**

**The Acquisition of English Locative Verbs by Persian Speakers:
Syntax- Semantics Interface**

Supervisor:

Dr. Mohammad Javad Rezai

Advisor:

Dr. Ali Akbar Jabbari

By:

Saeedeh Avand

December 2010

To my parents

Acknowledgments

This research project would not have been possible without the support of many people.

First and Foremost, I would like to express my sincere gratitude to my supervisor, Dr. Mohammad Javad Rezai for his continuous support, patience, invaluable assistance, and guidance.

Besides my supervisor, my sincere thanks also go to my advisor, Dr. Ali Akbar Jabbari for his great assistance, guidance and useful comments in conducting this research.

I would like to convey my thanks to all the BA and MA participants selected among students of English Department at Yazd University for providing me with the required data in this study.

Last but not the least, I would like to express my love and gratitude to my beloved family for their understanding and endless love and support, through my studies.

Abstract

The present research aimed at investigating the acquisition of English locative verbs by Persian speakers and in terms of theories of language acquisition. Locative constructions are defined as the structures in which an entity named as theme (content or figure) moves toward another entity goal (container or ground), or the goal argument changes its state by the movement of the theme argument toward it. In English there are four kinds of locative constructions namely non-alternating figure verbs (e.g. pour: pour sth into sth), non-alternating ground verb (e.g. fill: fill sth with sth), alternating figure verbs (e.g. spray: spray sth onto sth **or** spray sth with sth) and alternating ground verbs (e.g. load: load sth with sth **or** load sth into sth). In Persian, just the non-alternating forms are existent. Thus, Persian constitutes the subset to superset English system. This study investigated whether Persian speakers of English are able to learn such constructions without negative evidence and whether their L1 and proficiency level play any role in producing such constructions.

To this aim, 60 intermediate and advanced participants completed three tasks, namely, production task and grammaticality judgment task and forced-choice picture selection task. The results of the production and grammaticality judgment tasks showed that both groups of learners tended to produce one structure, judging one form as acceptable for alternating verbs. We interpret this as showing that the learners' interlanguage system is shaped by the L1 properties. In the forced-choice picture

selection task when presented with a ground-object structure, both groups of learners chose a ground-holism picture. We interpret this as a reflection of object holism effect as a part of broad-range constraints and the fact that EFL Learners, like native speakers, have access to the semantic properties of locative constructions. In sum, the overall results indicate that the acquisition of argument structure can cause learnability problems in narrow-range constraints at even higher levels of proficiency

Key Words: Locative verbs, Object Holism Effect, Persian Speakers, Broad-range Constraints, Narrow-range Constraints

Table of contents

Acknowledgement.....	I
Abstract.....	II
Table of Contents.....	IV
List of Tables.....	V
List of Figures.....	VII

Chapter One: Introduction

1.1 Preliminaries.....	2
1.2 Statement of the Problem.....	4
1.3 Purpose of the Study.....	6
1.4 Research Hypotheses.....	8
1.5 The Significance of the Study.....	8
1.6 Definition of the Ker Terms.....	10
1.7 Theoretical Framework.....	10
1.8 Outline of the Study.....	12

Chapter Two: Review of the Related Literature

2.1 Learnability Issue and Locative Constructions.....	15
2.2 Locative Constructions in English.....	17
2.3 Broad & Narrow- range Constraints and Object Holism Effect.....	19

2.4 Lexical Head and Phrase Level Meaning Hypothesis.....	22
2.5 Semantic Analysis of Locative Constructions.....	26
2.5.1 Semantic Representation of alternating verbs.....	29
2.5.2 Semantic Representation of Non-alternating Ground Verbs.....	31
2.5.3 Semantic Representation of Non-alternating Figure Verbs.....	32
2.6 Locative Constructions in Persian.....	33
2.6.1 Persian Locative Verb Formation.....	34
2.6.2 Semantic Structures of Persian Locative Verbs.....	35
2.6.2.1 Semantic Representation of Non-alternating Figure Verbs.....	36
2.6.2.2 Semantic Representation of Non-alternating Ground Verbs.....	37
2.7 A Contrastive Analysis of English and Persian Locatives.....	38
2.7.1 Non-alternating Locatives in Persian and English.....	38
2.7.2 Alternating Locatives in Persian and English.....	39
2.8 Acquisition of Locative Constructions in L1.....	39
2.9 Acquisition of Locative Constructions in L2.....	44
2. 10 Impetus to the Present Study.....	55

Chapter Three: Methodology

3.1 Participants.....	58
3.2 Materials.....	59
3.3 The main Tasks.....	60

3.3.1 Production Task.....	60
3.3.2 The Grammaticality Judgment Task.....	62
3.3.3 Holism Effect Task.....	63
3.4 Procedure.....	63
3.5 Data Analysis.....	65

Chapter Four: Data Analysis

4.1 The Results of the Production Test.....	69
4.1.1 Descriptive Statistics.....	69
4.1.2 Inferential Statistics.....	77
4.2 The Results of Grammaticality Judgment Task.....	80
4.2.1 Descriptive Statistics.....	80
4.2.2 Inferential Statistics.....	87
4.3 The Results of Holism Effect Test.....	93
4.3.1 Descriptive Statistics.....	93
4.3.2 Inferential Statistics.....	95
4.4 Status of the Hypotheses.....	98

Chapter Five: Discussion and Conclusion

5.1 Restatement of the Problem.....	102
5.2 Discussion of Hypotheses.....	104

5.2.1 Acquisition of Narrow-range Constraints.....	105
5.2.2 Acquisition of Broad-range Constraints and Holism Effect.....	108
5.2.3 L1 Influence.....	109
5.2.4 Effect of Proficiency.....	110
5.3 General Discussion.....	111
5.4 Concluding Remarks.....	119
5.5 Implication of the Study.....	121
5.6 Suggestion for Further Investigation.....	122
References.....	123
Appendices	
Appendix I.....	129
Appendix II.....	132
Appendix III.....	136
Appendix IV.....	140

List of Tables

Table 4.1: Descriptive Statistics of Producing Non-alternating Ground Verbs.....	68
Table 4.2: Descriptive Statistics of Producing Non-alternating Figure Verbs.....	70
Table 4.3: Descriptive Statistics of Producing Alternating Ground Verbs.....	73
Table 4.4: Descriptive Statistics of the Alternating Figure Constructions.....	74
Table 4.5: Overall Descriptive Results in the Production Task.....	75
Table 4.6: Pair-wise Comparison of Contexts in the Production Task.....	78
Table 4.7: Independent Sample T-test on Difference Between the Two Groups’ Production for Four Verb Constructions.....	79
Table 4.8: Descriptive Statistics of Subjects’ Judgments in Grammatical and Ungrammatical Non-alternating Figure Verbs.....	81
Table 4.9: Descriptive Statistics of Subject’s Judgments in Grammatical and Ungrammatical Non-alternating Ground Verbs.....	83
Table 4.10: Descriptive Statistics of the Subjects’ Judgments in Alternating Figure and Ground Verbs.....	84
Table 4.11: Descriptive Statistics for All Grammatical and Ungrammatical Non-alternating verbs and Alternating Verbs.....	86
Table 4.12: Pair-wise Comparison of Different Contexts in Grammaticality Judgment Task.....	87
Table 4.13: Paired – sample T-test on Similar Locative Constructions in Grammaticality Judgment and Production Tasks.....	92
Table 4.14: Mean Percentage and SD of Alternating Figure and Ground Verbs.....	94

Table 4.15: Pair-wise Comparison of Contexts in Holism Effect Task.....96

Table 4.16: Results of Paired-sample T-test for Partial-Whole Constructions.....97

List of Figures

Figure 2.1: The whole structure of locative constructions.....	28
Figure 2.2: The linear presentation of EVENT structure.....	28
Figure 4.1: Subjects' Performance in Non-alternating Ground Verbs.....	69
Figure 4.2: Subjects' Performance in Non-alternating Figure Verbs.....	71
Figure 4.3: Subjects' Performance in Alternating Ground Verbs.....	73
Figure 4.4: Subject's Performance in Alternating Figure Verbs.....	74
Figure 4.5: Subjects' Overall Performance in the production task for Alternating and Non-alternating Constructions.....	76
Figure 4.6: Means Plot of the Subject Performance in the Production Task.....	77
Figure 4.7: Subjects' judgments on Grammaticality and Ungrammaticality of Non-alternating Figure Verbs.....	82
Figure 4.8: Subjects' judgments in Grammatical and Ungrammatical Non-alternating Ground Verbs.....	83
Figure 4.9: Mean Percentage of Group's Judgments in Alternating Verb Constructions	85
Figure 4.10: Mean Percentage of Groups' Judgments in Grammatical and Ungrammatical Non-alternating and all Alternating Verbs.....	86
Figure 4.11: Subjects' overall judgments in Grammaticality Judgment Task.....	90
Figure 4.12: Means Plot of Performances in Grammaticality Judgment Task.....	91
Figure 4.13: Overall Subjects' Mean Performance in the Holism Task.....	95

Figure 4.14: Means Plot of the Subjects' Performance in the Holism Effect Task.....98

Chapter One

Introduction

1.1 Introduction

To understand the meaning of a verb and implement it correctly, a second language learner must learn the syntactic structures in which the verb is permitted. Across languages, there are verb semantics-syntax correspondences which help L2 learners to apply these regularities to attribute correct syntactic structures to verbs. For example, understanding the sentential argument of mental verbs such as “think,” “know,” and “hope” will help L2 learners to make use of this mental verb-sentential complement “linking rule” to infer that a verb like “wonder” will also take a sentential complement (Kim et al., 1999). However, more complex types of verbs exist which are subject to greater argument structure variation and create difficulty for many L2 learners. These verbs can occur in different syntactic structures but contain the same arguments, or can occur in the same syntactic structures but include different arguments.

Locative verbs in English are of such kind of verbs that are subject to great variation. They represent a relationship between a thematic entity (Content or Figure) and a location (Container or Ground).

Rappaport and Levin (1988) define the locative structures as constructions in which an object moves to a location.

Example:

1a. He sprayed the paint onto the wall. [x cause [y to come to be at z]/ spray]

1b. He sprayed the wall with the paint. [[x cause [z to come to be in state]]] by means of [x cause [y to come to be at z]]/spray].

They propose a semantic structure for the locative constructions is (1), in which (1a) presents the locative form and (1b) indicates the **with** variant. Of these two structures, the variant containing **into** or **onto** preposition is the main structure which is called the locative variant from which the **with** variant can be derived.

Basically, 1b is derived from (1a) by the use of phrase **by means of**, which causes a change of state to result from a change of location. In fact, the **with** variant is the subordinate of the locative (**into/ onto**) variant.

Likewise, Pinker (1989) defines locative as constructions that represent the transfer of a substance or object (theme, content or locatum) into or onto a container or a surface (goal, container or location). He believes that the standard structure in such pairs is the construction including **into** or **onto** preposition and can be called content-oriented or theme-object structure. The locative rule changes this structure into the one containing **with** preposition that is called container-oriented or goal-object construction. Therefore, the verb in locative construction is alternating if the form having prepositions **into/onto** converts into the structure containing preposition **with**. However, there are structures that denote just one form of locative, either figure or ground. Such forms are non-alternating such as Ben covered the wall with paint.

There have been some debates over the learnability problems of argument structures in general and locative constructions in particular. White (1989) claimed that

children's knowledge about what structures are ungrammatical in their L1 stems from UG. Moreover, UG includes negative evidence about what are not grammatical in languages. So, there is no need for children to learn a language using negative evidence. Negative evidence refers to the information available to the learner that an utterance is ungrammatical. But what about L2 learners? Can they acquire the argument structures in L2 without being exposed to sufficient exposure to the target constructions?

The issue of learnability in the acquisition of argument structure has been investigated by several researchers. (Baker, 1979; Brinkmann, 1997; Gropen *et al.*, 1991; Kim *et al.*, 1999; Lee, 1997; Pinker, 1989). This study aims to investigate whether Persian speakers of English are able to acquire the knowledge of argument structure in L2 based on the semantic broad-range and narrow-range rules and constraints proposed by Pinker (1989). Broad range rules are universal and determine the semantic categories of manner of motion and change of state. Narrow-range rules determine different subcategories within broad-range rules including non-alternating and alternating figure and ground verbs.

1.2 Statement of the Problem

The learnability of the argument structure alternations has posed questions to many researchers and was first investigated in first language (L1) acquisition. According to Baker (1979), the knowledge of just positive input, in general, is the factor which helps

learners of a first language to project their knowledge of how particular forms behave and thereby arrive at syntactic generalizations. Learners, in Baker's (1979) terms, generalize more narrowly than was previously thought. In fact, this generalization would be used to store densely existing lexical entries in the memory rather than to be extended to the new entries. Other researchers such as Bowerman, 1982; Pinker, 1989; Gropen and his associates, 1991 and Kim his associates, 1999 concentrated their focus on the acquisition of locative verbs in particular.

Pinker (1989) proposed two semantic criteria to account for learnability of locative constructions within L1 children. He argued that children limit the application of productivity rules in argument structure and especially locative constructions via semantic criteria: broad-range rules and conflation classes which limit the choice of the argument structure and narrow-range rules and conflation classes which are subclasses of the broad-range conflations and distinguish verb classes. Broad conflation classes refer to the class of verbs which include semantic categories of manner of motion (content-oriented or figure) verbs and change of state (container-oriented or ground) verbs. Pinker (1989) claimed that children first acquire broad constructional meaning of locative verbs based on so-called broad-range rules which help them to determine whether a verb can get involved in the locative alternation. If a learner knows that a verb permits *both* a manner of motion and a change of state, then it must be an alternator. In the opposite way, if a verb permits *either* a type of motion *or* a change of state but not the other, it is not an alternator. Therefore, broad-range rules provide L2 learners with

the opportunity to understand just the general characteristics of verbs (manner of motion or change of state) and determine whether they meet the minimum requirement that permits them to take part in the locative alternation. These rules have been reported to be universal; that is, locative verbs in all languages possess the two broad semantic constructions.

An important concept pertained to the broad-range rule is the idea of object's holism effect in which the object of the verb is completely affected by the action of the verb. Narrow-range rules, on the other hand, determine the various subcategories within the broad conflation classes; that is, it specifies that a verb belongs to narrow conflation classes including non-alternating figure, non-alternating ground, and alternating figure and ground verbs and thus are language specific.

It is worth noting that the two investigated languages in this study are different largely in terms of narrow-range rule; that is narrow-range rules are more restricted in Persian since locative verbs in Persian possess just non-alternating constructions whereas their English counterparts have both alternating and non-alternating subclasses.

Regarding the non-existence of alternating structures in Persian, some learning difficulties in narrow-range constraints are predicted since when a structure is absent in a language, the acquisition of its counterpart within the second or foreign language becomes much more difficult. However, Juffs (1996) believed that advanced L2 learners of English are more able than the intermediate and low groups to produce and accept alternating structures. He construes such ability as the accessibility of UG within these

learners. In the current study if such results are obtained, we can construe the source of such knowledge as their retreatment from L1 due to their exposure to more L2 input, having the knowledge of lexical semantic structure through linking verbs to their mental representation, testing variant semantic hypotheses by means of getting the L2 input in the environment and finally their ability to reset parameter in L2.

1.3 Purpose of the Study

One of the problems of acquiring argument structure and especially locative constructions is having the knowledge of broad-range and narrow-range conflation classes in L2. A research in L2 acquisition has revealed that L2 learners have knowledge of broad-range conflation classes including the holism effect; however, they lack the knowledge of narrow-range constraints which determines which verbs belong to non-alternating figure, non-alternating ground and alternating categories in L2. (Bley-Vroman & Joo, 2001).

L2 learners are expected not to encounter much difficulty in acquiring broad-range constraints since they are universal but confront much more difficulty in acquiring narrow-range conflation classes since they are language-bound. It seems that Persian is more restricted in alternating constructions than English; the present study endeavors to find out whether EFL learners can acquire such constructions in the lack of negative evidence.