

*In the Name of God*



**Shahrekord University**  
Faculty of Letters & Humanities  
English Department

**Multicompetent L2 Users' Lexico-Semantic Mapping  
in L1**

A Thesis Submitted in Partial Fulfillment of the Requirements for the  
Degree of M.A. in TEFL

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## LIST OF ABBREVIATIONS

BCR	▶▶▶▶	Base Conceptual Representation
CIT	▶▶▶▶	Conceptual Integration Theory
CLI	▶▶▶▶	Cross-Linguistic Influence
CRS	▶▶▶▶	Conceptual Role Semantics
CUCB	▶▶▶▶	Common Underlying Conceptual Base
DMM	▶▶▶▶	Dynamic Model of Multilingualism
EFL	▶▶▶▶	English as a Foreign Language
ESL	▶▶▶▶	English as a Second Language
FL	▶▶▶▶	Foreign Language
ICI	▶▶▶▶	Inferential Concept Interpretation
IL	▶▶▶▶	Interlanguage
L1	▶▶▶▶	First Language
L2	▶▶▶▶	Second Language
NE	▶▶▶▶	Non-English
PCA	▶▶▶▶	Principle Component Analysis
RR	▶▶▶▶	Representational Redescription (Model)
SLA	▶▶▶▶	Second Language Acquisition
TEFL	▶▶▶▶	Teaching English as a Foreign Language

## ABSTRACT

This study was an attempt to point out the L2 influences on different aspects of multicompetent L2 users' L1 lexico-semantic knowledge in the light of a 5-section Persian conceptual test. The participants were 120 male and female students at Shahrekord University and Islamic Azad University of Najaf Abad. They were assigned to 3 groups: (i) the NE group (nonEnglish participants) majoring in Persian Literature as the monolinguals; (ii) the EFL group majoring in EFL as the freshmen; and (iii) the TEFL group majoring in TEFL. Three tests were used to collect the data: (i) the ETS TOEFL test as the proficiency test; (ii) the Persian conceptual test as the main test of the L1 semantic knowledge; (iii) the Parallel English conceptual test as an extra test to compare EFL and TEFL scores on L2 semantic knowledge. There were 3 methods of analysis: (i) the ANOVA analysis, post hoc comparisons using Scheffe test, and effect size using eta squared to analyze the ETS TOEFL test scores; (ii) the MANOVA analysis to analyze the Persian conceptual test scores; and (iii) independent samples *t* test and effect size using eta squared as well as Pearson product-moment correlation. The results indicated that the TEFL group outperformed the other groups in collocations, similes, idioms, and metaphors. Moreover, the 3 groups performed similarly on the connotation test. Therefore, it was found that L2 use experience exert minimum influence on L1 knowledge of connotations. In sum, the findings showed that L2 user's semantic knowledge of L1 is more developed, and their cognitive ability varies from that of mono-linguals, while they share the same mental lexicon. In addition, the relationship between the amount of L2 use experience and exposure and the L2 cross-linguistic influence on L1 lexico-semantic mapping was statistically significant. The findings showed that the exposure to the L2 can enhance: (i) the complexity of the L2 users' L1 lexico-semantic mapping; (ii) the L2 users' L1 nonlinguistic, analogical and metaphorical inferences to get the meaning of the concepts; (iii) the L2 users' L1 figurative skills and improve their figurative conceptual mapping.

**Key Words:** Cross-linguistic influence (CLI), Multicompetence, Lexico-semantic knowledge

# **CHAPTER ONE**

## **INTRODUCTION**

# CHAPTER ONE

## INTRODUCTION

### 1.1. Overview

The focus of research on the influence of a second language (L2) on a first language (L1) was on the terms like contrastive analysis and error analysis (Lado, 1957; Levenston, 1970; Weinreich, 1953), transfer (Weinreich, 1953), interlanguage (IL) (Selinker, 1972; Kellermen, 1984; Plag, 1992; Zimmermann, 1992) cross-linguistic influence (CLI) and bilingualism (Bialystok, 1991, 2001). Conversely, due to insufficient research in the field of L2 influence on L1, this study aims to highlight L2 influence on multicompetent L2 users' L1 mental lexicon under the banner of Cook's idea of multicompetence, namely, "L2 users' knowledge of the second language is not the same as that of the native speaker." (Cook, 2001, p.195) Multicompetence, the knowledge of two or more languages in one mind, includes three components: 1) L2 user's knowledge of an L2 is not the same as that of native speakers even at advanced levels; 2) L2 user's knowledge of L1 is not the same as that of monolingual native speakers; and 3) L2 users think in different ways compared to their monolingual counterparts (Cook, 1991). After Chomsky's linguistic theory concerning linguistic knowledge of an ideal speaker-listener in a

completely homogeneous community (Chomsky, 1965, p. 4), Cook (1991) argued that this idealized construct ignored the fact of knowing more than one language. To provide an adequate linguistic theory, he introduced multicompetence as the knowledge of two or more languages in one mind or the compound state of mind with two grammars (p. 112).

Findings from various studies (e.g., Beretta, 1989; Corder, 1978; Ellis, 1985; Selinker & Douglas, 1987; Tarone, 1983) have revealed that IL is considered as an independent language system containing structures of neither L1 nor L2 but unique to the learner's IL. Before the advent of reverse or backward transfer (Cook, 2003), the whole attention was focused on L1 effects on the second language acquisition (SLA) (e.g., a foreign accent). Along the same lines, Weinreich defined interference as "those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language." (Weinreich, 1953, p.1)

Research on bilingualism focusing on cognitive differences between monolingual and bilingual language users revealed that bilinguals (1) were more sensitive and responsive to their interlocutors than their monolingual counterparts (Nicoladis & Genesee, 1996); (2) did better on tasks requiring more analyzed linguistic knowledge (Bialystok 1991, 2001); (3) scored higher on tests of divergent thinking, which value such traits as flexibility, originality, and fluency (Cummins, 1979; Diaz, 1985); and (4) were more metalinguistically aware and more flexible in their use of language learning strategies (Galambos & Goldin-Meadow, 1990; Nayak, 1989). These differences show that the language knowledge of L2 users is different from that of monolinguals.



This study tries to explore the academic effects of L2 on multicompetent L2 users' L1 lexico-semantic representation. Two important subcomponents of the L2 (English) users' mental lexicon were operationalized and included into the scope of the study. First, the direct CLI of the L2 on multicompetent L2 users' L1 (Persian) lexico-semantic knowledge was studied through assessing their collocational knowledge. Next, the study also probed into the L2 users' core and extended dimensions of their conceptual semantic knowledge in order to investigate the indirect CLI of the L2 on their L1 conceptual semantic mapping.

First, the term *collocation* was coined by the British linguist Firth (1957, p. 12). Stubbs (2001) defines collocation as “a lexical relation between two or more words which have a tendency to co-occur within a few words of each other in running text.” Bonci (2002) examined collocational restrictions in Italian as an L2 concentrating on co-occurrence of lexemes (collocation) and grammatical elements (colligation). Laufer (1992) studied the L2 (Hebrew) influence on the L1 (Russian) collocational knowledge and on L1 lexical diversity in free written expression. Faghih (1998) attempted to shed some light on one of the troublesome areas of learning EFL for Iranian students (figurative use of animal metaphors) in regard to their connotative meaning in Persian and English.

As to the direct influence of L2 on multicompetent L2 users' L1 lexico-semantic knowledge, the ability to judge L1 collocations as correct or incorrect can mirror changes in the way words have become connected to other words in mental lexicon. For example, it is hypothesized that an advanced EFL learner judges the collocation *barane sangin* (the correct form is *fast rain*) as correct because of collocational L2 CLI of *heavy rain*. To go beyond collocational knowledge, the

secondary concepts and far (near) senses of different words and their changes in multicompetent L2 users' mental lexicon were conceptualized in terms of conceptual knowledge, including core and extended meanings. Core meanings are those primary meanings that come to mind at first sight hearing or seeing the word. Extended meanings were branched into two categories: figurative meaning and connotations (e.g., positive, negative, and neutral attitude). For example, *walk about* conveys a positive connotation in English, whereas the same verb expresses a negative connotation in Persian. To clarify the point, *honest* and *intrepid* have a positive connotation, while *disturbing* and *superfluous* have a negative connotation. Consequently, figurative meanings were divided into three meaning categories: metaphor, idiom, and simile. For instance, in *she is a flower*, the far conceptual metaphoric sense of *flower* (beauty, freshness, liveliness, or loveable) is taken into account rather than its primary sense as a plant. But this metaphor carries a kind of semantic similarity in both Persian and English. Idiomatic units are the other subcomponents of the figurative conceptual meaning that were investigated for assessing their influence on the L2 users' L1 mental lexicon. For example, *he has a finger in every pie* shows the interest in something. Whereas in Persian conveys a kind of participation or inquisitiveness. On the other hand, *she is as cold as ice* implies semantic overlapping in L2 users' L1 and L2 lexico-semantic mapping. Similes are the other bones of figurative meaning skeleton such as *the wedding was like a funeral* in which the features of sadness, solemnity, seriousness, orderliness, and dignity have been attributed to wedding. From a cross-linguistic point of view, these features in English and Persian can be converged onto each other.

The first traces of semantic convergence in terms of different color terminologies in the two languages were reported by Ervin-Tripp (1961). Afterwards, the influence of Russian on English multiple semantic elements of oral narratives was studied by Pavlenko and Jarvis (2002). Bullock and Gerfen (2004) worked on phonological or orthographic convergence. Montrul (2004), Sanchez (2006), and Toribio (2004) studied the evidence of morpho-syntactic convergence. Also, Ameel, Storms, Malt, and Sloman (2005) examined the naming differences between Belgian Dutch and French-speaking monolinguals and Dutch-French bilinguals for two subsets of the domain of common household objects. Furthermore, Brown and Gullberg (2008) worked on the mutual influence of L1 and L2 on gesture and word selection in speech production providing further evidence for semantic convergence.

Witnessing such instances of cross-linguistic L2→L1 influence, one may assume that prolonged L2 use and incremental gain in L2 collocational and conceptual knowledge can be culminated in a proportional L1 loss or attrition in the L2 users' lexico-semantic super-system. In sum, this study is an attempt to empirically investigate this hypothetical CLI on the multicompetent L2 users' L1 lexico-semantic mapping and to see whether L1 and L2 lexico-semantic mapping in multicompetent L2 users' mental lexicon converge onto or diverge from each other and in which meaning area such an overlap (convergence) enhances L2 users' L1 development and in which meaning category such a gap (divergence) triggers L2 users' L1 attrition.

Along the same lines, this study aims to show the L2 influence (intensive English instruction in an EFL environment) on multicomponent L2 users' L1 lexico-semantic representation. In concrete terms, this study tries to explicate the CLI of

English exposure as a foreign language (FL) on the different aspects of multicompetent L2 users' Persian meaning system in regard to the collocational, connotative, and figurative meanings.

## **1.2. Statement of the Problem**

Due to the bulk of studies on SLA and the shift of attention from cross-linguistic L1→L2 influence toward multicompetence or the knowledge of two or more languages in the same mind and L2→L1 influence, different studies sought to find the L2 influences on different aspects of multicompetent L2 users' knowledge, for instance, semantic convergence (Ervin-Tripp, 1961), phonological or orthographic convergence (Bullock & Gerfen, 2004), and morpho-syntactic convergence (Sanchez, 2004). The aim of this study is to find those language changes that have been occurred due to cross-linguistic interplay (e.g., bidirectional or unidirectional, language attrition or enhancement, and divergence or convergence) in solving the problems of language learning and teaching. In sum, this study aimed at finding academic L2 cross-linguistic influence on multicomponent L2 users' L1 collocational/conceptual semantic mapping.

Due to the essential role of the cross-linguistic transfer in an EFL context like Iran, this study made an attempt to explore the CLI of L2→L1 in order to help teachers, curriculum designers, and policy makers to be cautious about selecting the appropriate type of teaching materials used in the L2 classrooms. More specifically, those vocabularies presented in texts and reading materials which carry emotional, cultural, and political meaning loads as well as the other senses certainly affect students' L1 conceptual meaning or semantic repertoire.