

**T.C.**  
**KAFKAS UNIVERSITY**  
**SOCIAL SCIENCES INSTITUTE**  
**WESTERN LANGUAGES AND LITERATURES DEPARTMENT**  
**ENGLISH LANGUAGE AND LITERATURE FIELD**

**THE EFFECT OF TEXT MODIFICATION ON EFL  
READING COMPREHENSION: A SCHEMA THEORY-  
BASED APPROACH**

**MA THESIS**

**Gökhan FINDIK**

**SUPERVISOR**

**Assit. Prof. Dr. Gencer ELKILIÇ**

**KARS-2013**

**T.C.**  
**KAFKAS ÜNİVERSİTESİ**  
**SOSYAL BİLİMLER ENSTİTÜSÜ**  
**BATI DİLLERİ ve EDEBİYATI ANABİLİM DALI**  
**İNGİLİZ DİLİ ve EDEBİYATI BİLİM DALI**

**METİN UYARLAMANIN YABANCI DİL OLARAK**  
**İNGİLİZCEDE OKUDUĞUNU ANLAMAYA ETKİSİ: ŞEMA**  
**KURAMINA DAYALI BİR YAKLAŞIM**

**YÜKSEK LİSANS TEZİ**

**GÖKHAN FINDIK**

**TEZ DANIŞMANI**  
**YRD. DOÇ. DR. Gencer ELKILIÇ**

**KARS-2013**

**T.C.**  
**KAFKAS ÜNİVERSİTESİ**  
**SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ'NE**

Gökhan FINDIK'a ait "The Effect of Text Modification on EFL Reading Comprehension: A Schema Theory-Based Approach" konulu çalışma, jürimiz tarafından Batı Dilleri ve Edebiyatları Anabilim Dalı, İngiliz Dili ve Edebiyatı Bilim dalında Yüksek Lisans tezi olarak oy birliğiyle kabul edilmiştir.

Öğretim Üyesinin Ünvanı, Adı ve Soyadı

Yrd.Doç.Dr. Gencer ELKILIÇ

Yrd.Doç.Dr. Mustafa KOL

Yrd.Doç.Dr. Savaş YEŞİLYURT

İmza



Bu tezin kabulü Sosyal Bilimler Enstitüsü Yönetim Kurulunun ...../...../20 tarih ve ...../..... sayılı kararı ile onaylanmıştır.

UYGUNDUR

...../...../.....

Sosyal Bilimler Enstitüsü Müdürü

## TABLE OF CONTENTS

TABLE OF CONTENTS.....	I
ABSTRACT .....	III
ÖZET.....	IV
ACKNOWLEDGEMENT .....	V
LIST OF TABLES .....	VI

### CHAPTER ONE

#### INTRODUCTION

1.1. Introduction.....	1
1.2. Purpose of the Study .....	3
1.3. Context of the Study .....	3
1.4. Definition of the Key Terms .....	4
1.5. Research Questions .....	5
1.6. Organization of Thesis.....	5

### CHAPTER TWO

#### REVIEW OF LITERATURE

2.1. Introduction.....	7
2.2. Content Schema.....	8
2.3. Formal Schema.....	9
2.4. Bottom-Up and Top-Down Approaches .....	10
2.5. Schema Factor and Its Effect on EFL/ESL Reading Comprehension.....	10
2.6. The Effects of Text Types on EFL/ESL Reading Comprehension.....	11
2.7. The Effect of Text Modification on EFL/ESL Reading Comprehension.....	13
2.7.1. Input modification .....	13
2.7.2. Simplification .....	15
2.8. The Role of Culture in Reading Comprehension.....	16

### CHAPTER THREE

#### METHODOLOGY

3.1. Introduction.....	21
------------------------	----

<b>3.2. Overview of the Design .....</b>	<b>21</b>
<b>3.3. Sampling and Selecting Procedures .....</b>	<b>22</b>
<b>3.3.1. Participants .....</b>	<b>22</b>
<b>3.3.2. Procedure .....</b>	<b>22</b>
<b>3.3.3. Validity and reliability of the study .....</b>	<b>23</b>
<b>3.3.4. Instrument.....</b>	<b>24</b>
<b>CHAPTER FOUR</b>	
<b>RESULTS</b>	
<b>4.1. Introduction.....</b>	<b>26</b>
<b>4.2. Descriptive Statistical Results.....</b>	<b>26</b>
<b>4.3. Inferential Statistical Results .....</b>	<b>30</b>
<b>CHAPTER FIVE</b>	
<b>CONCLUSION AND DISCUSSION</b>	
<b>5.1. Introduction.....</b>	<b>35</b>
<b>5.2. Summary of Methods and Findings Responding to Research Questions.....</b>	<b>35</b>
<b>5.3. Summary and Discussion of Findings .....</b>	<b>37</b>
<b>5.3.1. Discussion of the findings responding to research question 1 .....</b>	<b>38</b>
<b>5.3.2. Discussion of the findings responding to research question 2 .....</b>	<b>40</b>
<b>5.4. Limitations of the Study .....</b>	<b>41</b>
<b>5.5. Conclusions .....</b>	<b>42</b>
<b>REFERENCES.....</b>	<b>44</b>
<b>APPENDICES.....</b>	<b>49</b>
<b>APPENDIX A: Sample of Multiple-Choice Questions for Nativized Version of the American Short Story .....</b>	<b>49</b>
<b>APPENDIX B: Sample of Multiple-Choice Questions for Original Version of the American Short Story .....</b>	<b>50</b>
<b>APPENDIX C: Sample of the Original American Short Story .....</b>	<b>51</b>
<b>APPENDIX D: Sample of the Nativized American Short Story .....</b>	<b>52</b>
<b>CURRICULUM VITAE.....</b>	<b>53</b>

## **ABSTRACT**

The purpose of this study is to investigate the effect of nativization of a literary text on the EFL reading comprehension using schemata theory as the theoretical framework. Limitations of the preceding research have been taken into consideration while designing the study. The original version of a short story and its corresponding version after nativization was given to the two groups of participants, each including 35 undergraduate level Turkish-speaking EFL students. This study was conducted in two steps: In the first step, the story for EFL reading comprehension was selected, and then 10 inferential and 10 literal multiple-choice (MC) questions were prepared for nativized and original versions by the researcher. The questions involved two areas: literal questions, inferential questions. In the second step, the original story and a nativized version of it following MC questions was given as a task to the EFL students. The descriptive statistics showed that 3 out of 10 inferential questions received the highest scores. On the other hand, for the original text, the results show that only 1 question out of 10 inferential and 10 literal questions received the highest score. Paired sample *t*-tests showed that there was no significant difference for the literal scores obtained from ratings of the original and nativized MC test questions. Moreover the inferential statistical results and the descriptive statistical results confirmed that nativized and original reading test score yielded different results for at least inferential score; and therefore, the nativization of both reading text and its test questions had much impact on the EFL students' reading comprehension.

**Key Words:** Schema theory, EFL reading, inferential reading comprehension, literal reading comprehension, culturally adapted text.

## ÖZET

Bu çalışmanın amacı kuramsal çerçeve olarak şema kuramını kullanarak yabancı dil olarak İngilizcede okuduğunu anlamaya dayalı bir edebi metnin ana dile uyarlanmasının sonucunu araştırmaktır. Çalışma tasarlanırken önceki araştırmaların sınırlılıkları göz önünde bulundurulmuştur. Kısa bir hikâyenin orijinal hali ve onun ana dile uyarlandıktan sonraki hali her biri lisans seviyesindeki 35 Türkçe anadilli İngilizce öğrenen öğrencilerden oluşan iki grup katılımcıya verildi. Bu çalışma iki aşamada gerçekleştirildi: İlk aşamada İngilizcede okuduğunu anlamaya yönelik hikâye seçildi ve sonra araştırmacı tarafından anadile uyarlanmış ve orijinal hali için 10 çıkarımsal ve 10 edebi çoktan seçmeli soru hazırlandı. Sorular iki alanı kapsadı: edebi sorular ve çıkarımsal sorular. İkinci aşamada orijinal hikâye ve onun anadile uyarlanmış şeklini takip eden çoktan seçmeli sorular İngilizce öğrenen öğrencilere ödev olarak verildi. Betimleyici istatistikler 10 çıkarımsal sorudan 3 tanesinde en yüksek puanların alındığını gösterdi. Diğer taraftan sonuçlar orijinal metin için 10 çıkarımsal ve 10 edebi sorudan sadece 1 tanesinde en yüksek puanın alındığını gösterdi. Eşleştirilmiş örnek için t-testleri orijinal ve anadile uyarlanmış çoktan seçmeli test sorularının oranlarından elde edilen edebi kısma ait puanlar bakımından önemli bir fark olmadığını gösterdi. Ayrıca çıkarımsal istatistik sonuçları ve betimleyici istatistik sonuçları anadile uyarlanmış ve orijinal okuma test puanlarının en azından çıkarımsal kısma ait puan bakımından farklı sonuçlar verdiğini ve bu yüzden her iki okuma metninin anadile uyarlanması ve onun test sorularının İngilizce öğrenen öğrencilerin okuduğunu anlamasında çok etkisi olduğunu doğruladı.

**Anahtar Kelimeler:** Şema kuralı, İngilizce öğrenenlerin okuması, çıkarımsal okuduğunu anlama, edebi olarak okuduğunu anlama, kültürel olarak uyarlanmış metin.

## ACKNOWLEDGEMENT

I would like to express my most sincere gratitude and appreciation to my supervisor, Assist.Prof.Dr. Gencer ELKILIÇ, for his invaluable guidance, understanding, and excellent suggestions. He has not only guided me in my academic studies but also helped me, as a friend, acquire a new life perspective for the rest of my life. I am very grateful to Assist.Prof.Dr. Mustafa ÖZDEMİR, for his invaluable encouragements and guidance, supports, constructive criticisms and helpful suggestions throughout the entire process of this research.

I also sincerely thank the teaching staffs of the English Language and Literature Department of Kafkas University, especially my colleague Lect. Turgay HAN, English Language and Literature Department of Atatürk University, especially Assist.Prof.Dr. Oktay AKARSU and English Language and Teaching Department of Atatürk University, especially Assist.Prof.Dr. Savaş YEŞİLYURT and Assist.Prof.Dr. Oktay YAĞIZ for their invaluable supports and contributions.

I owe special thanks to the students of English Language and Literature Department for their kind help and participation in this research. I would like to thank the Staff of the Institute of Social Sciences for their supports. Finally, thanks to everyone whose names I might have forgotten for their support, cooperation and help to make this study a reality.

**Kars-2013**

**Gökhan Fındık**



## LIST OF TABLES

<b>TABLE 4.1</b> .....	<b>27</b>
<b>TABLE 4.2</b> .....	<b>28</b>
<b>TABLE 4.3</b> .....	<b>29</b>
<b>TABLE 4.4</b> .....	<b>29</b>
<b>TABLE 4.5</b> .....	<b>30</b>
<b>TABLE 4.6</b> .....	<b>31</b>
<b>TABLE 4.7</b> .....	<b>32</b>
<b>TABLE 4.8</b> .....	<b>33</b>
<b>TABLE 4.9</b> .....	<b>33</b>

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Introduction**

Reading is defined to be as an active, fluent process involving both the reader and the text for comprehending its meaning by combining the words with the reader's background knowledge and experiences (Anderson 1999; p. 1). Therefore, reading is considered to be a complex process in which many researchers need to analyse the process by parting it into skills to understand and explain reading (Grabe, 1991, p. 379).

Ajideh (2003, p.1) indicates that reading both in native language and foreign/second language (FL/L2) entails an interaction between reader's understanding of something with regard to past experiences and what a text really says; in fact, reading requires a process of selecting depending on readers past experiences that includes, to some extent, available language cues from input and which are selected for partial use. When this limited information is taken into the course of interaction, tentative understandings have to be substantiated, rejected or refined in the course of reading (Goodman, 1970, p.260). As Erten and Razi (2009) describe when readers use their relevant background knowledge in the reading process, they give more attention for textual analysis and interpretation; therefore, "existing background knowledge may contribute to the functioning of what are described as automatic processes by McLaughlin (1987), sparing valuable attentional space for more unfamiliar and newer elements in the text" (Erten & Razi, 2006, p.61).

While processing texts, readers engage in two types of comprehensions: literal comprehension and inferential comprehension. The former type depends on lower-level cognitive process related to lexical access and syntactic parsing while the latter type higher-level cognitive processing of understanding what a text really says and what it is about (Alptekin, 2006). Overall, selecting words and their connection with each other to form semantic propositions are the essence of the interaction in reading (Alptekin, 2006). In this context, the concept of schema accounts for "how information in stories and events is reconfigured in memory for further recall"

(Nassaji, 2002, pp. 439-440). Schemata “reflect the experiences, conceptual understanding, attitudes, values, skills, and strategies” (Vocca & Vocca, 1999, p. 15).

The theoretical base of background knowledge in the reading process refers to schema theory (Carrell & Eisterhold, 1983) that focuses on how prior information structures are stored in the human mind (Nassaji, 2002, p. 444). In this sense, Smith (1994) states that “everything we know and believe is organized in a theory of what the world is like, a theory that is the basis of all our perceptions and understanding of the world, the root of all learning, the source of hopes and fears, motive and expectancies, reasoning and creativity” and “if we make sense of the world at all, it is by interpreting our interactions with the world in the light of our theory” the theory is “our shield against bewilderment” (p. 8). Further, Rumelhart (1980) focuses on how knowledge is structured mentally in the mind and states that “all knowledge is packaged into units. These units are the schemata”.

Based on the schemata theory several researchers have investigated association of pre-existing knowledge in a reader’s mind with the reading text (e.g. Ajideh, 2003; Alderson, 2000; Alptekin, 2006; Anderson, 1999; Carrell, 1983; Carrell & Eisterhold, 1983; Clarke, 1980; Erten & Razi, 2009; Eskey, 2005; Grabe & Stoller, 2002; Oller, 1995).

One of the assumptions of the schemata theory is that using background knowledge facilitates comprehension. In this sense, Nassaji (2002) states that there are three foci approaches to the way knowledge is utilized in comprehension. The first one is about the schemata of pre-existing knowledge structure in mind, the second one is mapping the information available in the text by relating it to that pre-existing knowledge, and the last is about being of knowledge-based processes as predictive and reader-driven (Nassaji, 2002, p. 444). Briefly, Schemata are described as *interlocking mental structures* that represent readers’ knowledge (Anderson, 2000).

During the reading process of a text, readers interrelate the information from the text into their schemata (Shin, 2002). Schemata are often divided into formal schemata and content schemata. The former refers to knowledge of the language and linguistic conventions, including the organization of the text. The latter pertains to knowledge of the world, including the subject matter of the text (Shin, 2002).

Clarke (1980) states that "...skillful readers in one language could simply transfer their skills to reading in a second language" (Eskey, 2005; p.566). Additionally, Clarke (1980) advocates that depending on a language proficiency 'threshold', regardless of proficiency in L1 reading, readers cannot transfer their L1 reading skills into their L2 reading until they learn more of L2 (cited in Eskey, 2005; p.566). It is believed that beyond the threshold level of L2 will they generate elaborate inferences when they are given the nativized version of the text (Alptekin, 2006; p.498).

In this context, through the analysis of the words and sentences by relating readers' own background, meaning of a text is acquired; further, the factor affecting readers' background is, in essence, 'culture' (Reynolds, Taylor, Steffensen, Shirey, & Anderson, 1982; p.354). Therefore, to explore the effects of cultural schemata in comprehension of a text by EFL readers, nativization processes in inferential reading gain importance in this study.

## **1.2. Purpose of the Study**

The purpose of this study is to investigate the effect of nativization of a literary text on the EFL reading comprehension using schemata theory as the theoretical framework of this study. In accordance with this main purpose, this study also aims at exploring whether the students who read the nativized version of the story outperform those who read the original story.

In other words, the main focus of the study is to inspect the effect of cultural schemata, that is, the effect of culturally familiar knowledge on "inferential comprehension" and "literal comprehension" in EFL reading. To test this effect, a short story was given in two versions to one experimental group and one control group of participants of the study and the results were compared.

## **1.3. Context of the Study**

This study used an American short story and a nativized version of the same story to investigate undergraduate level EFL students' reading comprehension. All the participants were volunteer students studying English Language Teaching at

Atatürk University in Turkey, which is one of the Turkish state universities. Mostly, the students at this department take a reading comprehension test that requires them to read a text and then choose the correct answer in multiple choice questions in about 40 minutes. The number of the multiple choice questions ranges from 15 to 25, each with a four or five-item. The texts used for reading comprehension classroom are mostly chosen from English and American literature.

This study involved the analysis of Turkish-speaking undergraduate level EFL students' responses to two different versions of the same reading comprehension multiple choice (MC) questions for an American short story. The story was an American short story. The researcher prepared most of the multiple-choice questions and some were adopted from a former study (cf. Alptekin, 2006). The questions aimed to examine different level of schema of the EFL students; and for this purpose, the original text and MC questions were nativized. The questions involved two areas: literal questions, inferential questions.

Therefore, the research focus is about how and to what extent an adapted and adjusted L2 text that includes socially distant cultural norms to readers' own culture into native culture would contribute to the EFL students' reading comprehension.

#### **1.4. Definition of Key Terms**

The following terms were involved in this study.

**Schema Theory:** Schema theory deals with “pre-existing knowledge structures stored in the mind” (Nassaji, 2002, p. 444). In other words,

“Linguists, cognitive psychologists, and psycholinguists have used the concept of schema (plural: schemata) to understand the interaction of key factors affecting the comprehension process. Simply put, schema theory states that all knowledge is organized into units. Within these units of knowledge, or schemata, is stored information” (Sacramento State University, 2012).

**Schema(ta):** Schemata are described as “interlocking mental structures” that represent readers' knowledge (Anderson, 2000). During the reading process of a text, readers interrelate the information from the text into their schemata.

“Generalized description or a conceptual system for understanding knowledge-how knowledge is represented and how it is used. According to this theory, schemata represent knowledge about concepts: objects and the relationships they have with other objects, situations, events, sequences of events, actions, and sequences of actions” (Sacramento State University, 2012).

**Formal Schemata:** . The formal schemata refer to knowledge of the language and linguistic conventions, including the organization of the text (Shin, 2002).

**Content Schemata:** The content schemata pertain to knowledge of the world, including the subject matter of the text (Shin, 2002).

**Nativization:** Nativization is “...the sociological, semantic, and pragmatic adaptation of the textual and contextual cues of the original story into the language learner’s own culture, while keeping its linguistic and rhetorical content essentially intact” (Alptekin, 2006, p.499).

**EFL students:** Turkish speakers of English

**Short story:** An American Short story

**Multiple-choice question:** Inferential and literal questions referring to the short story

## 1.5. Research Questions

Two research questions were addressed in this study are:

1. Does the nativized version (culturally nativized) of an American cultural short story affect EFL learners’ inferential and literal comprehension in L2 reading?
2. Do participants who read the nativized version of the story outperform those who read the original story?

## 1.6. Organization of the Thesis

The chapter two includes a review of the research related to schemata theory and reading comprehension in ESL/EFL context. First, it explains Schema factor and its effects on EFL/ESL reading comprehension. Then reviews the effects of text

types on ESL/EFL Reading Comprehension, the effect of text modification on ESL/EFL reading comprehension and the Role of culture in Reading comprehension.

Next, Chapter 3 describes the quantitative data (i.e., multiple choice reading comprehension questions) and how data analyses were conducted. Chapter four reports the descriptives and t-test results obtained from the multiple choice questions based on the research questions of the this study. Chapter 5 summarizes and discusses the findings followed by the limitations and the conclusions. Further, implications for practice from language teaching methodology were discussed in light of the limitations and recommendations for future research.

## CHAPTER TWO: THE LITERATURE REVIEW

### 2.1. Introduction

Reading is “a psycholinguistic guessing game”. Reader is active in “prediction, sampling, confirmation and correction” in such a game (Goodman, 1967 cited in Fuenzalida, undated). That is, readers comprehend based on their background knowledge and past experiences (Johnson, 1981, 1982; Steffensen, Joag-dev, & Anderson, 1979; Hudson, 1982). On the other hand, learning was described by Jean Piaget (1969) as “the modification of students' cognitive structures, or *schemata*, as they interact with and adapt to their environment”. *Schema(ta)* are like mental "filing or organizational systems where new information is organized with prior knowledge”. In this sense, the *schema theory of reading* comprehension “depends on a complex network of connections between prior and new knowledge” (Harris & Hodges, 1995) and the reader's background knowledge refers “to experiences, concepts, concrete and abstract knowledge, and the reasoning abilities the reader has developed over time” (cited in State College of Florida, 2012). The term ‘schema’ has been labelled as “scripts”, “plans” and “frames” by different researchers (Minsky, 1975; Schank, 1982 cited in Nassaji, 2002) to name the function of background knowledge in reading comprehension. A schema is an “abstract knowledge structure derived from repeated experiences with objects and events” (Garner, 1987, p.3). Moreover, schemata are considered to be “interacting knowledge structures” (Rumelhart & Ortony, 1977, p.100).

In the research literature on EFL/ESL reading comprehension, specialists in EFL/ESL reading were criticized for focusing more broadly on studies in L1; nonetheless, they provided a foundation for exploring shared and diverse characteristics between L1 and EFL/ESL reading; moreover for several years, EFL/ESL specialists did not consider research in EFL/ESL reading in spite of their obvious relevance; similarities between these two types of reading processes far outweigh the differences, in fact, the reading process in L1 and L2 are similar (Eskey, 2005). Traditionally; in the field of cognitive psychology, the effects of background knowledge, past experiences or namely schemata of L1 readers (Thordnyke, 1977; Kintsch & Greene, 1978) and the EFL/ESL learners’ EFL/ESL



reading comprehension have been studied in several empirical studies, and researchers reported that EFL and ESL learners' prior knowledge or schemata has impacts on comprehending reading texts (Johnson, 1981, 1982; Steffensen, Joag-dev, & Anderson, 1979; Hudson, 1982 cited in Carrel, 1983). In this context, two theoretical issues have been focused in the research literature of reading comprehension that deal with the background knowledge in terms of culture. The first issue is about the background knowledge of the content area of a text (content schemata) while the latter is about the background knowledge of the rhetorical structures of different types of texts (formal schemata) (Carrell, 1983). As schemata are "interlocking mental structures" that represent readers' knowledge (Anderson, 2000), during the reading process of a text, readers interrelate the information from the text into their schemata.

## **2.2. Content Schema**

Content schema refers to "the familiarity of the subject matter of the text" and "an understanding of the topic of the text and the cultural-specific elements needed to interpret it"; moreover, content schema is "part of the individual's cultural orientation..." (Al-Issa, 2006, p.42). If there is a discrepancy or incongruity between readers' cultural background and the cultural text as pointed out by Carrell and Eisterhold (1983), "a particular content schema may fail to exist for a reader since the schema is culturally specific and is not part of a particular reader's cultural background" (p. 560).

As Carrell and Eisterhold (1983, p.561) outlined the earlier literature, first, research showed general effects of content schemata on EFL/ESL reading comprehension, for example, Johnson (1982) found that "a text on a familiar topic is better recalled by ESL readers than a similar text on an unfamiliar topic"; on the other hand, Hudson (1982) examined an interaction between overall linguistic proficiency in ESL and content-induced schematic effects in ESL reading comprehension and the results of this study showed that there were "the facilitating effects on comprehension of explicitly inducing content schemata through pre-reading activities, especially at the beginning and intermediate proficiency levels, as compared to two other methods of inducing content schemata (through vocabulary

activities and read-reread activities)". Finally, Alderson and Urquhart (1983) found "a discipline-specific effect of content background knowledge in measuring reading comprehension in ESP/EST" (Carrell & Eisterhold, 1983, p.561). It was highlighted that there were "a growing body of empirical research attests to the role of both content and formal schemata in EFL/ESL reading comprehension and to the potential cultural specificity of both types of schemata (p.561). There are also some other studies that examined the effect of content schemata on reading comprehension. A few of these studies were outlined by Al-Issa (2006, p.42); first, in 1979, Steffensen, Joag-Dev and Anderson examined the effect of cultural closeness on reading comprehension, for this purpose, the researchers gave two reading letters about American and Indian weddings to university students whose native culture was either American or Indian. As wedding customs were different in America and India, the students tended to recall information that was relevant to their culture. What is more, when students recalled information about a culturally unfamiliar text, they tended to "distort information and insert ideas from their own culture to overcompensate for absent schemata" and they were also found to "elaborate the passages related to their own cultural experiences, and to read them faster" (Al-Issa, 2006, pp.42-43). Second, in a 1979 study, Kathryn Hu-Pei Au focused on the importance of children's experiences and the researcher stated that "the child's experiences contribute to reading achievement when the school uses a basal text containing stories directly related to the child's own world" (Al-Issa, 2006, p.43) . Another research was carried out by Koh in 1986 who related "understanding to the reader's prior knowledge" and the results of this study showed that "a combination of linguistic proficiency and prior knowledge is important for comprehension" (Al-Issa, 2006, p.43).

### **2.3. Formal Schema**

Theory-based schema studies in EFL/ESL reading field have generally proved that when the interactions between the content and/or formal data of a text and the readers' culture-specific background knowledge increase, the quality of reading comprehension increases as well; in other words, there is a positive correlation between the amount of content/formal data interaction in EFL/ESL readers' minds and comprehending a text (Alptekin, 2006). On the other hand, there are also several empirical studies that have confounded content and formal schemata

as an third alternative to examine naturally-occurring text effects in EFL/ESL reading comprehension (Carrell, 1983).

#### **2.4. Bottom-up and Top-down Approaches**

There are basic modes of information processing approaches in comprehending reading. These are bottom-up and top-down approaches. As Fuenzalida (undated, p.6) describes Rumelhart (1970) considers reading as “an interactive, cognitive psycholinguistic process where both, bottom-up and top-down processes are simultaneously involved” based on “the interactive approach”. Specifically, “bottom-up processing is evoked by the incoming data from the text, while top-down processing occurs as the reader makes predictions in the light of his / her background knowledge” (Carrell & Eisterhold, 1983). In other words, “the process of interpretation is guided by the principle that every input is mapped against some existing schema and that all aspects of the schema must be compatible with the input information. This principle results in two basic modes of information processing, called bottom-up and top-down processing” (Li, 2006, p.95).

#### **2.5. Schema Factor and Its Effects on EFL/ESL Reading Comprehension**

In the last three decades of time, a tradition of research can be traced back to Carrel (1983), who studied the effects of formal schemata in EFL/ESL reading comprehension by giving two different types of simple stories to ESL participants. In the study, one type of stories is well-structured according to simple story schemata (content schemata), and the story schema is deliberately violated in the other type (formal schemata). The results showed that both quantity of recall and temporal sequences of recall were affected when the rhetorical structure of the same story was changed but not the content.

Steffensen, Joag-dev, and Anderson (1979) carried out a similar study to investigate the effects of content schemata in comprehension by changing the content of the text but keeping formal rhetorical structure of the text constant. In that study, two groups of participants were members of American culture and Asian Indians culture. Asian Indians were living in USA. Each subject read and recalled two personal letters that were constructed with similar rhetorical schematic organization

but with different cultural contents. The letters were about traditional weddings in these different cultures. To control syntactic complexity, the letters were written by a member of each culture. The reason for specifying such a topic is that every member of a culture may be well aware of their customs and keep background knowledge related to this socially significant phenomenon. Nevertheless, the participants were expected to have lack of background knowledge about these distant cultures. The researchers tried to assess participants' recall of those different culture materials. The results showed that the participants of both groups read faster and recalled more when they were given their own culture-specific materials. But Americans were advantageous for they read and recalled in their native language while Asian Indians read and recalled in L2. In conclusion, the implicit background knowledge of content in the text was found to have a weighty positive effect on comprehension (Steffensen, Joag-dev, and Anderson 1979 cited in Carrel, 1983).

However, some measurement issues in the study seem to be neglected. Asian Indians might be grown as bilingual in America. Therefore, they may reflect similar performance in their native language and EFL/ESL; and if so, no judgment may be needed about their language proficiencies, that is, linguistic competence of both group participants might be similar and some other variations had to be investigated to understand the real effects of background information on reading comprehension. Because, "when a recall task is carried out in the L2, particularly with readers who have limited L2 proficiency, it may become an intervening and cumbersome factor itself due to the problems of comprehension-production interference, correction time exigencies, and scorer reliability" (Alptekin, 2006; p.497). In this context, to normalize the measurement in L2 reading comprehension, participants of empirical studies should take the same text.

## **2.6. The Effects of Text Types on ESL/EFL Reading Comprehension**

Recent research has shown that the sub-skills and text types affect reader performance considerably (Lumley, 1993, Dennis, 1982 cited in Shin, 2002). As Shin (2002) described the studies that investigated the effect of text structure on reader performance showed that "certain more highly structured English rhetorical patterns were more facilitative of meaningful recall for nonnative readers in general";

moreover there was an “interaction between a reader’s prior knowledge of and processing strategies for text structure and the rhetorical organization of the text” (p.112). When compared the effects of the expository texts and narrative texts, expository texts are harder to process than narrative texts, probably as a result of the greater variety of relationships among text units, or may be due to greater variety of content types (Alderson, 2000 quoted in Shin, 2002, p.112).

In 2002, Shin investigated the effects of the relative effects of sub-skills and text types on ESL/EFL reading comprehension performance simultaneously in Korean context. A reading test including equal numbers of items and texts representing four different sub-skills (Inference, Skimming, Scanning, and Coherence) and three text types (Narrative, Expository, and Argumentative) were given to 157 Korean male 12th graders attending a High School in Korea. The data was analyzed quantitatively using a Generalizability study and a Decision study (D-study) (Brennen, 1983). Results showed the effects of having various numbers of text types and sub-skills on the reliability of scores on this reading test.

Six years later, using a quasi-experimental study design, Zhou (2008) investigated the effects of three reading tasks on EFL students’ reading comprehension and the students’ attitudes towards the reading tasks in a Chinese university context. The tasks were reading with summary writing, reading with journal writing, and reading with oral discussion. Eighty-one Chinese undergraduate level EFL students were assigned to do 11 reading tasks as one of the course requirements. The students’ scores on a reading comprehension test, written questionnaires with 79 respondents, 238 entries of the student’s written feedback on the reading tasks, and semi-structured face-to-face interviews with 18 interviewees were analyzed for the purpose of this study. The analyses obtained from the comparison of multivariate means between groups at each level showed that the EFL students benefited more by reading with summary writing than by reading with journal writing or reading with oral discussion. Moreover, it was found that the text types had significantly different effects on reading comprehension, resulting in EFL students’ better score in expository than in narrative texts. Gender was not found to be a significant factor. On the other hand, the MANOVA results showed differential effects of the reading tasks across text types in the group of reading with journal writing and the outcomes indicated that the journal writing group had the most

positive attitudes. It was suggested that reading-writing connections have some potentials to improve EFL reading comprehension.

Most recently, Farvardin and Biria (2011) investigated the impact of gloss types on reading comprehension using narrative and expository texts in Iranian EFL context. The glosses applied in the study were single gloss in participants' first language (SL1G), single gloss in participants' second language (SL2G), and multiple-choice gloss (MCG) in participants' L2. 108 undergraduate level EFL students read the texts under three conditions: SL1G, SL2G, and MCG and they took a multiple-choice (MC) reading comprehension test. The quantitative results obtained from One-Way ANOVA and follow-up post hoc Tukey's HSD tests ( $p < .05$ ) showed that the most facilitative gloss type for the EFL students' reading comprehension of the narrative and expository texts were SL1G and SL2G respectively. Moreover, the results obtained from survey showed that they preferred marginal glosses in L2. Overall, the study gave some implications concerning textual glosses should be available to foreign language learners while they are engaged in reading tasks and when students are engaged in reading, their attention to new words is drawn by the gloss and their knowledge of the unknown words is enhanced by the rich context in the reading material. Besides, the presence of gloss can help students use dictionaries less frequently and prevent them using wrong inference or assigning an inappropriate meaning for the unknown words.

## **2.7. The Effect of Text Modification on ESL/EFL Reading Comprehension**

### **2.7.1. Input modification**

Based on what Krashen (1981, 1982, 1985, 1994) claimed on comprehensible input hypothesis ( $i + 1$ ), that is, what are meaningful for the L2 learners is that the information that are slightly above their current English language level. As Maleki and Pazhakh (2012) described that input comprehension was considered in different kinds of linguistic environments. First one is modified input in which native speakers (Ns) modify their input to facilitate non-native speakers' (NNSs) comprehension, for example, repetitions, paraphrase of words or sentences, and reduction of sentence length and complexity, among others. Ziglari (2008) advocates that the modified input in the environment can enhance language acquisition (i.e. when the native

speakers as proficient speakers adjust their language to the low-level learners (foreigners) to make it more comprehensible) (quoted in Maleki & Pazhakh, 2012).

In 2008, Sarab and Karimi investigated the role of input modification in text comprehension comparing linguistically-modified (LM) texts and interactionally-modified (IM) texts through repeated measure design. That is, the study sought how simplified, interactionally modified and unmodified input might impact Iranian EFL learners' comprehension of written texts but not the participants' performance and not their language development. Particularly, the study was aimed at finding difference, if any, in students' comprehension of text presented under the three above-mentioned conditions. 44 (18 male and 26 female) undergraduate level Iranian EFL students whose ages ranged from 19 to 24 participated in this study. The result obtained from ANOVA analyses showed that the learners' comprehension was highest under the interactionally-modified text condition and lowest under the unmodified text condition with the linguistically-modified text condition in between.

Then, in 2012, Maleki and Pazhakh examined the effects of pre-modified input, interactionally modified input and modified output on 80 EFL learners' comprehension of new words. Four groups each including 20 students were pre modified input, interactionally modified input, modified output and unmodified (control) groups. The experimental and control groups were taught under different conditions. The participants were trained to find the right position of each item a matrix picture of a place and its furniture and equipment. In the quantitative analyses framework a one-way ANOVA and Tukey test were used. The results showed that the interactionally modified input group achieved the highest comprehension scores than their peers in other three groups ( $P < 0.05$ ); on the other hand, modified output group outperformed both pre-modified input and control groups. But, there was no significant difference between pre-modified input and control groups and both of them obtained the lowest comprehension scores. It was concluded that teacher-student interaction in language learning and teaching is important where teacher directs and guides the students to have the best understanding through his/her clarifications.

### **2.7.2. Simplification**

Another type of text modification is simplification of the reading text. Simplification of a text is usually characterized by “a lack of complexity in vocabulary and syntax” (Oh, 2001 cited in Maxwell, 2011, p.4). In other words, simplification refers to the written texts that have been linguistically simplified and have the following features: “(1) shorter sentences than those found in an unmodified text (regarding the number of words used per sentence); (2) simpler syntax (fewer dependent clauses are used); (3) simpler lexis (the use of marked vocabulary is avoided); (4) a tendency to employ standard word order in which the topic is fronted in the sentence (subject – verb – object format); (5) fewer pronouns of all kinds are used (retention of nouns and noun phrases) and (6) pronouns and references are unambiguous (full noun phrases are used instead of pronouns and determiners)” (Brewer, 2008; Chen, 2011; Keshavarz, Atai & Ahmadi, 2007; Li, 2005; Oh, 2001; Short, 1989; Yano, et al., 1994 cited in Maxwell, 2011, p. 12).

First, in 2007, Keshavarz, Atai, and Ahmadi investigated the effects of linguistic simplification and content schemata on reading comprehension and recall in Iranian EFL context. Each of 4 homogeneous groups consisting 60 male participants (30 with high proficiency and 30 with low proficiency) was tested on one of the linguistic versions of the content-familiar and content-unfamiliar texts. Each type appeared in 4 versions: original, syntactically simplified, lexically simplified, and syntactically-lexically simplified. The results showed that there was a significant effect of the content and EFL proficiency, but not of the linguistic simplification, on reading comprehension and recall.

Next, Maxwell (2011) investigated how expository texts can best be modified (using either simplification or elaboration techniques) to increase ELL reading comprehension. In other words, the researcher examined the effects of two types of modifications (simplification and elaboration) on ESL students’ reading comprehension scores of an expository text. This study took place in a semi-rural mid-western city in the United States. The participants were seventy fourth grade English language learners who came from a wide range of both cultural and linguistic backgrounds. In this quasi-experimental study, first, a nine-item multiple-choice test to assess the participants’ reading comprehension of three expository texts was given. The test items were three types of comprehension questions; general,



specific and inferential. The data were analyzed using a 2-by-3 analysis of variance (ANOVA). These results surprisingly showed that the high proficiency students performed best on the comprehension test when they had read the original unmodified text over both the simplified and elaborated versions, which had undergone linguistic modifications.

Most recently, Chen examined the impact of EFL students' vocabulary range on literal reading comprehension. The study used a mixed-method approach. The participants took a set of tests including Vocabulary Levels Test and Reading Comprehension Tests. In the qualitative part of the study, individual interviews were used. The quantitative results showed that vocabulary extensiveness was positively and significantly correlated to literal reading comprehension. Further, the qualitative data showed that the majority of participants agreed that breadth of vocabulary knowledge affected their literal reading comprehension process and the participants with better language proficiency tended to utilize more literacy skills in interpreting the content of reading texts than did lower language proficiency learners.

## **2.8. The Role of Culture in Reading Comprehension**

The role of culture has been found to be effective on EFL/ESL reading comprehension. Alptekin (2006) argues that

“...the role of cultural background knowledge in L2 inferential comprehension needs to be investigated not necessarily in the framework of two texts that are thought to be syntactically, lexically, and rhetorically equivalent, but in the context of the *same text* used in two different ways, one being the original and the other a culturally nativized version” (p.497).

Alptekin in his study in 2006 tried to find answers to the question whether nativization of an original short story would affect L2 learners' inferential and literal comprehension in reading. Ninety-eight Turkish EFL (English as a Foreign Language) students who scored similarly on the TOEFL were the two groups of participants of that study. A short American story with an original version and a textually and contextually modified version to reflect the participants' culture were given to participants of both groups. Each task including multiple-choice questions in

both versions was directed to the participants to find out their inferential and literal comprehension. The results showed that the nativized version from an original short story facilitated L2 readers' inferential comprehension significantly, that is, the participants who took culturally congruent story, or nativized story, outperformed than those who took original version. Nevertheless, it had no effect on their literal understanding.

Overall, there are some important considerations in selecting the reading text for empirical research purposes. For example, one of the key factors in determining a text being short or long may be related to the proficiency levels of L2 learners, and moreover, the length of the text may possibly affect readers' recalling. Henceforth, it is essential for EFL/ESL teachers to take textual organization into account. In this sense, a reading text that is specified according to the average proficiency level of their students should be given for testing EFL/ESL reading comprehension because "...the rationale for selecting texts is frequently based on the difficulty of vocabulary and the complexity of sentence structure" (Riley, 1993; 426). Further, nativization of an L2 text may foster understanding for it creates more authentic milieu as Oller (1995) argues that when readers encounter materials that involve persons, events, places, and sociocultural relations from their own real life, it is probable for them to identify themselves and find some common ground (p.297).

Although as Carrel and Floyd (1987) argue that ESL teachers must provide the lack of schemata to the students and also help them to relate the existing knowledge and new knowledge to comprehend a text (Ajideh, 2003; p.5), activation of background knowledge may involve being aware of the gap between reader and culture free or culture bound texts. Of course, "it is one thing to show... that readers from distinctly different national cultures interpreted texts differently, and quite another to find the same phenomenon among readers from different subcultures within the same country" (Reynolds et al, 1982; p. 356).

In 1974, Pettit and Cockriel studied the literal reading comprehension test and the inferential reading comprehension test. 533 sixth grade students in midwestern public schools took the Inferential Reading Comprehension Test (IRC) and the Literal Reading Comprehension Test (LRC) that were developed by the researcher. The tests included six subscales for literal reading comprehension and five subscales

for inferential reading comprehension. The data was analyzed quantitatively using factor analysis. The results showed that the two tests are measuring distinct factors.

Al-Issa (2006) reviewed schema theory in EFL/ESL reading comprehension for three purposes; first, to give a brief overview of some of the literature dealing with schema theory as part of a reader centered psycholinguistic processing model for both native and non-native readers, second, it was aimed to show how familiarity with the subject matter (i.e., content schema) in terms of schema theory impact upon EFL/ESL reading comprehension, third to discuss the implications of schema theory in L2 classrooms. The researcher states that

“while it has been known for some time that both content and formal schemata are necessary for a complete understanding of written texts in a reader’s first language (L1), and has been suspected to be true in a reader’s second language (L2), it is still an area that has been generally ignored by both researchers and classroom teachers” (p.41).

Zhang (2008) investigated the effects of formal schemata or rhetorical patterns on reading comprehension of 45 EFL students. The participants were in three groups, each recalled the text and finished a cloze test after reading one of three versions of a passage with identical content but different formal schemata: description schema, comparison and contrast schema, and problem-solution schema. The analyses of the recall protocol showed that EFL students displayed better recall of the text with highly structured schema than the one with loosely controlled schema. It was concluded that formal schemata had a significant effect on written communication and the teaching of formal schemata to students is essential to enhance EFL writing ability.

Two years later, in 2009, Erten and Razi investigated the impact of cultural familiarity on EFL reading comprehension. For this purpose, they used nativized short stories and used reading activities. Forty four undergraduate level advanced-level EFL students participated in the study. In the first step, a group of students read an original short story without any activities while another group of students read the original short story with some activities. A third group students read the nativized version of the text without any activities while a fourth group read the nativized

version. The quantitative analyses showed that a better comprehension of the nativized story further the activities contributed to the comprehension of the original story, however the difference caused by nativization remained intact, indicating a powerful impact of cultural schema on EFL reading comprehension.

Following Erten and Razi's study, Baleghizadeh and Golbin, investigated the effect of vocabulary size on reading comprehension of EFL learners in 2010. In this empirical study, 83 undergraduate level EFL students in Iran (22 males and 61 females) took a vocabulary size test (Nation 1990) and a reading comprehension test (TOEFL version 2004). The results indicated that there was a significant correlation between vocabulary size and reading comprehension ( $r = .84$ ,  $p < .05$ ). It was concluded that improving the learners' vocabulary size affects reading comprehension positively.

One year later, Mihara (2011) examined how two pre-reading strategies: vocabulary pre-teaching and comprehension question affect EFL/ESL reading comprehension in Japanese undergraduate level EFL students' context. The participants performed a pre-reading strategy, read a passage, and then answered comprehension questions. Three weeks after they read the fourth passage, they were asked to answer a questionnaire. The results showed that vocabulary pre-teaching is less effective for Japanese EFL students, although students with higher English proficiency outperformed lower-level students regardless of which pre-reading strategy they used.

In 2012, Ahmadi and Mansoordehghan investigated the effect of gender on EFL reading comprehension. To trace the possible effect of background knowledge, a non-text that was followed by 10 reading comprehension questions was given to fifty three EFL undergraduate level students in the study. Eight questions focused on the antecedent-reference relationship; one question for the topic of the text and one for the main idea. The results showed that males were more successful in constructing the meaning for the non-text in general and in performing on the three types of items in particular; as a result EFL readers compensate for the lack of meaning in a text by making themselves activate possibly related schemata and even a non-text text can carry meaning.

In Gilakjani and Ahmadi (2011), the following suggestions are recommended towards reading materials in L2 classrooms:

- a. Reading materials should be really interesting.
- b. Reading materials should be pertinent to the students' English proficiency levels.
- c. Content knowledge should be taken from these materials.
- d. Teachers can design different types of reading activities and materials to increase their students' understanding of these materials.
- e. Teachers should motivate their students in reading these materials.
- f. Teachers should be sensitive to their students' hidden comprehension problems.
- g. Teachers should help their students change their attitudes towards reading.
- h. Teachers should help their students to become independent, self-directed readers.
- j. Teachers should give their students enough time to exercise their understandings of the materials" (p.147).

The importance of reading in cognitive psychology field is highlighted by Krashen and Terrel (1983): "reading may contribute significantly to competence in a second language. There is good reason in fact, to hypothesise that reading makes a contribution to overall competence, to all four skills" (Krashen & Terrel, 1983, p.131).

In this chapter, first, schemata theory in reading comprehension was highlighted by giving elaborate definitions and description of key terms. It was also tried to be explained how cultural and formal schemata works during the process of reading comprehension. Moreover, it explained the main attempts to make a text more comprehensible (e.g. simplification, elaboration, and nativization). Next, the findings of previous research that has explored the effects of simplification and elaboration on EFL/ESL reading comprehension were reviewed. In the next chapter the methods are used to systematically explore and answer the research questions given before.

## **CHAPTER THREE: METHODOLOGY**

### **3.1. Introduction**

This study used quantitative method research approach to examine the effect of nativization on the inferential and literal reading comprehension by undergraduate EFL students at a Turkish university. Quantitatively, ten literal and ten inferential multiple choice questions were given to the 70 participants (e.g. 35 participants in each group). Each correct answer was rated and the points were analyzed statistically, using SPSS software. The participants from English Language Teaching Department, Kazım Karabekir Education Faculty, Atatürk University in Turkey were selected for the study. Section 3.2 of this chapter makes an overview for the research design. Section 3.3 describes sampling and selecting procedures. Section 3.3.1 describes the participants. Section 3.3.2 explains the data collection procedure. Section 3.3.3 explains reliability and validity of the study. Section 3.3.4 explains the instrument used in the study.

### **3.2. Overview of the Design**

The research questions that are outlined in this study tested the relationship between nativized text and EFL students' reading comprehension scores. In order to analyze and compare the EFL undergraduate level students' comprehension scores, the design of the present study used a basic quantitative research. As quoted by Maxwell (2011, p.24) "A quantitative research method is characterized by the fact that it quantifies and statistically analyzes the data that is collected during the study (Anderson, 1990; Best & Kahn, 1989; Mackey & Gass, 2005)".

The participants of the study were selected based on convenience sampling according to the aim of the study. Then, a text reflecting American cultural norms is selected to extract the biases of the readers. Before giving answer to the inferential and literal multiple choice questions, the participants of experimental group were required to read the nativized version of the text while the participants of the control group engaged in the original text. The scores on the test were analyzed after doing statistical analyses by SPSS software.

### **3.3. Sampling/ Selecting Procedures**

#### **3.3.1. Participants**

Seventy (50 females, 20 males) volunteer Turkish-speaking EFL students served as the participants of this study. They were selected through convenience sampling from among about 300 EFL majors studying at Atatürk University in Erzurum, Turkey, one of the Turkish state universities. Their English proficiency levels were not assessed in a pretest. Yet, they are assumed to be similar in English proficiency levels as they are similar in English background, and before entering the department, they took a large-scale exam and then they took a department exam aiming at placing them either prep-class or freshman class.

They were first year students and assumed to have advanced level of English proficiency. Since the participants are at the advanced level, there would not be a relation between inference skills and level of L2 proficiency. The participants' ages ranged from 18 to 22. The participants were divided into two groups and they were randomly assigned into groups. Each group included 35 participants who were roughly homogenous in terms of English proficiency level. The control group consisted of 28 females and 7 males; the experimental group consisted of 30 females and 5 males.

#### **3.3.2. Procedure**

To relate the probable findings of tests with the research questions, the main study was conducted with 70 participants by giving a test. Both the control and experimental group were tested separately under the same conditions. They were asked to read the story and answer the multiple-choice questions in 50 minutes. Fifty-minute time was allotted to complete the task after a pilot test was given to a sub-sample of 6 students. In this pilot study, the test takers completed the task in a time ranging from 40 to 60 minutes. Participants were not allowed to use dictionary. The rater-researcher scored multiple choice (MC) questions. The data consistency was double-checked. The results obtained for inferential and literal understandings were statistically analyzed. The differences among the mean scores were statistically analyzed to compare the performance of groups in terms of the effects of nativized text and the original text on reading comprehension.

At the end of the study, by using SPSS statistical program, Paired samples t-tests were conducted to assess homogeneity of variances to see the difference between groups. Furthermore, both the equivalency of all three groups' proficiency levels and the effect size of the readers' familiarity with the cultural content of the text on their comprehension were statistically analyzed depending on the distribution of the Levene statistics.

### **3.3.3. Validity and reliability of the study**

In the main study, the sample consisting of 35 EFL students in each group took a single type of instrumentation test including multiple-choice items (MC). The items of the MC achievement test were redeveloped after doing a literature review in the reading comprehension field. Furthermore, a checklist was used to assess the conformity between test items and targeted issues, and among the distracters, options and stems and others. Most of the questions were developed by the researcher and some of the questions were adopted from Alptekin's study in 2006. Totally 20 MC items including ten questions aiming to assess participants' literal and the other ten questions aiming to assess participants' inferential understandings were used in the study. The test was piloted to assess the difficulty of test items, giving the MC questions to a sample group consisting of L2 readers who scored similar level of language proficiency, and as a result, too easy or too difficult items were replaced to make the test perform adequately. To accomplish this purpose, firstly, the index of difficulty of the items was calculated to assess how easy or difficult the items in the test were. Then, the discrimination index of the items was analyzed to indicate the extent to which the items discriminate between testees with the split-half method.

Regarding to the study, the time to be allotted was decided by the pilot administration of the test. The same test consisting two types of tasks was printed and given to two group participants with an equal number of inferential and literal MC questions and the participants were required to circle the letter of the correct option.



### **3.3.4. Instrument**

A short story tested by multiple-choice questions was used as an instrument. Both groups of participants - control group and experimental group read an American short story entitled “In Dreams Begin Responsibilities” written by Delmore Schwartz in 1978. The story is an autobiography focusing on struggles including financial and social problems the immigrants in America experience. This study was conducted in two steps. In the first step, for the purpose of this study, a short story for EFL reading comprehension was selected and inferential and literal multiple choice questions were prepared by the researcher depending on reading comprehension questioning literature. These constituted the instruments of this present study. Both groups of participants - control group and experimental group read the story. Such short stories were nativized for research purposes in former studies (i.e. Alptekin, 2006, Erten & Razi, 2009). The main underlying reasons for selecting such a story are that it enables reader to comprehend the common theme; the other reason is that the context of the story is culturally isolated from readers’ own culture. So, the adaptation of the context is possible for Turkish learners of English. Besides, the theme that will be nativized by the L2 readers “...would significantly improve the contribution of the narrative-based abstract schema[ta] to comprehension by making it possible for the readers to form conceptual links between their culture-based reality and that of the story writer, as they are more likely to associate themselves with the characters, events, places, customs and social relations in the story” (Alptekin, 2006; p.499).

The other reasons for selecting such a story are as follows: first the story has “a universally comprehensible theme” and “a culturally unfamiliar social context which lends itself to adaptation for the Turkish readership”. Second, Turkish speakers of English can “activate their abstract schemas” based on such a universal theme. Third, the cultural adaptation of the theme to Turkish culture may help the readers to form “conceptual links between their culture-based reality and that of the story writer” (Alptekin, 2006). In the second step, based on the second purpose of the study, a nativized version of the original text was given to the EFL students as it involves “...real material persons, events, places, and sociocultural relations with which [they] can identify and find some common ground” (Oller, 1995; p. 229) because readers can involve themselves in the text. In this context, this study

investigates the effect of readers' engagements in the text for their inferential and literal comprehension of the text which is culturally familiarized by the readers themselves. Because, fluent decoding is essential for successful reading and this can be assured by accompanying of the reader's construction of a meaning for the text; more specifically, any text gives information for the reader but the reader must determine the meaning through relating that information to some relevant amount of knowledge (Eskey, 2005; p.569). Briefly, in this study, it is thought that readers will outperform in their literal understanding of the text than those who are given original version of the same text.

In the nativization process, the original story was adjusted in two steps; textual and contextual. Textual adaptations refer to the substitutions of names of locations, characters, occupations, goods and others for Turkish equivalent; on the other hand, contextual adaptations are processed according to Adaskou et al's (1990) the four dimensions of culture. The first step is aesthetic dimension that is directly related to literary aspects of culture; however, this step is excluded as it is out of the focus of this study. The second step is sociological dimension in which there are culture-specific contextual cues of customs and rituals that are nativized. The next step is related to semantic dimension of the text in which conceptual and lexical changes such as food, currency, clothes, drinks, foods, institutions, and others are undergone nativization. The last step is about the pragmatic dimension of the text that refers to the substitution of readers own cultural values for American cultural values (cited in Alptekin, 2006, p.500).

The data is going to be collected by a test that includes multiple-choice (MC) items aiming to measure inferential comprehension. The test items comprise understanding the main idea and the details of the story. Henceforth, the inferential questions aim to test for attention to nuances.

In this chapter, the methods that were used in the study to determine the effects of text nativization on EFL reading comprehension scores were explained. Next chapter presents the results of this study and in chapter five, the implications of these findings are discussed and given a conclusion.

## **CHAPTER FOUR: RESULTS**

### **4.1. Introduction**

The purpose of this quantitative study is to investigate the effect of nativization of a literary text on the English-as-a-foreign-language (EFL) students' reading comprehension in the undergraduate classroom at the English Language and Literature Department of Atatürk University in Turkey, using schemata theory as the theoretical frameworks of this study.

The research was designed as quantitatively depending on the focus of the study. To inspect the effect of cultural schemata, that is, the effect of culturally familiar knowledge on 'inferential comprehension' and 'literal comprehension' in FL/L2 reading, the quantitative design of the analysis included descriptive statistics and inferential statistics. Descriptive statistics were used to describe the basic features of the data. Section 4.2 provides simple summaries about the sample and the measures. The descriptive statistical results (the mean and standard deviations) for the nativized and original scores assigned to the 70 EFL students' responses were included in tables. In the following section (section 4.3.) inferential statistical results for each of the nativized and original scores assigned to the 35 EFL students' responses were presented. Inferential statistics were used to draw inferences about a population from the sample. To compare the results, twenty paired sample *t*-tests were obtained in total.

### **4.2. Descriptive Statistical Results**

The descriptive statistics for the answers provided to the Nativized Inferential, Nativized Literal, Original Inferential, and Original Literal questions are presented in Table 1.

Table 1: Descriptive statistics related to the 20 MC questions of both nativized and original texts

Descriptive Statistics					
Questions	N	Min.	Max.	Mean	Std. D.
NI1	35	1,00	2,00	1,5429	,50543
NI2	35	1,00	2,00	1,7429	,44344
NI3	35	1,00	2,00	1,4857	,50709
NI4	35	1,00	2,00	1,6857	,47101
NI5	35	1,00	2,00	1,6286	,49024
NI6	35	1,00	2,00	1,6571	,48159
NI7	35	1,00	2,00	1,4857	,50709
NI8	35	1,00	2,00	1,2857	,45835
NI9	35	1,00	2,00	1,7429	,44344
NI10	35	1,00	2,00	1,7429	,44344
NL1	35	1,00	2,00	1,8286	,38239
NL2	35	1,00	2,00	1,6571	,48159
NL3	35	1,00	2,00	1,8571	,35504
NL4	35	1,00	2,00	1,4286	,50210
NL5	35	1,00	2,00	1,2286	,42604
NL6	35	1,00	2,00	1,4571	,50543
NL7	35	1,00	2,00	1,3714	,49024
NL8	35	1,00	2,00	1,4286	,50210
NL9	35	1,00	2,00	1,2000	,40584
NL10	35	1,00	2,00	1,4000	,49705
OI1	35	1,00	2,00	1,7714	,42604
OI2	35	1,00	2,00	1,4000	,49705
OI3	35	1,00	2,00	1,4857	,50709
OI4	35	1,00	2,00	1,8000	,40584
OI5	35	1,00	2,00	1,6857	,47101
OI6	35	1,00	2,00	1,7143	,45835
OI7	35	1,00	2,00	1,6000	,49705
OI8	35	1,00	2,00	1,3429	,48159
OI9	35	1,00	2,00	1,6857	,47101
OI10	35	1,00	2,00	1,8286	,38239
OL1	35	1,00	2,00	1,8000	,40584
OL2	35	1,00	2,00	1,7143	,45835
OL3	35	1,00	2,00	1,8857	,32280
OL4	35	1,00	2,00	1,4286	,50210
OL5	35	1,00	2,00	1,0857	,28403
OL6	35	1,00	2,00	1,4571	,50543
OL7	35	1,00	2,00	1,4857	,50709
OL8	35	1,00	2,00	1,2571	,44344
OL9	35	1,00	2,00	1,2000	,40584
OL10	35	1,00	2,00	1,4857	,50709

Note: NI= Nativized Inferential, NL= Nativized Literal, OI= Original Inferential, OL= Original Literal, MC=Multiple Choice

As can be inferred from Table 1, each of 35 participant students in control group gave answers to ten original inferential questions and ten original explicit questions referring to the original American short story. In the same way, the other 35 students in the experimental group gave answers to the ten nativized inferential and ten nativized explicit literal questions referring to the nativized version of the same American short story.

The table presents the mean and standard deviation of the answers given to Nativized Inferential (NI), Nativized Literal (NL), Original Inferential (OI), Original Literal (OL) questions.

When compared the results of the inferential and literal scores for the nativized text, the results show that 3 out of 10 inferential questions received the highest scores (NI 2, 9, 10) and, 1 out of 10 literal questions received the highest score (NI 3). Moreover, only one question from each version questions received the lowest scores (NI 8 and NI 9). On the other hand, for the original text, the results show that only one question out of 10 inferential and 10 literal questions received the highest score (OI 10 and OL3), similarly, one question from each group questions received the lowest scores (OI 2 and OL 5). Overall, the inferential and literal question 3 from original text (OL 5) received the highest score whereas the question 5 received the lowest score (OL 3).

**Table 2:** A detailed descriptive statistics for number of correct and wrong answers and their percentages for NI questions

NI questions	Correct	Wrong	Correct Answer Percentage
NI1	16	19	45,714
NI2	9	26	25,714
NI3	18	17	51,428
NI4	11	24	31,428
NI5	13	22	37,142
NI6	11	24	31,428
NI7	18	17	51,428
NI8	25	10	71,428
NI9	9	26	25,714
NI10	9	26	25,714

Note: NI= Nativized Inferential

Table 2 presents the number of correct and wrong answers and their percentages for answers given to nativized inferential questions. Three out of 10 answers given to NI were greater than 50 percent in terms of correctness (NI3, NI7,

NL8). Interestingly, 25 out of 35 students gave correct answer to the 8<sup>th</sup> NI question. On the other hand, 7 out of 10 NI questions were answered with a lower correctness value of %50 (i1, i2, i4, i5, i6, i7, i9, i10). What is more two NI questions received the lowest correct answer percentage, in other words, only 9 students gave correct answer to each NI9 and NI10.

**Table 3:** A detailed descriptive statistics for number of correct and wrong answers and their percentages for NL questions

NL questions	Correct	Wrong	Correct Answer Percent
NL1	6	29	17,142
NL2	12	23	34,285
NL3	5	30	14,285
NL4	20	15	57,142
NL5	27	8	77,142
NL6	19	16	54,285
NL7	21	14	60,000
NL8	21	14	60,000
NL9	28	7	80,000
NL20	21	14	60,000

Note: NL= Nativized Literal

Table 3 shows that EFL students answered the fifth explicit literal question most successfully (i.e. 27 correct and 7 wrong answers). The students were least successful in answering the first and third explicit literal question. The rest of the questions were answered correctly over 50 correct answer percentage point.

**Table 4:** A detailed descriptive statistics for number of correct and wrong answers and their percentages for OI questions

OI questions	Correct	Wrong	Correct Answer Percent
OI1	8	27	22,857
OI2	21	14	60,000
OI3	18	17	51,428
OI4	7	28	20,000
OI5	11	24	31,428
OI6	10	25	28,571
OI7	13	22	37,142
OI8	23	12	65,714
OI9	11	24	31,428
OI10	6	29	17,142

Note: OI= Original Inferential

Table 4 indicates that fewer EFL students answered the first, the fourth and the tenth original inferential questions correctly. On the other hand, the correct

answer percentage in only three questions was more than 50 % (OI2, OI3, and OI8). Moreover, 7 questions were answered correctly less than 50%. Taken Table 2 and 4 together, EFL students were less successful in answering questions of original short story.

**Table 5:** A detailed descriptive statistics for number of correct and wrong answers and their percentages for OL questions

OL questions	Correct	Wrong	Correct Answer Percent
OL1	7	28	20,000
OL2	10	25	28,571
OL3	4	31	11,428
OL4	20	15	57,142
OL5	32	3	91,428
OL6	19	16	54,285
OL7	18	17	51,428
OL8	26	9	74,285
OL9	28	7	80,000
OL10	18	17	51,428

Note: OL= Original Literal

Table 5 shows that fewer students answered the first and the third question correctly. Interestingly, the fifth question was answered correctly with a high rate (91, 428 %); only three students gave wrong answer to this question. Further, seven questions were answered correctly over 50 %.

### 4.3. Inferential Statistical Results

Paired sample *t*-tests for the nativized and original reading test scores assigned to 35 EFL students for each version of the reading texts story (e.g. original and nativized version) were conducted. These analyses were done to investigate if there was a significant mean score difference between the scores assigned to 70 EFL students' responses to nativized and original reading comprehension questions. Tables 6, 7, 8 and 9 show the results.

Table 6: Paired Sample t-tests results for answers given to NI and OI MC questions

		Paired Samples Test			df	Sig. (2-tailed)
		Mean Difference	Std. D.	Std. Error Mean		
Pair 1	NI1 - OI1	-,22857	,73106	,12357	34	,073
Pair 2	NI2 - OI2	,34286	,68354	,11554	34	,005**
Pair 3	NI3 - OI3	,00000	,68599	,11595	34	1,000
Pair 4	NI4 - OI4	-,11429	,67612	,11429	34	,324
Pair 5	NI5 - OI5	-,05714	,53922	,09114	34	,535
Pair 6	NI6 - OI6	-,05714	,63906	,10802	34	,600
Pair 7	NI7 - OI7	-,11429	,63113	,10668	34	,292
Pair 8	NI8 - OI8	-,05714	,72529	,12260	34	,644
Pair 9	NI9 - OI9	,54286	,56061	,09476	34	,000**
Pair 10	NI10 - OI10	,25714	,70054	,11841	34	,037**

*Note:* \*\* indicates significant difference at the .05 level; NI: Nativized inferential score; OI: original inferential score, MC=Multiple Choice.

As Table 6 shows, for the answers given to inferential multiple-choice questions, there was a significant difference between the nativized and original scores for the three questions (pair 2= 0,05; pair 9= 0,000; pair 10= 0,037,  $p < .05$ ).



Table 7: Detailed descriptive statistics for the paired sample t-tests

Paired Samples Statistics					
		Mean	N	Std. D.	Std. Error Mean
Pair 1	NI1	1,5429	35	,50543	,08543
	OI1	1,7714	35	,42604	,07201
Pair 2	NI2	1,7429	35	,44344	,07495
	OI2	1,4000	35	,49705	,08402
Pair 3	NI3	1,4857	35	,50709	,08571
	OI3	1,4857	35	,50709	,08571
Pair 4	NI4	1,6857	35	,47101	,07961
	OI4	1,8000	35	,40584	,06860
Pair 5	NI5	1,6286	35	,49024	,08287
	OI5	1,6857	35	,47101	,07961
Pair 6	NI6	1,6571	35	,48159	,08140
	OI6	1,7143	35	,45835	,07748
Pair 7	NI7	1,4857	35	,50709	,08571
	OI7	1,6000	35	,49705	,08402
Pair 8	NI8	1,2857	35	,45835	,07748
	OI8	1,3429	35	,48159	,08140
Pair 9	NI9	1,7429	35	,44344	,07495
	OI9	1,2000	35	,40584	,06860
Pair 10	NI10	1,7429	35	,44344	,07495
	OI10	1,4857	35	,50709	,08571

*Note:* NL: nativized literal score; OL: original literal score.

Table 7 indicates that the nativized inferential scores for these questions received were significantly higher than their original versions received (NI= 1,7429, OI= 1,400 for Pair 2; NI=1,7429, OI=2,200 for Pair 9 and NI=1,7429, OI= 1,4857 for Pair 10). For all other questionS, there was no significant mean score difference between scores assigned to nativized and original versions of the inferential reading comprehension test questions.

Table 8: Paired Sample t-tests for answers given to NL and OL MC Questions

		Paired Samples T-Test		t	df	Sig. (2-tailed)
		Mean	Std. D.			
Pair 1	NL1 - OL1	,02857	,51368	,329	34	,744
Pair 2	NL2 - OL2	-,05714	,63906	-,529	34	,600
Pair 3	NL3 - OL3	-,02857	,51368	-,329	34	,744
Pair 4	NL4 - OL4	,00000	,68599	,000	34	1,000
Pair 5	NL5 - OL5	,14286	,49366	1,712	34	,096
Pair 6	NL6 - OL6	,00000	,76696	,000	34	1,000
Pair 7	NL7 - OL7	-,11429	,75815	-,892	34	,379
Pair 8	NL8 - OL8	,17143	,66358	1,528	34	,136
Pair 9	NL9 - OL9	,00000	,64169	,000	34	1,000
Pair 10	NL10 - OL10	-,08571	,78108	-,649	34	,521

Note: NL: Nativized literal score; OL: Original literal score, MC=Multiple Choice.

Table 8 presents different results for the answers given to literal multiple choice questions, there was no significant difference between the nativized and original scores for all the questions.

Table 9: Detailed descriptive statistics for paired sample t-tests

		Paired Samples Statistics		
		Mean	N	Std. D.
Pair 1	NL1	1,8286	35	,38239
	OL1	1,8000	35	,40584
Pair 2	NL2	1,6571	35	,48159
	OL2	1,7143	35	,45835
Pair 3	NL3	1,8571	35	,35504
	OL3	1,8857	35	,32280
Pair 4	NL4	1,4286	35	,50210
	OL4	1,4286	35	,50210
Pair 5	NL5	1,2286	35	,42604
	OL5	1,0857	35	,28403
Pair 6	NL6	1,4571	35	,50543
	OL6	1,4571	35	,50543
Pair 7	NL7	1,3714	35	,49024
	OL7	1,4857	35	,50709
Pair 8	NL8	1,4286	35	,50210
	OL8	1,2571	35	,44344
Pair 9	NL9	1,2000	35	,40584
	OL9	1,2000	35	,40584
Pair 10	NL10	1,4000	35	,49705
	OL10	1,4857	35	,50709

Table 9 indicates that only one nativized inferential score for these questions was higher than the score its original version received (NI= 1,2286, OI= 1,0857 for Pair 5). For all questions, there was no significant mean score difference between scores assigned to nativized and original versions of the literal reading comprehension test questions.

Overall, although there was no significant difference for the literal scores obtained from ratings of the original and nativized multiple-choice test questions the inferential statistical results and the descriptive statistical results confirmed that nativized and original reading test scores yielded different results for at least inferential score; and therefore, the nativization of both reading text and its test questions had much impact on the EFL students' reading comprehension.

## **CHAPTER FIVE: CONCLUSION AND DISCUSSION**

### **5.1. Introduction**

This chapter summarizes and discusses the main findings. Then, conclusions based on these findings are provided. The next section of this chapter (Section 5.2) overview the research questions followed by briefly describes the quantitative method used in this study. Following section (5.3) summarizes and discusses the major findings obtained from quantitative data analyses. Section 5.4 provides limitations of the study. Finally Section 5.5 discusses the conclusions obtained and give implications for practice in light of the limitations.

### **5.2. Summary of Methods and Findings Responding to Research Questions**

This study used quantitative method research approach to examine the effect of nativization on the inferential and literal reading comprehension by undergraduate EFL students at a Turkish university. In this sense, the research questions focus on how and to what extent a ‘nativized’ version of an original native text would contribute to the reading comprehension when compared to an L2 text which includes socially distant cultural norms from readers’ own culture. Therefore, the L2 text was aligned with EFL students’ own culture. The data preparation includes four main steps.

The first step involves the selection and preparation of the reading tasks. A short story was selected as an instrument. Following that, multiple-choice test items were prepared to examine comprehension. The story is an autobiography focuses on struggles including financial and social problems the immigrants in America experience. The reading task that may extract the biases of the readers used in the study was a text reflecting American cultural norms. The reason of selecting this story as the instrument as follows: first, such short stories were nativized for research purposes in former studies (i.e. Alptekin, 2006, Erten & Razi, 2009); second, selecting such a story enables reader to comprehend the common theme; third, the context of the story is culturally isolated from readers’ own culture; therefore, the adaptation of the context is possible for Turkish learners of English; fourth, the story has “a universally comprehensible theme” and “a culturally unfamiliar social context

which lends itself to adaptation for the Turkish readership”, fifth, Turkish speakers of English can “activate their abstract schemas” based on such a universal theme; finally, the cultural adaptation of the theme to Turkish culture may help the readers to form “conceptual links between their culture-based reality and that of the story writer” (Alptekin, 2006). The subsequent process was the task preparation in which the original story was nativized through textual and contextual adaptations and adjustments. Textual adaptations refer to the substitutions of names of locations, characters, occupations, goods and others for Turkish equivalents; on the other hand, contextual adaptations are processed according to Adaskou et al’s (1990) the four dimensions of culture: a) aesthetic dimension that is directly related to literary aspects of culture; however, this step is excluded as it is out of the focus of this study, b) sociological dimension in which there are culture-specific contextual cues of customs and rituals that are nativized, c) semantic dimension of the text in which conceptual and lexical changes such as food, currency, clothes, drinks, foods, institutions, and others are undergone nativization, d) the pragmatic dimension of the text that refers to the substitution of readers own cultural values for American cultural values (cited in Alptekin, 2006, p.500).

The second step involves sampling procedure. Thirty-five volunteer Turkish-speaking EFL students in each group (e.g. original text group and nativized text group) served as the participants of this study. Totally 70 EFL undergraduate level English majoring students participated in the study voluntarily. They were selected through convenience sampling from about 300 EFL majors studying at Atatürk University in Erzurum, Turkey, one of the Turkish state universities. Their levels of proficiency in English were assumed to be similar at the time of the study. The participants’ ages ranged from 18 to 22. The 70 participants were randomly assigned in to two groups, and in each group there were 35 roughly homogenous participants in terms of English proficiency level. The control group consisted of 28 females and 7 males; the experimental group consisted of 30 females and 5 males.

Third step involves development of test items. The researcher developed most of the MC questions and some of the questions were adopted from former studies (e.g. Alptekin, 2006). The items of the MC achievement test were redeveloped after doing a literature review in the reading comprehension field. Furthermore, a checklist was used to assess the conformity between test items and targeted issues, and among

the distracters, options and stems and others. Totally 20 MC questions were divided into two sets. The first set of ten questions aimed at assessing participants' literal understanding and the next set of 10 questions aimed at assessing participants' inferential understandings. The reading comprehension test for EFL students were piloted to assess the difficulty of test items through giving the MC questions to a sample group consisting of 6 L2 readers who score similar level of language proficiency and the test items were adjusted.

The last step involves administration of the test and data analyses. Based on the purpose of the study, a quantitative research design was applied. Quantitatively, ten literal and ten inferential multiple-choice (MC) questions based on original text and nativized version were answered by the 70 participants. The same test consisting of two types of questions (e.g. inferential and literal MC questions) was given to two group participants with an equal number of inferential and literal MC questions. A fifty-minute time was allotted to the testees to complete the task. Participants were not allowed to use dictionary. Each correct answer was rated and the points were analyzed statistically using SPSS software. The differences among the mean scores were analyzed to assess the performance of groups in terms of the effects of nativization and the original text. Paired samples t-tests were conducted to assess homogeneity of variances to see the difference between groups. Furthermore, both the equivalency of both two groups' proficiency levels and the effect size of the readers' familiarity with the cultural content of the text on their comprehension were statistically analyzed depending on the distribution of the Levene statistics.

### **5.3. Summary and Discussion of Findings**

Section 5.2 of this final of the thesis summarizes and discusses the findings of the study. Based on the quantitative nature of the study, results obtained from the empirical data are summarized and discussed in accordance with the research questions. The quantitative findings include descriptive statistics and inferential statistics.

Two research questions addressed in this study are:

1. Does nativized version (culturally nativized) of an American cultural short story affect EFL learners' inferential and literal comprehension in L2 reading?

2. Do the group participants who take nativized version of the story outperform those who read the original story by themselves?

### **5.3.1. The discussion of the findings responding to research question 1: Does nativized version (culturally nativized) of an American cultural short story affect EFL learners' inferential and literal comprehension in L2 reading?**

The descriptive statistics for the answers provided to the Nativized Inferential, Nativized Literal, Original Inferential, Original Literal questions showed that 3 out of 10 inferential questions received the highest scores (Nİİ 2, 9, 10). On the other hand, for the original text, the results show that only one question out of 10 inferential and 10 literal questions received the highest score (Oİİ 10 and OİL3). This results are in line with former research (Ajideh, 2003, Erten & Razi, 2009, Alptekin, 2006; Johnson, 1982). As described by Alptekin (2006) while processing texts, readers engage in two types of comprehension: literal comprehension and inferential comprehension. Inferential comprehension requires higher-level cognitive processing of understanding what a text really says and what it is about. Smith (1994) describes that “everything we know and believe is organized in a theory of what the world is like, a theory that is the basis of all our perceptions and understanding of the world, the root of all learning, the source of hopes and fears, motive and expectancies, reasoning and creativity” and “if we make sense of the world at all, it is by interpreting our interactions with the world in the light of our theory” the theory is “our shield against bewilderment” (p.8). Based on the schemata theory, several researchers have investigated association of pre-existing knowledge in a reader's mind with the reading text (e.g. Ajideh, 2003; Alderson, 2000; Alptekin, 2006; Anderson, 1999; Carrell, 1983; Carrell & Eisterhold, 1983; Clarke, 1980; Erten & Razi, 2009; Eskey, 2005; Grabe & Stoller, 2002; Oller, 1995). During the reading process of a text, readers interrelate the information from the text into their schemata. In this context, through the analysis of the words and sentences by relating readers' own background, meaning of a text is acquired; further, the factor affecting readers' background is, in essence, ‘culture’ (Reynolds, Taylor, Steffensen, Shirey, & Anderson, 1982; p.354). Therefore, to explore the effects of cultural schemata in comprehension of a text by L2 readers, nativization processes in inferential reading gain importance in this study. As a result, this study has proved that nativization

affected EFL students' success in their inferential reading comprehension. There are several reasons for these: first the students could use their content schema effectively because they became more familiar with "the subject matter of the text" and they could easily understand "the topic of the text and the cultural-specific elements needed to interpret it" (Al-Issa, 2006, p.42). Second, they culturally oriented to the reading text after the nativization (Al-Issa, 2006). Third, there was little discrepancy or incongruity between readers' cultural background and the cultural text after the nativization (Carrell and Eisterhold , 1983). This result is confirmed by the former studies (e.g. Alptekin, 2006, Erten & Razi, 2009; Johnson, 1982). For example, Johnson (1982) found that "a text on a familiar topic is better recalled by ESL readers than a similar text on an unfamiliar topic" (cited in Carrell and Eisterhold (1983, p.561); on the other hand, Hudson (1982) found that there were "the facilitating effects on comprehension of explicitly inducing content schemata through pre-reading activities, especially at the beginning and intermediate proficiency levels, as compared to two other methods of inducing content schemata (through vocabulary activities and read-reread activities)" (cited in Carrell and Eisterhold (1983, p.561). Further, Alderson and Urquhart (1983) found "a discipline-specific effect of content background knowledge in measuring reading comprehension in ESP/EST" (Carrell & Eisterhold, 1983, p.561). Next, in 1979, Steffensen, Joag-Dev and Anderson examined the effect of cultural closeness on reading comprehension, the results showed that when students recalled information about a culturally unfamiliar text, they tend to "distort information and insert ideas from their own culture to overcompensate for absent schemata" and they were also found to "elaborate the passages related to their own cultural experiences, and to read them faster" (Al-Issa, 2006, pp.42-43). Another research was carried out by Koh in 1986 who related "understanding to the reader's prior knowledge" and the results of this study showed that "a combination of linguistic proficiency and prior knowledge is important for comprehension" (Al-Issa, 2006, p.43). As a result, it was found that nativization of an L2 text may foster understanding for it creates more authentic milieu as Oller (1995) argues that when readers encounter materials that involve persons, events, places, and sociocultural relations from their own real life, it is probable for them to identify themselves and find some common ground (p.297).



### **5.3.2. The discussion of the findings responding to research question 2: Do the group participants who take nativized version of the story outperform those who read the original story by themselves?**

Paired sample *t*-tests for the nativized and original reading test scores assigned to 35 EFL students for each version of the reading texts story (i.e. original and nativized version) were conducted. These analyses were done to investigate if there was a significant mean score difference between the scores assigned to 35 EFL students' responses to nativized and original reading comprehension questions.

There was a significant difference between the nativized and original scores for the three questions (pair 2= 0,05; pair 9= 0,000; pair 10= 0,037,  $p < .05$ ) in the inferential multiple choice questions. The nativized inferential scores received for these questions were significantly higher than their original versions received (NII= 1,7429, OII= 1,400 for Pair 2; NII=1,7429, OII=2,200 for Pair 9 and NII=1,7429, OII= 1,4857 for Pair 10). For all other questions, there was no significant mean score difference between scores assigned to nativized and original versions of the inferential reading comprehension test questions.

On the other hand, for literal multiple choice questions, there was no significant difference between the nativized and original scores for all the questions. Only one nativized inferential score received for these questions were higher than its original version received (NIL= 1,2286, OIL= 1,0857 for Pair 5). For all questions, there was no significant mean difference between scores assigned to nativized and original versions of the literal reading comprehension test questions.

Largely, although there was no significant difference for the literal scores obtained from ratings of the original and nativized multiple choice test questions, the inferential statistical results and the descriptive statistical results confirmed that nativized and original reading test score yielded different results for at least inferential score; and therefore, the nativization of both reading text and its test questions had much impact on the EFL students' reading comprehension.

The results of these study related to inferential comprehension level were in line with the empirical studies carried out before, as stated above. Moreover, the results related to literal understanding were also confirmed by former studies (Alptekin, 2006).

This study showed that nativization did not affect EFL students' literal understanding as there were no significant difference between the original text group and nativized text group.

Chen (2011) describes that “to achieve reading comprehension, readers must concurrently process different levels of the text. *Reading the line* refers to a basic literal comprehension by using fundamental knowledge of a given language to understand the surface concept that the writers try to convey to readers. “*Reading between the lines* involves background knowledge to comprehend the text (p.32)”. As stated by Gray (1960) “a good reader should be able to read the lines, as well as between the lines simultaneously (Chen, 2011, p.32). Further Chou (2011) argues that “the more vocabulary students know, the better they can decode and understand what they read whereas background knowledge helps students make successful inferences” (p.108).

Chen (2011) examined the impact of EFL students' vocabulary extensiveness on literal reading comprehension. This empirical study suggested that vocabulary breadth of knowledge was positively and significantly correlated to literal reading comprehension. In the same line, as the results of this thesis suggest that literal understanding of a reading text mostly depends on EFL students' vocabulary knowledge base rather than text nativization. This is confirmed by Chou (2011) who investigated the effects of vocabulary knowledge and background knowledge on EFL reading comprehension. The participants were 159 college level Taiwanese students who took an EFL reading text. The results obtained from this empirical study showed that the participants who received a list of vocabulary to study outperformed on the reading comprehension test than the participants who relied on background knowledge.

#### **5.4. Limitations of the Study**

There are four limitations that need to be acknowledged and addressed regarding the present study. The first limitation concerns the type of the reading task. The research literature has shown that the sub-skills and text types affect reader performance considerably (Lumley, 1993, Dennis, 1982 cited in Shin, 2002). Therefore, the obtained in this study may deviate when different types of reading

texts are used. This study was designed to examine the effect of cultural familiarity on EFL reading comprehension. For this purpose, the text used in the study includes cultural norms of target culture. However, different cultural texts may yield different results. Further, the researcher did adaptations of these cultural norms to L1 culture and alternative adaptations from both students and other teachers were not considered in the process of adaptation of the text.

Second, the groups that include third year EFL students were randomly divided. A pretest on participants' reading skills could be used to homogenize the groups. More reliable results could be obtained if standardized tests (e.g. Michigan Proficiency, TOEFL, and IELTS) were used as pretest before assigning students to the groups. As stated by Erten and Razi (2009), previous research also focused on internal factors such as motivational and attitudinal factors and their relations to reading comprehension. However, these factors were not in the scope of this present study.

Third, a small number of participants voluntarily took part in this study. The result could be different if the test were implemented under exam conditions to a larger number of participants.

Finally, this study used only quantitative research design. If the data was triangulated through collecting qualitative data to examine readers' behaviours while comprehending the text (e.g. open-ended question, interviews and verbal protocols), more reliable and detailed results could be reached.

## **5.5. Conclusions**

This study reached the following conclusions. Firstly, EFL students' inferential reading comprehension level is relevant to the cultural similarity of the reading text and cultural norms. On the other hand, literal understanding is not directly relevant to the cultural similarity or distance of the text. It can be suggested that there is an important difference between a situation in which readers from distinctly different "national cultures" interpret a text in different ways and situations in which readers from different "subcultures" within the same country interpret a text in different ways (Reynolds, Taylor, Steffensen, Shiry, & Anderson, 1981, p.5). Second, although the nativization or cultural adaptation of the text is important in

itself, it must be noted that they work harder or longer on the text and so understand it better. Finally, cultural adaptation of a text that includes target language cultural norms into native culture may help EFL readers to activate their schemata and facilitate reading comprehension.

## REFERENCES

- Adaskou, K., Britten, D., Fahsi, B. (1990). "Design Decisions on the Cultural Content of a Secondary English Course for Morocco". **ELT Journal**, 44, pp.3-10.
- Ahmadi,A., & Mansoordehghan, S. (2012). Comprehending a Non-text: A Study of Gender-based Differences in EFL Reading Comprehension. **Journal of Language Teaching and Research**, 3( 4), pp.761-770
- Ajideh, P. (2003). "Schema theory-based pre-reading tasks: A neglected essential in the ESL reading class". **The Reading Matrix**, 3 (1), pp.1–14.
- Al-Issa, A. (2006). "Schema Theory and L2 Reading Comprehension: Implications for Teaching". **Journal of College Teaching & Learning**, 3(7), pp.41-48.
- Alderson, J.C. (2000). **Assessing Reading**. Cambridge, England: Cambridge University Press.
- Alptekin, C. (2006). "Cultural Familiarity in Inferential and Literal Comprehension in L2 Reading". **System**, 34(4), pp.494–508.
- Anderson, N. J. (1999). **Exploring Second Language Reading**. Boston, MA: Heinle & Heinle.
- Baleghizadeh, S., & Golbin, M. (2010). "The Effect of Vocabulary Size on Reading Comprehension of Iranian EFL Learners". **Linguistic and Literary Broad Research and Innovation**, 1(2), pp.33-46.
- Carrell, P.L. & Eisterhold, J.C. (1983). "Schema Theory and ESL Reading Pedagogy". **TESOL Quarterly**, 17(4), 553-573.
- Carrell, P.L. (1983). "Some issues in studying the role of schemata, or background knowledge, in second language comprehension". *Paper presented at the 17th Annual TESOL Convention, Toronto, Ontario, March 16th 1983.*
- Carrell, P.L., & Floyd, P. (1989). "Effects on ESL Reading of Teaching Cultural Content Schemata". **Language Learning**, 37, pp.88–108.
- Chen, K.Y. (2011). "The Impact of EFL Students' Vocabulary Breadth of Knowledge on Literal Reading Comprehension". **Asian EFL Journal**, 51, pp.30-40.
- Chou, P.T.M. (2011). "The Effects of Vocabulary Knowledge and Background Knowledge on Reading Comprehension of Taiwanese EFL Students". **Electronic Journal of Foreign Language Teaching**, 8(1), pp.108-115

- Clarke, M. (1980). "The Short Circuit Hypothesis of ESL Reading: When Language Competence Interferes with Reading Performance". **The Modern Language Journal**, 64, pp.114-124.
- Erten, İ.H., Razi, S. (2009). "The Effects of Cultural Familiarity on Reading Comprehension". **Reading in a Foreign Language**, 21(1), pp.60-77.
- Eskey, D.E. (2005). "Reading in Second Language. In E. Hinkel (Ed.)", **Handbook of Research in Second Language Teaching and Learning** (pp.563–579). Mahwah, NJ: Erlbaum.
- Fuenzalida, C.M. (undated). "Reading Comprehension Learning Strategies: An Attempt to Guide 4th Grade Students to Learn Some Strategies for Interpreting Written Pieces of Discourse in EFL Lessons". *Research Project retrieved on 10.08.2012 from [http://blogs.funiber.org/formacion-profesores/files/2011/09/Memoria\\_Constanza-Fuenzalida.pdf](http://blogs.funiber.org/formacion-profesores/files/2011/09/Memoria_Constanza-Fuenzalida.pdf)*
- Farvardin, M.T., & Biria, R. (2011). "Textual Glosses, Text Types, and Reading Comprehension". **Theory and Practice in Language Studies**, Vol. 1, No. 10, pp. 1408-1415.
- Garner, R. (1987). **Metacognition and Reading Comprehension**. Norwood, N.J: Ablex Publishing Co.
- Goodman, K.S. (1970). "Reading: A Psycholinguistic Guessing Game. In H. Singer & R.B. Ruddell (Eds.)", **Theoretical Models and Processes of Reading** (pp. 259–272). Newark, DE: International Reading Association.
- Grabe, William. (1991). "Current Developments in Second Language Reading Research". **TESOL Quarterly**. 25 (3), pp.375-406.
- Grabe, W., & Stoller, L.F. (2002). **Teaching and Researching Reading**. Harlow, England: Pearson Education.
- Hudson, T. (1982). "The Effects of Induced Schemata on the "Short Circuit" in L2 Reading: Non-decoding Factors in L2 Reading Performance". **Language Learning**, 32(1), pp.1–131.
- Gilakjani, A.P. & Ahmadi, S.M. (2011). "The Relationship Between L2 Reading Comprehension and Schema Theory: A Matter of Text Familiarity". **International Journal of Information and Education Technology**, 1 (2), pp.142-149.
- Johnson, P. (1981). "Effects on Reading Comprehension of Language Complexity and Cultural Background of a Text". **TESOL Quarterly**, 15(2), pp.169–181.

- Johnson, P. (1982). "Effects on Reading Comprehension of Building Background Knowledge". **TESOL Quarterly**, 16(4), pp.503–516.
- Keshavarz, M.H. ,Atai, M.R. & Ahmadi, H. (2007). "Content Schemata, Linguistic Simplification, and EFL Readers' Comprehension and Recall". **Reading in a Foreign Language**, 19(1), pp.19-33
- Kintsch, W., & Greene, L. (1978). "The Role of Culture-specific Schemata in the Comprehension and Recall of Stories". **Discourse Processes**, 1(1), pp.1-13.
- Krashen, S. (1981) **Second Language Acquisition and Second Language Learning**. Oxford: Pergamon Press.
- Krashen, S.D., & Terrel, T .D. (1983) **The Natural Approach: Language Acquisition in the Classroom**. Oxford and San Francisco: Pergamon, Almany.
- Krashen, S.D. (1982). **Principles and Practice in Second Language Acquisition**.Oxford: Pergamon.
- Krashen, S.D. (1985). **The Input Hypothesis: Issues and Implications**. Harlow: Longman.
- Krashen, S.D. (1994). "The Input Hypothesis and Its Rivals. In N. Ellis (Ed.)", **Implicit and Explicit Learning of Languages** (pp. 45–77). New York: Academic Press.
- Li., Z. (2006). "The Psycholinguistic Schema Theory and ESL Reading Methodology". **CELEA Journal**, 29(3), pp.94-97.
- Maleki, Z., & Pazhakh, A. (2012). "The Effects of Pre-modified Input Interactionally Modified Input, and Modified Output on EFL Learners' Comprehension of New Vocabularies". **International Journal of Higher Education**, 1(1), pp.128-137.
- Maxwell, S. (2011). "The Effects of Two Types of Text Modification on English Language Learners' Reading Comprehension: Simplification Versus Elaboration". *Unpublished MA thesis, Hamline University, Saint Paul, Minnesota*
- Mihara, K. (2011). "Effects of Pre-Reading Strategies on EFL/ESL Reading Comprehension". **TESL Canada Journal/ Revue TESL Du Canada**, 28(2), pp.51-73

- Minsky, M.A. (1975). "A Framework for Representing Knowledge. In P.H. Winston (Ed.)", **The Psychology of Computer Vision** (pp.211–277). New York: McGraw- Hill.
- Nassaji, H. (2002). "Schema Theory and Knowledge-based Processes in Second Language Reading Comprehension: A Need for Alternative Perspectives". **Language Learning**, 52 (2), pp.439–481.
- Pettit, N. T. & Cockriel, I. W.(1974). "Inferential Reading Comprehension Test: A Factor Study of the Literal Reading Comprehension Test and the Inferential Reading Comprehension Test". **Journal of Literacy Research**, 6(63), pp.63-75.
- Reynolds, R.E., Taylor, M. A., Steffensen, M.S., Shirey, L., & Anderson, R.C. (1981). "Cultural Schemata and Reading Comprehension". *Technical Report No. 201. Center for the Study of Reading. University of Illinois at Urbana-Champaign.*
- Reynolds, R.E, Taylor, M.A., Steffensen, M.S., Shirey, L., & Anderson, R.C. (1982). "Cultural Schemata and Reading Comprehension". **Reading Association**, 17 (3), pp.353–366.
- Riley, G. L. (1993). "A Story Structure Approach to Narrative Text Comprehension". **The Modern Language Journal**, 77(4), pp.417-430.
- Rumelhart, D.W., & Ortony, A. (1977). "The Representation of Knowledge in Memory. In R.C Anderson, R.J. Spiro, & W.E. Montague (Eds.)". **Schooling and the Acquisition of Knowledge** (pp 99-136). Hillsdale, N.J Lawrence Erlbaum Associates.
- Rumelhart, D.W. (1980). "Schemata. The Building Blocks of Cognition. In R.J. Spiro, B.C. Bruce, & W.F Brewer (Eds.)", **Theoretical Issues in Reading Comprehension**. (pp. 33-57). Hillsdale, N.J: Lawrence Erlbaum Associates.
- Scaremento State University. "Schema Theory". *Retrived on August, 7, 2012 from <http://www.csus.edu/indiv/g/gipej/teaparty.pdf>*
- Schank, R.C. (1982). **Dynamic Memory: A Theory of Reminding and Learning in Computers and People**. New York: Cambridge University Press.
- Sarab, M.R.A., & Karimi, M. (2008). "The Impact of Simplified and Interactionally Modified Input on Reading Comprehension of Iranian EFL Learners". **Human Sciences**, 56, pp. 29 – 42.



- Schank, R.C., & Abelson, R.P. (1977). **Scripts, Plans, Goals, and Understanding**. Hillsdale, NJ: Erlbaum.
- Shin, S. (2002). "Effects of Subskills and Text Types on Korean EFL Reading Scores". **Second Language Studies**, 20(2), pp. 107-130.
- Smith, F. (1994). **Understanding Reading** (5th ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- State College of Florida. "Principles of Reading Instruction". *Retrieved on 09.08.2012 from faculty.scf.edu/sharric/lesson2/lesson2topic2.htm*
- Steffensen, M.S., Joag-dev, C., & Anderson, R.C. (1979). "A Cross-cultural Perspective on Reading Comprehension". **Reading Research Quarterly**, 15(1), pp. 10–29.
- Thorndyke, P.W. (1977). "Cognitive Structures in Comprehension and Memory of Narrative Discourse". **Cognitive Psychology**, 9(1), pp. 77-110.
- Vocca, R.T. & Vocca, J.L. (1999). **Content Area Reading: Literacy and Learning Across the Curriculum** (6<sup>th</sup> Ed.). New York: Longman.
- Zhou, L. (2008). "Effects of Reading Tasks on Chinese EFL Students' Reading Comprehension". *Unpublished PhD Dissertation, Suranaree University of Technology*.
- Zhang, X. (2008). "The Effects of Formal Schema on Reading Comprehension—An Experiment with Chinese EFL Readers". **Computational Linguistics and Chinese Language Processing**, 13(2), pp.197-214.

## APPENDICES

### Appendix A: Sample of Multiple-Choice Questions for Nativized Version of the American Short Story

They reach the avenue, and the street-car leisurely arrives. They are going to Büyük Island this afternoon. My mother has made up her mind to indulge only in a walk on the boardwalk and a pleasant dinner, avoiding the riotous amusements as being beneath the dignity of so dignified couple.

1. What seems to make the narrator's mother refrain from hilarious amusements?
  - a. They aren't convenient for noble couple.
  - b. She is frightened of noisy environment.
  - c. She considers them quite dull.
  - d. They are attractive for dignified couple.

My father has chosen to take this long walk because he likes to walk and think. He thinks about himself and his visit, getting the utmost enjoyment out of this Bayram and so arrives at the place he is to visit in a mild state of exaltation.

2. What does the narrator's father prefer to do in the days of Bayram?
  - a. He stays at home with his family.
  - b. He choose take long walk and visit the places.
  - c. He prefers to go to house in which Bayram meal is eaten.
  - d. He prefers to get enjoyment with his relatives.

## **Appendix B: Sample of Multiple-Choice Questions for Original Version of the American Short Story**

But the photographer is not satisfied with their appearance. He feels with certainty that somehow there is something wrong in their pose. He explains that he has ride, he is not interested in all of this for the money, and he wants to make beautiful pictures.

1. According to the narrator, why the photographer wants to make nice pictures?
  - a. He hopes a great popularity for himself.
  - b. He is keen on much money.
  - c. He considers photography as a valuable art.
  - d. The narrator's father is too meticulous.

As their dinner goes on, my father tells of his plans for the future and my mother shows with expressive face how interested she is, and how impressed. My father becomes exultant, lifted up by the waltz/music that is being played, and his own future begins to intoxicate him. My father tells my mother that he is going to expand his business, for there is a great deal of money to be made.

2. What causes the narrator's father to feel so exultant at the dinner table?
  - a. The waltz/The music
  - b. His present business
  - c. The woman he is to marry
  - d. Money

### **APPENDIX C: Sample of the Original American Short Story**

My father walks from street to street of trees, lawns and houses, once in a while coming to an avenue on which a streetcar skates and gnaws, slowly progressing. The conductor, who has a handle-bar moustache, helps a young lady wearing a hat like a bowl with feathers on to the car. She lifts her long skirts slightly as she mounts the steps. He leisurely makes change and rings his bell. It is obviously Sunday, for everyone is wearing Sunday clothes, and the street-car's noises emphasize the quiet of the holiday. Is not Brooklyn the City of Churches? The shops are closed and their shades drawn, but for an occasional stationery store or drug-store with great green balls in the window.

My father has chosen to take this long walk because he likes to walk and think. He thinks about himself in the future and so arrives at the place he is to visit in a state of mild exaltation. He pays no attention to the houses he is passing, in which the Sunday dinner is being eaten, nor to the many trees which patrol each street, now coming to their full leafage and the time when they will room the whole street in cool shadow. An occasional carriage passes, the horse's hooves falling like stones in the quiet afternoon, and once in a while an automobile, looking like an enormous upholstered sofa, puffs and passes.

#### **APPENDIX D: Sample of the Nativized American Short Story**

My father walks from street to street of shops, cafes, and cinemas, once in a while coming to an avenue on which a streetcar skates and gnaws, progressing slowly. The ticket collector, who has a long and curved moustache, helps a young lady wearing a hat like a feathered bowl onto the car. He leisurely makes change and rings his bell as the passengers mount the car. It is obviously Bayram, for everyone is wearing Bayram clothes and the streetcar's noises emphasize the quiet of the holiday (Istanbul is said to be the city of mosques). The shops are closed and their shades drawn but for an occasional candy store or pastry shop with great red candied apples in the window.

My father has chosen to take this long walk because he likes to walk and think. He thinks about himself and his visit, getting the utmost enjoyment out of this Bayram and so arrives at the place he is to visit in a mild state of exaltation. He pays no attention to the houses he is passing, in which the Bayram meal is being eaten, nor to the many shops which line each street. An occasional carriage passes, the horses' hooves falling like stones in the quiet afternoon, and once in a while an automobile, looking like an enormous upholstered sofa, puffs and passes.

## **CURRICULUM VITAE**

He was born in Erzurum, in 1979. In 2001, he graduated from the English Language and Literature Department of Faculty of Arts and Sciences at Ataturk University. In the same year, he began to work as an English teacher in Erzurum at the Ministry of Education and he worked for seven years. In 2008 he commenced his academic career as a lecturer at the School of Foreign Languages of Ataturk University. He embarked on his MA education at the English Language and Literature Department at Kafkas University in Kars, in 2010. His research interests are academic reading and applied linguistics.