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İngilizce'yi Yabancı Dil Olarak Öğrenen Türk Öğrencilerin Ana Dil ve İkinci Dil'de Okuma Stratejilerini Kullanmaları Üzerine Tanımlayıcı Bir Çalışma

A Descriptive Analysis of Strategy Use in L1 and L2 Reading by Turkish EFL Learners

Osman ÖNCÜ

(Yüksek Lisans Tezi)

Eskişehir 1998

ANADOLU ÜNİVERSİTESİ

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ANADOLU ÜNİVERSİTESİ

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Bu çalışma İngilizce'yi yabancı dil olarak öğrenen Türk öğrencilerin, ana dil ve ikinci dil arasında okuma stratejilerini kullanış farklılıklarını araştırmaktadır. Bunun yanında, dünya bilgisinin, ana dil ve ikinci dilde okuma stratejilerinin kullanımı üzerine etkileri de göz önüne alınmaktadır.

Bu amaçla, 86 birinci sınıf üniversite öğrencisi arasından 28 öğrenci bu çalışmanın denekleri olarak seçilmiştir. Çalışma, Tokat Gaziosmanpaşa Üniversitesi, Ziraat Fakültesi'nde uygulanmıştır. Seçim işlemi bir seviye tespit sınavı içermektedir. Seçilen öğrencilerin İngilizce düzeyleri başlangıç (*beginner*) seviyesindedir. Veri toplama aşamasında denekler iki İngilizce, iki Türkçe olmak üzere dört metin okumuşlardır.

Metinlerin ikisi (bir Türkçe, bir İngilizce) deneklere tanıdık, diğer ikisi (bir Türkçe, bir İngilizce) deneklere tanıdık olmayan konulara sahiptir. Veri toplamak için *yüksek sesle düşünme metodu (the think aloud method)* ve iki adet *okuma stratejileri anketi (reading strategies questionnaire)* kullanılmıştır. Deneklerin ana dil ve ikinci dilde kullandıkları okuma stratejilerini ortaya çıkarabilmek için *yüksek sesle düşünme* metoduyla toplamış olduğumuz veriler bir *strateji sınıflandırma şemasına* göre sınıflandırılmıştır.

Deneklerin ana dil ve ikinci dildeki strateji kullanımları karşılaştırılmış ve sonuçta, başlangıç (*beginner*) seviyesinde, ana dil ve ikinci dilde okuma stratejilerinin kullanımı arasında dikkate değer bir farklılık olmadığı bulunmuştur. Aynı zamanda, bir metnin konusu hakkında önceden dünya bilgisine sahip olmanın da, ana dil ve ikinci dilde, okuma stratejilerinin kullanımı üzerinde bir etkiye sahip olmadığı sonucuna varılmıştır.

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ABSTRACT

This study tries to investigate the difference between the strategy use of Turkish EFL learners in L1 and L2 reading and the effect of background knowledge on the use of reading strategies in L1 and L2 reading.

To do this, 28 students among 86 first year university students were selected as the subjects of this study. The study was applied at Gaziosmanpaşa University, Agricultural Engineering Faculty in Tokat. The selection procedure included a placement test. The proficiency level of the selected subjects was beginner. The subjects read four texts (two Turkish and two English) during the sessions the data gathered. Two of the texts had familiar topics (one in Turkish and the other in English), and two of them had unfamiliar topics (one in Turkish and the other in English). The *think aloud method* and two *reading strategies questionnaires* were used to gather the data. To reveal the reading strategies the subjects used in their L1 and L2 reading, the think aloud data were classified according to a strategy classification scheme.

The strategy use of the subjects' in their L1 and L2 reading was compared and it was found that there was not a significant difference between the subjects' strategy use in their L1 and L2 reading at beginner level. It was also found that topic familiarity did not have an influence on the use of reading strategies in L1 and L2 reading.

JURİ VE ENSTİTÜ ONAYI

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Osman ÖNCÜ'yü 'A Descriptive Analysis of Strategy Use in L1 and L2 reading by Turkish EFL Learners' başlıklı tezi **27 Kasım 1998** tarihinde, yukarıdaki jüri tarafından Lisansüstü Eğitim Öğretim ve Sınav Yönetmeliğinin ilgili maddeleri uyarınca, İngiliz Dili Eğitimi Anabilim Dalında, yüksek lisans tezi olarak değerlendirilerek kabul edilmiştir.

Prof. Dr. Enver OZKALP
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CHAPTER I

INTRODUCTION

1.1 Introduction

Reading is one of the four skills in language learning and acquisition. It has been defined as a receptive skill in that the reader receives a message from a writer. Apart from learning the graphical representation of a language people mostly read for meaning. In our daily life we read several types of texts. The range of text types covers a big list from literary pieces to newspapers, school books and notice boards. For the reader, the language of a text is just a means to an end. End is comprehension (Eskey, 1986:4).

Reading comprehension has always been the focus of reading research. Comprehending a written text means relating what we do not know or new information to what we already know, that is, extracting the required information from the text as efficiently as possible (Grellet, 1985:3).

The way a person reads and his understanding of reading effect the outcome of comprehension process. The language one is reading in, one's mother tongue or foreign language, also has quite considerable effects on this process. Research on reading comprehension has studied the variables effecting the comprehension and a considerable amount of variables has been found to be effective on it. Among them the most outstanding distinction is made between the characteristics of good and poor readers.

Good readers are also proficient readers. Reader's proficiency includes not only language based knowledge (e.g. grammar, vocabulary) but also the *learning strategies*

which have been found to be effective on reading comprehension. Experiments have been conducted to see the effect of the former and the latter on reading comprehension. It has been stated that good language learners use effective strategies and that strategy use has an influence on the quality and the quantity of reading comprehension (Eskey, 1986; Grabe, 1991; Koda, 1993; Chamot, 1993).

The importance of strategy use has also been emphasized by the psycholinguistic model of reading. It has suggested that reading is an active process of comprehending and students should be taught strategies to read more effectively (e.g. guessing from context, predicting, etc.) (Grabe, 1991:377).

1.2 Background of the Study

Strategy use in L1 and L2 reading has been an important issue for the researchers. Reading research has shown that there is difference between the reading strategies of readers reading in their mother tongue and readers reading in a foreign language (Goodman, 1988; Clarke, 1988; Grabe, 1988; Grabe 1991; Block, 1992; Chamot, 1993).

For example, first language readers are faster than foreign language readers at a number of reading tasks including interpreting words and syntactic structures, anticipating sequence of words. Foreign language learners read more slowly because they need longer eye fixations to process information. So, they put overloads on their short term memories. First language readers rely on semantic structures, whereas foreign language learners rely on syntactic clues (Bowen, Madsen and Hilferty, 1985:230).

Reading, both in L1 and L2, has been discussed in terms of top-down and bottom-up models with regard to reading process (Horiba, 1990; Grabe, 1988; Eskey & Grabe 1988; Carrel & Eisterhold, 1983).

The bottom-up model of reading refers to a process in which readers mostly rely on individual words and syntactic structures to get the meaning. Most of the L2 learners feel that they have to know all the words in a text so that they can understand it better. Therefore they rely on the dictionary and are unable to transfer productive L1 strategies to L2. Consequently they attribute their difficulties to a lack of L2 proficiency (Auerbach & Paxton, 1997:238). This causes readers to focus their attention on lexical and syntactic features of a text while reading. So, they are lost in a bulk of unknown words and grammatical structures. Consequently they cannot get overall meaning of a text, because they cannot approach a text globally. When learners view reading as a sound or word centered process, they often rely on processing strategies which hinder comprehension.

On the other hand the top-down model of reading refers to a process in which readers select the most productive elements from a text so as to make sense of it.

However, none of the models, alone, has been considered sufficient enough. The importance of individual words to get the meaning cannot be overlooked. Nor can the process in which readers make use of larger units to get the overall meaning. A good reader does not avoid bottom-up skills, but they become automatic in using them. Therefore, good readers are supposed to use a mixture of both bottom-up and top-down skills. This has been called an interactive model of reading (Lynch & Hudson 1991:218-219). According to Auerbach and Paxton (ibid:238) L2 readers can compensate for a lack of English proficiency by invoking interactive strategies.

Apart from the importance of strategy use, studies on reading comprehension also present the evidence that background knowledge has an importance on reading comprehension (Adams & Bruce, 1982; Langer, 1983; Carrell & Eistherhold, 1983; Lee, 1986; Eskey, 1986). It is suggested that meaning in a text is not carried by the graphic representations. Langer (1983:150) states that

"the reader's prior knowledge permits interpretation of the author's intended message and leads to comprehension of the material. ... This suggests that for efficient text processing and successful comprehension to take place, a link with some already acquired knowledge is necessary.".

Another evidence comes from Eskey (1986:6). He states that

"better comprehension depends more on individual's world knowledge, what is sometimes called background knowledge, than his knowledge about language.".

That is, no matter how well a student may know a language, he cannot comprehend a given text if the subject of the text is one he knows nothing about. The evidence from the literature suggests that background knowledge has an importance on better comprehension of written materials. Readers comprehend a text better if they have prior knowledge about the topic of a given text.

1.3 Statement of the Problem

Reading comprehension has always been a problem for L2 learners. Especially beginner readers feel themselves insecure because of a lack of language based knowledge. When they read in their L2, they focus on the individual words and syntactic structures. They find language based knowledge an essential to get the meaning from a text. In fact the problem is that they lose the meaning while they are dealing with those language particles.

Reading for an L2 learner is not a new skill to be internalized. An L2 learner has already had an understanding of reading coming from an L1 reading background. What is new for an L2 reader is the language and its components, such as new vocabulary, a different grammatical structure, and a different written discourse. For beginner readers of an L2, these language based items become a handicap while reading an L2 text. To an extent, these language items are necessary to comprehend an L2 text. However, the dependence on

these language elements can be decreased. Studies in first language reading have shown that readers do not focus on all words and syntactic structures. Instead they approach texts globally (Bowen et al., 1985:230). Readers reading in L2 can make use of their reading abilities coming from their L1 reading background to ease reading in L2.

Reading in an L2 is also a problem for the students who learn English as a foreign language. Though they have a long background of L1 reading, they have problems related with language items when they read in L2. Thus, a study investigating the strategy use in L1 and L2 reading would contribute to the understanding of teaching reading and improving reading skills of the students.

1.4 Aim and Scope of the Study

In this study, the strategy use of Turkish EFL learners at beginner level in L1 and L2 reading will be examined. The aim of the study is to investigate the differences between L1 and L2 reading with respect to strategy use. The study also focuses on the effect of background knowledge on the use of reading strategies. That is, it is also aimed to investigate whether topic familiarity has an effect on the use of reading strategies in L1 and L2 reading.

By investigating the strategy use in L1 and L2 reading, it is aimed to contribute to a problematic area of L2 learning, such as reading comprehension. Our aim is to reveal whether learners could bring anything from their L1 reading background to their L2 reading to promote the reading process in L2. If L1 reading skills do not seem to help improve L2 reading skills, it is aimed to reveal what might be done to improve reading comprehension process in L2.

Therefore this study tries to investigate the following research questions:

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1- Do the reading strategies of Turkish EFL learners at the beginner level show any differences as a function of language ?

That is,

a. Do they use different reading strategies in their L1 and L2 reading ?

2- Do the reading strategies of Turkish EFL learners at the beginner level show any difference as a function of topic familiarity ?

That is,

a. Do they use different reading strategies when they read a Turkish text with familiar topic ?

b. Do they use different reading strategies when they read a Turkish text with unfamiliar topic ?

c. Do they use different reading strategies when they read an English text with familiar topic ?

d. Do they use different reading strategies when they read an English text with unfamiliar topic ?

1.5 Data Collection Method and Procedures

The *think aloud* method will be used to collect the data. This methodology has been used by some researchers in the studies questioning reading comprehension and strategy use of L1 and L2 readers (Horiba, 1990; Block, 1992; Vann & Abraham, 1990; Davis &

Bistodeau, 1993; Young 1993). However, it has received great attention since it has been supposed to be an inadequate method to collect data. Therefore, a brief background of the method is needed to be reviewed.

This method was developed from the introspection method. Introspection, as stated in Van Someran & Barnard & Sandberg (1994:29), was based on the idea that one can observe events that take place in consciousness, more or less as one can observe events in the outside world. The history of the introspection method in psychology has made psychologists suspicious of methods that resemble introspection. Van Someran et al. (ibid:33) add the following lines to clear the chaos surrounding this method:

> *"We know now that this suspicion is not justified with respect to think aloud method for two reasons: 1) The think aloud method avoids interpretation by the subject and only assumes a very simple verbalization process. 2) The think aloud method treats the verbal protocols, that are accessible to anyone, as data thus creating an objective method."*

It is also added that errors due to incomplete or false recall are essentially absent in case of the think aloud method and no evidence has been found that think aloud protocols are inaccurate in the sense that people give inaccurate information about the cognitive process concerned.

When applying this method special attention must be given to the conditions under which the method is applied. These conditions include a warming activity, setting and instructions. Subjects should practice the think aloud method before they are actually engaged in the process. Instructions must be clear and short. The setting should be such that subjects feel at ease (Van Someran et al,1994:41).

The subjects of this study are enrolled in the first year of Agricultural Engineering Faculty at Gaziosmanpaşa University in Tokat. Their native language is Turkish, and they study English as a foreign language. This study focuses on the strategy use of Turkish EFL

learners at beginner level. Therefore a placement test will be given to select the subjects at beginner proficiency level.

The subjects will read four texts during the think aloud sessions and the sessions will be audio recorded. Two selection procedures will be used to select the reading materials of the study. Two of the texts will be in Turkish and two of them will be in English. All of the texts will have different topics. The think aloud data will be classified according to a strategy classification scheme. This classification is assumed to reveal the strategies the subjects use when they read the selected texts. A non-parametric statistical test, the Mann-Whitney test, will be used to analyze the think aloud data. That is, the test will be used to reveal the significance between the strategy use in L1 and L2 reading. The subjects will also be given two reading strategies questionnaires. These questionnaires will question the strategy use of the subjects in L1 and L2 reading. The results of these questionnaires will be compared to those of the think aloud data.

1.6 Definitions

The definitions of the terms used in this study are as follows:

a. Learning strategies: Learning strategies are defined as specific actions taken by the learner to make learning easier, faster, more enjoyable, more self-directed, more effective, and more transferable to new situations (Oxford, 1990:8).

b. Local strategies: Local strategies are defined as bottom-up processing, focused on word, phrase and sentence level concepts, such as skipping unknown words, breaking lexical items into parts, translating a word or phrase, and paraphrasing (Young, 1993:454).

c. Global strategies: Global strategies are defined as top-down processing, focused on conceptual and discourse level processing strategies, such as anticipating content, integrating information and recognizing text structure (Young, 1993:454).

CHAPTER II

LITERATURE REVIEW

This study aims at investigating the strategy use of Turkish EFL learners who are novices in L2 reading. Therefore, a review on how reading as a skill is regarded in literature, reading in L1 and reading in L2, the differences between L1 and L2 reading, how reading strategies are used in L1 and L2, and background knowledge and its effect on strategy use in L1 and L2 reading will be presented.

2.1 Reading as a skill

Teaching reading generally begins with the recognition of the sounds the letters represent. After learning the sounds, learners, in later steps, try to get the meaning. In order to comprehend a text, learners use a set of knowledge. This set includes vocabulary, structural knowledge, discourse structure knowledge, world knowledge and some skills.

The knowledge of vocabulary and syntax help readers comprehend a text. But reading, as Goodman (c. in Grabe, 1991:376) says, is not simply a process of picking up information from the text letter by letter or word by word manner. Rather it is a selective process. Fluent readers, for example, do not look at all the words on a page and still read at a rapid rate. This shows that readers must have some knowledge and skills to comprehend a text better.

Reading is said to be a complex process. To understand this complex process, researchers analyze it into a set of component skills. Six general component skills have been proposed in Grabe (1991:379). These are :

a. Automatic recognition skills: Automaticity occurs when the reader is not consciously controlling the process. The readers use little processing capacity.

b. Vocabulary and structural knowledge : Vocabulary and syntactic knowledge are seen critical to reading on a basic level.

c. Formal discourse structure knowledge : A good knowledge of formal discourse structure is needed by readers. The knowledge of text organization influences the comprehension of text.

d. Content/World background knowledge : Content and background knowledge also influences reading comprehension.

e. Synthesis and evaluation skills/strategies : While trying to comprehend a text, readers also evaluate the information in the text and compare and synthesize it with other sources of knowledge. Therefore synthesis and evaluation skills, and strategies are critical components of reading abilities.

f. Metacognitive knowledge and skills monitoring : Metacognitive knowledge and skills monitoring include recognizing the more important information in a text, adjusting reading rate, using context to sort out a misunderstood segment, skimming portions of the text, previewing headings, using search strategies and so on.

These skills have been proposed to understand the reading process better. However, according to Eskey (1986:5-6) reading comprehension is not essentially different from other kinds of comprehension. The mental tasks involved in reading are fundamental human cognitive acts. They are not peculiar to reading. Whatever is comprehended depends on knowledge. Comprehension occurs when we relate what we do not know or new

information to what we already know. Therefore Eskey defines reading as one of the many ways in which human beings go about their basic business of making sense of the world.

According to Goodman (1975:12-16) reading is a psycholinguistic process. It starts with a linguistic representation encoded by a writer and ends with meaning. Meaning is constructed by the reader. He proposes that readers employ five processes while reading. The brain is the organ of information processing. It decides what tasks it must handle, what information is available, what strategies it must employ, which input channels it must use, and where to seek information. The five processes the brain employs in reading are:

a. Recognition-initiation : The brain recognizes a graphic display in the visual field as written language and initiates reading. This occurs once in each reading activity.

b. Prediction : The brain is always anticipating and predicting. It seeks order and significance in sensory inputs.

c. Confirmation : Since the brain predicts, it also seeks to verify its predictions.

d. Correction : When the brain finds inconsistencies it reprocesses.

e. Termination : When the reading task is completed, the brain terminates the reading. If the task is non-productive, or little meaning is being constructed, or the meaning is already known then termination may occur for these reasons as well.

If the reading does not end with meaning it is a short circuit. Readers may sometimes short circuit for some reasons. Generally they short circuit when they cannot get meaning, or lose the structure; when they use non-productive strategies, or when they are not permitted to terminate non-productive reading.

The features cited up to this point are not peculiar to reading in one or another language, but cover reading in any language. However, the language one is reading in effects the reading process because readers show different performances when they read in their mother tongue and when they read in their L2. Therefore, the literature on how learners read in their L1 and L2 will be reviewed, too.

2.2 Reading in L1 and L2

Reading in one's mother tongue and in a foreign language has attracted researchers for a long time (Connor, 1984; Lee, 1986; Block, 1992; Lee, 1997). Since brain does most of the work during reading it is difficult to understand this process. Bernhardt (1991, c. in Davis and Bistodeau, 1993:459) states that

> *"many L1 reading resaerchers tend to see L2 studies as marginal and derivative because they view L2 reading itself as merely a slower ... version of doing the same task in the native language."*

To which extent L1 and L2 reading vary, especially in terms of strategy use, has been a focus of attention among language researchers.

Researchers in this field have put forward some hypotheses to explain the process. Among them are the three hypotheses most commonly known. These are *Short Circuit Hypothesis*, now referred to as *Linguistic Threshold Hypothesis*, *Linguistic Interdependence Hypothesis* and *Bi-orientation Hypothesis*.

These hypotheses put forward the idea that readers use some reading strategies to comprehend a text and that they use similar strategies in their L1 and L2. However, these hypotheses claim different ideas for the strategy use in L1 and L2 reading. In addition, the amount and the type of the strategies used in L1 and L2 vary.

According to Linguistic Threshold Hypothesis (LTH), low proficiency in the L2 results in a short circuit of effective strategies when good L1 readers are confronted with an L2 text. That is, firm first language reading skills cannot help readers compensate when reading in a second language. A lack of second language linguistic knowledge short circuits first language reading knowledge. An amount of L2 grammatical or linguistic knowledge is necessary in order to get L1 reading knowledge to engage (Clarke, 1980; Davis & Bistodeau, 1993; Bernhardt & Kamil, 1995). This means that as L2 readers develop their overall skills in L2, they increase their use of effective strategies.

The second hypothesis is Linguistic Interdependence Hypothesis (LIH). It states that "reading performance in a second language is largely shared with reading ability in a first language". That is, once a set of language operations has been acquired in L1, they will also be available within second language context (Bernhardt & Kamil, 1995:17).

The last hypothesis is Bi-orientation hypothesis. It takes bottom-up and top-down knowledge into account. It states that even readers who are novices in the L2 simultaneously combine both bottom-up and top-down knowledge. That is, language learners who are good L1 readers are oriented neither from the bottom-up nor from the top-down. They are bi-oriented. According to this hypothesis, little difference exists in psychological processing between L1 and L2 reading (Davis & Bistodeau, 1993:459).

These hypotheses have been tested by some researchers and the studies have yielded contrasting results. Studies of second language reading provide direct or indirect evidence on the LTH and LIH. Statistical results of the studies (Bernhardt, 1991; Lee & Musumeci, 1988; Allen & Bernhardt & Berry & Demel, 1988 c. in Bernhardt & Kamil, 1995) indicate a clear increase in comprehension scores based on the level of language. They report that secondary school students in these studies make progress in their reading comprehension

that can be anticipated based on their instructional level. This is an evidence for the LTH. That is, the more language one has, the higher the comprehension scores.

On the other hand different conclusions have been drawn in the replications of Allen et al. (ibid). These studies were conducted on college students and there was no such development noted. Their data provide indirect evidence for the LIH. That is, the more reading ability one has, the more it plays a role in L2 text comprehension.

To interpret the relationships between L1 and L2 reading Bernhardt & Kamil (ibid) compares LTH and LIH with the following question: Is second language reading a language problem (linguistic threshold) or a reading problem (linguistic interdependence) ? Their study gathers data from 186 adult English speakers reading in English and Spanish. They report that their results indicate that neither hypothesis is wholly reflective of the L2 reading process. Their answer is 'Yes' to both sides of the questions. They find each hypothesis appropriate to some degree.

Another study questioning the LTH is Clarke's (1980). The study reported in Clarke was conducted on adult Spanish speaking readers reading in Spanish and English. One of the research questions addressed was: Do proficient L1 readers transfer their reading skills to the second language ?

The result of this study showed that in their native language, in Spanish, the good readers seemed to rely on semantic rather than syntactic cues. The poor readers relied on syntactic cues more than did the good readers. In their second language, in English, the use of syntactic cues by both good and poor readers was equal. The difficulties of reading in a second language seemed to have reduced the distinction between good readers and poor readers. The good L1 readers appeared less able to focus on semantic cues in the target language than in the native language.

Clarke concluded that there was some transfer of skills because the good readers performed better than the poor readers in both languages. Another conclusion from his study was that limited control over the language short circuited the good reader's system. That is, the shortage of L2 knowledge caused them to revert to poor reader strategies when confronted with a difficult or confusing task in the second language.

The difference between L1 and L2 reading has also been studied by Davis and Bistodeau (1993). They used data collected from think aloud protocols to determine how two groups of adult subjects, who were proficient native but novice L2 readers, approached reading in their L1 and L2. They tried to investigate the question whether the processing strategies of proficient L1 readers were different from their L2 processing strategies. Another related question was : 'Will L1 and L2 processing strategies also vary as a function of text topic ?'. Their starting point for these two questions was two competing hypotheses: Short circuit hypothesis and bi-orientation hypothesis. These two hypotheses attempt to account for the performance of novice L2 readers who are already skilled in L1 reading. They concluded that components of the foreign language itself (in particular, vocabulary) had a powerful impact upon psychological processing during L2 reading by novices.

The differences in L1 and L2 reading is also a matter of background knowledge effects. It has a long history in literature. The following title reviews the relation between background knowledge and reading.

2.3 Background Knowledge

The strategy use by readers in L1 and L2 reading has also been studied with respect to text topic. The effect of background knowledge on reading skill has received much attention in literature and it has been found to be an important factor on reading comprehension (Adams & Bruce, 1982; Carrell & Eistherhold, 1983; Lee, 1986).

Reading comprehension is said to involve one's knowledge of the world. According to schema theory, reading comprehension is said to be an interactive process between the text and the reader's prior background knowledge (Adams & Collins, 1979 & Rumelhart, 1980 c. in Carrell & Eistherhold, 1983). It has been stated that

> *"the role of background knowledge would be that comprehension is the use of prior knowledge to create new knowledge. Without prior knowledge, a complex object such as a text, is not just difficult to interpret, strictly speaking, it is meaningless."* (Adams & Bruce, 1982:23).

However, studies on the effect of background knowledge on reading comprehension and strategy use have yielded contrasting results. Lee (1986), in his study with Spanish subjects, found a very complex interaction between reader and text. His conclusion is that background knowledge has an effect on reading comprehension.

Davis & Bistodeau (1993), studying the difference between L1 and L2 reading with respect to strategy use, found that prior background knowledge of text topic was effective on the strategy use of readers.

However, Carrel's study (1983, c. in Lee, 1986) yielded contrasting results. According to her study, nonnative readers showed no effect of background knowledge on reading, comprehending or recalling target language texts.

In sum, reading research has presented studies with contrasting results for the strategy use in L1 and L2 reading and the effect of background knowledge on the strategy use and reading comprehension. Some of those studies were reviewed in this study. The researchers of these studies have presented tentative results due to limitations of their studies and the context under which they applied their studies.

Most of those researchers feel that their findings should be examined more extensively in future investigations because of the limitations of their studies, such as the size of the sample, the design of the experiment and the choice of the texts. Therefore, it is aimed to conduct a study in Turkish context with different subjects and text types (texts with familiar and unfamiliar topics) to investigate the strategy use of Turkish EFL learners at beginner level in L1 and L2 reading.

CHAPTER III

METHODOLOGY

3.1 Subjects

Subjects for this study were chosen among the students enrolled in the first year of Agricultural Engineering Faculty at Gaziosmanpaşa University in Tokat. The subjects are native speakers of Turkish. They study English as a foreign language.

The strategy use in L1 and L2 reading has been studied at different proficiency levels. Some studies have also tested some hypotheses about the reading process in L1 and L2 with respect to strategy use (Clarke, 1980; Davis & Bistodeau, 1993; Bernhardt & Kamil, 1995). One of those hypotheses which is also a part of the motivation of this study is the Linguistic Threshold Hypothesis. According to this hypothesis, the effective strategies of L1 readers with low proficiency level in L2 are short circuited when readers confront with an L2 text. That is, an amount of L2 grammatical or linguistic knowledge is necessary in order to get L1 reading knowledge to engage. At low levels in L2, first language reading skills do not help compensate when reading in a second language (Davis & Bistodeau, 1993). Therefore, it was planned to select beginner level subjects to investigate the differences between reading in L1 and L2 with respect to strategy use.

The students come to this faculty from different high schools with different proficiency levels of English. Thus, a placement test was given to select the subjects for the study. The test given was Michigan Placement test. 86 students took the test. 28 students whose scores were between 20 and 27 were chosen as the subjects of this study. The result of the test is shown in table 1.

Table 1. The result of the placement test.

Total Subjects	Mean Score	St.Dv.
28	22.00	2.194

3.2 Research Design

3.2.1 General Procedures

This study is a descriptive study. The strategy use of subjects in L1 and L2 reading was compared in the study. To do this, subjects read four texts (two Turkish and Two English). The think aloud method was used to collect the data. The subjects attended the think aloud sessions one by one. Before the application of the actual sessions, the think aloud method was practiced by the subjects. The sessions were audio-recorded. After the sessions, subjects were interviewed in an exit interview. The recorded data were listened and transcribed in the exit interview. Subjects were also given two reading questionnaires (one questioning strategy use in L1 reading and the other questioning strategy use in L2 reading). The questionnaires were given at different times after all the think aloud sessions finished.

The think aloud data were classified according to a strategy classification scheme taken from Young (1993:463-467). This classification revealed the strategies the subjects use in L1 and L2 reading. The strategy use in L1 and L2 reading was compared using a non-parametric statistical test, the Mann-Whitney test. The details of the procedures are given in the following sub-divisions.

3.3 Materials

In order to compare the strategy use of the subjects in their L1 and L2 reading and reveal the effect of topic familiarity on the use of reading strategies in L1 and L2 reading, two English and two Turkish texts with familiar and unfamiliar topics were to be selected.. So a text selection procedure was planned to select an English and a Turkish text whose topics are familiar to the subjects and an English and a Turkish text whose topics are unfamiliar to the subjects.

Most of the studies on strategy use in L1 and L2 reading have used reading materials on the assumption that the texts are suitable for the purpose of the study (Connor, 1984; Horiba, 1990; Block, 1992; Davis & Bistodeau, 1993; Young, 1993). However, the text selection procedure in this study included a criterion. Although a suitable number of texts is not suggested for this type of studies, 14 texts (seven English and seven Turkish texts) were collected for the selection procedure. The English texts were taken from beginner level textbooks. The Turkish texts were taken from textbooks prepared for university level students. The length of the texts was about 180-280 words long. The reading materials were taken from the following sources:

1. English ALFA. 1981. Kenton Sutherland. Houghton Mifflin Company. Re-printed in Turkey. Haşet Kitabevi. İstanbul

2. Double Take. Reading and Writing. 1996. Derek Strange. OUP. Italy.

3. Reading Elementary. 1987. Alan Maley. OUP: Hong Kong.

4. Her Yönüyle İnternet. 1996. Alfa Basım Yayım Dağıtım. İstanbul.

5. Genel Psikoloji. 1987. Feriha Baymur. İnklap ve Aka Basımevi. İstanbul.

6. Aile El Sağlığı. 1995. Y.Öztürk- O.Günay. Erciyes Ün. Matbaası.

3.3.1 The Selection of the Texts with Familiar and Unfamiliar Topics

In order to select the texts with familiar and unfamiliar topics, a topic familiarity assessment plan was used as the selection criterion. This plan was adapted from Langer (1982:153-156). The real application of the plan includes a class discussion on a topic and has the following steps:

The plan has three phases to assess the familiarity of the topic of a text.

In the first phase the teacher tells a word or shows a picture about the text and says, 'Tell anything that comes to mind when you hear this word or see this picture.'.

In the second phase the students are asked, 'What made you think of ..... (the responses given by each of the students during phase 1.) ?

In the last phase the teacher asks, 'Based on our discussion have you got any new ideas about .... (the word, the picture, etc.) ?

To complete the plan the teacher evaluates the responses from the students on the checksheet shown in figure 1. The responses are classified according to the idea units as grouped on the MUCH, SOME and LITTLE columns and they are written on these columns. The teacher can see the students' readiness to read a text on the checksheet. That is, if the students have much prior knowledge about the topic of the text most of their responses will be on the MUCH column or their responses will be on the LITTLE column if they do not have much prior knowledge about the topic of the text. The SOME category is not taken into consideration. Since we are interested in the two ends (familiarity and unfamiliarity), it is considered to be a neutral category.

Categories / Students	**MUCH** Superordinate concepts, definitions, analogies	**SOME** Examples, attributes, defining characteristics	**LITTLE** Morphemes, sound alikes, recent experiences
Student 1			
Student 2			
Student 3			

(Langer, 1982:156)

Figure 1. Topic familiarity assessment checksheet.

This plan is called as 'a pre-reading plan'. Langer (1982:160) thinks the plan will be useful to check students' readiness to read a text. This plan also prepares the students who have not got any background knowledge about the topic of a text. Throughout the class discussion all the students become ready to read a text the topic of which has been discussed.

However, the application of this plan was different in our study. To check the subjects' familiarity with the texts, written responses, instead of class discussion, were taken from the subjects. The reason for the written responses instead of the class discussion was to avoid the subjects from being influenced by their friends' ideas. That is, this plan was used to check the subjects' familiarity with the text topics. It was important to get the subjects' own ideas. If a class discussion were to be held, the subjects who did not have any background knowledge about the topic of the texts would perhaps take part in the discussion because he or she would be influenced by others' ideas. Therefore, written responses were thought to be isoleted outcome of the subjecs' own ideas about the text topics and they would let us chose the right texts for the purpose of the study.

The plan was applied in the following way: First seven English and seven Turkish texts were collected. Students were given a sheet containing three sections (See Appendix A): 1) Directions and information about the evaluation, 2) A sample form showing subjects how to evaluate the topics, 3) The list of the topics of the 14 texts. The topics of these texts are shown in figure 2.

No	Language	Topics
1	English	Computers
2	"	Categories of education in the USA
3	"	The invention of the first plane
4	"	Oceans
5	"	Air pollution
6	"	New forms of energy
7	"	Treasure hunting under the seas
8	Turkish	Güneydoğu Anadolu Projesi
9	"	Reflekslerimiz
10	"	Boğmaca
11	"	Kas duyusu
12	"	İnsanlarda savunma mekanizmaları
13	"	Bitkilerde nem ve önemi
14	"	İnternet

Figure 2. The list of the topics of the 14 texts.

Apart from the assessment activity, subjects were also asked to rate the topics from 0 to 5 points with respect to their familiarity with the topics on the following scale. This procedure was used to support the findings obtained from the topic familiarity assessment.

Scale	Meaning
0	None
1	Very little
2	Little
3	An average amount
4	Much
5	Very much

Figure 3. Topic familiarity rating scale.

While evaluating the text topics subjects responded them in three steps as shown in Appendix A. They wrote their responses on paper. Their responses were evaluated on the checksheet shown in the figure 1.

Subjects' responses were classified on the checksheet according to the idea units, such as superordinate concepts, definitions, analogies, examples, attributes, defining

characteristics, morphemes, sound alikes, and recent experiences. So the classification of the responses formed three categories: MUCH, SOME and LITTLE. The responses were evaluated and the idea units were counted. Subjects' contributions to these categories are shown in tables 2 and 3.

Table 2. Topic familiarity assessment results for the English texts. Subjects' contributions to each category.

Texts		Computer			Catego..			The Inv.			Oceans			Air Pol.			New Form			Treasure		
No	Subjects	M	S	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S	L
1	İG	2	1	1	-	-	-	-	1	1	-	-	1	4	1	-	2	2	-	-	-	-
2	EG	1	1	1	-	-	-	1	2	1	1	2	1	3	1	-	1	1	-	-	-	-
3	MD	1	2	-	-	-	-	-	-	-	1	1	1	5	2	-	3	2	1	-	-	1
4	MÇ	1	1	1	-	-	-	-	-	-	-	-	-	3	1	-	1	-	1	-	2	3
5	ÇC	2	1	-	-	3	2	-	1	-	-	-	-	2	-	1	4	1	-	1	1	2
6	DÜ	1	-	1	-	3	2	-	-	-	1	2	1	2	1	-	3	2	-	-	-	-
7	YM	3	1	-	-	-	-	2	3	1	2	3	2	5	2	-	1	2	-	-	1	1
8	OP	2	1	1	-	1	1	-	-	-	-	-	-	3	1	-	2	1	-	-	-	-
9	GT	1	-	1	-	2	1	-	1	1	1	2	-	2	-	1	2	-	1	-	-	-
10	CG	1	1	1	-	-	-	-	2	1	-	-	-	4	2	-	1	2	-	2	1	2
11	EU	3	1	1	-	-	-	1	1	1	1	2	1	2	1	-	3	1	1	-	-	-
12	KC	1	1	1	-	2	1	-	1	-	-	-	-	1	-	-	4	1	1	-	2	2
13	MS	1	-	-	-	1	1	-	2	1	-	-	-	3	1	-	2	1	-	-	1	1
14	DM	2	1	1	-	-	-	-	1	1	-	-	1	2	-	1	2	-	-	-	-	-
15	ÖÖ	2	1	1	-	2	1	1	1	1	1	2	1	2	1	-	1	-	1	1	-	1
16	SE	3	1	-	-	-	-	-	-	-	-	-	-	4	1	-	3	1	-	2	3	1
17	SA	1	1	-	-	-	-	-	1	1	-	-	-	4	1	-	2	2	1	-	-	-
18	FO	2	1	1	-	-	-	-	1	1	1	1	1	3	-	1	1	2	-	-	2	2
19	TB	2	1	-	-	-	-	-	-	-	-	-	-	1	1	-	3	1	-	-	-	-
20	FK	1	1	1	-	2	1	-	2	1	-	-	-	2	-	-	2	-	1	-	-	-
21	EM	1	1	-	-	1	1	-	1	1	-	-	-	4	1	-	4	3	1	3	2	1
22	ÖT	3	1	1	-	1	1	1	1	1	1	3	1	2	1	-	2	1	-	-	-	-
23	MA	1	1	-	-	1	1	-	1	1	-	-	-	2	1	-	2	2	-	-	1	1
24	BY	2	1	1	-	1	-	-	2	-	-	-	-	3	1	-	1	2	2	-	-	-
25	EK	2	1	-	-	-	-	-	-	-	-	-	1	2	-	-	2	2	-	1	1	2
26	AY	1	1	-	-	-	-	-	1	-	1	2	2	3	1	-	2	1	-	-	-	-
27	AE	2	1	1	-	1	-	-	1	1	-	-	-	2	1	1	3	2	1	-	1	1
28	AÇ	3	1	1	-	-	-	-	1	-	1	1	1	4	1	-	1	-	-	-	-	-

Key: M=MUCH, S=SOME, L=LITTLE

Table 2 shows the subjects' individual contributions to each category of MUCH, SOME, and LITTLE for the English texts. As it is seen in this table, the text *Air Pollution* has the highest values of contributions in MUCH category. The text *Categories of Education in the USA* has not got any contributions in MUCH category.

Table 3. Topic familiarity assessment results for the Turkish texts. Subjects' contributions to each category.

Texts		GAP			Refleks..			Boğmaca			Kas Duy			İn.Sav.M			Bitkiler			İnternet		
No	Subjects	M	S	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S	L	M	S	L
1	İG	-	1	2	1	-	1	2	1	2	1	2	1	-	1	-	-	1	-	2	2	-
2	EG	1	2	1	1	1	1	-	-	-	-	-	-	-	-	-	1	-	-	1	1	-
3	MD	-	1	2	1	-	1	1	2	1	-	1	1	-	-	-	-	1	-	-	-	1
4	MÇ	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	2	2	1	-
5	ÇC	-	1	1	3	2	1	1	2	2	1	2	1	1	1	-	-	-	-	3	1	-
6	DÜ	1	2	-	2	-	1	1	-	1	1	2	1	-	1	-	2	1	2	1	2	-
7	YM	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	2	-	-
8	OP	3	2	2	2	1	1	-	-	1	-	1	-	-	-	-	-	-	-	-	1	-
9	GT	-	1	1	-	-	-	-	1	1	-	-	1	1	2	1	-	1	3	1	1	-
10	CG	-	1	1	2	3	1	2	3	2	1	2	2	-	-	-	-	-	-	1	1	-
11	EU	1	2	1	-	-	-	-	-	-	-	-	-	1	2	1	-	1	2	2	2	-
12	KC	-	-	-	-	1	1	-	-	-	-	1	-	-	1	-	-	2	1	2	1	-
13	MS	2	1	1	-	1	1	-	-	-	-	-	-	-	-	-	2	1	1	2	1	1
14	DM	-	2	2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	2	-
15	ÖÖ	1	-	1	2	2	1	1	2	1	2	3	2	-	-	-	-	2	3	2	2	-
16	SE	-	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1	3	3	1	-
17	SA	-	2	1	-	1	-	-	-	-	-	-	-	-	-	-	-	2	1	2	1	-
18	FO	2	1	-	1	1	2	1	1	2	-	1	1	-	-	-	-	-	2	3	1	-
19	TB	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	2	-	-
20	FK	1	1	2	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	2	-
21	EM	-	2	1	3	4	2	1	2	2	1	2	1	-	-	-	1	1	2	1	1	1
22	ÖT	2	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-
23	MA	-	1	-	1	1	1	-	-	1	-	-	1	-	-	-	3	1	2	2	1	-
24	BY	2	-	1	-	2	1	-	-	-	-	-	-	-	1	-	-	-	-	1	2	-
25	EK	-	2	1	2	1	1	1	1	2	-	1	2	-	-	-	-	-	-	2	2	-
26	AY	1	3	2	-	-	-	-	-	-	-	-	-	-	-	-	2	1	2	2	1	-
27	AE	-	1	-	-	1	-	-	1	1	-	-	-	-	1	1	-	-	-	2	-	-
28	AÇ	3	2	1	2	3	1	1	1	1	1	-	1	1	2	1	-	1	2	1	2	-

Key: M=MUCH, S=SOME, L=LITTLE

Table 3 shows the subjects' individual contributions to each category of MUCH, SOME, and LITTLE for the Turkish texts. As it is seen in this table, the text *İnternet* has the highest values of contributions in MUCH category. The text *İnsanlarda Savunma Mekanizmaları* has the lowest contributions in MUCH category.

The totals of the subjects' contributions to each category of MUCH, SOME and LITTLE are shown in table 4.

Table 4. The totals of the idea units classified and counted according to the familiarity assessment checksheet.

Text Topics	MUCH	SOME	LITTLE	TOTAL
Computers	48	26	17	91
Categories of education in the USA	-	21	13	34
The invention of the first plane	6	28	16	50
Oceans	12	21	15	48
Air pollution	79	24	5	108
New forms of energy	60	35	12	107
Treasure hunting under the seas	10	18	21	49
Güneydoğu Anadolu Projesi	21	32	27	80
Reflekslerimiz	23	25	18	66
Boğmaca	12	17	20	49
Kas duyusu	8	19	17	44
İnsanlarda savunma mekanizmaları	4	13	5	22
Bitkilerde nem ve önemi	13	24	30	67
İnternet	46	33	3	82

According to the results of the text selection procedure, we selected the texts shown in table 5 as the reading materials of this study.

Table 5. The list of the texts selected.

No	Language	The topic of the text	Familiarity
1	English	Air pollution	Familiar
2	"	Categories of education in the USA	Unfamiliar
3	Turkish	Internet	Familiar
4	"	İnsanlarda savunma mekanizmaları	Unfamiliar

Apart from the topic familiarity assessment, as stated before, the subjects rated the titles of the 14 texts with respect to their familiarity with them on the scale shown in figure 3. The rating procedure yielded the following results.

Table 6. Text selection rating results.

Text Topics	Total	Mean	St.Dev.
Computers	90	3.214	0.630
Categories of education in the USA	17	0.607	0.567
The invention of the first plane	37	1.321	0.723
Oceans	69	2.464	0.508
Air pollution	132	4.714	0.460
New forms of energy	96	3.429	0.573
Treasure hunting under the seas	56	2.000	0.770
Güneydoğu Anadolu Projesi	83	2.964	0.693
Reflekslerimiz	85	3.036	0.744
Boğmaca	53	1.893	0.737
Kas duyusu	61	2.179	0.723
İnsanlarda savunma mekanizmaları	45	1.607	0.685
Bitkilerde nem ve önemi	69	2.464	0.962
İnternet	88	3.143	1.044

(N=28)

This procedure was applied to support the findings of the topic familiarity assessment. As it is seen in table 6, the texts *Air Pollution* and *Internet* have the highest mean scores in their language categories with scores 4.714 and 3.143 respectively. Therefore the topics of these two texts were thought to be familiar to the subjects. The texts *Categories of Education in the USA* and *İnsanlarda Savunma Mekanizmaları* have the lowest mean scores in their language categories with scores 0.607 and 1.607 respectively. Therefore the topics of these two texts were thought to be unfamiliar to the subjects.

3.4 Data Collection

The *think aloud* method was used to collect the data. We felt that the data obtained from the think aloud could need supporting. Therefore, the subjects were also given two reading strategies questionnaires.

There were four steps in data collection procedure. These steps were :

1. A practice session before the actual *think aloud* session (See Appendix C).

2. The *think aloud* session. It had four sub-steps.
    a. Reading the Turkish text with familiar topic.
    b. Reading the English text with familiar topic.
    c. Reading the Turkish text with unfamiliar topic.
    d. Reading the English text with unfamiliar topic.

3. An exit interview.

4. The Reading strategies questionnaires.

3.4.1 The Practice Session

There was a practice session before the actual *think aloud* session. In practice session subjects practiced the *think aloud* procedure. They were given a list of what can be told after reading a sentence in case they may not know what to tell while thinking aloud. The list was also used in Davis and Bistodeau (1993:461). This list includes the following titles:

- comments on the subject's own behavior,
- predicting what is coming next in the text,
- confirmation of the prediction,
- reference to antecedent information in the text,
- making inferences,
- comments on the text order,
- using general knowledge to make associations with information in the text,
- self-questioning,
- comments on intrasentential features,
- focus on individual words.

This list was given to the subjects in Turkish.

Subjects were given a short paragraph to read and they were asked to report what was going on in their mind as they read each sentence. They were also audio recorded in practice session. The real conditions of the think aloud procedure were formed in practice session so that subjects could feel themselves secure in the actual think aloud session. A sample practice session appears in Appendix C.

3.4.2 The *Think Aloud* Session

Subjects attended the sessions one by one. They read four texts. The texts were reprinted for each subject. The four texts were ;

a. İnternet (Appendix D/1)
b. İnsanlarda Savunma Mekanizmaları (Appendix D/2)
c. Air Pollution (Appendix D/3)
d. Categories of Education in the USA (Appendix D/4)

The order of the presentation of the texts (whether the subjects read İnternet first, İnsanlarda Savunma Mekanizmaları next and so on) was counterbalanced. It took about 20-30 minutes to read. each text.

There was a red point at the end of each sentence. They were asked to report what was going on in their mind as they read each sentence. The red points were used to remind subjects to think aloud. This avoided experimenter intervention during the task.

While the subjects were thinking aloud, they were expected to report the reading strategies they used. Subjectss were likely to report any strategies they used. The list given in practice session was assumed to form an awareness for the students in case they might not know what to tell while thinking aloud. That is, the list was only a model for the subjectss and it was supposed to enable them to report the process going on in their mind as they read the texts.

The actual think aloud session was audio recorded. Subjects used their mother tongue while thinking aloud. The use of mother tongue to gather data in the think aloud method is supported by some researchers (Lee, 1986; O'Malley & Chamot, 1990; Wolf, 1993a; Wolf, 1993b; Davis and Bistodeau, 1993; Young, 1993). It was suggested that

> *"because of the potential interference from L2 production writing protocols in the native language of L2 reader is a better measure of actual comprehension .... than writing in the nonnative language. For instance, a subject writing in the L2 may express an idea inaccurately for fear of stating it incorrectly."* (Davis and Bistodeau, 1993:461)

3.4.3 The Exit Interview

The process of simultaneous reporting may have some disadvantages. Subjects may sometimes produce incomprehensible utterances. This makes the transcription of the think aloud data difficult and sometimes causes misconceptions. Therefore, after the think aloud session, an exit interview was held. In this step, the recorded sessions were listened with the subject and the think aloud data were transcribed. This process, soon after the think aloud session, helped us to transcribe the data better.

3.4.4 The Reading Strategies Questionnaire

After all the think aloud sessions finished, all the subjects were given a reading strategies questionnaire (RSQ). The RSQ had two versions: one was asking subjects their reading behaviors when they read in their L1 (RSQL1) and the other was asking subjects their reading behaviors when they read in their L2 (RSQL2). Since the statements in the questionnaires were same, the RSQs were given in seperate sessions. This was because subjects could give the same responses to the statements without taking L1 and L2 difference into consideration. First, the RSQL1 was given to the subjects, then in another session the RSQL2 was given. A sample copy of the questionnaires appears in Appendix B.

These questionnaires were adapted from Young (1993:463-467). The RSQ was used to support the results of the think aloud. The findings of the RSQ were compared to the

findings of the think aloud. Through the RSQ the general reading behavior of the subjects were checked.

3.5 Data Analysis

The data were obtained from two main procedures:

1 - The *think aloud* sessions.

2 - The reading strategies questionnaires.

3.5.1 The Analysis of the *Think Aloud* Data

The recorded think aloud protocols were transcribed in the exit interview and later they were checked again. This procedure formed four types of data.

a. Subjects' comments for Turkish text with familiar topic. (Internet)

b. Subjects' comments for English text with familiar topic. (Air Pollution)

c.Subjects' comments for Turkish text with unfamiliar topic. (İnsanlarda Savunma Mekanizmaları)

d.Subjects' comments for English text with unfamiliar topic. (Categories of Education in the USA)

A strategy classification scheme (see Appendix E for the strategy categories, codes and definitions) was used to classify the reading strategies reported by the subjects. The strategy classification scheme was taken from Young (1993:463-467).

This classification scheme contains 25 strategies. The 25 strategy categories are divided into two groups. First 13 strategies are *Local Strategies* and the next 12 strategies are *Global Strategies*. Sample responses obtained from the think aloud data to the 25 strategy categories appear in Appendix F.

The strategy use of subjects in L1 and L2 reading was compared across the 25 strategy categories. The following steps were used for the comparison.

3.5.1.1 L1 vs L2

This analysis was used to reveal the significances between the strategy use of the subjects' in L1 and L2 reading. The strategy categories reported for Turkish texts formed a group and the strategy categories reported for English texts formed another group and the strategies in these two groups were compared. The test was applied in the following way:

The test was applied in two steps: in the first step all the strategies used in L1 and L2 reading were compared as a whole; in the second step the strategies reported mutually for both language categories were compared individually. The statistical test yielded the P value for each of the comparison to indicate the significance between the strategy use of the subjects in their L1 reading and L2 reading. If $p<0.05$, it indicated a significant difference with respect to strategy use. If $p>0.05$, it indicated an insignificance with respect to strategy use. The computer program Minitab Release 8.2 was used for the statistical analysis. The cells were assigned '1' for the strategy use and '2' for the non-use of strategy.

3.5.1.2 L1 vs L1 - L2 vs L2

This analysis was used to reveal the effect of topic familiarity on the use of reading strategies both in L1 and L2. We used a 2 X (*The Turkish text with familiar topic vs. The Turkish text with unfamiliar topic*) 2 (*The English text with familiar topic vs. The English*

text with unfamiliar topic) design. The P value was calculated for the strategies reported mutually for the two text types. The same procedures cited above was applied in the statistical analysis.

While evaluating the effect of topic familiarity on the use of reading strategies in L1 reading, the reports of the subjects 3 (MD) and 8 (OP) were not taken into account, because these two subjects did not contribute to the MUCH category of the text Internet. We thought these two subjects were not familiar with the topic of this text.

3.5.2 The Analysis of the Data from the Reading Strategies Questionnaires

The results of the RSQ were used to support the results of the think aloud. The result of the version questioning reading in Turkish was compared to the result of the think aloud for the Turkish texts. The result of the version questioning reading in English was compared to the result of the think aloud for the English texts. The same statistical test and procedures cited above were used for the comparison between RSQ data and think aloud data.

CHAPTER IV
ANALYSIS OF RESULTS

This study tried to investigate two main research questions. It was questioned whether the reading strategies of Turkish EFL learners at the beginner level showed any difference as a function of language and whether the reading strategies of these learners differed as a function of topic familiarity.

To do this, 28 subjects read four texts (two English and two Turkish texts). The think aloud method was used to gather the data. The think aloud protocols of the subjects were classified according to a strategy classification scheme. The classification scheme included 25 reading strategies. 13 of these strategies were local strategies, and 12 of them were global strategies.

4.1 The Strategy Classification of the Think Aloud Protocols

The recorded data obtained from the think aloud sessions were transcribed and then classified according to the strategy classification scheme. This classification revealed the subjects' strategy use for the four texts. The result of the classification for each text is shown in appendix (Internet, Appendix G; İnsanlarda Savunma Mekanizmaları, Appendix H; Air Pollution, Appendix I; Categories of Education in the USA, Appendix J).

4.1.1 The Strategy Classification of the Think Aloud Protocols for Turkish Texts

There were two Turkis texts. One of them (*İnternet*) had a familiar topic and the other (*İnsanlarda Savunma Mekanizmaları*) had an unfamiliar topic.The strategies used for these two texts were classified and the frequency of their occurences were calculated. Results are shown in table 7.

Table 7. The frequency of the reported strategy categories for the Turkish texts

No	Code	İnternet		İnsanlarda Savunma Mek.	
		n	%	n	%
1	SUW				
2	SKW				
3	EUG				
4	BLI				
5	UCC				
6	SVP	1	1		
7	TIL				
8	QMW	2	2		
9	ITC	2	2		
10	QMS	7	8	2	1.9
11	UKG	1		2	1.9
12	MRB	14	17	22	21.8
13	POW			3	2.9
14	SRH			5	4.9
15	ANC	4	5	1	0.9
16	RTS	2	2	2	1.9
17	INI	5	6	13	12.8
18	RTT	6	7	7	6.9
19	SBT	11	13	19	18.8
20	ALB			3	2.9
21	RAH	3	4	4	3.9
22	VIS	3	4	2	1.9
23	IMI	3	4	2	1.9
24	UIC	8	10	12	11.9
25	UBK	12	14	2	1.9
	Total	**84**	**% 100**	**101**	**% 100**

As it is seen in table 7, the classification for the text *İnternet* gave the following results:

According to the result of the classification of the think aloud data for this text, subjects had some vocabulary problems due to some technical terms, such as *"TCP/IP"* and *"protocol"*. So they reported the local strategy categories, such as *solving vocabulary problems (SVP)*, *questioning meaning of a word (QMW)*, and *questioning meaning of a sentence or clause (QMS)*. The most frequently reported local strategy category is *monitoring reading pace and reading behaviour (MRB)* with % 17 frequency score. The least frequently reported local strategy categories are *solving vocabulary problem (SVP)* and *using knowledge of syntax and punctuation or other grammar (UKG)* with % 1 frequency score.

The most frequently reported global strategy categories are *using inference or drawing conclusions (UIC)*, *speculating beyond the information in the text (SBT)* and *using background knowledge (UBK)* with frequency scores % 10, % 13 and % 14 respectively.

The classification result for the text *İnsanlarda Savunma Mekanizmaları* yielded the following results:

According to the familiarity assessment result, this text had an unfamiliar topic. As it is seen in table 7, 16 of the total 25 strategy categories were reported for this text. All of the 12 global strategy categories were reported. 9 out of 13 local strategy categories were not reported. Only 4 of them were reported.

The most frequently reported local strategy category is *monitoring reading pace and reading behaviour (MRB)* with % 21.8 frequency score. The least frequently reported local strategy categories are *questioning meaning of a clause or sentence (QMS)* and *using knowledge of syntax and punctuation or other grammar (UKG)* with % 1.9 frequency score.

The most frequently reported global strategy categories are *using inference or drawing conclusions (UIC)*, *integrating information (INI)* and *speculating beyond the information in the text (SBT)* with frequency scores %11.9, % 12.8 and % 18.8 respectively.

4.1.2 The Strategy Classification of the Think Aloud Protocols for the English Texts

There were two English texts. One of them (*Air Pollution*) had a familiar topic and the other (*Categories of Education in the USA*) had an unfamiliar topic. The strategies used for these two texts were classified and the frequency of their occurences were calculated. Results are shown in table 8.

Table 8. The frequency of the reported strategy categories for the English texts.

No	Code	Air Pollution		Categories of Education in the USA	
		n	%	n	%
1	SUW	9	7	9	7
2	SKW	2	1	1	1
3	EUG	25	19	26	21
4	BLI	1	1		
5	UCC	6	5	7	6
6	SVP	8	6	5	4
7	TIL	11	8	12	10
8	QMW	4	3	12	10
9	ITC	1	1	1	1
10	QMS	1	1		
11	UKG	11	8	8	6
12	MRB	15	11	13	11
13	POW				
14	SRH	1	1	2	2
15	ANC	4	3	4	3
16	RTS	1	1	2	2
17	INI	11	8	9	7
18	RTT	1	1	4	3
19	SBT	5	4	3	2
20	ALB			2	2
21	RAH	2	1		
22	VIS				
23	IMI	4	3	1	1
24	UIC	1	1		
25	UBK	8	6	1	1
	Total	**132**	**% 100**	**122**	**% 100**

As it is seen in table 8, the classification for the text *Air Polluiton* gave the following results:

22 of the total 25 strategy categories were reported for this text. 12 of these strategies are local strategies and 10 of them are global strategies. Only the strategy category *paraphrasing (POW)* was not reported. This was possibly due to the shortage of L2. Since our subjects were beginners they were unable to paraphrase the original wording of the text. The subjects selected this text as having a familiar topic, consequently they did not report the strategy category *acknowledging lack of background knowledge (ALB)*.

The most frequently reported local strategy categories are *translating a word or phrase (TIL), using knowledge of syntax and punctuation or other grammar (UKG), monitoring reading pace and reading behaviour (MRB)* and *expressing use of gloss or a dictionary (EUG)* with frequency scores % 8, % 8, % 11 and % 19 respectively. Although this text was selected as having a familiar topic, vocabulary seems the most important problem for the subjects. The strategy category *expressing use of gloss or a dictionary (EUG)* with the highest frequency score supports this idea.

The most frequently reported global strategy categories are *speculating beyond the information in the text (SBT), using background knowledge (UBK)* and *integrating information (INI)* with frequency scores % 4, % 6 and % 8 respectively.

The classification result for the text *Categories of Education in the USA* yielded the following results:

According to the familiarity assessment result, this text had an unfamiliar topic. As it is seem in table 8, 19 of the total 25 strategy categories were reported. Among them 10 of the reported strategy categories are local strategies. The strategy category *paraphrasing (POW)* was not reported for this text, either. This was again due to shortage of L2. Subjects

were unable to paraphrase the original wording of the text. 9 of the reported strategies are global strategies.

The most frequently reported local strategy categories are *translating a word or phrase (TIL), questioning meaning of a word (QMW), monitoring reading pace and reading behaviour (MRB)* and *expressing use of gloss or a dictionary (EUG)* with frequency scores % 10, % 10, % 11 and % 21 respectively. The strategy category *expressing use of gloss or a dictionary (EUG)* has the highest frequency score. Vocabulary seems the most important problem for this text, too.

The most frequently reported global strategy category is *integrating information (INI)* with frequency score % 7.

4.2 The Reading Strategies Questionnaire (RSQ)

The questionnaire had two versions: One asking subjects the reading strategies they use when they read a text in Turkish (RSQL1), and the other asking subjects the reading strategies they use when they read a text in English (RSQL2). The result of the RSQL1 was compared to the findings of the think aloud procedure for Turkish texts and the result of the RSQL2 was compared to the findings of the think aloud procedure for English texts.

4.2.1 RSQL1 vs the Think Aloud Findings for the Turkish Texts

The think aloud data for Turkish texts (*İnternet and İnsanlarda Savunma Mekanizmaları*) were classified and the strategies the subjects reported were revealed. The result of this classification is shown in table 7. The strategy classification of these two texts and RSQL1 are presented in appendix K. The strategy classification result for the Turkish texts and RSQL1 were compared. The test result is shown in table 9.

Table 9. The statistical test results for the comparison between the RSQL1 and the think aloud findings for the Turkish texts.

No	Strategy Code	p	Significance
1	SUW		
2	SKW		
3	EUG		
4	BLI		
5	UCC		
6	SVP	0.000	p<00.5
7	TIL		
8	QMW	0.001	p<00.5
9	ITC	0.001	p<00.5
10	QMS	0.064	p>00.5*
11	UKG	0.000	p<00.5
12	MRB	0.235	p>0.05*
13	POW	0.119	p>00.5*
14	SRH	0.080	p>0.05*
15	ANC	0.001	P<0.05
16	RTS	0.054	p>0.05*
17	INI	0.099	p>0.05*
18	RTT	0.064	p<0.05*
19	SBT	0.407	p<0.05*
20	ALB	0.098	p>0.05*
21	RAH	0.057	p>00.5*
22	VIS	0.000	p>00.5
23	IMI	0.000	p<0.05
24	UIC	0.602	p>00.5*
25	UBK	0.060	p>0.05*

(N=28 : * strategy categories with insignificant result)

Strategy categories 1-8 are concerned with vocabulary problems. Since the texts were in Turkish, subjects did not have vocabulary problems. So they reported almost no strategies related with vocabulary. However, when they responded the RSQL1, they gave contrasting answers. This shows that they consider vocabulary an important factor to comprehend a text whether in L1 or L2, but the texts they read did not present such a difficulty. We applied the Mann-Whitney statistical test on the strategy categories reported mutually both in RSQL1 and in the think aloud procedure. Our aim was to reveal the overlapping strategy categories of the think aloud data and the RSQL1 data.

When we classified the think aloud data of the Turkish texts, we found 19 strategy categories reported by the subjects. The statistical analysis results in table 9 show that 12 strategy categories of the think aloud data and RSQL1 overlap ($p>0.05$ for 12 strategy categories). 9 of the overlapping strategies are global strategies and 3 of them are local strategies. The total number of overlapping strategy categories form % 63 of the total strategy categories obtained from the think aloud procedure. More than % 50 of the strategy categories of the RSQL1 and the think aloud classification for the Turkish texts overlap.

4.2.2 RSQL2 vs the Think Aloud Findings for the English Texts

The think aloud data for English texts (*Air Pollution* and *Categories of Education in the USA*) were classified and the strategies the subjects reported were revealed. The result of this classification is shown in table 8. The strategy classification of these two texts and RSQL2 are presented in appendix L. The strategy classification result for the English texts and RSQL2 were compared. The test result is shown in table 10.

Table 10. The statistical test results for the comparison between the RSQL2 and the think aloud findings for the English texts.

No	Strategy Code	P	Significance
1	SUW	0.188	p>0.05*
2	SKW	0.073	p>0.05*
3	EUG	0.313	p>0.05*
4	BLI	0.000	p<0.05
5	UCC	0.110	p>0.05*
6	SVP	0.114	p>00.5*
7	TIL	0.153	p>0.05*
8	QMW	0.106	p>00.5*
9	ITC	0.000	p<00.5
10	QMS	0.000	p<00.5
11	UKG	1.000	p>00.5*
12	MRB	0.119	p>0.05*
13	POW		
14	SRH	0.002	p<0.05
15	ANC	0.000	p<0.05
16	RTS	0.000	p<0.05
17	INI	0.051	p>0.05*
18	RTT	0.225	p<0.05*
19	SBT	0.773	p<0.05*
20	ALB	0.000	p<0.05
21	RAH	0.000	p<0.05
22	VIS		
23	IMI	0.000	p<0.05
24	UIC	0.000	p<00.5
25	UBK	0.000	p<0.05

(N=28 : * strategy categories with insignificant result)

We applied the Mann-Whitney statistical test on the strategy categories reported mutually for the RSQL2 and the think aloud procedure for English texts. Our aim was to reveal the overlapping strategy categories of the think aloud data and the RSQL2 data.

According to the strategy classification result of the think aloud data for English texts, 23 of the total 25 strategy categories were reported by the subjects. Among them 12 strategy categories of the think aloud data and RSQL2 overlap ($p>0.005$ for 12 strategy categories). 9 of the overlapping strategies are local strategies and 3 of them are global strategies. The total number of overlapping strategy categories form % 52 of the total strategy categories obtained from the think aloud procedure. More than % 50 of the strategy categories of the RSQL2 and the think aloud classification for the English texts overlap.

4.3 The Difference between the Strategy Use in L1 Reading and L2 Reading: L1 vs L2.

The reading strategies of the subjects were presented in tables 7 (p.36) and 8 (p.39). The strategies the subjects used in their L1 and L2 reading were compared. This comparison was done regardless of the familiarity aspects of the texts since our aim was to reveal the difference between the strategy use in L1 and L2 reading. The statistical test was applied on the data in two steps: in the first step, all the strategies in the two coloumns (L1 and L2) were compared as a whole; in the second step each strategy reported mutually in the two columns was compared. The test result in the first step indicated that there was not a significant difference between the strategy use of subjects in L1 and L2 reading ($p= 0.397$: $p>0.05$).

In the second step, the statistical test was applied on 17 strategy categories. 8 strategy categories were not taken into consideration because they were not reported for both language categories mutually. The result of the statistical test is shown in table 11.

As it is seen in table 11, 6 strategy categories indicate significance and 11 of them indicate insignificance. This means that there is no difference between the subjects' strategy use in their L1 and L2 reading in 11 strategy categories. 2 of these strategies are local strategies and 9 of them are global strategies. That is, the insignificance between subjects' strategy use in L1 and L2 reading is formed by 2 local and 9 global strategies.

4.4 The Effect of Topic Familiarity on the Use of Reading Strategies

As it was stated before, four texts were selected as the reading materials of this study. 2 of them had familiar topics and 2 of them had unfamiliar topics. Subjects read these texts without knowing the familiarity aspect of the texts. To reveal the effect of topic familiarity on the use of reading strategies, we applied the Mann-Whitney statistical test on the strategy categories according to language groups. We used a 2 X (The Turkish text with familiar topic vs the Turkish text with unfamiliar topic) 2 (The English text with familiar topic vs The English text with unfamiliar topic) design.

4.4.1 L1 vs L1

The comparison was done in two steps. The test result in the first step indicated that there was not a significant difference between subjects' strategy use in L1 reading with familiar and unfamiliar topics ($p=0.976$: $p>0.05$).

In the second step, the test was applied on 13 strategies reported mutually for both texts. The result of the statistical test is shown in table 12.

Table 12. The statistical test results for the comparison between the subjects' strategy use in L1 reading with familiar and unfamiliar topics.

No	Strategy Code	P	Significance
1	SUW		
2	SKW		
3	EUG		
4	BLI		
5	UCC		
6	SVP		
7	TIL		
8	QMW		
9	ITC		
10	QMS	0.734	p>0.05*
11	UKG	0.571	p>0.05*
12	MRB	0.028	p<0.05
13	POW		
14	SRH		
15	ANC	0.168	p>0.05*
16	RTS	1.000	p>0.05*
17	INI	0.024	p<0.05
18	RTT	0.762	p>0.05*
19	SBT	0.034	p<0.05
20	ALB		
21	RAH	0.699	p>0.05*
22	VIS	0.654	p>0.05*
23	IMI	0.654	p>0.05*
24	UIC	0.273	p>0.05*
25	UBK	0.002	p<0.05

(N=26 : * strategy categories with insignificant result)

As it is seen in the table 12, there are 13 strategy categories reported mutually. There is a significant difference between the use of 4 strategy categories. There is an insignificant difference between the use of 9 strategy categories. That is, the insignificance between the subjects' strategy use for the Turkish texts with familiar and unfamiliar topics is formed by 9 strategies. 2 of these strategies are local strategies and 7 of them are global strategies.

Strategy categories *acknowledging lack of background knowledge (ALB)* and *using background knowledge (UBK)* do not indicate insignificance. Since they are related with background knowledge, significance for these strategy categories is a logical result.

4.4.2 L2 vs L2

The comparison was done in two steps. The test result in the first step indicated that there was not a significant difference between subjects' strategy use in L2 reading with familiar and unfamiliar topics ($p=0.674$: $p>0.05$).

In the second step, the test was applied on 13 strategies reported mutually for both texts. The result of the statistical test is shown in table 13.

Table 13. The statistical test results for the comparison between the subjects' strategy use in L2 reading with familiar and unfamiliar topics.

No	Strategy Code	P	Significance
1	SUW	1.000	p>0.05*
2	SKW	0.570	p>0.05*
3	EUG	0.654	p>0.05*
4	BLI		
5	UCC	0.762	p>0.05*
6	SVP	0.352	p>0.05*
7	TIL	0.795	p>0.05*
8	QMW	0.019	p<0.05
9	ITC	1.000	p>0.05*
10	QMS		
11	UKG	0.407	p>0.05*
12	MRB	0.603	p>0.05*
13	POW		
14	SRH	0.570	p>0.05*
15	ANC	1.000	p>0.05*
16	RTS	0.570	p>0.05*
17	INI	0.587	p>0.05*
18	RTT	0.169	p>0.05*
19	SBT	0.457	p>0.05*
20	ALB		
21	RAH		
22	VIS		
23	IMI	0.169	p>0.05*
24	UIC		
25	UBK	0.012	p<0.05

(N=28 :* strategy categories with insignificant result)

As it is seen in the table 13, there are 18 strategy categories reported mutually. There is a significant difference between the use of 2 strategy categories. There is an insignificant difference between the use of 16 strategy categories. This means that there is no difference between subjects' strategy use in their L2 reading in 16 strategy categories when they read a text with familiar topic and when they read a text with unfamiliar topic. That is, the insignificance is formed by 16 strategies. 9 of these strategies are local strategies and 7 of them are global strategies.

According to the results of the analysis of the data with respect to topic familiarity, it may be said that topic familiarity does not play an important role on the use of reading strategies in L1 and L2 reading.

4.5 Discussion

In this study, the strategy use of the subjects in L1 and L2 reading was compared. This comparison tried to reveal the significance between the subjects' strategy use in L1 and L2 reading and the effect of topic familiarity on the use of reading strategies in L1 and L2. In the light of the results, the two main research questions and the other questions related to them were answered.

4.5.1 The Difference between the Strategy Use of the Subjects in their L1 and L2 Reading

The first main question of the study was whether the reading strategies of Turkish EFL learners at the beginner level showed any difference in L1 and L2 reading. When subjects read the texts in L1, they reported 19 strategy categories (see table 11). 12 of these strategy categories were global strategies. That is, most of the strategies they used were top-down strategies. However, they used bottom-up strategies, too. When subjects read the texts in L1, they did not avoid bottom-up skills, they used a mixture of both bottom-up and

top-down strategies. Since they read in their L1, or the Turkish texts did not present such a difficulty, they did not have vocabulary problems. Therefore they reported almost no strategies related with vocabulary problems.

When they read texts in their L2, they reported 23 strategy categories. 11 of these strategies were global strategies and 12 of them were local strategies (see table 8). When they read in their L2, they had vocabulary problems. Therefore they reported the strategies related with vocabulary problems, such as *stating understanding of words (SUW), skipping unknown words (SKW), expressing use of gloss or a dictionary (EUG), breaking lexical items into parts (BLI), using cognates L1 and L2 to comprehend (UCC), solving vocabulary problems (SVP), translating a word or phrase (TIL),* and *questioning meaning of a word (QMW).* However, they used the top-down strategy categories as well.

The result of the examination of the subjects' strategy use in L1 and L2 reading accounts for the Lynch and Hudson's (1991) description of a good reader. According to their description, good readers do not avoid bottom-up skills, but they become automatic in using them. Good readers are supposed to use a mixture of bottom-up and top-down skills. This is called an interactive model of reading. It may be said that the reading behaviors of the subjects of this study are compatible with this model.

The statistical analysis of the strategy use of the subjects in L1 and L2 reading indicated that there was an insignificant difference between the subjects' use of reading strategies in L1 and L2. This insignificance is formed by 11 strategy categories (see table 11). 9 of these strategies are global strategies and 2 of them are local strategies.

These findings contrast to the Linguistic Threshold Hypothesis (LTH). According to LTH, low proficiency in the L2 short circuits the readers effective strategies. When readers confront with an L2 text, their top-down processing turns into bottom-up processing. According to our findings, subjects did not avoid using the global strategies in their L2

reading. The insignificance between the 11 strategy categories in L1 and L2 readings of the subjects supports this. When they read in L2, they used local strategies as well.

Whereas our findings are in support of another hypothesis that is bi-orientation. According to this view beginning language learners are oriented neither from the bottom-up nor from the top-down; they are bi-oriented. And a little difference exists in psychological processing between L1 and L2 reading (Davis and Bistodeau, 1993:459).

Our findings also contrast to the findings of Davis and Bistodeau's (ibid) study. They found that low linguistic proficiency resulted in greater attention to bottom-up components of comprehension.

The analysis of the RSQ data for the individual strategy categories indicated that the subjects also had a tendency towards bottom-up processing in their L1 reading as well. Since the texts in subjects' L1 did not present vocabulary problems, they did not report most of the local strategies in their L1 reading, which would, otherwise, form an insignificance between the use of local strategies.

To answer our first question, in the light of these results, it may be said that no difference exists between L1 and L2 readings of our subjects with respect to strategy use. When the individual strategies are examined, there seems to be a difference in the use of local strategies. However, this difference is heavily dependent upon bottom-up processing. Components of L2, especially vocabulary, exert an influence on the use of bottom-up processing.

4.5.2 The Effect of Topic Familiarity on the Use of Reading Strategies

The second main question of this study was whether the reading strategies of the subjects differed as a function of topic familiarity. Related to this it was questioned whether

the subjects used different reading strategies when they read texts with familiar and unfamiliar topics in L1 and whether they used different reading strategies when they read texts with familiar and unfamiliar topics in L2.

The subjects did not know the familiarity aspects of the texts while reading them. That is, they reported the reading strategies they used without knowing the familiarity aspects of the texts. The strategy use of the subjects was compared according to the language categories to reveal the effect of topic familiarity on the use of reading strategies.

The statistical test results indicated that there was not a significant difference between the subjects' strategy use in their L1 reading with familiar and unfamiliar topics. It was also indicated that there was not a significant difference between the subjects' strategy use in their L2 reading with familiar and unfamiliar topic.

The results of the comparison for the individual strategy categories were presented in tables 12 and 13 to indicate the strategies forming the insignificance between the subjects' strategy use with familiar and unfamiliar topics..

According to the statistical test results, it may be said that topic familiarity does not have a powerful influence on the use of reading strategies in L1 and L2 reading. The result seems contrary to the general assumption that background knowledge has an importance in reading. However, the result obtained in this study may be based on the proficiency level of the subjects. Since the subjects were at beginner level, this may not be a surprising result.

These findings related with the effect of topic familiarity on the use of reading strategies support the findings obtained by Carrel (1983, c.in Lee, 1986). According to her findings nonnative readers show no effect of background knowledge on reading, comprehending or recalling target language texts.

CHAPTER V

CONCLUSION

5.1 Overview of the Study

The studies on the use of reading strategies in L1 and L2 (Davis & Bistodeau, 1993) have shown that there is difference between L1 and L2 reading with respect to strategy use. Most of these studies were motivated by the two contrasting hypotheses: 1) The Linguistic Threshold Hypothesis suggesting that low proficiency in the L2 short circuits the effective strategies of L2 readers (Clarke, 1980); 2) The Bi-orientation hypothesis suggesting that L1 readers are oriented neither from the top-down nor from the bottom-up, they are bi-oriented (Lee, 1991, c.in Davis & Bistodeau, 1993).

These two hypotheses related with the strategy use of learners in L1 and L2 reading have been a great concern for the researchers. The contrasting results of the studies on the use of reading strategies and these two hypotheses motivated us to conduct a study comparing the strategy use of Turkish EFL learners in L1 and L2 reading.

Therefore this study tried to investigate two main research questions: It was questioned whether the reading strategies of Turkish EFL learners at the beginner level showed any difference as a function of language and whether the reading strategies of these learners differed as a function of topic familiarity. Related to these two main questions the following questions were asked:

a. Do they use different reading strategies when they read texts in L1 and when they read texts in L2 ?

b. Do they use different reading strategies when they read a Turkish text with familiar topic ?

c. Do they use different reading strategies when they read a Turkish text with unfamiliar topic ?

d. Do they use different reading strategies when they read an English text with familiar topic ?

e. Do they use different reading strategies when they read an English text with unfamiliar topic ?

To do this, first of all, four texts were selected (two Turkish and two English) among 14 texts (seven Turkish and seven English).

The selection procedure included a topic familiarity assessment plan and a rating step. Among the 14 texts, the following texts were selected with respect to the subjects' familiarity with them.

a. Internet (Turkish text with familiar topic).

b. Air Pollution (English text with familiar topic).

c. İnsanlarda savunma mekanizmaları (Turkish text with unfamiliar topic).

d. Categories of Education in the USA (English text with unfamiliar topic).

The *think aloud* method was used to collect the data. The subjects were also given two reading strategies questionnaires. These questionnaires were used to confirm the think aloud data. Its findings were compared to those of the think aloud data.

The data collection procedure included four steps:

a. A practice session before the actual think aloud session : Subjects practiced the think aloud procedure in this step.

b. The *think aloud* session : Subjects read the selected texts in this session and reported their comments on the current sentence and its role in understanding the passage. The order of presentation of the texts (whether the subjects read Internet first, Air Pollution next and so on) was counterbalanced. Subjects' reports were audio recorded. They used their mother tongue while thinking aloud.

c. The exit interview : In this step, the recorded think aloud protocols were listened and transcribed with the subjects.

d. The reading strategies questionnaires: All the subjects were given two RSQs. The RSQs asked subjects their general reading behaviors: one for reading in L1 and the other for reading in L2. The RSQs were given after all the think aloud sessions had been finished.

This study was conducted with the first year students attending the Agricultural Engineering Faculty at Gaziosmanmpaşa University in Tokat. Since the study aimed to investigate the strategy use of Turkish EFL learners at beginner level, a placement test was given to 86 students and 28 of them with scores 20-27 were selected as the subjects of this study.

The think aloud protocols of the subjects were classified according to a strategy classification scheme. This classification revealed 25 reading strategies. The strategy categories were divided into two groups: *local strategies* (bottom-up processing, focused on word, phrase and sentence level concepts, such as skipping unknown words, breaking lexical items into parts, translating a word or phrase, and paraphrasing), and *global strategies* (top-down processing, focused on conceptual and discourse level processing strategies, such as anticipating content, integrating information and recognizing text structure). A non-parametric statistical test, the Mann-Whitney Test, was used to analyze the data.

The results indicated that there was not a significant difference between the subjects' strategy use in their L1 reading and L2 reading with respect to strategy use. There seemed to be a difference with respect to bottom-up processing when the individual strategy categories are examined and this was due to vocabulary problems in L2. However, the examination of the responses given to the questionnaires indicated that the subjects also had a tendency towards bottom-up processing in their L1 reading, but the Turkish texts did not present problems related with vocabulary, so they did not report strategies related with bottom-up processing in L1.

The results also indicated that topic familiarity did not have an influence on the use of reading strategies in L1 and L2 reading. That is, there was not a significant difference between subjects' reading familiar and unfamiliar topics both in L1 and L2 with respect to strategy use.

5.2 Limitations of the Study

This study was conducted with a limited number of subjects at beginner level. Four texts were used as the reading material of the study: two Turkish and two English. The think aloud method and the reading strategies questionnaires were used as the data collection methods. These are all important determining factors for this type of studies.

The result of the study could show differences with different proficiency level subjects, with different text types and number of texts, and with different

methodologies. So the results of this study can not be generalized to all situations of the strategy use in reading.

5.3 Suggestions for Further Research

According to the results of the study, we have two suggestions. The first suggestion is concerned with further research. This study can be conducted with different proficiency level and number of subjects, with different text types and with different methodologies to gather data. These variables can be changed to test the results of this and this type of studies. Different conclusions may be obtained by changing these variables.

The second suggestion is concerned with language teaching. The result of the study indicated that L2 vocabulary knowledge is an important component of L2 reading process and it should be given more importance in the teaching of L2 reading. To overcome learners' vocabulary problems in L2, strategies related with vocabulary, such as *skipping unknown words, guessing from the context* and *solving vocabulary problems* are important strategy types to improve the reading process in L2. That is, subjects may be taught vocabulary strategies for better and productive comprehension of the L2 texts.

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Appendix A

Topic Familiarity Assessment Sheet

A. Task Hakkında

Aşağıda sizden bazı kounlar hakkında sahip olduğunuz bilgiler sorulmaktadır. Konu başlıkları C bölümünde verilmiştir. Lütfen konularla ilgili bilgilerinizi aşağıda verilen örnek formata göre size verilen kağıtlara yazınız.

B. Örnek Cevaplama Formatı

Konu : ŞİİR

a. ŞİİR kelimesini duyduğunuzda ilk aklınıza gelen şeyler nelerdir ?

b. Birinci adımda yazdıklarınızı size düşündüren şeyler nelerdir ?

c. ŞİİR'le ilgili olarak başka neler biliyorsunuz ? Bilgi ve tecrübelerinizi yazınız.

C. Konu Başlıkları

1. Computers
2. Categories of Education in the USA
3. The Invention of the First Plane
4. Oceans
5. Air Pollution
6. New Forms of Energy
7. Treasure Hunting under the Seas
8. Güneydoğu Anadolu Projesi
9. Reflexlerimiz
10. Boğmaca
11. Kas Duyusu
12. İnsanlarda Savunma Mekanizmaları
13. Bitkilerde Nem ve Önemi
14. İnternet

Appendix B

Name and surname :..... Department:.....

Yönerge: Aşağıdaki soruları dikkatle okuyarak sizin için doğru olan cevabı yuvarlak içersine alınız.

Bir (İngilizce/Türkçe) metni okurken .....

1. anlamanın bütün kelimeleri bilmeye dayalı olduğuna inanırım EVET HAYIR

2. bilmediğim kelimeler üzerinde durmam, atlarım. EVET HAYIR

3. sözlük ihtiyacı duyar ve kullanırım. EVET HAYIR

4. bir kelimenin (cümleciğin) anlamını çıkarabilmek için kelimeye ait ekleri (cümleciği) parçalara ayırırım. EVET HAYIR

5. Türkçe'de ve İngilizce' de aynı anlamda kullanılan kelimelerden anlamı yakalamak için faydalanırım. EVET HAYIR

6. bilmediğim bir kelimeyi anlamak için metnin konusu, eş anlamlı kelimeler veya başka kelime anlama yollarını kullanırım. EVET HAYIR

7. daha iyi anlayabilmek için çeviri yaparım. EVET HAYIR

8. bilmediğim kelimelerin anlamını mutlaka sorgularım. EVET HAYIR

9. anlamadığım kelime veya kelime gruplarının altını çizer veya yuvarlak içersine alırım. EVET HAYIR

10. anlamadığım bir cümleyi mutlaka sorgularım. EVET HAYIR

(Continued Appendix B)

11. cümledeki kelime dizilişi, gramer ve noktalama işaretleri gibi cümle içi özelliklere dikkat ederim. EVET HAYIR

12. anlamadığımda okuma hızımı yavaşlatır, yeniden okur veya okuduğum cümleyi anlayabilmek için bir iki cümle sonrasına bakarım. EVET HAYIR

13. okuduğum cümleyi kendi kelimelerimle kendime anlatırım. EVET HAYIR

14. derinlemesine okumaya başlamadan önce genel bir fikir edinmek için metni baştan sona gözden geçiririm. EVET HAYIR

15. ilerleyen cümlelerde, bölümlerde anlatılanlarla ilgili tahminde bulunurum. EVET HAYIR

16. fikirleri ana fikir, detaylar şeklinde değerlendirir, metinde sunulan bilgilerin amacını ve sunuluş şeklini kafamda sorgular ve yorumlarım. EVET HAYIR

17. okumakta olduğum cümledeki bilgilerle önceki cümlelerde geçen bilgiler arasında ilişki kurarım. EVET HAYIR

18. metindeki bilgilere duygusal olarak reaksiyon gösteririm. EVET HAYIR

19. metindeki bilgilerin ötesinde tahminler yapar, düşünceler ortaya koyarım. EVET HAYIR

20. eğer metnin konusuyla ilgili bir yakınlığım yoksa, metni anlamakta zorluk çekerim. EVET HAYIR

21. sonraki cümlelere bakarak metnin ilerleyen bölümlerinde veya sonunda neler olduğunu anlamaya çalışırım. EVET HAYIR

(Continued Appendix B)

22. okuduğum şeylerle ilgili nesneleri gözümde canlandırırım. EVET HAYIR

23. metnin ana fikrini anlayıp ortaya koymaya çalışırım. EVET HAYIR

24. metindeki bilgileri ve kendi bilgilerimi kullanarak sonuçlar çıkarır, tahminlerde bulunurum. EVET HAYIR

25. konuyla ilgili yakınlığımı, dünya bilgimi konuyu anlamakta kullanırım. EVET HAYIR

Appendix C

Sample Practice Session Aactivity for the 'Think Aloud' Task.

Experimenter (to the subject):

Bu, yapacağımız uygulamanın bir deneme aşamasıdır. Şimdi size kısa bir metin vereceğim. Benim ilgilendiğim şey bir metni okurken aklınızdan geçen düşüncelerinizdir. Dolayısıyla metni okurken aklınızdan geçen şeyleri yüksek sesle düşünmenizi istiyorum. Metne bakacak olursanız her cümlenin sonunda bir kırmızı işaret göreceksiniz. Bu işaretler 'cümleyi oku, kırmızı işarete geldiğinde aklından geçenleri yüksek sesle ifade et' anlamına gelmektedir.

Daha önce böyle bir uygulama ile karşılaşmamış olabilirsiniz. Okuduğunuz bir metinle ilgili olarak yüksek sesle düşünerek ifade vermenin nasıl bir uygulama olduğunu bilemeyebilirsiniz. Bu sebeple sizden ne beklendiğini tam olarak kestiremeyebilirsiniz. Aslında bütün bunları insanlar bir metni okurken otomatik olarak yapmaktadırlar. Bu konuda size yol götermesi açısından aşağıdaki listeyi bir rehber olarak kullanabilirsiniz.

- kendi okuma davranışınızla ilgili yorumlar,
- konunun gidişatı ile ilgili tahminde bulunma,
- yaptığınız tahminlerle ilgili onay ve yorumlar,
- metinde okuyup geçtiğiniz bilgilerle ilgili referanslar,
- okuduklarınızla ilgili sonuçlar çıkarma,
- metnin düzeni ile ilgili yorumlar,
- metindeki bilgilerle dünya bilgileriniz arasında ilişkiler kurma,
- metindeki bilgilerle ilgili kendini sorgulama,
- cümlelerin yapısı ve grameri gibi cümle içi özellikler ile ilgili yorumlar,
- ve metinde geçen kelimelerle ilgili yorumlar.

(continued Appendix C)

Sizden bir metni okurken gerçekten yapmadığınız bir şeyi söylemenizi istemiyorum. Yalnızca o an aklınızdan geçeni söylemenizi istiyorum. Bana ifadelerinizi açıklamaya çalışmanızı da istemiyorum. Yalnızca o an aklınızdan geçeni söyleyin. Kendinizi son derece rahat hissedin. Konuşmalarınız kasete kaydedilecektir. Odada yalnız başınıza kendi kendinize konuşuyormuşsunuz gibi davranın.

Şimdi önce size verilen bu listeye bir göz atın ve kendinizi rahat ve hazır hissettikten sonra metni okumaya ve sizden istenen şeyleri yapmaya başlayabilirsiniz.

(The text used in the practice session)

English Today * [1]

English is a first language in 12 countries. * Number of speakers : 350 million. *

People use English as a second language in 33 countries. * Number of speakers : 400 million. *

People study English as a foreign language in 56 countries. *

The 10 most frequent words in English : the, of, and, a, to, in, is, you, that, it. *

The 10 most studied foreign languages : English, French, Spanish, Italian, Russian, Arabic, German, Chinese, Japanese, Turkish.

(* : Red points)

1 Taken from INTERCHANGE Student's Book 1.

APPENDIX D / 1

(Turkish Text 1)

INTERNET

Internet'in Tanımı

Bugüne dek üzerinde uzlaşmaya varılmış ortak bir tanım bulunmamasına karşın, çeşitli elektronik arşivlerdeki Internet dökümanlarında yer verilen tanımlara bakarak, Internet'in Dünya üzerindeki mevcut milyonlarca ağın birbirleriyle ortak bir protokol çerçevesinde iletişim kurmasını ve birbirlerinin kaynaklarını paylaşmasını sağlayan ağlar-arası-ağ olduğu söylenebilir.

Daha teknik terimlerle konuşarak başka tanımlarda verilebilir. Örneğin Internet, TCP/IP protokolünü tanıyan ağların oluşturduğu bir büyük ağdır.

Bir başka tanıma göre Internet, bu protokolü tanıyan ağları kullanan insanların oluşturduğu bir büyük topluluktur.

Ama tüm bu tanımlar arasında ortak olan bir terim var, o da TCP/IP protokolü.

Host ve Access Provider

Internert'e iki şekilde bağlanabilirsiniz: doğrudan, dolaylı.

Doğrudan bağlanma şeklinde kullandığınız bilgisayar Internet'in gerçek bir parçası olur ve bir numarayla adlandırılır. Bu tür bilgisayarlara host bilgisayar ya da Türkçe olarak ana bilgisayar adını veriyoruz.

Bu bağlanma şekli biraz daha pahalı olduğu için kullanıcıların çok büyük bir çoğunluğu Internet'e dolaylı yoldan bağlıdırlar. Yani önce bir host bilgisayara bağlanmakta ve onun sunduğu hizmetler sayesinde Internet'e erişmektedirler. Bu hizmeti veren kurumlara erişim sağlayıcı adı verilir.

APPENDIX D / 2

(Turkish Text 2)

İnsanlarda Savunma Mekanizmaları

Özdeşim (Identification)

Hayatta türlü başarısızlıklar, engellemeler ve yılgınlıklar karşısında birey, bazen herhangi bir alanda başarılı bir kişi yada kişilerle kendini bir sayma, kendisini onlara yakın hissetme ile biraz doygunluk alabilir. Buna tipik bir örnek olarak küçük bir çocuğun bir gün bahçede oynarken bir arkadaşının kendisinden daha yükseğe sıçrayabildiğini görünce 'Benim ağabeyim göğe kadar sıçrar' demesini gösterebiliriz. Çocuk böylece çok güçlü olduğunu söylediği ağabeyi ile kendisini bir tutarak kişisel değer duygusunu artırmağa çalışmaktadır. Yetişkinlerin de sık sık kendilerini daha üstün seviyedeki bir insan ya da kurum ile özdeşerek benlik değerlerini artırmağa çalıştıkları olur. Bazı insanların şu ya da bu kurumun üyesi bulundukları ile öğündükleri görülebilir.

Karşıt Tepkiler Kurma (Reaction Formation)

Bireylerin bazen çatışan duygu veya güdülerden toplumca beğenilmeyeni inkar için, böyle bir güdünün onları sevkettiği davranışın tam tersini yapmaya çalıştıkları ve bunda bir dereceye kadar başarı gösterdikleri görülür. Örneğin, kardeşini kıskanan bir çocuğun aşırı derecede iyi bir abla ve ağabey olmağa çalışması gibi. Cinsellik güdüsünü yenmek için bazı kimselerin karşı cinse düşman kesilmeleri, onları aşağı gören bir tavır takınmaları gibi. Bu tutumun aşırı biçimleri toplumca garip karşılanır ve bazen bireyin aleyhine sonuçlar verir.

(Continued Appendix D / 2)

Yer Değiştirme (Displacement)

Çeşitli enngellemeler karşısında, bu engellemelere sebep olan kişiye türlü nedenlerle çatamayan kimse hıncını egemenlik kurabileceği başka birinden veya eşyadan alır. Telefonda fena bir haber alan bir iş adamının telefon ahizesini yere firlatması gibi.

Gerileme (Regression)

Temel ihtiyaçların ve isteklerin karşılanmaması sonucu meydana gelen doygunsuzluk ve kaygı hallerinde, daha ilkel bir olgunluk düzeyine gerileme sık görülen hallerdendir. Sıkıntılı durumlarda yetişkin bir insan kekeler, kızarır, kendi olgunluk düzeyinin altında adeta bir delikanlı, bir genç kız gibi davranır. Bir genç bazen on yaşındaki bir çocuk gibi bağırır çağırır, hatta ağlar.

Çeşitli savunma mekanizmaları herkeste görülür. Bunların makul ve ölçülü bir şekli şağlıklı sayılır. Ancak bunlar bireyi çalışmaktan alıkoyar, veya aşırı bir biçim alıp davranışlarını toplumca garip karşılanan şekle sokarsa, bireyde bir takım uyumsuzluklara, kişilik bozukluklarına ve nihayet akıl hastalıklarına neden olabilir.

Appendix D / 3

(English Text 1)

Air Pollution

Air pollution is one of the most serious problems in the world today. People make the air dirty with machines that produce gases and smoke. Badly polluted air can cause sickness and even death. Everyone wants to stop pollution, but it is a difficult problem to solve.

Most of our pollution is caused by things that people need. Automobiles and airplanes cause pollution, but they also provide people with transportation. Factories cause air pollution too, but they also provide people with jobs and products. In crowded cities, thousands of automobiles and factories can add tons of pollution to the air everyday.

Nobody likes air pollution. It makes clear, fresh air look cloudy and smell bad. It is dangerous to everyone's health. Air pollution damages the plants that provide us with food. Most materials wear out more quickly in polluted air than they do in clean air. Polluted air can even damage strong materials like steel and concrete.

If people wanted to stop pollution immediately, they would have to stop using many of the machines that make life easier for them. Most people do not want to do that. Pollution can also be stopped slowly. Scientists and engineers can develop automobiles and factories that produce less pollution. People can work together to persuade businesses to be more concerned about the problem.

Appendix D / 4

(English Text 2)

Categories of Education in the United States

Education in the United States is usually divided into four levels. These are early childhood, elementary, secondary, and higher education.

The first level is early childhood education. This is for children under six years. Its main purpose is to prepare children for school. Children in kindergarten and preschool learn to get along in a group. They express their ideas and feelings by painting, singing and playing.

The second level, elementary education, is for children from age six to twelve or fourteen. Elementary education is divided into six or eight grades. Children usually meet with one teacher for most of the day. They learn reading, arithmetic, writing, social studies, and science. They also have art, music and physical education.

The third level is secondary education. It is for junior and senior high school students. Junior high school is usually for students from ages twelve to fourteen. High school students are fourteen to seventeen or eighteen years old. Most American high schools have comprehensive programs. This means that a variety of subjects are taught in the same school. Some students take courses to prepare themselves for college. Other students take technical or vocational courses that prepare them for jobs after they graduate from high school.

(Continued Appendix D / 4)

Higher education continues the educational process after high school. There are many kinds of institutions of higher education. Technical institutes offer two-year programs in electronics, engineering, business and other subjects. Community or junior colleges also offer two-year programs. Some of these programs are vocational. Others are academic. After two years at a junior college, students receive an Associate degree. They can then continue at a four-year college. Many students go directly from high school to a four year college or university. Colleges and universities offer many courses and programs. These lead to a Bachelor of Arts or a Bachelor of Science degree. Most universities also have professional schools. These provide training in business, education, engineering, law, and medicine.

Appendix E

Strategy Classification Scheme

Strategy	Code	Definition
Local Strategies		
1. States understanding of words/vocabulary.	SUW	The reader acknowledges comprehension based on knowing all the words.
2. Skips unknown words.	SKW	The reader states that s/he skipped a word that was not familiar.
3. Expresses use of gloss.	EUG	The reader voices use of word glosses or a need for a gloss or dictionary.
4. Breaks lexical items into parts.	BLI	The reader breaks up words or phrases into smaller units to figure out the word/phrase.
5. Uses cognates L1 and L2 to comprehend.	UCC	The reader expresses ease of understanding because of words that look and mean the same in L1 and L2.

(Continued Appendix E)

6. Solves vocabulary problem.	SVP	The reader uses context, a synonym or some other word-solving behaviour to understand a particular word.
7. Translates a word or phrase into L2.	TIL	The reader expresses meaning of a word or phrase into English.
8. Questions meaning of a word.	QMW	The reader doesn't understand a particular word.
9. Identifies through circling, underlining, or placing an arrow, words/phrases not understood.	ITC	The reader states that s/he circled,underlined word or phrase not understood.
10. Questions meaning of a clause or sentence.	QMS	The reader doesn't understand the meaning of a portion of the text.
11. Uses knowledge of syntax and punctuation or other grammar.	UKG	The reader expresses awareness of grammar, syntax, and parts of speech or punctuation.

(Continued Appendix E)

12. Monitors reading pace and reading behaviour.	MRB	The reader makes reference to slowing down, reading or perhaps

reading on in spite of not understanding some things. The reader mentions specifically that s/he went back and read something again, or indicates using information which is more than a sentence away.

13. Paraphrases.	POW	The reader rewords the original wording of the text.

Global Strategies

14. Skims, reads headings, subheadings, subtitles and looks at pictures.	SRH	The reader previews text to get a general idea of what the article is about before actually reading the text.
15. Anticipates content.	ANC	The reader predicts what content will occur in succeeding portions of text.
16. Recognizes text structure.	RTS	The reader distinguishes between main points and supporting details or discusses the purpose of information or notes how the information is presented.

(Continued Appendix E)

17. Integrates information.	INI	This reader connects new information with previously stated content.
18. Reacts to the text.	RTT	The reader reacts emotionally to information in the text.
19. Speculates beyond the information in the text.	SBT	The reader shares a thought that goes beyond the information in the text.
20. Acknowledges lack of background knowledge.	ALB	The reader states lack of familiarity or knowledge about text topic.
21. Reads ahead.	RAH	The reader specifically mentions reading ahead as s/he reads.
22. Visualizes.	VIS	The reader indicates that s/he had a mental image.

(Continued Appendix E)

23. Identifies main idea.	IMI	The reader relates major points of paragraph or passage.
24. Uses inference or draws conclusions.	UIC	The reader indicates that s/he guesses based on info in text and own knowledge.
25. Uses background knowledge.	UBK	The reader states a familiarity or knowledge about text topic.

Appendix F

Sample Responses to the 25 strategy categories.

A. LOCAL STRATEGIES

1. States understanding of words / vocabulary.

Tüm kelimelerin anlamını bildiğim için cümlenin ne demek istediğini anladım.

2. Skips unkown words.

Kelimelerin hepsini bilmesemde cümlenin akışı parçayı anlamamı sağlıyor.

3. Expresses use of gloss.

Divide kelimesinin anlamını bilmiyorum, sözlüğe bakmam gerekir.

4. Breaks lexical items into parts.

*Cümlenin sonundaki **easier**'i bilmiyorum ama **easy** kolay anlamında idi. Bıda ondan oluşan bir kelime olabilir.*

5. Uses cognates L1 and L2 to comprehend.

*Bazı kelimeleri, **technical** gibi, Türkçe'mizde de kullanıyoruz.*

6. Solves vocabulary problem.

***Sickness** kelimesinin anlamını bilmiyordum. Ölüm kelimesinden hastalık gözümün önüne geldi.*

7. Translates a word or phrase into L1.

Anlamak için tercüme etmem gerekir.

(Continued Appendix F)

8. Questions meaning of a word.

Provide kelimesinin anlamı nedir, bilmiyorum.

9. Identifies through circling, underlining or placing an arrow words or phrases.

Bazı kelimelerin altını çiziyorum.

10. Questions meaning of a clause or sentence.

Kişisel duygu ve değerler derken ne demek istiyor.

11. Uses knowledge of syntax and punctuation or other grammar.

***But** geçince sonunun ne geleceğini anlamak mümkün.*

12. Monitors reading pace and reading behavior.

Sanırım yavaş yavaş okuyup iyice düşünerek yorumlamalıyım.

13.Paraphrases (Rewords the original wording)

Yani bu cümleler insanların kendilerini yüceltmek için neler yaptıklarını ifade ediyor.

B. GLOBAL STRATEGIES

14. Skims, reads headings, subtitles and looks at pictures.

Başlığı okuyunca neler olabileceğini yorumlayarak daha kolay anlaşılıyor.

(Continued Appendix F)

15. Anticipates content.

Birinci cümlede sorunu belirtmiş, gelecek cümlelerde nedenini ve çözümünü verecektir.

16. Recognizes text structure.

Cümleler örneklerden genellemeye dönüşmeye başladı.

17. Integrates information contained in the text.

Önceki cümlede anlatılanların açıklaması şeklinde verilmiş.

18. Reacts to the text.

Bu cümleyi okurken lise yıllarım aklıma geliyor ve birdenbire duygusallaşıyorum.

19. The reader shares a thought that goes beyond the information contained in the text.

Bu gibi bireyler toplum tarafından dışlanır.

20. Acknowledges lack of background knowledge.

Bu konuda doğru yada yanlış diyebilecek kadar bilgim yok.

21. Reads ahead.

Anlayabilmek için paragrafın tümünü okumam gerek.

22. Visualizes.

Bunu okuyunca bilgisayarlarla dolu, dünyayla iletişim kuran bir oda aklıma geliyor.

(Continued Appendix F)

23. Identifies main idea.

Konu başlığından da anlaşıldığı gibi hava kirliliğinden bahsediyor.

24. Uses inferences or draws conclusions.

Bu mekanizmalarda bir derece de olsa insan hayatının tuzu biberidir diye düşünüyorum.

25. Uses background knowledge.

Bu konudaki bilgim anlamama yardımcı oluyor.

Appendix G

The strategy classification results for İnternet

	Subjects	İG	EG	MD	MÇ	ÇC	DÜ	YM	OP	GT	CG	EU	KC	MS	DM	ÖÖ	SE	SA	FO	TB	FK	EM	ÖT	MA	BY	EK	AY	AE	AÇ	Total
No	Strategy Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
1	SUW																													
2	SKW																													
3	EUG																													
4	BLI																													
5	UCC																													
6	SVP																						X							1
7	TIL																													
8	QMW																			X								X		2
9	ITC							X													X									2
10	QMS		X		X	X	X					X			X										X					7
11	UKG						X																							1
12	MRB	X			X		X	X	X	X	X	X	X			X					X			X		X		X		14
13	POW																													
14	SRH																													
15	ANC												X									X			X	X				4
16	RTS																			X		X								2
17	INI				X						X			X									X				X			5
18	RTT									X		X		X		X					X						X			6
19	SBT			X		X		X				X	X	X	X		X	X				X							X	11
20	ALB																													
21	RAH							X					X														X			3
22	VIS		X										X											X						3
23	IMI																	X									X		X	3
24	UIC				X	X						X		X				X	X		X	X								8
25	UBK		X		X			X							X		X	X	X	X		X		X				X	X	12
	Total	1	3	1	5	3	3	5	1	2	2	5	5	4	3	2	2	4	2	3	4	5	2	3	2	2	4	3	3	**84**

Key : X = Strategy use by the subjects. Codes for strategy categories appear in appendix E.

Appendix H

The strategy classification results for İnsanlarda Savunma Mekanizmaları

	Subjects	İG	EG	MD	MÇ	ÇC	DÜ	YM	OP	GT	CG	EU	KC	MS	DM	ÖÖ	SE	SA	FO	TB	FK	EM	ÖT	MA	BY	EK	AY	AE	AÇ	Total
No	Strategy Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
1	SUW																													
2	SKW																													
3	EUG																													
4	BLI																													
5	UCC																													
6	SVP																													
7	TIL																													
8	QMW																													
9	ITC																													
10	QMS															X					X									2
11	UKG					X																		X						2
12	MRB	X	X	X	X	X	X	X	X	X	X	X	X	X					X		X		X	X	X	X	X	X	X	22
13	POW																	X				X					X			3
14	SRH		X	X	X					X							X													5
15	ANC	X																												1
16	RTS																			X			X							2
17	INI	X						X			X		X						X	X			X	X	X	X	X	X	X	13
18	RTT									X		X				X				X	X	X							X	7
19	SBT	X	X	X	X	X		X		X		X		X	X	X	X	X	X		X	X					X	X	X	19
20	ALB																		X		X								X	3
21	RAH			X						X																X			X	4
22	VIS			X						X																				2
23	IMI																X			X										2
24	UIC				X	X		X	X			X		X	X		X	X	X		X	X								12
25	UBK							X															X							2
	Total	4	3	5	4	4	1	5	2	6	2	4	2	3	2	3	4	3	5	4	6	4	4	3	2	3	4	3	6	**101**

Key : X = Strategy use by the subjects. Codes for strategy categories appear in appendix E.

Appendix I

The strategy classification results for Air Pollution

	Subjects	İG	EG	MD	MÇ	ÇC	DÜ	YM	OP	GT	CG	EU	KC	MS	DM	ÖÖ	SE	SA	FO	TB	FK	EM	ÖT	MA	BY	EK	AY	AE	AÇ	Total
No	Strategy Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
1	SUW	X		X	X		X	X	X			X	X							X										9
2	SKW																	X										X		2
3	EUG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X			X	X	X	X	X	X	25
4	BLI											X																		1
5	UCC				X	X			X					X						X						X				6
6	SVP								X	X			X	X									X				X	X	X	8
7	TIL		X			X		X			X	X	X										X	X			X	X	X	11
8	QMW																X				X	X				X				4
9	ITC			X																										1
10	QMS																											X		1
11	UKG			X	X			X							X	X				X				X		X	X	X	X	11
12	MRB		X		X			X	X	X	X		X	X							X		X		X	X	X	X	X	15
13	POW																													
14	SRH			X																										1
15	ANC								X				X								X	X								4
16	RTS																			X										1
17	INI			X	X				X		X			X	X			X	X		X			X			X			11
18	RTT														X															1
19	SBT			X				X								X													X	X	5
20	ALB																													
21	RAH																X								X					2
22	VIS																													
23	IMI					X						X															X	X		4
24	UIC																											X		1
25	UBK	X	X			X												X	X			X					X		X	8
	Total	3	4	7	6	5	2	6	7	3	4	5	6	5	4	3	3	3	3	5	5	3	3	4	3	5	8	10	7	**132**

Key : X = Strategy use by the subjects. Codes for strategy categories appear in appendix E.

Appendix J

The strategy classification results for Categories of Education in the United States

	Subjects	İG	EG	MD	MÇ	ÇC	DÜ	YM	OP	GT	CG	EU	KC	MS	DM	ÖÖ	SE	SA	FO	TB	FK	EM	ÖT	MA	BY	EK	AY	AE	AÇ	To tal
No	Strategy Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	
1	SUW	X				X	X		X	X	X	X	X							X										9
2	SKW																	X												1
3	EUG	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	26
4	BLI																													
5	UCC			X	X				X					X						X	X								X	7
6	SVP	X			X								X					X									X			5
7	TIL	X	X	X				X	X		X	X						X	X							X	X		X	12
8	QMW										X		X	X	X				X	X	X	X			X		X	X	X	12
9	ITC							X																						1
10	QMS																													
11	UKG							X				X								X		X		X	X		X		X	8
12	MRB					X				X	X							X			X	X	X	X	X	X	X	X	X	13
13	POW																													
14	SRH								X								X													2
15	ANC		X										X			X					X									4
16	RTS							X											X											2
17	INI			X				X	X		X					X			X	X					X		X			9
18	RTT							X												X	X		X							4
19	SBT							X								X					X									3
20	ALB															X					X									2
21	RAH																													
22	VIS																													
23	IMI																											X		1
24	UIC																													
25	UBK																												X	1
	Total	4	3	4	3	3	2	8	6	3	6	4	5	3	2	5	2	4	5	6	8	4	3	3	5	3	7	4	7	**122**

Key : X = Strategy use by the subjects. Codes for strategy categories appear in appendix E.

Appendix K

The result of the RSQL1 and the classification of the think aloud data for Turkish texts

	Subjects	İG	EG	MD	MÇ	ÇC	DÜ	YM	OP	GT	CG	EU	KC	MS	DM	ÖÖ	SE	SA	FO	TB	FK	EM	ÖT	MA	BY	EK	AY	AE	AÇ
No	Strategy Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	SUW						R				R				R								R						R
2	SKW	R		R		R		R	R			R	R		R	R	R		R	R		R	R		R	R	R	R	
3	EUG																												
4	BLI	R										R		R				R								R			
5	UCC	R	R		R		R	R	R	R				R			R	R		R	R	R			R	R			R
6	SVP	R	R	R	R		R			R	R		R	R	R	R	R			R	R	R	B			R	R	R	R
7	TIL	R	R	R	R	R	R	R	R	R	R	R	R		R			R	R	R	R	R	R	R		R	R		R
8	QMW		R	R	R		R		R	R	R	R			R			R	R	B				R		R		B	R
9	ITC		R				R	B			R										B	R							R
10	QMS	R	B	R	B	B	B	R		R	R	B			B	T				R	B			R	T			R	R
11	UKG	R	R	R	R	R	T	R		R	R	R	R	R	R	R	R	R	R	R	R	R		B	R			R	R
12	MRB	B	B	B	B	B	B	B	B	B	B	B	B	B	R	B		R	B	R	B		B	B	B	B	B	B	B
13	POW		R				R	B	R									B				B				R	B		R
14	SRH		B	B	B		R	R		B						R	B	R				R						R	
15	ANC	T	R		R	R	R		R	R	R	R	B	R			R	R	R		R	B	R	R	B	B		R	
16	RTS	R			R		R					R								B	R	B	B		R			R	
17	INI	B	R	R	B	R	R	T			B	R	B	T	R	R		R	B	B	R	R	B	T	B	T	B	B	B
18	RTT		R	R	R		R	R	R	B	R	B	R	T		T	R			T	T	B	R			R	B	R	B
19	SBT	T	B	B	T	B		B	R	B	R	B	B	T	B	T	T	T	B		B	T	R		R	R	T	B	B
20	ALB		R						R				R			R			B		T					R	R		B
21	RAH		R	B			R	B		B		R	B	R						R		R				B	B	R	B
22	VIS	R	B	B	R	R	R	R	R	T	R	R	B	R	R	R	R	R	R		R		R	B	R	R	R	R	R
23	IMI	R	R	R	R		R	R		R	R	R	R	R	R	R	B	B	R	B	R	R	R	R	R	R	B	R	B
24	UIC		R	R	T	B	R	B	B		R	B	R	B	B	R	T	T	B		T	B							
25	UBK		B		B	R		B	R	R			R	R	B	R	B	B	B	B		B	B	B	R			B	B

Key : R = RSQ Responses, T = Think Aloud Classification, B = Both of them

Appendix L

The result of the RSQL2 and the classification of the think aloud data for English texts

	Subjects	İG	EG	MD	MÇ	ÇC	DÜ	YM	OP	GT	CG	EU	KC	MS	DM	ÖÖ	SE	SA	FO	TB	FK	EM	ÖT	MA	BY	EK	AY	AE	AÇ
No	Strategy Codes	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
1	SUW	B		B	T	B	B	B	B	T	B	B	B		R			R		B	R		R			R	R		R
2	SKW	R					R	R					R			R		T							R			T	R
3	EUG	B	B	B	B	B	T	B	B	B	B	B	B	B	B	T	B	R	B	B	B	T	T	B	T	B	B	B	B
4	BLI	R			R	R	R	R	R			B	R		R		R	R	R	R	R	R	R	R	R	R	R	R	R
5	UCC	R		T	B	T	R	R	B	R				B			R		R	B	T	R			R	B		R	B
6	SVP	B	R		B	R			B	T	R		B	B			R	B		R		R	B			R	B	B	B
7	TIL	B	B	B		T	R	B	B	R	B	B	B	R	R			B	B		R	R	B	B	R	B	B	T	B
8	QMW		R	R		R	R		R	R	B	R	B	T	T		B	R	B	B	B	B	R	R	T	B	B	B	T
9	ITC	R	R	B	R		R	B			R					R	R	R	R	R	R	R	R	R		R	R	R	
10	QMS	R	R	R			R	R		R	R	R	R		R			R	R	R		R	R	R		R	R	R	
11	UKG	R		T	B			B	R		R	T	R		B	T		R		B		B		B	B	T	B	B	T
12	MRB	R	B	R	B	T	R	B	B	B	B	R	B	B	R			B	R	R	B	B	B	T	B	B	B	B	B
13	POW					R									R							R					R		
14	SRH		R	T	R	R	R	R	T	R	R	R			R	R	B		R							R		R	
15	ANC	R	B	R	R	R	R	R	B	R	R	R	B		R	B	R	R	R		B	B	R		R			R	
16	RTS	R	R				R	B		R	R	R	R		R	R	R	R	T	T			R	R		R	R	R	
17	INI	R	R	B	B	R		T	B	R	B		R	B	B	B	R	B	B	B	B	R		T	B	R	B		R
18	RTT			R		R		T				R	R		T		R			T	T	R	T				R	R	R
19	SBT			B			R	B	R			R			R	T		R			B	T						T	T
20	ALB	R		R	R	R	R		R	R	R		R	R		B	R		R	R	B	R	R		R		R		
21	RAH		R	R	R	R	R	R	R		R	R	R		R	R	B	R	R		R	R		R	B	R	R		R
22	VIS	R	R	R	R	R	R	R	R		R	R	R	R	R	R	R		R	R	R		R	R	R	R		R	R
23	IMI	R	R			B	R			R	R	B	R		R	R	R	R	R	R	R	R	R	R		R	T	B	
24	UIC		R		R		R	R	R		R	R	R		R	R	R					R				R	R	B	R
25	UBK	T	B	R	R	B		R	R	R	R	R	R		R	R	R	B	T	R	R	B	R	R	R	R	B	R	B

Key : R = RSQ Responses, T = Think Aloud Classification, B = Both of them