# A COMPARATIVE ANALYSIS ON THE USE OF *BUT*, *HOWEVER* AND *ALTHOUGH* IN THE UNIVERSITY STUDENTS' ARGUMENTATIVE ESSAYS: A CORPUS-BASED STUDY ON TURKISH LEARNERS OF ENGLISH AND AMERICAN NATIVE SPEAKERS

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DİDEM ÖZHAN

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Approval of the Graduate School of Social Sciences	
Pi	rof.Dr.Meliha Altunışık Director
I certify that this thesis satisfies all the requirements as a t Master of Science/Arts / Doctor of Philosophy.	hesis for the degree of
	Prof. Dr. Wolf Konig Head of Department
This is to certify that we have read this thesis and that in adequate, in scope and quality, as a thesis for the Science/Arts/Doctor of Philosophy.	-
	Prof. Dr. Deniz Zeyrek Supervisor
<b>Examining Committee Members:</b>	
Assist. Prof. Dr. Nurdan Gürbüz (ELT, METU)	
Prof. Dr. Deniz Zeyrek (ELT, METU)	
Prof. Dr. Işıl Özyıldırım (İDB, HU)	
Assoc. Prof. Dr. Çiler Hatipoğlu (ELT, METU)	
Assist. Prof. Dr. Perihan Savaş (ELT, METU)	

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	_	
	Name, Last name: Didem Özhan	
	Signature:	

#### **ABSTRACT**

A COMPARATIVE ANALYSIS ON THE USE OF *BUT*, *HOWEVER* AND *ALTHOUGH* IN THE UNIVERSITY STUDENTS' ARGUMENTATIVE ESSAYS: A CORPUS-BASED STUDY ON TURKISH LEARNERS OF ENGLISH AND AMERICAN NATIVE SPEAKERS

Özhan, Didem

Ph.D., Department of Foreign Language Education Supervisor: Prof. Dr. Deniz Zeyrek

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Discourse connectives signal discourse coherence by making discourse relations explicit and by playing a role in the organization and structure of information in discourse. Therefore, their use in L2 writing is an important field of study that is likely to have implications for discourse competence both at the sentence-level discourse and at the level of larger discourse structure.

The aim of the present study is to account for the use of three contrastive discourse connectives, *but*, *however* and *although* at both the microstructural and the macrostructural levels of discourse in the argumentative essays written by Turkish learners of English and native speakers of American English. The patterns of use by L2 learners are compared with those of native speakers. The analysis is based on 120 essays from two corpora: Turkish subcorpus of the International Corpus of Learner English (TICLE) and American subcorpus of Louvain Corpus of Native English Essays (ALOCNESS).

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The study reveals that the argumentative essays of Turkish learners of English and American students do not differ significantly regarding the three connectives neither structurally nor semantically. However, at the macrostructural level of discourse, differences concerning the pattern of argumentation and the role that the connectives play in the claim-counterargument-refutation pattern of organization were observed. Further analysis on other lexical items used in argumentation shows that in ALOCNESS, there is more reliance on other means, such as the lexical items expressing modality and those signaling the argumentative nature of the text.

**Keywords**: Claim, counterargument, refutation, discourse connectives, metadiscourse

ÜNİVERSİTE ÖĞRENCİLERİNİN TARTIŞMA YAZILARINDA
KULLANDIKLARI *BUT* "AMA", *HOWEVER* "OYSA" VE *ALTHOUGH*"RAĞMEN" BAĞLAÇLARININ KARŞILAŞTIRMALI BİR ANALİZİ:
İNGİLİZCE ÖĞRENEN TÜRK ÖĞRENCİLERİNİN VE ANADİLİ İNGİLİZCE
OLAN AMERİKALI ÖĞRENCİLERİN DERLEMLERİ ÜZERİNE BİR
ÇALIŞMA

Özhan, Didem

Doktora, Yabancı Diller Eğitimi Bölümü

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Bağlaçlar yazıdaki anlamsal ilişkileri göstererek ve yazının yapı ve organizasyonunu oluşturarak yazıdaki bağdaşıklığa katkıda bulunurlar. Bu nedenle, ikinci dil edinimi sürecinde bağlaçların kullanımı, öğrencilerin hem tümce düzeyindeki söylem becerilerini hem de üstsöylem düzeyindeki söylem becerilerini göstermesi bakımından önemli bir çalışma konusudur.

Bu tezin amacı, İngilizce öğrenen Türk öğrencilerle anadili İngilizce olan öğrencilerin tartışma yazılarında kullandıkları *but* "ama", *however* "oysa" ve *although* "rağmen" bağlaçlarını metnin iki farklı düzeyinde incelemektir. İki grup öğrencinin ödevleri, bu kullanımlar açısından karşılaştırılmaktadır. Analiz, iki derlemden ayrı ayrı alınan 120 ödevin analizine dayanmaktadır: İngilizce öğrenen öğrencilerin ödevlerinden oluşan uluslararası öğrenci derleminin Türkçe alt derlemi

(TICLE) ve Anadili İngilizce olan öğrencilerin ödevlerinden oluşan Louvain

derleminin Amerikan alt derlemi (ALOCNESS).

Çalışma, üç bağlacın kullanımının, yapısal ve anlamsal özellikleri bakımından iki

derlem arasında farklı olmadığını göstermiştir. Öte yandan, bu bağlaçların, iddia-

karşıt görüş-çürütme metin yapısındaki kullanımları açısından iki derlem arasında

farklar gözlenmiştir. Bağlaçlar dışında kullanılabilen, kiplik ifade eden yapılar ve

yazının tartışmacı yapısını gösteren ifadeler gibi diğer sözcükler üzerinde yapılan

analiz, bu yapıların ALOCNESS ödevlerinde hem tartışma geliştirme hem zıtlık

işaret etme amacıyla daha sık kullanıldıklarını göstermektedir.

Anahtar Kelimeler: İddia, karşıt görüş, çürütme, bağlaç, üstsöylem

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To my family

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# LIST OF ABBREVIATIONS

ALOCNESS American Subcorpus of the Louvain Corpus of Native

**English Essays** 

AO Abstract Object

CA Contrastive Analysis

CALL Computer Assisted Language Learning

CCR Claim-Counterargument-Refutation

CEFR Common European Framework of Reference

CIA Contrastive Interlanguage Analysis

CIB Clause Initial but

CIH Clause Initial *however*DC Discourse Connective

DM Discourse Marker

DPU Delayed Pedagogical Use

EA Error Analysis

EFL English as a Foreign Language

ELT English Language Teaching

ESL English as a Second Language

ICLE International Corpus of Learner English

IL Interlanguage

IPU Immediate Pedagogical Use

LOCNESS Louvain Corpus of Native English Essays

L2 Second Language

NNS Nonnative Speakers

NS Native Speakers

PDTB Penn Discourse TreeBank

SIB Sentence Initial but

SIH Sentence Initial *however* 

SLA Second Language Acquisition
TAP Toulmin's Argument Pattern

TICLE Turkish Subcomponent of ICLE

TSA Topical Structure Analysis

## **CHAPTER I**

## INTRODUCTION

# 1.1 Background to the Study

Learning a second or foreign language is a complicated process as successful foreign language learning requires the learner to demonstrate high levels of communicative competence, and achieving communicative competence is the main objective in many English as a Foreign Language (EFL) classrooms. There has been widespread recognition among second language acquisition (SLA) researchers that SLA is not restricted to the acquisition of the second language (L2) linguistic system and that other aspects of language ability, often referred to as "communicative competence" (Hymes, 1972; Canale and Swain, 1980), also needs to be investigated in order to define what it means to learn an L2. There is now no doubt that L2 learners have to have more than grammatical competence in order to be able communicate effectively in an L2 and that they also need to know how the language is used by members of the speech community to accomplish their purposes.

To master communicative competence is quite an undertaking for an L2 learner because it is made up of four competence areas: grammatical, sociolinguistic, discourse, and strategic (Canale and Swain, 1980). A successful L2 acquisition requires the learner to master these competence areas, the examination of which is actually out of the scope of the present study. The aspect of communicative competence which the current study aims to investigate falls under the broad concept of "written discourse competence".

Any discourse has a structure and whenever one reads or listens to a piece of discourse, the structure of the discourse reveals itself. The reader or the listener begins to see different relations in the discourse which bring the different segments of discourse together to make a coherent whole. The job of the foreign language learner is to recognize these discourse relations and to interpret the discourse accordingly. In a similar way, a competent L2 learner is also required to demonstrate discourse competence in writing by producing coherent texts according to the requirements of the genre and the discourse mode they are writing in.

Written discourse competence is a very crucial aspect of academic success, in particular at universities, as academic world mostly depends on writing. Members of the academic discourse community are expected to be able to produce effective written texts in their own fields. In academic writing, the writer is expected to adhere to certain argumentation criteria and apply appropriate reasoning strategies. The writer should be aware of the writing conventions of the field and should write accordingly. For example, as a genre, academic writing has its own conventions such as the use of formal language, developing claims with valid, and relevant evidence, citing sources from the literature using the appropriate citation conventions, having a beginning, middle and an end. These shared features and many others of academic writing need to be followed by students for a successful writing. Therefore, the successful writer should be able to produce texts appropriate to the genre and discourse mode (see Section 1.5 below for the definition of terms). Different genres and discourse modes have different characteristics and producing a text in the given discourse mode requires discourse mode sensitivity. However, as reported in several studies, this is an area of discourse competence which nonnative learners of English find rather difficult (Field and Yip, 1992; Granger and Tyson, 1996; Lorenz, 1999; Gilquin and Paquot, 2008).

A common genre in the academic environment that L2 learners are engaged in is the academic essay and one of the discourse modes L2 learners are frequently asked to produce is argumentation. This discourse mode requires the writer to support claims with evidence, to acknowledge opposing view points and to refute these

counterarguments with logical reasoning, as emphasized by Coirier, Andriessen and Chanquoy (1999). That is, successful L2 writers should be able to produce argumentative texts with a debatable topic and with an adequate level of information about the topic. They are required to develop their claims with logical reasoning and support them with evidence, acknowledge the opposing view points to the thesis of the essay and refute them. Such factors influence the organization process in argumentation greatly.

The success of an argumentation also depends on the way the arguments are related, i.e., the overall structure formed with the arguments, which can be referred to as the macrostructure of discourse. The organisation of argumentation at the macrostructural level of text significantly influences the success of the argumentation. In addition to these, as in any text, while producing an argumentative text, the writer should order the presentation of information in the text. This information can be linked by a variety of discourse relations such as casuality, opposition, etc. To recapitulate, in producing an argumentative text, the writer's job is to organize the different types of arguments in the essay, and linguistically code them to form a coherent structure.

The organization of ideas at the sentence-level of discourse by relating the discourse segments together forms the microstructural level of discourse. As Van Dijk (1980) states, the microstructure of discourse involves the structures that are described at the local level such as words, phrases, clauses, sentences and connections between sentences. The organization at the microstructural level of discourse in that way contributes to the overall structure, i.e., the macrostructural level, of discourse. The macrostructure operates to facilitate the understanding and the organization of information presented in a text. This overall structure in argumentation requires the organization of the arguments into an argumentation pattern which requires the statement of claims, opposing viewpoints and refutation of these opposing views. This pattern of organization is referred to as the claim-counterargument-refutation (CCR) pattern for the purposes of the present study. Therefore, it can also be argued that the macrostructure has a cognitive reality. On the other hand, the macrostructure of a text clearly has a linguistic reality as the complex linguistic

forms such as pronouns, discourse connectives, adverbs, etc., are used to signal the macrostructure.

The descriptions of both terms, microstructure and macrostructure, clearly indicate that these concepts also have linguistic realities and one of the linguistic forms used at both levels of discourse, i.e. discourse connectives, is the focus of the present study. The structure of the text as formed in the writer's mind and on paper should be made explicit with the use of linguistic devices. The linguistic devices are used by the writers to engage their audience, keep their attention, emphasize certain issues and support their points. Some examples to linguistic devices that a writer can use are the vocabulary, discourse connectives, metaphors, anaphors and the grammatical system of the language.

Discourse connectives (DCs) have been analyzed extensively in the discourse literature as one of the devices signalling discourse relations. Degand (1998) holds that coherence relations are not always signalled linguistically, and that they may be signalled by other linguistic means than connectives. However, as she states, it is obvious that DCs at microstructural level of discourse always mark a coherence relation. Furthermore, DCs do facilitate the reader's interpretation process by explicitly signalling the relation the writer wants to convey. As human communication is inferential, DCs constrain the discourse processes in relation to the context easing the job of the reader to infer the meaning the writer wants to create. It is obvious that the appropriate use of DCs contributes to discourse coherence but this never means that a discourse without DCs will be incoherent. DCs signal discourse coherence by making discourse relations explicit and by playing a role in the organization of information in discourse.

The role of DCs at both the microstructure and the macrostructure of discourse will be discussed in detail in Chapter 2 and it will suffice here to say that DCs have both textual and interpersonal metadiscourse functions in discourse. While the term "metadiscourse" is not always used in the same way, in the light of the definition porposed by Hyland (2000), metadiscourse is defined here as the linguistic

resources that are used to organize a discourse or to reflect the writer's stance towards the content or the reader. Vande Kopple (1985) categorized metadiscourse markers into two main functions: textual and interpersonal. Discourse connectives, as one of the metadiscourse markers, function textually to relate a clause to the preceding text and function interpersonally to signal the writer's acknowledgement of the reader's expectations. In other words, the textual metadiscourse functions involve the discourse relations DCs establish between the discourse segments such as contrast, concession, and addition, whereas interpersonal metadiscourse functions concern their role in the overall text organization. In the present study, the textual metadiscourse functions of DCs involve the sense relations proposed by Prasad et. al. (2008) between two discourse segments at the microstructural level of discourse. As for the interpersonal metadiscourse functions of DCs, an example for the interpersonal metadiscourse functions in argumentation is the role DCs play in the claim-counterargument-refutation pattern of organization in relation to the overall structure of discourse. Metadiscourse is particularly important in the analysis of the L2 discourse competence as it "reveals the ways writers project themselves into their discourse to signal their attitudes and commitments" (Hyland, 2004, p.133). DCs may function as interpersonal metadiscourse in written language and reflect the writer's stance towards both the content in the text and the potential reader.

The use of DCs by L2 learners is also a well-studied topic. This line of research is a part of interlanguage (IL) analysis, a concept introduced by Selinker (1972) as a linguistic system evidenced when adult L2 learners attempt to express meaning in a language they are in the process of learning. IL research is divided into two as IL grammar and IL pragmatics, as argued by Müller (2005). IL pragmatics is part of the research that is associated with the pragmatic and discourse levels of IL. That is, the use of DCs by L2 learners is part of IL development. At a different but related domain, the significance of appropriate DC use for discourse competence is recognized in the Common European Framework of Reference for Languages (CEFR). In CEFR, discourse competence is treated as one aspect of pragmatic competence and defined as "the ability of a user/learner to arrange sentences in

sequence so as to produce coherent stretches of language" (Council of Europe, 2001, p. 123). As part of discourse competence, the use of DCs across proficiency levels is described in CEFR in relation to the range of connectives used and to the degree of control and efficiency with which they are employed. At lower levels of proficiency, there is less variety of connectives and limited reference to the control of connectives but as the proficiency level increases, the range of connectives used varies and there is explicit reference to how the connectives are used.

Although DC use is very much related to the discourse competence of L2 learners and discourse coherence, the present study does not attempt to account for coherence or lack of coherence in L2 argumentative writing but limits its focus to the role of three contrastive DCs, *but*, *however* and *although*, in argument development. The study focuses on how three DCs are used in argumentation. These DCs are selected for analysis because, as will be discussed in more detail in Chapter 3, they are found to be the most frequent ones used in the data analyzed. In addition to their frequency, they represent three major syntactic classes: *however* is a discourse adverbial, *but* a coordinating conjunction, *although* a subordinating conjunction. It is of interest to the present thesis to reveal any differences concerning the use of DCs belonging to these syntactic classes at two levels of discourse.

## 1.2 The Problem

As mentioned earlier, an important characteristic of coherent argumentation is the organization of discourse relations in discourse. This organization is achieved with the presentation of information in a logical way with the use of some linguistic devices. Therefore, linguistic devices have an important role in forming and signalling discourse structure. This linguistic coding, which also involves the use of DCs, is crucial for the linguistic realization of the text plan in the writer's mind and the specification of relationships between discourse segments. This allows the reader to reconstruct the original structure in the mind of the writer. The writer should manage these linguistic tools simultaneously when writing a text. This, however, is a difficult issue for nonnative speakers, as many L2 teachers would admit.

In fact, the acquisition and the appropriate use of DCs has been reported as one of the problem areas for learners of English by various researchers (for example, Milton and Tsang, 1993; Tang and Ng, 1995; Granger and Tyson, 1996; Altenberg and Tapper, 1998; Bolton, Nelson and Hung, 2002; Chen, 2006; Yeung, 2009). In the majority of the L2 connective studies, the use of connectives is found to be problematic both for foreign language learners as well as native speakers, and DCs are often shown to be under-, over- or misused in written products (see e.g. Bolton et al., 2002; Crewe, 1990; Field and Yip, 1992; Wei-yu Chen, 2006). These studies have shown that, despite the differences in general frequencies, over- and underuse of individual connectives is a general pattern and that learners seem to rely heavily on a rather small set of connectives in their writing.

An important observation that inspired the present study is the lack of literature on how Turkish learners of English use DCs. Despite some studies in written discourse by L2 learners with different L1 backgounds, the DC use by Turkish learners of English has not been the focus of research. There are only a few studies regarding this group of L2 learners, which will be briefly explained in Chapter 2. In the majority of the studies on learners' use of DCs, (both those about learners from different L1 backgrounds and the studies with Turkish learners), the focus has been the frequency at which certain DCs have been used by the learners compared to native speakers. For example, the L2 studies by Yasuko (1989), Granger and Tyson (1996), Cho (1998), Martinez (2004), Ting (2003), Choi (2005), Tapper (2005), Fei (2006), Chen (2006), Ying (2007), and Altunay (2009) largely focused on the frequency of certain DC classes and the appropriate or inappropriate uses of these DCs regarding their textual functions in discourse. They reported overuse, underuse and misuse of certain categories of DCs considering the frequency of DC use and the semantic (textual) functions of DCs; that is, the function of relating two discourse segments at the microstructural level of discourse.

To the researchers' best of knowledge, there are no studies dealing with how learners structure the discourse through the use of DCs. In this thesis, the term "structure" refers to the discourse segments that DCs connect, where in the sentence

DCs are located and what types of discourse segments are linked by particular DCs. An analysis of these structural issues is also necessary to evaluate nonnative speakers' discourse competence. For example, if the structural property of the DC (e.g., however) allows for different positioning of the DC (sentence-initial, sentence medial or sentence-final), the analysis of learners' preference for the location of that DC might have implications for learners' competence. Besides the gap in the literature concerning an understanding of such structural issues in DC use in learners' writing, the learners' use of DCs to establish the metadiscoursal functions of the argumentative mode (i.e., the CCR pattern as briefly mentioned above) has not been examined. Studying these issues will provide insights into the use of three DCs by the Turkish learners and the native speakers at both levels of discourse. The DC use studies in the literature as mentioned earlier are crucial for our understanding of DC use by various L2 learners. To complete the picture of L2 DC use, the structural realizations of connectives and their role at the macrostructural level of discourse need to be investigated in an integrated fashion.

# 1.3 Purpose of the Study

The purpose of the study is to investigate the use of the most frequent three contrastive DCs, *but*, *however* and *although*, in terms of their structural realizations, textual and interpersonal metadiscourse functions in Turkish learners' argumentative essays and compare them to those of native speakers' use. The study focuses on DC use in argumentative writing because in the process of organization in argumentation, DCs function as both discourse segment linking devices and discourse structuring devices.

The study first examines the structural properties of *but*, *however* and *although* such as the linear ordering of the discourse segments the DC relates, the position of the DC in discourse, the types of the discourse segments it relates (i.e. the arguments of the DCs), and the location of the first discourse segment/argument in discourse. The study also undertakes a sense analysis, which aims to reveal the sense relations a DC establishes between the discourse segments it relates such as contrast, concession and expansion. In addition to this analysis, which is called the textual metadiscourse analysis in the thesis, a further analysis is carried out to investigate

what interpersonal metadiscourse functions these DCs serve in CCR pattern of organization in both corpora. This is called the interpersonal metadiscourse analysis in the thesis. The interpersonal metadiscourse analysis forms a crucial framework for the understanding of the role of DCs undertaken in the textual metadiscourse analysis. As it has been argued so far and will be detailed in later chapters of the thesis, the whole purpose of using DCs and other linguistic devices in the argumentative texts, as in our case, is to persuade the reader by means of a text organized in terms of the CCR pattern. The structural and sense analysis of the three frequent DCs was conducted within the CCR pattern of argumentation. Otherwise, the analysis would have yielded misguided and somewhat uninterpretable results as such an analysis would have only identified how these DCs are used but would not have pinpointed the deeper issues concerning their role in discourse organisation.

The study reveals the role of three DCs in how Turkish learners of English and native speakers organize their ideas to persuade the reader in the claim-counterclaim-refutation (CCR) pattern. For these purposes, the study examines and compares 120 essays from two corpora, one being the Turkish subcomponent of the International Corpus of Learner English (TICLE) and the other one being the American subcorpus of the Louvain Corpus of Native English Essays (ALOCNESS). Thus, with the advantage of corpus analysis, the study will be a larger scale study when compared to those in the literature to obtain a more accurate account of the role of three DCs at both the microstructural and the macrostructural levels of argumentation.

The study compares the L2 use with native novice writer use. Native novice writer group is a good control group for the study because these writers are at similar ages with similar educational level with the selected group of nonnative speakers. Moreover, in professional writing, there is no exact equivalent discourse mode as argumentative writing. Therefore, it would have been unfair to compare L2 writing with the professional writing which does not reflect the requirements of the classroom argumentative writing.

## 1.4 Significance of the Study

Although there are studies on DC use by students from a variety of different L1s, such studies that attempt to explore the use of DCs by L2 learners of English are not abundant. On the other hand, the majority of the available studies on L2 writing aim to examine the general cohesion of the writings; thus, they do not specifically analyze the structural patterning of DCs, neither do they analyze the role of DCs in argument development, i.e., their role in the CCR patterning. The study will address both of these issues in an integrated fashion. The study is also unique as it deals with these issues in a corpus-based analysis. Moreover, there has been no studies that focused on the role of DCs in argument development in the writings of Turkish learners of English. The study is the first attempt to provide insights into *but*, *however* and *although* use by Turkish learners of English at two different levels of discourse.

#### 1.5 Definition of Terms

In this section, brief definitions of the basic terms used in the rest of the dissertations are provided. More detailed descriptions are given in the relevant chapters where these terms are used for analysis.

**Argumentation**: Argumentation is a discourse mode where the intention is to persuade the audience to accept a proposition. To achieve that, an argumentative writing requires a debatable topic, a strong claim which is further supported by various forms of evidence, acknowledgement of opposing viewpoints and the refutation of these oppositions.

**Coherence**: Coherence is the connectivity in discourse in terms of content and organization and on a broader level such as paragraph and the text as a whole.

**Cohesion**: Cohesion is the semantic relation between discourse segments realized through the vocabulary and grammatical system of the language.

**Discourse connective**: A discourse connective is a word, phrase or pair of phrases which relate two discourse segments such as events, states, facts, situations, questions, commands etc. A discourse connective is drawn from three grammatical classes (coordinating, subordinating and adverbial connectives). Some examples are the coordinating connectives but and and, the subordinating connectives although and whereas, the adverbial connectives however and otherwise.

**Discourse marker**: A discourse marker is a lexical item which is independent of sentential structure, can occur freely within a sentence, does not seem to belong to a specific word class, and is more frequent in spoken discourse. The distinction between the discourse connective category and discourse marker category will be explained in Chapter 2. Although there is no clear agreement on the terminology and some researchers do not accept certain lexical items as discourse markers, some examples to the DM category of lexical items are well, and, y'know, in that case etc.

**Discourse modes**: Discourse modes are passages of different kinds such as narrative, description, report, information and argument which have a particular force and make different contributions to a text. Each discourse mode has a characteristic principle of progression, temporal and atemporal and each mode introduces certain types of situation such as event, state, generalization (Smith, 2003).

**Discourse segment**: Just as the words in a single sentence form constituent phrases, the clauses or sentences in a discourse are grouped as *discourse segments*. The clauses or sentences in a segment, like the words in a phrase, serve particular roles with respect to that segment and the discourse segments, like the phrases, fulfill certain functions with respect to the overall discourse (Grosz and Sidner, 1986).

**Genre**: Genre has been defined in different ways in the field of applied linguistics. For the purposes of the present study, Swales' and Bhatia's definitions of the term are used. Swales (1990) defines genre as communicative events, the members of

which share some set of communicative purposes as defined by a discourse community. It is this communicative purpose that brings any genre into being shaping the structure of the discourse and influencing the choices of content and style. Properties such as form, structure and audience expectations identify whether an exemplar is a prototypical of a particular genre. Similarly, Bhatia (2004) proposes a comprehensive definition of the term and states that genre refers to "language use in a conventionalised communicative setting in order to give expression to a specific set of communicative goals of a disciplinary or social institution, which give rise to stable structural forms by imposing constraints on the use of lexico-grammatical as well as discoursal resources" (p.23).

Interpersonal metadiscourse functions of discourse connectives: These functions reflect the writer's stance towards both the content in the text and the potential reader. Some interpersonal metadiscourse devices are hedges, boosters, attitude markers and discourse connectives. In addition to their textual functions, discourse connectives, the focus of the present study, have also interpersonal functions in argumentation. As Barton argues (1995), DCs can be used to allow the writer to adopt a particular role with respect to the reader in counterarguments, to call attention to a claim through the use of a contrastive DC and to emphasize the writer's problematizations.

Macrostructure: Van Dijk (1980) argues that discourse is built on three structures: macrostructure, microstructure and superstructure which is out of the scope of the present study. One of these structures is the macrostructure which describes the overall structure of discourse. The macrostructure of a text accounts for the global meaning of the text, which cannot be defined in terms of individual sentences. Summaries are one way to express the macrostructures of texts. For example, the topic or the theme in a text operate at the macrostructure of the text. Similarly, the main idea in a text forms the macrostructure of the text.

**Metadiscourse:** It is an important means that help to facilitate communication, support a position, increase readibility and build a relationship with the audience. It

is the aspect of writing which explicitly organizes a discourse or reflects the writer's stance towards the content or the audience as Hyland (2004) argues.

**Microstructure**: One of the three structures, as Van Dijk (1980) argues, on which discourse is built is the microstructure which is the structure of individual text sentences and their relations. It is the underlying propositional content of the sentences and clauses in the text and their connections to each other in the linear sequence they occur in. For example, at the microstructural level, words and phrases combine to form more complex structures.

**Structural properties of DCs:** These properties concern the grammmatical classes the DCs belong to, the location of a DC in the discourse, the types of the discourse segments a DC relates, the linear position and the location of these discourse segments in discourse.

**Textual metadiscourse functions of DCs:** These functions are the functions of linking discourse segments to form a cohesive and coherent discourse. DCs can establish contrast, concession, addition and temporal relations between the discourse segments they link.

#### **CHAPTER II**

#### REVIEW OF LITERATURE

This chapter mainly describes the fields of study the present work concentrates on. The study is an interdisciplinary one in that it takes a corpus-based approach to discourse analysis. Thus, first of all, corpus linguistics and discourse analysis will be defined briefly with their relevance to SLA research. The definition of a corpus will be provided and the linguistic areas of corpora use and learner corpus research together with its relevance to English Language Teaching (ELT) and SLA will be examined. In the part related to discourse analysis, the way corpus linguistic studies integrate discourse analysis will be explained and written discourse analysis will be the focus in the remaining part of the chapter. As the present study concerns linguistic devices that have a role in discourse coherence, the terms "coherence" and "cohesion" will be explained and different perspectives to discourse coherence will be briefly mentioned. The present study examines student argumentative writing; therefore, a section is devoted to the description of argumentation in writing, where the components and the organization of an academic argumentative essay are explained with the use of discourse connectives in argumentation. Under this section, the role of contrastive language and some lexical items used in argumentation are also mentioned. In the last part of the chapter, the two main approaches to the study of discourse connectives are described. As the study concerns the structural properties and sense categories of contrastive discourse connectives, these features are explained with a special emphasis on three main researchers, Fraser (1996), Webber, Joshi, Miltsakaki, Prasad, Dinesh, Lee, and Forbes (2005) and Blühdorn (2008), whose studies have shaped the present study.

## 2.1 Corpus Linguistics

The corpus wave has now spread to many fields of language analysis. Corpusanalysis has been providing new insights into many areas of language structure and use, offering opportunities to examine the actual language use in a large scope of naturally occurring texts and to expand the scope of earlier investigations. However, before discussing what impact corpus-based research has brought to the study of language, we should consider what a "corpus" refers to and what corpus-linguistic analysis is.

## 2.1.1 Definition

The term "corpus" is the Latin for "body". Thus, it can be said that a corpus is any body of text. However, when used in the context of modern linguistics, it has more specific connotations (McEnery and Wilson, 2001). The authors describe these connotations under four headings:

- 1) Sampling and representativeness
- 2) Finite size
- 3) Machine-readable form
- 4) A standard reference

Sampling and representativeness imply that a corpus is a sample of the language variety we are interested in which is representative of the variety under examination. Thus, a corpus should provide us with an accurate picture of the tendencies of that variety. A corpus should also be a body of text of a finite size. Generally speaking, when a corpus reaches the predetermined number of words, the collection of texts stops and the size of the corpus is not increased. Moreover, a corpus is machine-readable. Though many years ago, a corpus might refer to the body of printed texts, this is no more the case and corpora today are machine-readable. It is generally expected that a corpus constitutes a standard reference for the language variety which it represents, which presupposes its wide availability to other researchers. Also, a standard corpus means that a continuous base of data is used. As a result, variation between studies is not due to the differences in the data used. Considering the four main features mentioned, a corpus can be defined as a finite-sized body of machine-readable text representative of the language variety

under examination. Similarly, Tognini-Bonelli (2001) emphasizes that the texts in a corpus are collected according to some explicit design criteria for a specific purpose and a corpus consists of the natural and authentic language. The texts are compiled either as written texts or as a transcription of recorded speech. Thus, corpus-based research is an empirical approach to the analysis of actual patterns of use in natural texts. It also makes extensive use of computers for analysis and depends on both qualitative and quantitative analytical techniques.

When looking at corpus data, one important distinction is that of raw data and annotated data. Raw data is plain text (words and punctuation marks without any other information) while annotated data is raw text with formatting information (page breaks, paragraphs, fonts), identifying information (author, date, genre), and linguistic information (word class, syntactic structure, discourse markers).

Biber, Conrad and Reppen (1998) state that the characteristics of corpus-based research "result in a scope and reliability of analysis not otherwise possible" (p.4). Many of the advantages of the corpus-based research are due to the use of computers. With the help of the computers, large database of natural language can be stored and analyzed to examine complex patterns of language use. Moreover, the analysis with computers is more consistent and reliable compared to the analysis carried out by a human being who can easily be distracted or become tired. On the other hand, a human analyst can also make linguistic judgements throughout the analysis on the computer.

Corpus linguistics deals with the principles and practice of using corpora in language study. The aim of corpus linguistics is to analyze and describe the language use as realised in texts. The influential work in the field of corpus linguistics was the "Computational Analysis of Present-Day American English" by Henry Kucera and Nelson Francis on the basis of the Brown Corpus in 1967 (Koteyko, 2006). McEnery and Wilson (2001), in their introductory work on corpus linguistics, note that the basic corpus methodology was widespread in linguistics in the early twentieth century. They also state that whereas corpus linguistics was

largely used in English linguistics, more specifically in studies of English grammar, it has started to widen its scope. It is also "multilingual" now as many languages and many varieties of these languages are being studied with the help of corpus data.

# 2.1.2 Linguistic Areas of Corpora Use

This section describes what roles corpora may play in a number of different fields of language study summarizing the related section in McEnery, Xiao and Tono (2006). The aim is to show how corpus-based research contributes to the advancement of knowledge in those areas and how it is used.

The core areas of linguistic structure such as lexicography and grammar can be studied by applying corpus-based research. Corpora use has revolutionized dictionary-making so that it is now nearly impossible to hear of new dictionaries and new editions of old dictionaries not to be based on corpus data. Corpora use is an invaluable source for lexicographer as corpora allow them to extract all authentic and typical examples of the usage of a lexical item from a large body of text in a very short time. Also, use of corpora enables the dictionary makers to get frequency information and quantification of collocation a corpus can readily provide. Moreover, the fact that many corpora are encoded with textual (e.g. register, genre) and sociolinguistic (e.g. user gender and age) metadata allows the lexicographers to give a more accurate picture of the usage of a lexical item. A balanced representative corpus provides a valuable data also for the syntactic features of a language and is used to test hypotheses derived from grammatical theory. A corpusbased grammar can explore the differences between spoken and written grammars, and between registers. It can provide insights into how spoken grammar differs from written grammar.

A variety of issues in other areas of linguistics can also be addressed with corpusbased research. For example, the study of register variation and genre analysis is another field of study where corpus-based research can be used because corpora cover a wide range of registers and genres. The differences between written and spoken discourse, between formal and informal registers and between different genres can be explored with the help of corpus research. Also, dialect distinctions and language varieties are examined with the help of corpus-research. Varieties of a language include the standard language (standardized for the purposes of education and public performance), dialects (geographically defined), sociolects (socially defined), idiolects (unique to individual speakers) and jargons (particular to specific domains). Such variations can be found in pronunciation, spelling and word choice and they can be explored with the use of representative corpora. Moreover, in contrastive and translation studies, corpora are valuable. In translation studies, corpora can be used to study the translation process, to provide a basis for training translators and for developing applications like machine translation and computerassisted translation systems. With the help of parallel corpora, one can study how an idea in one language is conveyed in another language. Thus, such corpora can be used for contrastive studies. Still another area where corpora are used is the diachronic study and language change. In this area of research, the changes regarding the language used in the past are being investigated. Thus, many linguistic features across historical periods can be examined.

Corpus-based studies are also applicable to educational linguistics. The results of such studies can be used in designing materials and activities for classroom, syllabus design and workplace training as corpus research allows us to help students with the language actually used in different target settings. In language testing, tests can be developed that conform to the actual language students will be using. Similarly, interlanguage studies benefit from corpus research. Comparing learner data and native speaker data or language produced by learners from different L1 backgrounds provides valuable insights into the development of learner interlanguage. Such studies identify under or overuse of particular linguistic features and uncover L1 interference or transfer. Learner corpora can also be used to investigate the order of acquisition of certain linguistic features.

Another area of corpora use is discourse analysis where, a number of different types of discourse can be analyzed and also compared such as academic discourse, business discourse, legal discourse, media discourse and medical discourse. In such

efforts, the corpus provides data about the distribution of the searched items and reveal facts not noticeable in individual texts. In such studies, the researchers can investigate the discourse structure of the selected discourse type, the lexical items and the grammatical structures, that appear in different discourse types and different discourse styles of people.

# 2.1.3 Learner Corpus Research

# 2.1.3.1 Definition and Examples

One type of corpora is the learner corpora which can be used to identify the characteristic patterns in student's writing. Computer learner corpora are electronic collections of spoken or written texts produced by foreign or second language learners. This collection of texts is "systematic" in that the texts in the corpus are selected on the basis of some criteria such as learner levels, the learners' L1, learners' age, text type, task setting etc. (Nesselhauf, 2004). A learner corpus consists of texts that are written by learners in an environment with very little control. Therefore, free compositions produced for a certain course or free compositions or oral interviews produced for the corpus are used for the learner corpus. On the other hand, Granger (2004) emphasizes that corpus collection is not simply collecting texts from Internet and pasting them together. There has to be some L2 specific variables that are controlled and recorded in a corpus and one such corpus is the International Corpus of Learner English (ICLE). Granger (2004) states that ICLE database involves L2 specific variables pertaining to the learner or the task. The general variables controlled in ICLE are age, gender, mother tongue, region, medium, genre, topic and length while the L2 specific variables are other foreign language, L2 exposure, timing of the task, exam and reference tools.

Nesselhauf (2004) states that while learner corpus compilation is a relatively new activity, collecting learner language is not a new phenomenon. In the late 1960s and 1970s, when error analysis was popular, many collections of learner language were created. On the other hand, it was the 1990s when compilation of learner corpora began and today quite a number of corpora exist. Granger (2004) categorizes corpora into two: commercial computer learner corpora which are initiated by major

publishing companies and academic learner corpora which are compiled in educational settings. The two major commercial learner corpora are the Longman Learners' Corpus and the Cambridge Learner Corpus. The examples to academic corpora are various. The biggest written learner corpus to date is the Hong Kong University of Science and Technology (HKUST) Learner Corpus that contains about 25 million words and is still growing. It includes academic texts written by Chinese learners of English. Other examples of learner corpora are the Chinese Learner English Corpus that contains 1.2 million words of compositions of secondary school and university students and the Uppsala Student English Project with about 1 million words of different types of essays written by Swedish undergraduate learners of English. ICLE is one of the sizeable non-commercial learner corpora containing data from learners with different L1s. It consists of about 2 million words and comprises the argumentative essays written by university students of English with 14 different L1 backgrounds.

Granger (2004) classifies the current computer learner corpora along two major dimensions in relation to the characteristics of the learners and the characteristics of the tasks they performed. Learners represented in the current learner corpora are learners of EFL rather than as a Second Language (ESL). To distinguish the terms, Gass and Selinker's definition (2001) is used. According to this definition, ESL takes place when there is considerable access to the speakers of the target language whereas in EFL situation, there is no such access. In the current learner corpora, the proficiency level of the learners are in the intermediate-advanced range, though the description of these levels may change in different studies. This problem of description is lessened with the use of some external criteria to compile corpora. In learner corpora, the institutional status of the learners (e.g. third year university students) is favored more over some other criteria such as specific researchdesigned tests or standardized tests. Regarding the task related features, the number of written corpora is far more than the spoken corpora, probably because it is difficult to collect and transcribe spoken data. As far as the field of discourse is concerned, currently, the language of the learner corpora is English for General

Purposes rather than English for Specific Purposes. On the other hand, the written corpora include also predominantly English for Academic Purposes.

Learner corpus research relies on both the corpus linguistics and the methodologies of Contrastive Analysis (CA) and Error Analysis (EA) from SLA research. This brings an advantage for the quantitative and qualitative analysis of foreign language learning (Díaz-Negrillo and Fernandez-Dominguez, 2006). Through the methodology of comparison, work on learner corpora is intended to reveal areas of language use different from the native speaker use and through error analysis, it aims to gain insights into learners' errors in the target language. Granger (2004) summarizes the wide range of topics that received a great deal of attention among Contrastive Interlanguage Analysis (CIA) studies. The topics that are being studied widely are high frequency vocabulary, modals, connectors, and collocations. Many of these studies, as Granger stated (2004), are based on unannotated learner corpora and they are valuable contributions to advanced interlanguage analysis as they "bring out the words, phrases, grammatical items or syntactic structures that are either over or underused by learners and therefore contribute to the foreignsoundingness of advanced interlanguage even in the absence of downright errors" (p.132).

## 2.1.3.2 The Potential and Limitations of Learner Corpora

Needless to say, similar to other corpora, the most important advantage of learner corpora is that the texts are computerized. It is quite easy to compare results and to verify the findings from computerized corpora. Computerization makes data manageable and widens the possibilities and systematization of analysis. Moreover, with the use of learner corpora, real production data can be analyzed while previously many investigations into learner language have been based on more experimental data through the use of tasks such as multiple choice tasks or grammaticality judgment tasks. Though such experimental data is still valuable, the analysis of learners' spontaneous production provides insights into not only learners' errors but their language use.

On the other hand, with the use of learner corpora, more comprehensive studies can be possible as many aspects of learner language can be investigated at once and more general questions such as the frequency of different types of mistakes can be answered. Moreover, with learner corpora, new aspects of learner language can be discovered without approaching the data with some hypotheses.

As the corpora are collected on the basis of some criteria, the effects of such criteria can also be addressed in the analysis. Thus, any aspect of learner language can be investigated with respect to learners' proficiency level, age, sex, L1, years of acquisition, the text type etc. The overuse and underuse of certain language features can be analyzed in addition to mistakes and correct forms with the help of a comparable native speaker corpus. Moreover, with the use of a comparable L1 corpus, the effect of L1 on some difficulties and non-difficulties learners face with the target language can be examined. Another advantage of the criteria used to collect corpus data is that they make learner corpus research more reliable, representative and valid for the generalization of the results.

In addition to these advantages, there are some limitations of learner corpora. Some aspect of language acquisition can not be investigated with a learner corpus. For instance, what learners have in mind when producing a type of language cannot be examined. Moreover, a word or a structure cannot be analyzed if it does not occur in the corpora and one cannot find out whether the learners know it or not. Some learner characteristics such as aptitude or motivation are also very difficult to observe in a learner corpus. Therefore, in general, the best method of analysis can be determined by specifying the aim of analysis and the language feature to analyze. The best way to shed some light on learner language is undoubtedly to combine corpus research with an experimental approach.

# 2.1.3.3 Learner Corpora and Second Language Acquisition

The aim of learner corpus research is to describe learner language and thus to contribute to second/foreign language acquisition research and to improve foreign language teaching (Granger, Hung and Tyson, 2002). In a state-of-the-art paper on learner corpora, Granger et. al. (2002) argue that there needs to be a better link

between second language acquisition research and learner corpus research. They state that learner corpus research brings an empirical basis to the field of SLA. It is a new type of data source to contribute to SLA research. Learner corpus provides a ground for SLA specialists to test whether their results can be applicable to larger datasets. On the other hand, Granger et. al. (2002) hold that much current SLA research favors experimental and introspective data rather than natural language use data.

Granger et. al. (2002) state that linguistic analysis of learner corpora involves one of the two approaches: Contrastive Interlanguage Analysis (CIA) and Computer-Aided Error Analysis. In the first type of analysis which is particularly relevant to the present study, there are both nonnative speaker (NNS)/native speaker (NS) comparison and NNS/NNS comparison. Granger et. al. (2002) proposed the CIA approach in order to identify the features common to all learners and the ones unique to learners with a particular L1 background, which will enable researchers to distinguish universal errors from L1-specific errors. Comparing NNS data with NS data sheds light on some nonnative features of learner writing and speech. In such type of analysis, both errors and instances of under and overrepresentation of words, phrases and structures can be revealed. In this way, nonnative interlanguage development is investigated. The concept of "interlanguage" (IL) as proposed by Selinker (1972) refers to the emerging linguistic system of an L2 learner who has not become fully proficient yet. IL rules are shaped by several factors such as L1 transfer, transfer of training, L2 learning strategies, or overgeneralization of target language patterns. One way to investigate IL development is text production as a rich source of information about learner's IL (Cobb, 2003). Therefore, learner corpus can be used to analyze the stages learners go through as they move to NS competence. Cobb (2003) states that the comparison of NNS corpus with a NS corpus is promising in that such an analysis can reveal both what is in a learner corpus and what is not. On the other hand, Granger et. al. (2002) state that some linguists object to comparing NNS data with some NS norms as, they believe, IL should be studied on its own right and not as deficient compared to NS norms. They argue, however, that one can investigate IL to understand the underlying system and then compare it with some NS norms to observe the extent of deviation. In foreign language teaching, NS norms cannot be disregarded as improving learners' proficiency in a way means "bringing it closer to some NS norms" (p.13), an argument which describes the motivation behind the present study.

Another type of comparison is NNS/NNS. In this type of comparison, learners from different L1 backgrounds learning the same target language are compared to investigate the differences and similarities of use among different groups of learners. In that way, the effect of L1 and the developmental factors can be better examined. In computer-aided error analysis, on the other hand, the main aim is to analyze learner errors in the corpus. With the help of an error-tagged corpus, learners' errors can be examined, different types of errors, error counts can be obtained in a very short time and errors can be examined in context.

With the learner corpus studies, Granger et. al. (2002) hold that, a much more accurate picture of advanced EFL interlanguage has already begun to emerge. Work on advanced interlanguage implies that there is an interplay of developmental, teaching-induced and transfer-related factors that shape the advanced EFL interlanguage. Similarly, learner corpus studies, Tono (1999) argues, can foster SLA research by describing the developmental stages of IL, studying the effect of L1 transfer, identifying the overuse and underuse of linguistic features, discriminating between universal and L1 specific errors, and distinguishing native from non-native-like performance. For instance, one important finding emerging from learner-corpus-based studies in general and English for Academic Purposes (EAP) in particular is that some of the linguistic features that characterize learner language are shared by learners from a wide range of mother tongue backgrounds whilst others are exclusive to one particular learner population. The shared features can be assumed to be developmental whilst the latter are presumably due to transfer from the learners' mother tongue (Gilquin, Granger and Paquot, 2007).

## 2.1.3.4 Learner Corpora and Foreign Language Teaching

Learner corpora have potential pedagogical implications and applications. Granger et. al. (2002) categorize corpora use in foreign language teaching into two: delayed

pedagogical use (DPU) and immediate pedagogical use (IPU). DPU corpora are not used directly as teaching/learning materials by the learners who have produced the data. These corpora are often compiled by academics or publishers to provide a description of one specific interlanguage and/or to design pedagogical materials which will benefit similar type learners. IPU type corpora, on the other hand, are collected by teachers as part of their classroom activities from the learners in the classroom who are producers and users of the corpus data. DPU corpora are bigger and have wider generalizability while IPU corpora are smaller and less representative of general use.

The learner corpora have the potential to provide opportunities for the teachers to enrich the pedagogic environment. Learner corpus data can be applied to the fields of syllabus and materials design, and classroom methodology. One field of learner corpus data use is the advanced learners' dictionaries. For instance, Granger et. al. (2002) state that the latest editions of Longman Dictionary of Contemporary English and Cambridge Advanced Learners' Dictionary contain language notes based on their learner corpora so that learners can avoid some common mistakes. These notes are valuable as they inform learners about some fossilized errors advanced learners commit. Similarly, Nesselhauf (2004) argues that one way to use learner corpora for language teaching is to identify what is particularly difficult for a particular group of learners and to emphasize these areas of difficulty in language teaching materials. Another more indirect way to benefit from learner corpora in language teaching is to derive insights about SLA and to draw implications for language teaching.

Computer-Assisted Language Learning (CALL) is another field which is learner corpora informed and such CALL programs are developed to assist language learners by making use of the common errors and common difficulties found in the learner corpora. Granger et. al. (2002) provide examples of CALL programs which use learner corpora. One of these programs is WordPilot developed by Milton (1998) which contains remedial exercises targeting Hong Kong learners' language learning difficulties and a writing aid tool that help learners to select appropriate

wording by accessing native corpora of specific text types. Similarly, ESL Tutor Program developed by Cowan, Choi and Kim (2003) aims to correct Korean ESL learners' grammatical errors.

# 2. 2 Discourse Analysis

One area of linguistics that benefits from corpus research is discourse analysis and corpus research is valuable in discourse analysis studies as it contributes to furthering our understanding of discourse. Using corpora to uncover linguistic patterns that are used in the construction of discourses, also one of the main objectives of the present study, involves combining corpus analysis and discourse analysis. Before discussing how these two fields of study contribute to our understanding of the language, what the term "discourse" means and what discourse analysis does will be described.

### 2.2.1 Definition and Aim

The study of discourse has become a major field of study in many disciplines and it has been approached from different perspectives. Therefore, the term "discourse" has been used in different ways in different disciplines. Schiffrin, Tannen and Hamilton (2001) group definitions of "discourse analysis" into three categories as (1) the study of language use (2) the study of linguistic structure beyond the sentence (3) the study of social practices and ideological assumptions that are associated with language and/or communication. The study of language use deals with the linguistic constructs such as phrase structure and clause structures and investigates why languages have structural variants with equivalent meanings. On the other hand, the study of linguistic structure beyond the sentence focuses on extended sequences of utterances or sentences and how these are organized in systematic ways. The study of communicative social practices and ideological assumptions focuses on social construction of discourse rather than the linguistic description of texts. The aim is to understand the broader social contexts of the discourse and for that aim, the researchers interview, observe and work with the actual writers and readers or interlocutors.

Schiffrin (1994) describes two paradigms in linguistics that provide different assumptions about the general nature of language and the goals of linguistics. These paradigms are called the formalist paradigm where discourse is defined as a unit of language beyond the sentence and the functionalist paradigm which defines discourse as language use. The two paradigms have different perspectives regarding the goals of a linguistic theory, the methods for studying language and the nature of data and the evidence. In addition, this difference in the perspectives also influences the definitions of discourse.

Alba-Juez (2009) compares formalists and functionalists on their views of discourse. Formalists view discourse as the next level in a hierarchy of morphemes, clauses and sentences whereas functionalists focus on the way in which people use language to achieve certain communicative goals. Discourse, in this view, includes not only the propositional content, but also the social, cultural and contextual contents. On the other hand, in order to have a more comprehensive and accurate picture of what constitutes discourse, Schiffrin (1994) proposes an approach to discourse, in which both the formal and the functional paradigms are integrated. She (1994) views discourse as "utterances", i.e. "units of linguistic production (whether spoken or written) which are inherently contextualized" (p.41). From this perspective, the aims for discourse analysis are not only sequential or syntactic, but also semantic and pragmatic.

In the same vein, Celce-Murcia and Olshtain (2000) mention that there are traditionally two types of definitions given for the term "discourse": in formal definitions of the term, it is described as a unit of coherent language that consists of more than one sentence whereas functional definitions characterize discourse as language in use. However, the authors criticize both definitions as they are deficient. They argue that a piece of discourse can consist of as little as one or two words and that the phrase "language in use" is very general and it presupposes that "a piece of discourse is an instance of putting elements of language to use" (p.4). They claim that the most satisfying definition is the one that combines the two definitions above. Thus, they describe discourse as "an instance of spoken or

written language that has describable internal relationships of form and meaning (e.g. words, structure, cohesion) that relate coherently to an external communicative function or purpose and a given audience/interlocutor" (p.4). Another description of discourse that combines form and function is by Douglas (2001) who defines discourse as the language used by members of a speech community. He also adds that discourse analysis involves the examination of both language form and function including the analysis of both spoken interaction and written texts.

According to Trappes-Lomax (2004) discourse analysts do exactly what people in their everyday life do with the language. That is, discourse analysts notice language patterns in use and the circumstances such as the participants, situations, purposes and outcomes that are associated with the language patterns. However, this noticing is conscious, deliberate and systematic unlike people's notice in their everyday life. Trappes-Lomax (2004) defines discourse analysis as "the study of language viewed communicatively and/or of communication viewed linguistically" (p.134) and states that this definition involves reference to concepts such as language in use, language above and beyond the sentence, language as meaning in interaction and language in situational and cultural context.

There are a variety of different fields of study within discourse analysis. These fields of study have become significant areas of investigation in their own right. Celce-Murcia and Olshtain (2000) discuss four such areas. These are cohesion, coherence, information structure and conversation analysis. The cohesion of a text is the result of cohesive ties that explicitly link together all the propositions in a text. These cohesive ties are discussed in detail by Halliday and Hasan (1976) as grammatical ties (reference, ellipses, substitution, and conjunction) and lexical ties. Another aspect of discourse investigated in discourse analysis studies is the coherence of a text. In a coherent text, the sentences or utterances hang together and relate to each other. This unity and relatedness of texts is examined in discourse analysis studies. The present study also focuses on an aspect of cohesion and coherence in discourse, e.i. DCs. Connective use is examined in argumentative discourse in relation to the structural and semantic features connectives demonstrate

and to their role in argument development. In that sense, it is also a discourse analysis study.

Another major concern of discourse analysis studies is the information structure of text. The aim in these studies is to understand how information is managed at the local level regarding the old information and the new information. On the other hand, in conversation analysis studies, the aim is to find out how the conversation is maintained concerning both the information structure and the turn-taking behavior between the interlocutors. These studies also examine the cultural differences regarding turn-taking.

## 2.2.2 Discourse Analysis in Corpus Linguistics

Discourse analysis finds its applications in different fields of study. However, the major field of study that the present study is concerned with is the corpus linguistics. Therefore, how discourse analysis is viewed in a corpus-analytic approach is also important. Teubert (2005) defines discourse from the perspective of corpus linguistics. He holds that for corpus linguistics, discourse constitutes the texts that have been produced within a discourse community. Corpus linguistics make general and specific claims about the discourse based on the analysis of the corpus. Similarly, Alba-Juez (2009) also emphasizes the corpus use in discourse studies and states that discourse analysts are interested in the actual patterns of use in naturally occurring texts. These natural texts, once transcribed and annotated, are known as the "corpus", which constitutes the basis for analysis. Thus, discourse analysts necessarily take a corpus-based approach to their research.

Conrad (2002), in her overview of approaches within corpus linguistics that address discourse-level phenomena, states that corpus-based studies provide information about social and textual factors influencing language choices and in that way, they contribute to our understanding of discourse. She summarizes four approaches in corpus-based research that are applicable to discourse analysis. The first approach concerns investigating characteristics associated with the use of a language feature (a word, phrase or grammatical structure), which contributes to understanding the factors that shape the choices language users make for different discourse

conditions. The second approach is to focus on a function of language and to determine how it is realized in discourse. For instance, in a study, all the lexicogrammatical patterns that are used to show stance can be examined. The third approach makes the language variety the main focus of investigation. For instance, the study of English academic vocabulary or of spoken academic language are studies concerning a language variety. In the fourth approach, one or more features are examined in the entire text to determine how the features contribute to discourse development. Multiple texts are compared to identify consistent patterns of use. These are main areas of discourse analysis which are addressed in corpus-based studies.

Baker (2006) in his discussion on the advantages of the corpus-based approach to discourse analysis state that in any research, it is quite difficult to stay truly objective but using a corpus restricts researchers' biases to some extent. Particularly, the data is not selected in a corpus study to confirm one's existing conscious or subconscious biases because with a corpus, one is less selective of data as the work is not on a small amount of selected texts but rather on hundreds of texts. On the other hand, corpus-based research is a useful way to analyze discourse due to "the incremental effect of discourse" (Baker, 2006, p.13). A discourse can be constructed with a word or a phrase but it is often difficult to tell whether such a discourse is typical or not. In order to know that, one has to collect numerous supporting examples of a discourse construction. A lot of human communication may not be by chance but is constrained by different factors. In such circumstances, the use of corpus is valuable. The corpus-based approach can reveal which words are used in association occurring repetitively in natural discourse and whether such a use is typical and is a "majority common-sense ways of viewing the world" (Baker, 2006, p.14). Another advantage of using corpora for discourse analysis lies in the fact that discourses are not static. A typical discourse ten years ago may be quite unacceptable today. This change can be observed with the use of a historical corpus and by comparing corpora from different time periods. Triangulation is another benefit of using corpus-based research for discourse analysis. It is obvious that using multiple methods of analysis rather than relying on one is more valuable in research. Triangulation with the use of a corpus facilitates validity checks of hypotheses and confirmation of results in small-scale research studies.

## 2.2.3 Written Discourse Analysis

Discourse can be classified as written discourse and spoken discourse. These types of texts are further distinguished according to register which concerns the formality or informality of a text, and genre which is a culturally and linguistically distinct form of discourse such as a narrative or exposition. As the present study concerns the analysis of written discourse, brief information on written discourse analysis will be relevant here.

Written texts have culturally preferred shapes which influence their overall organization. These preferred shapes are not incidental. On the contrary, they provide orientations for the readers and the writers with organizational properties at both global and local levels. Written discourse analysts aim to investigate what norms or rules people adhere to when creating written texts. Research into written discourse is motivated by pedagogical interests to help writers to succeed in writing. Such research aims to help develop a better understanding of written texts and their organizational structure. In the same vein, Bazerman and Prior (2004) state that traditionally the motivation for analyzing texts was to understand them more deeply and to examine the limitations of their meanings. Written discourse analysis became prominent in the early development of composition studies as a field to teach the basic conventions of both academic and non-academic texts.

In his book on written discourse, Bhatia (2004) describes different perspectives to written discourse analysis in the history. In 1960s and in early 1970s, written discourse analysis was influenced by formal linguistics and was confined to surface-level features of language. These early analyses of written discourse focused on some lexico-grammatical features in texts and thus, in this perspective, discourse was viewed as text. Later, the relation between the choice of a lexico-grammar and specific forms of discourse organization was investigated. The focus was on coherence and cohesion, macro-structures and information structures of discourse. This focus on patterns of organization triggered interest in the analysis of

larger stretches of discourse. Another important development in written discourse studies was the focus on genres to understand how members of different discourse communities construct, interpret and use different genres to achieve their goals. This view of discourse extends the analysis of discourse to context in a broader sense to account for the way the discourse is interpreted and used in specific institutional and professional contexts to achieve specific goals. On the other hand, other discourse analysts were interested in social context to investigate how discourse is used as a powerful instrument of social control. In this perspective, the focus is more on the features of the context rather than the textual output such as the changing identities of the participants. Discourse as social practice view requires social and pragmatic knowledge to be able to communicate successfully. Bhatia (2004) summarizes the story of written discourse analysis in four terms as discourse as text, discourse as genre, discourse as professional practice and discourse as social practice.

### 2.2.3.1 Coherence and Cohesion

Discourse organization in terms of textual phenomena coherence and cohesion has long attracted attention. Research on coherence and cohesion in different fields of study led to different viewpoints of the concepts. In general, it is accepted that coherence and cohesion are two different concepts. Cohesion is defined by many researchers as referring to the syntactic and semantic connectivity of the linguistic forms on the textual surface (Halliday & Hasan, 1976; Connor & Johns, 1990; Crystal, 1991). However, coherence is defined as "principle of organization postulated to account for the underlying functional connectedness or identity of a piece of spoken or written language" (Crystal, 1991, p.60). In other words, cohesion is the connectivity on the surface or sentential level and coherence is the connectivity in terms of content and organization and on a broader level such as paragraph or discourse level (Jin, 1998, p.2).

It has been widely discussed whether both coherence and cohesion are necessary for the organization of discourse, a discussion which will not be given in details here as this is beyond the scope of this study. Thus, it will suffice to say it has been argued that cohesion is a necessary, but not sufficient criterion of coherence (e.g., Halliday & Hasan, 1976; Halliday, 1985). It has also been claimed that cohesion is neither necessary, nor sufficient for the coherence of a text, and a text can be coherent without formal cohesive devices (Carrell, 1982; Hoey, 1991; Hellman, 1995). Similar to the discussion on the relation between cohesion and coherence of a text, another discussion concerns the perception of coherence. There are different linguistic conceptions of coherence and these different approaches can be categorized according to the features they focus on in the text that create coherence: textual perspective and pragmatic perspective which are more relevant for the present study, information perspective and cognitive perspective which are less relevant and thus, will be discussed in less detail.

# Textual perspective

Although there are arguments to criticize a textual perspective to coherence, the role of textual elements in coherence can never be disregarded. From the textual perspective, Halliday and Hasan (1976) propose a notion of cohesion in which explicit linguistic devices relate one element in the text to another and in that way create texts through cohesive ties between propositions that are structurally unrelated. According to Halliday and Hasan (1976), cohesion is a semantic concept referring to "relations of meaning that exist within the text and that define it as a text" (p. 4) and they add that cohesion is "the continuity that exists between one part of the text and another" (p. 299). In other words, cohesion occurs if an element in the discourse can be interpreted depending on the interpretation of another element and they argue that cohesion is the factor that makes a text a text distinguishing it from a non-text.

For Halliday and Hasan (1976), textual elements constitute only one aspect of coherence. Meaning results from an interaction of three main components, namely, ideational, interpersonal, and textual. The ideational component is the expression of content whereas the interpersonal component has to do with speakers role relationships. And, finally, the textual component refers to the linguistic sources that form a text. Under textual component, Halliday and Hasan (1976) examine the cohesion of texts. Cohesion is one part of the complex set of relations that come together to form texture or coherence. Sentences are linked by relational elements

which combine them to a unified whole that is called a text. The process of combining sentences to a meaningful unit is called cohesion and it can be subdivided into the categories: reference, substitution, ellipsis, conjunction and lexical cohesion. Halliday and Hasan (1976) argue that cohesion can be achieved partly through grammar and partly through vocabulary. They view these cohesive devices as linguistic tools that semantically link elements which are structurally unrelated. Halliday and Hasan (1976) are interested more in relatively short-range relations such as between sentences rather than more extended discourse segments but they were among the first to provide a systematic description of discourse cohesion and coherence. Although conjunction forms only one category of lexical ties that contribute to cohesion, it is the only relevant category for the present study.

As stated before, one way of achieving grammatical cohesion, according to the authors, is the use of linking (connecting) linguistic expressions or discourse markers such as *and*, *or*, *but*, *yet*, *now*, *then*, *however* and *after all*. Conjunctions are "a specification of the way in which what is to follow is systematically connected to what has gone before" (Halliday and Hasan, 1976, p.227).

Halliday and Hasan (1976), the term "conjunction" encompasses the meaning of connectives in general sense as words or phrases that connect two or more clauses or sentences to express a coherent relation. Halliday and Hasan (1976, p.231) categorize three types of expressions under the heading of conjunctions:

- Adverbs including
   Simple adverbs (coordinating conjunctions), e.g. but, so, then
   Compound adverbs in –ly, e.g. accordingly, subsequently
   Compound adverbs in there- and where-, e.g. therefore, thereupon, whereat
- 2) other compound adverbs, e.g. *furthermore*, *nevertheless*, *anyway*, *instead* prepositional phrases, e.g. *on the contrary*, *as a result*
- 3) prepositional expressions with that or other reference item, the latter being optional, e.g. *as a result of that, instead of that* obligatory, e.g. *in spite of that, because of that*

In addition to the grammatical categorization, Halliday and Hasan (1976) classify conjunctions into four semantic relations: additive, adversative, causal and temporal. Conjunctions of additive relations, such as *and* and *for instance*, add new information, examples or make restatement to support previous argument. Conjunctions of adversative relations, like *but* and *instead*, contrasts two arguments and signals another important message. Conjunctions of causal relations, like *because* and *therefore*, signals a cause-effect relationship between two arguments. On the other hand, conjunctions of temporal relations, like *before* and *finally*, link two arguments in time sequence and signals the time of a great change.

The point severly criticised in Halliday and Hasan's (1976) discussion of cohesion over the years is their emphasis on cohesion as a necessary element to create unity in texts. According to Tanskanen (2006), those critisizing this view point strongly argue that overt markers of cohesion are not enough to make a text unified. More important than cohesion is the unity or coherence between the propositional units in the text. However, she argues, it is rather difficult to find real life examples where a text is coherent without any single cohesive tie and that is the reason why those researchers claiming that a text can be coherent without any lexical tie do argue for the viewpoint using the same examples in several studies. Therefore, Tanskanen (2006) states that although a text can be coherent without any cohesive tie, such examples are very uncommon at least in real language data. She also holds that the examples used in various studies to show that there can be coherence without cohesion are generally very short texts. However, as the texts get longer, it is more likely that it will show cohesion.

Although cohesion and coherence will be kept separate in the present study, it is important to realize that they are related. It is believed in the present study that although there might be instances where coherence is achieved without cohesion, and more specifically without DCs, the use of cohesive devices and DCs in particular for the present study facilitates the discourse interpretation and signals discourse coherence. One aspect which is a not discussed by Halliday and Hasan (1976) but which the present study concerns is the possibility that relations can hold

also between nonadjacent discourse segments. With this point of view, more extended relations held between discourse segments with the use of DCs are also examined.

## Pragmatic perspective

One of the researchers who studied coherence from a pragmatic perspective is Widdowson (1978). According to Widdowson (1978), in uttering a sentence, one expresses a proposition of some sort and in the expressing of a proposition, one performs an illocutionary act of some sort. The propositions and the acts combine to form discourse. The link between the propositions is called cohesion and one can modify sentences in a text in a number of ways to produce various combinations to link sentences. However, considering different texts formed with these different combinations of sentences, not all versions are accepted to be coherent for the reader. The text that can most readily be processed by the reader is the most coherent. What leads to cohesion and coherence in a text is the propositional and illocutionary developments and the speaker has to choose sentences appropriate for the context paying attention to what the listener wants to know. Coherence of an incohesive text is shown in the following example (in Jin, 1998, p.13):

# (1) a. What are the police doing?

### b. I have just arrived.

In the previous example, there seems to be no overt link between the utterances, the text is still coherent in that B's answer is an explanation for his inability to answer A's question. Thus, successful interaction takes place if one of the interlocuters understand the others' illocutionary intentions. Widdowson (2000) argues that a text is coherent to the extent that the reader recognizes it as a normal language use, to the extent that the reader is familiar with the illocutionary acts conforming to known conventions. Thus, a discourse is coherent as long as the reader is familiar with the conventions. Although it is incoherent, it can be cohesive with the syntactic and semantic clues that show how the propositions relate to each other. One can recognize the cohesion but may not recognize the illocutionary significance of the relationship and how the propositions expressed function as part of a total communicative activity. Widdowson (2000) states that if a text is incoherent to a reader, when asked what the text is about, the reader cannot summarize but only

quote. Widdowson (2000) perceives reading as a dialogue between the reader and the writer and successful interaction requires the reader to understand the illocutionary intention of the writer such as persuasion, and suggestion. In other words, writing will be structured to communicate writer's intentions and purposes within certain accepted principles and the reader's task is to understand these intentions and purposes.

Widdowson's (2000) views on cohesion and coherence are also significant for the present study in that the present study never claims that discourse coherence can be achieved only with the use of DCs as linguistic markers of cohesion and coherence. However, they are viewed as linguistic devices that guide the reader towards the writer's intention. The discourse mode in the corpora is argumentative writing which has its own specific patterns of organization and purpose. The reader has to understand the writer's intention and purpose so that there is a successful interaction between the reader and the writer. In order to facilitate this process, DCs have a role in communicating the writer's intentions and the arguments the writer is for and against. This role will be made clear in the following sections where interpersonal metadiscourse functions of DCs are explained.

Similarly, Schiffrin (1987) presents a very detailed analysis of some linguistic expressions in English which she calls *discourse markers* (Discourse marker-discourse connective distinction will be further discussed below in another section). She studies the semantic and grammatical status of these markers, their functions and characteristics. Schiffrin (1987) claims that a hearer interprets the meaning of a text by using the propositional connections underlying the utterance. Therefore, cohesive devices help the reader to find the meaning underlying the surface utterance.

Schiffrin (1987) views conversation as a multilayered interaction consisting of the following five planes of talk:

1) Exchange structure, including the adjacency pairs and the turn-taking mechanism

- 2) Action structure, involving the use of speech acts
- 3) Ideational structure, covering propositional meaning and relations between ideas
- 4) Participation framework, referring to the different ways in which speaker and hearer relate to each other
- 5) Information state, covering the participant's cognitive status during the interaction

She maintains that all these components need to be integrated to make communication successful. According to her, discourse markers have roles within these different components and can function on different levels of discourse structure (linguistic or non-linguistic). They can operate on the ideational (informational) structure in the sense that they indicate relations between ideas in discourse. They can also operate on the participation framework (discourse exchange and interaction) as they have a role organizing the conversation between speakers and hearers. Schiffrin (1987) argues that discourse markers such as but, or, because and so operate on the ideational level and they can indicate three types of relations: cohesive relations, topic relations and functional relations (p.330). Other discourse markers such as well, oh, now, and I mean operate on other levels such as exchange, action, participation framework and information state. Thus, discourse markers contribute to discourse coherence by relating different components of talk. The argument that these lexical items have both linguistic and non-linguistic functions is also supported in the present study as they signal discourse relations and discourse organization as well as serving pragmatic functions.

According to Sperber and Wilson (1986) and Blakemore (1987), coherence is interpreted from a pragmatic perspective in the light of theory of Relevance. This theory attempts to account for utterance interpretation process and the search for relevance in this process. As the process itself is outside the scope of the present study, the theory will be explained briefly here and the aspects that relate to the present study will be stated. This theory emphasizes the fact that human beings seek relevance in texts and if relevance is found, the text is received as coherent. The

search for relevance is a basic feature of human cognition. Relevance may be assessed in terms of cognitive effects in that the greater the positive cognitive effects achieved by processing an input, the greater the relevance of the input to the individual at that time. It may also be assessed in terms of processing effort in that the greater the processing effort, the lower the relevance of the input to the individual at that time. In relevance-theoretic terms, an input is relevant to an individual when its processing in a context of available assumptions yields a positive cognitive effect which is a worthwhile conclusion achieved by processing the input.

In the Relevance Theory, relevance of an input is a matter of degree in that one input among others might be more relevant than the others. Sperber and Wilson (1986) describe two criteria that make an input more or less relevant than the other:

Other things being equal, the greater the positive cognitive effects achieved by processing an input, the greater the relevance of the input to the individual at that time. Other things being equal, the greater the processing effort expended, the lower the relevance of the input to the individual at that time (p.252).

In order for an utterance or piece of discourse to be consistent with the principle of Relevance, the hearer or the reader should recognize that it is an act of ostensive communication, an act of deliberate communication in which the speaker or the writer intends to convey a message and helps the hearer or the reader to recognize this message. Blakemore (2003) uses the term "discourse markers" and gives *but* as an example stating that it constrains "the interpretation process by narrowing down the search for the intended contextual effects" (p.113). That is, discourse markers constrain the relevance of utterances in which they occur. She further argues that some discourse markers do not contribute to the semantic truth-conditional content of utterances in which they occur. They are procedural in the sense that they constrain the process of utterance interpretation.

The theory proposes that a piece of discourse is a deliberate act of communication where the writer conveys a message, that discourse markers have a role in

constraining the interpretation and that there is a difference between what we say, the explicature, and what we mean, the implicature, between the abstract semantic representations of sentences and the particular interpretations of statements or utterances in context. Although the lexical items that are called "disourse connectives" (DCs) in the present study are examined regarding their function of relating two discourse segments, it is also believed that their functions are not restricted to relating the discourse segments semantically but they also serve some interpersonal metadiscourse functions in argumentation. It is through the use of DCs that students facilitate the interpretation process for the reader and through the interpersonal metadiscourse functions that they convey their intention.

In the Relevance account, discourse markers play an important role in the process of interpreting an utterance by guiding the hearers/readers in the inferential phase of utterance interpretation and the search for optimal relevance. Discourse markers encode a constraint on the pragmatic inferences. That is, with the use of the discourse markers, the number of potential interpretations which the reader can draw from the discourse is narrowed down. Blakemore (1987) makes a distinction between procedural meaning and conceptual meaning in relation to discourse markers. She argues that discourse markers encode procedural information and they indicate how the proposition expressed by an utterance is to be interpreted to be relevant. Words with conceptual meaning (for example, adverbials such as *frankly*) contribute to the content of assertions whereas words with procedural meaning (connectives such as but and so) encode information about how these representations are to be used in inference. She argues that discourse markers with procedural meaning do not contribute to the semantic truth-conditional content of utterances in which they occur and that they constrain the process of utterance interpretation.

### Information perspective

Some researchers studied coherence and cohesion as an information management process. This aspect of discourse is not relevant for the present study. Therefore, it will be discussed very briefly here for the sake of completeness. Lautamatti (1978) developed a type of analysis called Topical Structure Analysis (TSA). TSA attempts

to examine the development of discourse topics through sequences of subtopics that are ordered hierarchically. To describe the coherence of texts, TSA inspects semantic relationships between sentence topics and the overall discourse topic by investigating the repetitions, shifts and reoccurences of the topic. According to Lautamatti (1978), subtopics can be ordered in different ways such as parallel progression, sequential progression and extended parallel progression. Parallel progression occurs when the theme of a sentence is the same as the theme of the preceding sentence (A-B, A-C, A-D). Sequential progression refers to the progression where the theme of a sentence is the same as the rheme of the preceding sentence (A-B, B-C, C-D). Extended parallel progression, on the other hand, occurs when a parallel progression is interrupted by a sequential progression (A-B, B-C, A-D). Lautamatti (1978) applies her analyses to written discourse and she shows that "certain patterns of topical progression may be more readable than others". For instance, texts with fewer competing subtopics, fewer complex sequential progression (A-B, B-C, C-D) and more series of parallel topic progressions (A-B, A-C, A-D) appear to be more readable.

Similarly, Grimes (1975) argues that the speaker arranges information in units known as "information blocks". According to Grimes (1975), each information block has a center where new information is presented. For instance, in the following example, words in capital letters (used for words that are intonationally prominent) show the center of information and convey new information:

(2) THIS/ is the FIRST TIME/ we have EVER/ DONE/ anything like this. In his discussion, Grimes (1975) claims that cohesion is the result of grouping of information into larger units and as a result of this grouping, coherence can be achieved

Although the scope of the present study is limited to the use of DCs, as further research, information perspective aspect of discourse can also account for discourse coherence and L2 writing can be analyzed from the perspective of information structuring to shed light on information organization and topic development in writing.

## Cognitive perspective

In this approach to coherence, the focus is on the cognitive representation of discourse in the mind of the language user. Similar to the information perspective of discourse coherence, this perspective is also not relevant to the present study as the focus in the study is not the cognitive representation of discourse and the cognitive processes involved in this representation. Therefore, a more detailed discussion of the cognitive perspective can be reached in other sources. For the sake of completeness, it will suffice here to give a very brief discussion of the perspective in general and how discourse coherence is viewed from this perspective.

Sanders, Spooren and Noordman (1992) discuss discourse coherence from a "discourse structure approach" which focuses on the relation that exists between two or more discourse segments (p.2). They view coherence relations as cognitive entities and coherence relations and their linguistic markers affect the cognitive representation of the discourse. Text comprehension requires the reader to construct a cognitive representation of the content conveyed by the text. Sanders and Noordman (2000) assert that the connectedness of discourse is a mental phenomenon. When confronted with a stretch of discourse, language users make a coherent representation of it. Readers establish coherence by relating the different information units in the text. On the other hand, inferring coherence relations is a necessary condition for discourse representation to be coherent. Considering coherence as a mental phenomenon implies that it is not an inherent property of the text under consideration

Coherence relations, according to Sanders et. al. (1992), are meaning relations that connect two text segments such as Cause-Consequence or Argument-Claim. The presence of these coherence relations distinguishes a text from a random set of sentences. The role of some linguistic markers is to make these relations explicit and how these relations are established is of a cognitive nature. According to Sanders et. al. (1992), the set of coherence relations is ordered and "readers use their knowledge of a few cognitively basic concepts to infer the coherence relation" (p.4). In that way, they argue that there are similarities between coherence relations

and that one discourse connective can express only a limited number of relations. They state that they strive for an economic theory that generates a limited set of classes of coherence relations. They provide a taxonomy of coherence relations which consists of primitives in terms of which coherence relations are ordered. This taxonomy involves the primitives basic operations, source of coherence, order of the segments and polarity. Such an analysis provides a systematic categorization of coherence relations.

Givon (1995) also argues that discourse coherence is a property of the internal product of communication. According to him, text comprehension is achieved through structural mental representation of the text. He claims that a "mentally represented text has some sequential-hierarchic network structure" (1995, p.4). Therefore, one should have some nodes in the network of mental text and these nodes should be connected to some other nodes within the mental text-structure. If the node has more connections, it becomes easier to access that node.

The mental text represented in the memory has a sequential-hierarchic network structure. Rapid access to memory nodes in this structure during discourse comprehension and production depends on the coherent representation of the text. During text comprehension and production, the hearer or the reader tries to connect the incoming lexical and propositional nodes to the pre-existing structure of the current text. The speaker or the writer uses the grammar to cue this connectivity to guarantee the hearer's or the reader's comprehension and the use of grammar in this way has two directions: anaphoric grounding and cataphoric grounding. Anaphoric grounding occurs when new information is connected to some existing mental representation of the text or of other mental entities. On the other hand, cataphoric grounding involves "clues the speaker gives the hearer at a particular point in the discourse as to how to ground it vis-à-vis the following discourse, particularly in terms of thematic/topic importance" (Givon in Jin, 1998, p.21). The following examples illustrate two types of grounding:

- (3) The man I told you about is not here yet.
- (4) The man, who had no shoes on, came into our office.

(5) A man who had no shoes on came into our office.

When the speaker utters the example (3), s/he assumes that the event in the relative clause is mentally accessible to the hearer because the proposition in the relative clause is shared by the speaker and the hearer. However, the use of non-restrictive relative clause in example (4) gives some parenthetical information rather than conveying any shared proposition or limiting the domain of reference of the head noun the man. In example (5), there is a restrictive relative clause with an indefinite head noun a man. Therefore, the relative clause functions as a descriptive clause introducing new information. In both examples (4) and (5), the head nouns are cataphorically tied to the relative clause. In order to develop a coherent conversation, the speaker has to use anaphoric and cataphoric grounding.

Having mentioned the different perspectives to the study of coherence in discourse, it is obvious that there are certain aspects of each perspective that contribute to our understanding of coherence. Coherence is very much related to the cognitive representation of the text in the reader's mind as well as to the recognition of relevance in discourse and the realization of the illocutionary acts and communicative intentions in the discourse. Moreover, linguistic devices in discourse have a role in guiding the reader towards a coherent representation of the text. A successful interaction between the reader and the writer/the text requires the above mentioned features.

## 2.2.3.2 Argumentative Discourse

Argumentative discourse is of concern for the present study as the study analyzes argumentative essays of native English speakers and L2 learners of English. Therefore, an examination of the structure and features of argumentative writing is a significant part of the study. Argumentative writing is an essential part of academic writing. Chittleborough and Newman (1993) contend that:

An argument has been put forward where there has been an intention to either establish a proposition, or persuade one or more people to accept a proposition (where such an acceptance would involve a change in belief, strength of belief, or a change in behaviour) (p.202).

Chittleborough and Newman (1993) add that the object-matter of an argument's intention (to establish or persuade) is its conclusion, which can be a prescribed action or an assertion, and in order to achieve an argument's intention, one needs to use at least one "supportive" and/or at least one "persuader". A supportive is defined as being a reason or item of information presented in an argument which is intended to provide "support for a conclusion," and a persuader as "a psychologically manipulative technique used by an arguer with the intention or hope of increasing the chances of the conclusion being accepted by a recipient" (Chittleborough and Newman, 1993, p. 196).

Structure and organization are integral components of an effective persuasive essay. No matter how strong the ideas are, a paper lacking a strong introduction, well-organized body paragraphs, and an insightful conclusion is not an effective paper. As the main aim of an argumentative essay is to persuade, to this end, the structure of the essay requires careful consideration. Argumentative essays must establish a clear thesis and follow sound reasoning, that the heart of the academic essay is persuasion, and the structure of the argument plays a vital role to achieve persuasion.

The structure of an argumentative essay can be either deductive in that one can start off with a generalization or assertion, and then provide support for it or inductive in that facts, instances or observations can be reviewed, and the conclusion to be drawn from them follows. Moreover, the structure of the essay requires the writer to have a clear, concise, and defined thesis statement that occurs in the first paragraph of the essay, clear and logical transitions between the introduction, body, and conclusion parts, body paragraphs that include evidential support, evidential support (whether factual, logical, statistical, or anecdotal) and a conclusion that does not simply restate the thesis, but readdresses it in light of the evidence provided. In this structure, it seems to be the common practice that there are claim, an overall argument the writer supports, and counterclaim, a claim that negates or disagrees with the thesis/claim in a successful argumentative essay. In addition to these claims, each claim needs to be supported with data.

The acknowledgement of counterarguments and refutation of these arguments is a crucial aspect of argumentation particularly in a reader-oriented approach. Hatch (1992) defines argumentation as "the process of supporting or weakening another statement whose validity is questionable or contentious" (p.185) and she describes the classic form for argumentation as introduction, explanation of the case under consideration, outline of the argument, proof, refutation and conclusion. She argues, however, that there are variants other than this classic form and except one of these variants, in all the other patterns, there is the mention of counterarguments and refutation.

Similarly, Coirier, Andriessen and Chanquoy (1999), in their study to define the characteristics of argumentative text writing, argue that there is always a conflict on debatable topics and the writer has to solve the conflict by means of discussion with the use of language. They further state that the goal is to convince the addressee and this "requires application of a number of relevant operations: supporting one's claim with acceptable reasons, and recognizing the strength and relevance of the opposite position" (1999, p.44). Therefore, an elaborated argumentation requires both supporting claims and refutation of opposite claims.

The researchers define elaborated argumentative text as "a type of text that complies simultaneously with eight crucial argumentative constraints, derived from research and theory on argumentation" (1999, p.14). The following list is taken from Coirier, Andriessen and Chanquoy (1999, p.15) which provides the constraints of an elaborated argumentation. The researchers state that the first four constraints concern a situation for an argumentation to develop and the remaining four constraints correspond to genre specific constituents of elaborated argumentative texts.

- 1) To recognize the existence of a conflict between two different positions on the same topic
- 2) To recognize the topic as 'debatable': socially, ideologically, and contextually

- 3) To be inclined to solve the conflict which presupposes a favorable negotiation context
- 4) To be inclined to try to solve the conflict by means of language
- 5) Claim a position
- 6) Support that claim with reasons (claim backing)
- 7) Assign a minimal value to the opposite claim and reasons
- 8) Restrict or modulate the opposing claims, by using counterargumentation This list of argumentative text features also emphasizes similar requirements for a successful argumentation as discussed above.

The English logician Stephen Toulmin (1958) developed a model by which rhetorical arguments are analyzed. Toulmin's Argument Pattern (TAP) has been applied as a methodological tool for the analysis of a wide range of school subjects such as English, Science and History as well as the assessment criteria for student writing and as a support for learning (Jamaludin, Ho and Chee, 2007). The TAP framework suggests that there are three basic components of an argument: data (D), claim (C) and warrant (W). Data refers to the materials of fact and opinion which can be called evidence. Claim is what is generally called conclusion and it can be the final proposition in an argument or it can be an intermediate statement which serves as data for a subsequent inference. It is the assertion that an individual makes and grounds are the facts that a person explicitly appeals to as a foundation for their claim. The usual order in which these are presented is data first and the claim next. In this sequence the claim implies therefore and in the other sequence, the claim implies because. The function of the warrant is to certify the claim as true by showing how the writer gets to that claim. Warrants are justifications used to show why data is relevant to the claim. An application of the model is given in Figure 1 below:

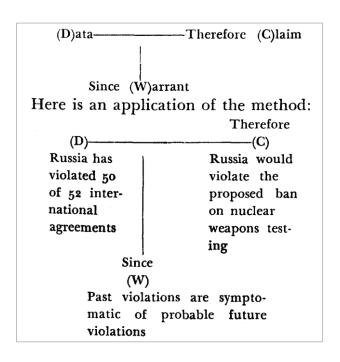


Figure 1. Toulmin (1958)'s Argument Pattern

In addition to these elements, Toulmin (1958) mentions another set of components any or all of which may be present in an argument. These are backing (B), qualifier (Q), and rebuttal (R). The backings of an argument are the comments that strengthen the acceptability of the warrants so that the connection between the data and the claims will not be scrutinised. A rebuttal anticipates certain objections that might be used against the argument. A qualifier shows the degree of force the writer believes the claim to possess. The qualification may be expressed by terms such as possibly and probably. These components are exemplified in the following figure.

Toulmin (1958) argues that the strength of an argument is based on the presence or absence of these different structural components. Stronger arguments contain more of these different components than weaker arguments.

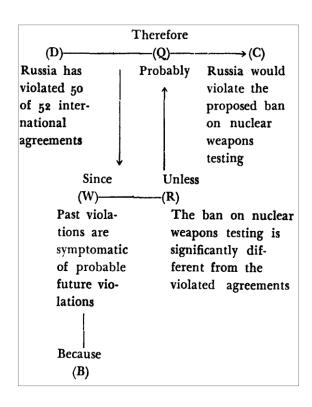


Figure 2. Toulmin (1958)'s Additional Components to the Model

This short discussion of Toulmin's argumentation framework (1958) provides insights into the structure of a successful argumentative writing. The framework emphasizes the value of developing strong claims, acknowledging counterarguments to one's own argument, refuting these counterarguments by backing up one's arguments with effective evidence and data.

## Contrastive language and lexical choice in argumentation

An important aspect of argumentative writing, which is of concern for the present study, is the use of contrastive language, in particular contrastive DCs. Coirier, Andriessen and Chanquoy (1999) define the way argumentation is put into writing as the linearization which is the process of expressing a cognitive representation into a linear sequence of information. They mention four processes in argumentative writing:

1) the reasoning process, that is the computation of logical relations between pieces of information;

- 2) the argumentative process, consisting of choosing the best hierarchical organization of argumentative information, taking into account the orientation (for or against the main position) of arguments;
- 3) the linearization process to combine pro- and counter-arguments in a sequence;
- 4) the linguistic coding process to express, with means of linguistic tools (connectives, embedding), the structure which has been built up.

Within this process of argumentative writing, the focus of researchers on the last step will be detailed here for the purposes of the present study. They argue that the writer must establish complex relationships between successive sentences such as subordination, coordination, specification or concession relationships, and the writer must express these relations especially by means of syntax, punctuation, connectives, and the anaphoric system. These linguistic devices, they argue, are crucial for the linguistic realization of the text plan. Therefore, defining ideas and their interrelationships and organizing the argumentation require linguistic skills on the part of the writer. The appropriate use of textual tools is a crucial aspect of achieving the purpose of argumentation. The management of supporting claims with evidence and logical reasoning, and of opposing views with refutation in the same text coherently definitely requires linguistic skills.

Pounds (2005), in a study on the writer's argumentative attitude in argumentative discourse, states that writers reveal their attitudes towards certain arguments through the use of linguistic resources. One of these linguistic devices is the modal verbs and lexical items expressing modal meanings such as adverbs and nouns. The writer's use of modal expressions to communicate their stance towards their statements and their audience constitutes a crucial feature of academic writing. On the other hand, in a study of modality in academic writing, Salazar and Verdaguer (2009) observe differences in the use of verbs expressing modality between native speakers and nonnative learners. One finding is that nonnative learners use verbs with their concrete, prototypical meaning whereas native speakers use them with their abstract meaning. One such striking example was the verb *feel*. Native

speakers tend to use this verb to refer to a way of thinking about something whereas nonnative learners use it with the meaning of having a particular emotion.

Similarly, Hyland and Milton (1997) compare the expression of doubt and certainty in a native speaker corpus and a nonnative learner corpus. They also argue that the ability to express doubt and certainty appropriately in English is a complex task for language learners, but it is crucial for successful academic writing. They hold that "statements must not only indicate the extent of the writer's conviction in their truth, which may range from uncertain possibility to confident prediction, but also convey a suitable degree of deference and modesty to the audience" (1997, p.183). They argue that as EFL instructors, they observe L2 learners' difficulties in manipulating the degrees of probability in academic writing. They find that L2 writers differ significantly from the native speakers in relying on a more limited range of items, offering stronger commitments, and exhibiting greater problems in conveying a precise degree of certainty. L2 learners appear to depend more heavily on modal verbs and both groups of students prefer adverbs such as *obviously*, *certainly* over lexical verbs such as *think*, *claim*, *believe* and *seem* although lexical verbs occur more often in published academic discourse.

The researchers argue that the popularity of adverbs over semantically equivalent verbal forms may be due to students' uncertainty in how to employ lexical verbs appropriately in stating claims because lexical verbs signal the writer's commitment to a proposition more overtly and precisely than adverbs expressing relative degrees of assurance and uncertainty. Another reason is that "verbs also indicate whether it carries a judgemental warrant, expressing the degree of conjecture involved, or provides evidential justification, indicating the reliability of the source of information" (1997, p.191). Adverbs are more common in speech, are syntactically more mobile in a clause and the distinctions they offer are easily scalable. Moreover, the appropriate use of lexical verbs is more problematic for L2 learners than the use of adverbs because the use of lexical verbs requires critical lexical, tense and voice choices which can have significant rhetorical effects. These choices may have effects concerning the writer's confidence in the truth of an

accompanying proposition and stance by manipulating proximity and distance. On the other hand, with the use of adverbs, the writer can easily express an attitude to his/her statements and adjust the strength of the claims without such grammatical and lexical complications.

In addition to the use of the lexical items expressing modality, there are other lexical items that are used in argumentation which reflect the argumentative nature of the discourse. As McCarthy (1991) states, there are lexical items that cluster round the elements of claim-counterclaim patterns such as *claim, assert, state, truth, false, in reality*. He cites Jordan's list of lexical items which the writers use to indicate doubt or uncertainty in claim and counterargument pattern. Here is the list:

according to	stimated	might	seems
apparently	evidently	old wives' tale	should
appears	expected	perhaps	signs
arguably	forecast	potential	so-called
believes	imagine	probably	speculation
claimed	likely	promises to be	suggests
considered	look	reported	thought
could	may	says	
			(p.80)

These recurrent features of textual patterning are crucial in reflecting the argumentative nature of the discourse and in expressing the writer's stance and attitude towards claims and counterarguments. Therefore, they constitute a significant linguistic element in argumentation.

On the other hand, as argumentation requires a strong support for claims, the statement of counterarguments and the refutation of these opposing views, lexical items that are used for these purposes will definitely signal the argumentative nature of the discourse. For instance, when the writer wants to refer to an opposing point of view, s/he is likely to use lexical expressions such as *opponents*, *claim*, *disagree*, and *but*. These lexical items are categorized as in Table 1 for the present study.

Table 1. Lexical Items Signalling the Argumentative Nature of the Text

Category of Lexical Items	Examples	
Lexical items signalling problem- solution pattern	Difficulty, concern, drawback, problem Solution, solve, answer, consequence, outcome, result	
Lexical items to describe claims	Strong, important, effective, valid	
Lexical items to describe counterarguments	Weak, controversial, problematic	
Other lexical items signalling the argumentative nature	Opponents, proponents, opposing, refutation, argument, debate, controversy, agree, disagree	

The argumentative nature of the text presupposes contrastive views. As stated earlier, a requirement of argumentation is the presence of a debatable topic. Therefore, contrast is in the nature of argumentation. Barton (1995) also states that contrast is the basis for argumentation and that this contrast is established through the use of contrastive language in argumentation. One way of signalling this contrast is the use of contrastive DCs.

These DCs can relate two discourse segments at the microstructural level of discourse establishing contrast and concession relations between the segments. On the other hand, they can also function at the macrostructural level of discourse to structure the discourse and to signal moves in argumentation. In addition to their functions of establishing contrast or concession relations, they can be used to signal the start of a counterargument as an opposing view to the writer's claim and to signal the refutation as an opposing argument to the counterargument mentioned. Still, the claim statements can also be marked with contrastive DCs although naturally claims are not in contrast to the thesis. Barton (1995) argues that such a use serves the purpose of emphasizing the claim because contrast is a valued basis for academic argumentation. He also states that writers emphasize their problematizations in argumentation with the use of contrastive language and that contrast is a shared value in academic argumentation.

In the following section, DCs are described in more detail with two different approaches to the study of these lexical items. After a general overview of DCs is given, in the remaining parts of the chapter, the functions they serve in argumentation at the macrostructural level of discourse will be discussed and their structural and sense realizations at the microstructural level of discourse will be detailed.

### 2.3 Discourse Connectives

DCs have been much studied in the last twenty years and different proposals and approaches have been developed on this subject. Müller (2005) holds that during the last two decades, analyses of discourse markers (also called as *discourse connectives, discourse particles*, etc.) have occupied a large space in the literature on pragmatics. He notes that discourse markers have been considered from a variety of perspectives and approaches, e.g. as signalling a sequential relationship between utterances, as marking discourse coherence and from a relevance-theoretic point of view. However, a comparison of different definitions of DCs proves that there is some agreement on the function and definition of DCs (Oates, 1999). For example, there is an agreement that DCs guide the hearer or the reader to a specific interpretation of the utterance. Moreover, there is also an agreement that DCs can signal relations on a global level by connecting paragraphs in addition to their local use between clauses and sentences.

Fraser (1999) uses the term *discourse markers* and refers to their problematic and controversial nature. He points out that discourse markers (DMs henceforth) have been studied under different labels and that although researchers have agreed that DMs are lexical expressions that relate discourse segments, they have disagreed on their definition and function. There have been so far a lot of terms used to refer to DCs. Among them are *discourse marker* (Schiffrin 1987), *pragmatic marker* (Fraser 1996), *discourse particle* (Schoroup 1985), *logical connectors* (Celce-Murcia and Larsen-Freeman, 1999), *sentence connectives* (Halliday and Hasan, 1976) and *connectives* (Blakemore, 1987), *cue phrases* (Hovy, 1994), *discourse operators* (Redeker, 1991). Every definition of a discourse marker reflects different attitudes towards these lexical items.

### 2.3.1 Discourse Connective-Discourse Marker Distinction

Schiffrin (1987) observes various types of conversation and how certain lexical items indicate coherence in conversation. She defines discourse markers as "sequentially dependent elements which bracket units of talk" (1987, p.31). They establish coherence relations between units of talk. In a study of twelve discourse markers (DMs), Schiffrin (1987) identifies a number of conditions that allow a linguistic item to be used as a DM. According to her, a DM has to be a sequentially dependent element that brackets units of talk, has to be commonly used in the initial position in discourse and has a range of prosodic contours which allow for distinguishing between sentential use and discourse use. Furthermore, a DM should operate at both local and global discourse levels and should operate in different discourse planes. Schiffrin (1987) is very broad in what she considers as a DM as she suggests that non-verbal gestures and aspects of prosody such as intonation and stress can be considered among the category of DMs.

Jucker and Ziv (1998) state that there is no definition of the term *discourse marker* that is agreed upon and that there are a variety of different terms used to refer to these lexical items. This variety reflects the different approaches to the study of these lexical items and the different functions they serve in discourse. One agreement in relation to the term *discourse connective*, however, is that this term tends to be used in more restricted sense than the term *discourse marker*. Jucker and Ziv (1998) use the term *discourse marker* as, they state, this is the term with least restrictions in use which include a broader range of lexical items.

Brinton (1996) refers to these lexical items as *pragmatic markers* and provides a long list of features of DMs. Below, there is a summary of the list (Brinton, 1996, pp.32-35):

1) DMs are short and phonologically reduced and are difficult to place within a traditional word class. There are various lexical items that are considered to be a discourse marker: adverbs, particles, verbs, coordinate and subordinate conjunctions, phrases, idioms, clauses

- 2) They are optional, occur at the sentence-initial position, occur outside the syntactic structure, have no clear grammatical function
- 3) They have little or no propositional meaning.
- 4) They are multifunctional, can operate on both local and global levels of discourse.
- 5) They are found more in oral discourse rather than written discourse, they are associated with informality and they appear frequently.

Fraser (1999), on the other hand, defines DMs as a type of pragmatic markers which occur as part of a discourse segment but are not part of the propositional content of the message conveyed, which do not contribute to the meaning of the proposition. DMs within the class of pragmatic markers signal a relation between the discourse segments, one which hosts the DM and the other which is the prior discourse segment. He excludes many segment-initial expressions from the list of DMs which do not signal a relationship between the two discourse segments such as *frankly* in (6) and *well* in (7) below:

- (6) a: Harry is old enough to drink.
  - b: Frankly, I don't think he should.
- (7) a: What am I going to do now?
  - b: Well... I really don't know.

Fraser (1999) states that there is no agreement on the terminology and on what the class of DMs consist of. Fraser's (1999) account of DMs is also summarized below in a list which includes the features of DMs:

- 1) DM is a lexical expression so non-verbal gestures are not DMs.
- 2) DM does not contribute to the semantic meaning of the proposition which hosts it, S2 and it does not have any role in the truth condition of S2.
- 3) A DM often relates contiguous discourse segments and these segments need not consist of a single utterance. S2, as the discourse segment which includes the DM and S1, as the previous discourse segment can consist of several discourse segments.

- 4) Every DM signals one of four types of relationships: contrastive markers, elaborative markers, inferential markers and temporal markers.
- 5) There are no strong generalizations about the phonology and morphology associated with DMs.
- 6) DMs are members of one of five syntactic categories: coordinate conjunction; subordinate conjunction; preposition; prepositional phrase; adverb.
  - a) coordinate conjunctions (and, but, or, nor, so, yet,...)
  - b) subordinate conjunctions (after, although, as, as far as, as if, as long as, assuming that, because, before, but that, directly, except that, given that, granting that, if, in case, in order that, in that, in the event that, inasmuch as, insofar that, like, once, provided that, save that, since, such that, though, unless, until, when(ever), whereas, whereupon, wherever, while,...)
  - c) adverbs (anyway, besides, consequently, furthermore, still, however, then,...)
  - d) prepositions (despite, in spite of, instead of, rather than,...)
  - e) prepositional phrases (above all, after all, as a consequence (of that), as a conclusion, as a result (of that), because of that, besides that, by the same token, contrary to that, for example, for that reason, in addition (to that), in any case/event, in comparison (with that), in contrast (to that), in fact, in general, in particular, in that case/instance, instead of that, of course, on that condition, on that basis, on the contrary, on the other hand, on top of it all, in other words, rather than that, regardless of that,...)

As for the discourse connectives, Maat and Sanders (2006) define DCs as "one word items or fixed word combinations that express the relation between clauses, sentences or utterances in the discourse of a particular speaker" (p.33). They argue that the category of DCs differ from the category of DMs in several aspects. DMs do not affect the truth conditions of their host sentences and they are loosely connected to the syntactic structure of their host sentence. DCs, on the other hand,

may be both truth-functional and non-truth-functional and may be strongly integrated in the syntactic structure of their host segment.

Similarly, Webber, Knott and Joshi (1999) argue that DCs consist of "words and phrases whose use requires an on-going discourse (i.e., the presence of at least one clause other than that to which the connective is attached) and whose meaning involves (in part) that discourse" (p. 2). For the Penn Discourse TreeBank (PDTB) corpus project, Miltsakaki, Prasad, Joshi and Webber (2004) categorize explicit connectives in English into three main grammatical classes: subordinating conjunctions (e.g. because, when, although, since), coordinating conjunctions (e.g. and, or, nor) and adverbials (e.g. however, otherwise, for example). The first two groups of discourse connectives require two arguments (discourse segments connected with a DC) that can be identified structurally from adjacent units of discourse whereas the last group of DCs requires two arguments but only one of them drives structurally. The other one derives anaphorically from the previous discourse.

The short overview of the discussion on the distinction between the two terms shows that there is no clear agreement on the terminology. However, it is clear that DC class of lexical items is narrower than the DM class. As will be discussed in more detail in later chapters, the present study adopts the definition and categorization of DCs explained both by Webber et. al. (1999) and by Miltsakaki et. al. (2004). In the following section, the main approaches to the study of DCs will be discussed. These approaches can be categorized into two groups as coherence-based approach and relevance-based approach. Rouchota (1996) states that in both accounts, connectives have a constraining function. In coherence-based approach, connectives constrain the types of relations held between the propositions which help the hearer in the interpretation of the utterance. Similarly, in relevance-based approach, connectives constrain the interpretation process by guiding the hearer towards the intended context and contextual effects.

#### 2.3.2 Coherence-Based Approach

DCs play a major role in the interpretation of the text by signalling coherence relations between discourse units. In other words, the interpretation of a text depends on the identification of coherence relations between the units of that text (Schoroup, 1999: 240). The common ground of researchers in the coherence-based group is that texts are coherent, that there is a definable set of coherence relations, and that the recovery of such coherence relations are essential for comprehension. In other words, coherence theorists assume that the most important property of texts is that they are coherent and coherence can be analyzed in terms of some coherence relations that hold the text together. For instance, the coherence relations such as cause, sequence, evidence and result can be found in a text which help different segments of the text to hold together and the reader's comprehension of the text depends on the recovery of these relations. In the coherence-based approach, DCs are considered to play a role in the organisation and structuring of information in spoken or written texts.

Halliday and Hasan (1976) are two researchers whose work can be viewed as a coherence-based approach to DCs. They point out that coherence is what makes the text semantically well-formed. When two sentences cohere, a semantic relationship holds between them. They provide a comprehensive discussion of the notion of cohesion. They point out that cohesion is a set of different linguistic devices through which one can judge whether a certain sequence of sentences is a text or not. If sentences maintain semantic relationships between each other through the use of some cohesive devices, then these sentences would form a text. Halliday and Hasan (1976) argue that cohesion can be achieved partly through grammar and partly through vocabulary. Thus, there are two different types of cohesion: grammatical cohesion and lexical cohesion. A way to achieve grammatical cohesion is through linking (connecting) linguistic expressions or DCs such as and, or, but, yet, now, then, however and after all. Halliday and Hassan (1976) consider cohesion as responsible for textforming (texture or well-formedness). They view cohesive devices such as conjunction as linguistic tools that semantically link elements which are structurally unrelated. Conjunction signals the way the writer

wants the reader to relate what is about to be said to what has been said before. They point out that conjunctive elements "express certain meanings which presuppose the presence of other components in the discourse" as illustrated in the following example with *after* (1976, p.222):

(8) He took a cup of coffee *after* he woke up.

The conjunctive element *after* suggests a sequence, signalling that what is expressed in the first clause followed what is expressed in the second one.

One of the most influential contributions to the study of DCs within the coherence framework is Schiffrin (1987). She uses the term discourse marker for English expressions *oh*, *well*, *and*, *but*, *or*, *so*, *because*, *now*, *then*, *I mean*, *y'know* and analyses the usage of these expressions in conversation. Schiffrin (1987) views conversation as a multilayered interaction consisting of five planes of talk:

- 1) The exchange structure, which consists of units of talk organized in turns or adjacency pairs (e.g. question-answer, greetings). *Well, and, but, so, or* and *y'know* all signal a change in the exchange structure. For example, *but* signals that the hearer wishes to take a turn, *so* marks the completion of a turn and *and* is used by the speaker to continue their turn.
- 2) The action structure, which refers to speech act structure. *Oh, well, and, but, so, because* and *then* are all markers of the action structure. Both *but* and *and* are used by a speaker to continue their turn regardless of the other speaker's activity.
- 3) The ideational structure, which includes propositions that carry semantic content, ideas and the different relationships that can be established between them for a satisfactory discourse organization. For example, one idea may provide evidence or background information for another idea.
- 4) The participation framework, which refers to the different types of relations that a speaker and a hearer can set up and the way they are related to their propositions, acts and turns. For example, *well* is used by a speaker to warn the hearer that their response should not be interpreted as a direct answer to a question and that there will be a digression before a relevant answer is given.

5) The information state, which is related to the cognitive capacity of the participants, how they organize their knowledge and what they know or assume they know of their shared knowledge. The primary function of *oh* occurs in the information state in which it marks the receipt of information.

Schiffrin (1987) claims that for a successful communication, all these discourse components need to be integrated and discourse markers are active in this process indicating the hearer how an utterance is to be interpreted. In Schiffrin's terms (1987), discourse markers function on different planes of talk – information state, participation framework, ideational structure, action structure and exchange structure – and create coherence through the integration of these different planes of talk.

Another researcher within coherence-based approach to DCs is Fraser (1999). Fraser (1999) provides a comprehensive definition of DMs:

A class of lexical expressions drawn primarily from the syntactic classes of conjunctions, adverbs and prepositional phrases. With certain exceptions, they signal a relationship between the interpretation of the segment they introduce S2, and the prior segment, S1. They have core meanings which is procedural, not conceptual, and their more specific interpretation is 'negotiated' by the context, both linguistic and conceptual (p.831).

Fraser (1999, p.942), excludes some of the segment-initial expressions used to be as DMs. The following example illustrates his point:

- (9) You should help John in his maths homework.
- (10) Frankly, I am not very good at maths.

According to Fraser (1996), *frankly* does not relate two discourse segments, but rather signals a comment of separate message that relates to the following segment. Fraser (1996) calls *frankly*, and similar segment-initial expressions such as *obviously* and *stupidly*, "commentary pragmatic markers" rather than DMs. Fraser also excludes particles such as *even*, *only*, *just* and pause markers such as *well* and *ah* form the class of DMs for the same reason. Fraser (1999) argues that DMs do

not form a unified grammatical class. For example, they can be conjunctions (and and but), adverbs (anyway and however) and prepositional phrases (after all and in spite of this). Such DMs differ in grammatical class, but have the same function. Fraser (1999) also argues that DMs are syntactically subordinate conjunctions and, thus, they cannot introduce separate sentences.

As far as the function of DMs is concerned, Fraser (1999) argues that DMs signal a relationship between the interpretations of the segment they introduce (S2) and the prior segment (S1). The way such DMs contribute to discourse coherence is that they indicate discourse relationships between units of talk. In addition to signalling the relation between adjacent segments of talk, DMs can relate the segment they introduce with any other previous segment in discourse. This is known as "global coherence" as contrasted to Schiffrin's (1987) "local coherence". Finally, Fraser (1999) argues that DMs have a core meaning which is procedural, not conceptual. That is, DMs can be deleted without affecting the propositional content of the segments they connect. However, when they are deleted, the hearer will have no guidance to the relationship between the two segments. Thus, the core meaning encoded by DMs provides the hearer/reader with the information on how to interpret the message or the utterance. According to Fraser (1999), DMs work as procedures that provide the hearer/reader with information on how to relate between the interpretation of S2 and that of S1. This procedural meaning conveyed by DMs contributes to the coherence of the text.

Having discussed the viewpoints of different researchers from the coherence-based perspective to DCs, for the present study, the coherence-based approach is regarded as providing insights into the role of DCs in discourse coherence. Recovery of coherence relations may not always guarantee discourse comprehension. A discourse may also be regarded as incoherent despite the presence of DCs signalling the particular discourse relation intended by the writer. However, this aspect of coherence is beyond the scope of the present study and the main focus is the use of DCs as linguistic signals of coherence relations. The study does not make any

claims regarding how coherence is achieved in discourse and how readers comprehend a discourse.

# 2.3.3 Relevance-Based Approach

Wilson (1998) and Blakemore (2002), argue against any coherence-based account of DCs. They claim that such account cannot give an explanation for situations such as the two examples below where *however* cannot replace *but* and *therefore* cannot replace *so* even though each pair of these DCs encode the same coherence relation.

- (11) He is a prime minister <u>but</u>/? <u>however</u> not a president.
- (12) a. I am on holiday next week.
  - b. <u>So/? Therefore</u>, you will not attend the meeting.

In addition to that, relevance theorists maintain that such relations between discourse segments are not necessarily between linguistic units. The relation could be of cognitive nature where there is the relevance of certain thoughts or propositions to an individual. That is why the coherence account is not able to account for the initial use of the DCs as in the example below:

- (13) [speaker looks in his wallet and finds a £5 note]

  So I did not spend all the money.
- (14) [speaker, who is suffering from shock, has been given a glass of whisky]

  But, I don't like whisky

Blakemore (1992) argues that Halliday and Hasan's (1976) text-linguistics model presents an incomplete account of discourse interpretation and suggests that there needs to be a move from linguistic connectivity to connectivity of content. Linguistic devices can facilitate a coherent construction of meaning only with the presence of a context. Linguistic devices such as connectives not only signal thematic relations but also guide the hearer and reader towards the intended meaning of the speaker and writer by limiting and identifying relevant assumptions, and thus leading to an appropriate interpretation of the communication at hand.

Relevance-based approach to DCs is mainly based upon the Relevance Theory proposed by Sperber and Wilson (1986). The relevance approach argues that the

recognition of coherence relations between discourse topics as proposed in coherence-based approach is neither necessary nor sufficient condition for a successful discourse. The recognition of contextual (cognitive) effect held in that discourse is a prerequisite for a successful discourse. Therefore, the notion of discourse is cognitive rather than textual.

Within relevance theory, the most influential work on connectives is Diane Blakemore's (1987) who introduced the idea that connectives encode procedural, rather than conceptual information. Rouchota (1996) explains the difference between procedural and conceptual information as follows:

Words with conceptual meaning contribute to the content of assertions and are analysed as encoding elements of conceptual representations. Words with procedural meaning, on the other hand, encode information about how these representations are to be used in inference, they tell you how to 'take' these representations (p.5).

In the relevance-based approach, it is argued that connectives do not contribute to the proposition expressed by an utterance but they point the hearer to the context in which he is expected to process the utterance. Thus, DCs are considered to be indicators or procedures that constrain the inferential phase of utterance interpretation by guiding the process of utterance interpretation and offering clues that enable the hearer/reader to recognize the intended cognitive effect with the least processing effort (Blakemore, 2002). The following examples illustrate how DCs guide the reader or hearer to a specific interpretation:

- (15) <u>He did not prepare well for the chemistry exam</u>. <u>So, he failed</u> premise conclusion
- (16) <u>He did not prepare well for the chemistry exam</u>. <u>After all, he failed.</u>

  conclusion premise
- (17) <u>He did not prepare well for the chemistry exam</u>. <u>He failed.</u>
  (premise, conclusion) (conclusion, premise)

Blakemore (2002) argues that the use of *so* and *after all* in (13) and (14) respectively constrains the context under which these utterances are relevant. Accordingly, *so* in (13) instructs the hearer/reader to see that what follows *so* is *relevant* as a conclusion and what precedes it as a premise, whereas the instructions given by *after all* in (14) indicates that what follows is relevant as a premise and what precedes is relevant as a conclusion. However, if neither *so* nor *after all* is used in (15) and (16), then the utterance will be open to both interpretations, as can be seen in (17).

In his discussion of the relevance-theoretic approach to coherence, Rouchota (1996) states that the speaker has an intention in mind uttering a statement and expects the hearer to arrive at that interpretation of the utterance. To interpret the utterance in the right way, the hearer must process the utterance in the intended context and this selection of context is governed by optimal relevance. Connectives have a significant role in directing the hearer towards the intended interpretation by making a certain set of assumptions immediately accessible. Providing the linguistic cue that guides the hearer's interpretation, the speaker saves the hearer some processing effort in arriving at the intended interpretation. The essential property of connectives is to indicate the inferential process the hearer is expected to go through. Therefore, connectives link an utterance and a specific inferential process. For example, but is linked to the inferential process of contradicting and eliminating an assumption, so is linked to the inferential process of drawing a conclusion, whereas is linked to the inferential process of parallel processing leading to contrasting conclusions etc. In the following example, but makes the relation of "contradiction" explicit:

# (18) He votes Tory but I trust him

The speaker uses *but* to indicate that the proposition it introduces is relevant as a denial of an expectation created by the proposition expressed by the first clause.

As discussed earlier in the coherence-based approach to DCs part, the main focus of the present study is not to provide a theory of discourse comprehension and to argue for or against any available theory. The aim of the study is to examine the structural and sense realizations of three DCs and to investigate their role in argumentation. In that respect, the strenghts or the weaknesses of the two accounts of discourse are outside the scope of the present study. However, both theories are significant for the present study as they contribute to our understanding of discourse and the role of DCs in discourse coherence from two different perspectives.

Having mentioned the two different accounts concerning the role of DCs in creating coherence, it can be argued that in both accounts, DCs form an important part of discourse knowledge that writers and readers draw on as as they produce and interpret a text. It is interesting to note that in both of these approaches, connectives have a constraining function. In the coherence-based approach, connectives constrain the type of coherence relations the reader need to recover to interpret a discourse. In the relevance-based approach, connectives constrain the interpretation process by guiding the reader towards the intended context and contextual effects.

The relevance-based approach to coherence contributes to the present study in that DCs guide the reader towards the intention of the writer and constrain the possible interpretations the reader can make. In that sense, DCs have an important role to help the reader make sense of the discourse at hand. That is, the types of discourse segments that can be related by a particular DC are constrained by the relation associated with that DC. According to the relevance-based approach, the writer uses a particular connective to ensure the intended interpretation, making the reader's job as easy as possible.

In the present study, it is believed that there is not only one mechanism involved in the construction of discourse coherence but there are many factors that contribute to it. The study does not make any claims regarding whether successful comprehension depends on any textual or cognitive factors. In the study, DCs are viewed as signalling discourse relations and thus constraining the reader's possible interpretations of these relations. DCs are examined in relation to their textual functions (sense realizations) and interpersonal metadiscourse functions in argumentation and they are used by the writer to guide the reader towards a

meaningful representation of the text. The analysis of interpersonal metadiscourse functions in particular shows how learners structure the discourse with the use of DCs and guide the reader towards different moves in argumentation.

### 2.3.4 Functions of DCs in Argumentation

Connective expressions in argumentation form an important part of the contrastive language which can have both textual and interpersonal functions and these two functions are the metadiscourse functions. Vande Kopple (1985) defines metadiscourse as words and phrases that "do not add propositional material but help our readers organize, classify, interpret, evaluate and react to such material" (p.83). Textual metadiscourse refers to the organisation of discourse, while interpersonal metadiscourse reflects the writer's stance towards both the content in the text and the potential reader. Similarly, Dafouz-Milne (2008), in her study of metadiscourse markers in persuasion, defines metadiscourse as the "features which writers include to help readers decode the message, share the writer's views and reflect the particular conventions that are followed in a given culture" (p.97). Dafouz-Milne's (2008) definition confirms that metadiscourse is not simply a stylistic device, but is dependent on the rhetorical context in which it is used and the pragmatic function it fulfils. Textual metadiscourse, as Vande Kopple argues (1985), are expressions that "show how we link and relate individual propositions so that they form a cohesive and coherent text" and he defines interpersonal metadiscourse as "expressions that express our role in the situation in which the text finctions and our hopes for the kinds of responses readers might make."(p.87)

Metadiscourse markers can be of many types and adopt various forms. A detailed description of what constitutes the metadiscourse is not presented here as this is beyond the scope of this study. However, as DCs constitute one category of textual metadiscourse devices, both the textual and interpersonal metadiscourse functions of DCs are relevant to the study. DCs express structural and sense relations between discourse segments, and help readers interpret semantic connections by explicitly signalling additive (and, furthermore), contrastive (but, however), and conclusive relations (finally, in sum) in the text. As the study concerns the analysis of

contrastive class of DCs, the metadiscourse functions of this class in argumentation is of particular concern for the present study.

Hyland (2004) comments on the focus on metadiscourse markers in L2 writing and argues that the functions of metadiscourse devices are largely ignored especially in L2 writing. He states:

In L2 classes metadiscourse is often familiar to teachers as an array of distinct devices which are helpful in assisting readers to process written texts. Thus, logical connectives (however, therefore, etc.), sequencing items (first, next, then, etc.), and hedges (might, perhaps, possibly, etc.) are, if EAP textbooks are any indication, widely taught in academic writing courses. But while the addition of these features can help writers to transform a dry, difficult text into coherent, reader-friendly prose, they are often taught in a rather piecemeal fashion, and little attention is given to how they function more widely to influence the interaction between writer, reader and text, or how they relate to the particular genre and discipline in which the student is working (p.135).

Barton (1995), in a study on the use of contrastive DCs in academic argumentation, states that most research describing the metadiscourse functions of connective expressions has concentrated on the textual aspects of the connectives. That is, for most of the time, connectives have been studied with their textual functions. However, Barton (1995) reports that connectives have interpersonal metadiscourse functions as well as their textual functions. Thus, he investigates the interpersonal metadiscourse functions of contrastive connectives within the presentation of claims and counterclaims in academic argumentation. Barton argues that the use of connectives with their interpersonal metadiscourse functions is important as this demonstrates a sensitivity to audience understandings by acknowledging the reader's response to the discourse and marking what the writer anticipates will be unexpected. Considering reader's expectations is a key strategy in academic writing.

Barton (1995) selected 50 essays from the back page of the Chronicle of Higher Education which is a publication for faculty members and administrators of colleges and universities. He calls the essays "point of view" essays which discuss the current issues in education and he states that they share many features with argumentative essay. They have a thesis at the end of the introduction paragraph, present claims in support of the thesis and counterclaims that refute the possible oppositions to the thesis of the essay. Barton (1995) studies the claim and counterclaim argument structure in academic writing and the role of the contrastive DCs in this argument structure. Claims are defined as statements providing positive support for the thesis of the essay whereas counterclaims are defined as statements providing opposition to potentially detracting information or possible competing interpretations against the thesis. In other words, claims are the statements that directly support the thesis of the essay whereas counterclaims are statements that indirectly support the thesis of the essay by refuting the oppositions to the thesis. Barton (1995) calls the presentation of claim and counterclaim in a sequence as two-part structure of argumentation.

Barton (1995) observes the use of contrastive connectives in presenting both the claims, which he believes is less expected, and the counterclaims, which for him is expected. He states that the use of contrastive connectives in claims raises the question of what underlies this preference for contrastive forms in the presentation of supporting claims. He suggests that interpersonal functions underlie the metadiscourse uses of connectives in the presentation of claims and counterclaims. He argues that contrastive connectives in two-part counterclaims function interpersonally as metadiscourse markers of politeness as there is a denial or refusal of an argument in such a structure which is a face-destroying move. Moreover, Barton (1995) finds that before the counterclaim statement, there is the statement that presents the potentially detracting information or possible competing interpretation as shown in the example below which also functions as a politeness device presenting a shared knowledge or shared agreement. When presenting the counterclaims, the writer adopts a particular role in respect to the reader and the writer can express what s/he hopes to be a shared response in claims. Connectives

function as interpersonal metadiscourse markers of politeness between writers and readers in an academic discourse community.

We often hear today that our most serious scholarly problem is one of excess – there is too much information being produced too expensively for too few users and most of it isn't that important to begin with. Like many truisms, this one is based upon an undeniable fact: the amount of information being produced and published in this country has grown exponentially. <u>But</u> in a more profound way, the truism is false. (p.227)

What Barton (1995) finds more interesting is that there is a non-contrastive connective in the initial description of the statement for which a counterclaim follows later with a contrastive connective as in the example. This also, he argues, is a way:

(19) The affirmative-action cause has failings, of course.... But righting ancient wrongs is complex work (p.228)

On the other hand, claims are also presented with a contrastive connective in the essays Barton (1995) analyzed which he finds interesting. This is less expected as the claim presented with a contrastive connective supports the thesis. However, the contrastive connectives used in that way have an interpersonal metadiscourse function. Presenting a claim contrastively, Barton (1995) argues, adds urgency and importance to the claim. Barton (1995) states that "the use of contrastive connectives allows claims to be marked contrastively, thus enabling the writer to seem to anticipate (or perhaps more subversibly, to direct) the reader's positive response to knowledge presented contrastively." (p.235)

Barton's study is an important one for the present study as it clearly demonstrates the multifunctional uses of connectives. It shows that contrastive DCs have interpersonal metadiscourse functions as well as their textual function of relating two discourse segments. In other words, the study challenges the categorization of connectives as textual metadiscourse expressions. It is also equally important to

clarify once again the conventions of argumentation through the analysis of the metadiscourse.

# 2.3.5 Structural Properties of DCs

In this sub-section, the features of DCs at the microstructural level of discourse will be discussed particularly referring to their structural realizations. Although there are different approaches to the study of DCs and various DC definitions, many of the researchers studying DCs agree on the structural properties of these lexical items concerning the structural categories they belong to, the location of a DC in the discourse, and linear position of the arguments. The following researchers analyze the structural properties of DCs in similar ways.

## Fraser (1999)

One researcher who provides a comprehensive analysis of DCs is Fraser who describes his approach as "grammatical-pragmatic" approach (1999, p.936). For Fraser (1999), what he names as discourse markers (DMs) form a class of pragmatic markers that are present in every language. DMs signal a relation between the discourse segment which hosts them, and the prior discourse segment. Fraser holds that the segments related with a connective may not necessarily be adjacent. One of the segments a connective relates might be the several prior or following segments or a nonadjacent segment. Although the class of DMs is defined functionally as those lexical expressions which signal a relationship between two discourse segments, all are members of one of five syntactic categories: coordinate conjunction; subordinate conjunction; preposition; prepositional phrase; adverb.

- 1) Coordinate conjunctions (and, but, or, nor, so, yet,...)
- 2) Subordinate conjunctions (after, although, as, as far as, as if, as long as, assuming that, because, before, but that, directly, except that, given that, granting that, if, in case, in order that, in that, in the event that, inasmuch as, insofar that, like, once, provided that, save that, since, such that, though, unless, until, when(ever), whereas, whereupon, wherever, while,...)
- 3) Adverbials (anyway, besides, consequently, furthermore, still, however, then,...)
- 4) Prepositions (despite, in spite of, instead of, rather than,...)

5) Prepositional phrases (above all, after all, as a consequence (of that), as a conclusion, as a result (of that), because of that, besides that, by the same token, contrary to that, for example, for that reason, in addition (to that), in any case/event, in comparison (with that), in contrast (to that), in fact, in general, in particular, in that case/instance, instead of that, of course, on that condition, on that basis, on the contrary, on the other hand, on top of it all, in other words, rather than that, regardless of that,...)

The syntactic category of each DM determines where it may occur in the discourse segment the connective is a part of (i.e., S2). All DMs, with the exception of *though*, occur in S2-initial position. For coordinate and subordinate conjunctions, the S2-initial position is the only place they may occur, due to the syntactic constraints placed on conjunctions. The other three categories (prepositions, prepositional phrases, adverbials) have a much greater flexibility syntactically, some occurring in S2-final position, with others occurring in both the final and medial position.

Another aspect of DMs, according to Fraser (2005), is related to the previous discourse segment (i.e., S1) the marker connects to S2. The syntactic properties of DMs in (1) that are conjunctions require that there be two discourse segments. On the other hand, DMs with some anaphoric expressions such as *that* as in (2), which is often elided, indicate that there is a previous segment which serves as the S1 for the relationship, while in (3), the relationship between S2 and S1 is implied by the meaning of the DM.

- 1) Syntactic requirement (and, although, but, or, since, so, while, whereas)
- 2) Anaphoric expression (as a consequence (of that), as a result (of that), as a result (of this/that), because (of this/that), besides that, contrary to that, despite that, for that reason, in addition(to that), in comparison (with that), in spite of that, in that case, instead (of this/that), on that basis, on that condition, rather (than this/that), regardless (of that)
- 3) Implied by meaning of the DM (above all, accordingly, after all, all things considered, also, alternatively, analogously, as a conclusion, besides, by

the same token, consequently, contrariwise, conversely, correspondingly, equally, further(more), hence, however, in particular, likewise, more accurately, more importantly, more to the point, moreover, nevertheless, nonetheless, on the contrary, on the other hand, on top of it all, otherwise, similarly, still, then, therefore, thus, what is more, yet)

The following sequences reflect the possible syntactic arrangements of DMs in sequences, ignoring the initial/medial/final option discussed above.

## 1) **S1, DM+S2**.

Coordinate Conjunction: John left late, <u>but</u> he arrived on time. Subordinate Conjunction: John was sick <u>because</u> he had eaten spoiled fish.

#### 2) **S1. DM**+ **S2**

Coordinate conjunction: John left late. But he arrived on time.

Adverbial: John left late. However, he arrived on time.

Preposition Phrase: John came late. After all, he's the boss.

Preposition: John left late. Despite that, he arrived on time.

## 3) **DM+S1, S2**

Preposition: Despite the fact that John left late, he arrived on time.

Fraser's account concentrates on the pragmatic functions carried by DMs and they are all linguistic elements that encode clues which signal the speaker potential communicative intention. He argues that DMs provide the hearer/reader with information on how to relate between the interpretation of S2 and that of S1. This procedural meaning conveyed by DMs contributes to the coherence of the text. Fraser indicates that as well as signalling any relationship between S2 and S1 (adjacent segments of talk), a DM can relate the segment it introduces with any other nonadjacent previous segment in discourse. This is known as "global coherence".

# Webber et. al. (2005) and Prasad, Dinesh, Lee, Miltsakaki, Robaldo, Joshi, and Webber (2008)

One group of researchers who provide a comprehensive description of structural properties of connectives is the Penn Discourse TreeBank (PDTB) corpus project group. In their introductory paper of the PTDB corpus project, Webber et. al. state their aim as "to annotate the million word WSJ [Wall Street Journal] corpus in the Penn TreeBank with a layer of discourse annotation" (2005, p.2).

In The Penn Discourse TreeBank Annotation Manual, PDTB Group gives a detailed description of the annotation process for the first release of the PDTB corpus. The PDTB Project "aims to annotate the argument structure, semantics and attribution of DCs and their arguments" (Prasad et. al., 2008, p.1) and in this respect, the annotation manual is a useful source for the present study. In this manual, DCs are described as "discourse level predicates that take two abstract objects such as events, states, and propositions as their arguments" (p.1) and they are distinguished into explicit as in (20), including the lexical items from some syntactic classes, and implicit DCs as in (21) inserted between sentence pairs which are not connected explicitly with explicit DCs.

- (20) <u>Since McDonald</u>'s menu prices rose this year, the actual decline may have been more (Prasad et. al., 2008, p.8).
- (21) Several leveraged funds don't want to cut the amount they borrow because it would slash the income they pay shareholders, fund officials said. But a few funds have taken other defensive steps. Some have raised their cash positions to record levels. <u>Implicit</u> = <u>because</u> High cash positions help buffer a fund when the market falls (Prasad et. al., 2008, p.17).

In this project, explicit connectives in English are categorized into three main grammatical classes: subordinating conjunctions (e.g. *because*, *when*, *although*, *since*), coordinating conjunctions (e.g. *and*, *or*, *nor*) and adverbials (e.g. *however*, *otherwise*, *for example*). Miltsakaki et. al. (2004) describe the three syntactic classes of connectives. They state that subordinating conjunctions connect clauses that are syntactically dependent on a main clause. Clauses introduced with a subordinate

conjunction can precede the main clause. Coordinating conjunctions are connectives such as *but*, *or* and *and*. Adverbial connectives are defined as sentence-modifying adverbs expressing a discourse relation. The arguments of an adverbial connective may or may not be adjacent to the sentence that contains the connective. The arguments may also be found one or two paragraphs away from the connective.

An argument is defined by Miltsakaki et. al. (2004) as the minimum unit of discourse containing at least one clause-level predication which is usually a verb but it can also span as much as a sequence of clauses and sentences. The two arguments of a DC are labelled as Arg1, for the argument that appears in the clause that is not syntactically bound to the connective, and Arg2, for the argument that appears in the clause syntactically bound to the connective. In all the examples they provide and in the corpus, the text used to interpret Arg1 appears in italics and the one used to interpret Arg2 appears in bold. On the other hand, the explicit DCs are underlined. These connectives in English are analyzed according to certain structural properties and these properties are discussed in the following section with their examples.

In the examples below, the first argument of the connective is labelled as Arg1 and the second argument as Arg2. Arg1 is signalled in italics and Arg2 is signalled in bold. The connective is underlined.

#### 1. Linear order of connectives and arguments

This feature is related with the order in which the connectives and their arguments can appear. For the subordinating conjunctions, the linear order can be in three ways: Arg 1-Arg2 (22), Arg2-Arg1 (23) or Arg2 may appear between discontinuous parts of Arg1 (24).

- (22) The federal government suspended sales of U.S. savings bonds because Congress hasn't lifted the ceiling on government debt. (Prasad et. al., 2008, p.11).
- (23) <u>Because</u> **it operates on a fiscal year**, *Bear Stearns's yearly filings are available much earlier than those of other firms.* (Prasad et. al, 2008, p.11).

(24) Most oil companies, when they set exploration and production budgets for this year, forecast revenue of \$15 for each barrel of crude produced. (Prasad et. al., 2008, p.11).

On the other hand, the linear order of the arguments for adverbials and coordinating conjunctions is Arg1-Arg2. However, sometimes Arg1 of the adverbials can appear between the discontinuous spans associated with Arg2 as shown in the example below.

(25) As an indicator of the tight grain supply situation in the U.S., market analysts said that late Tuesday the Chinese government, which often buys U.S. grains in quantity, turned instead to Britain to buy 500,000 metric tons of wheat. (Prasad et. al., 2008, p.11).

As far as the position of connectives is concerned, Webber et. al. (2005) state that for subordinating and coordinating conjunctions, the position of the connectives in the Arg2 clause is restricted to initial position but adverbials are free to appear anywhere in their Arg2 clause as in (24).

#### 2. Location of arguments

Similar to Fraser (1999), Webber et. al. (2005) also state that arguments can be found in the same sentence as the connective (26), in the sentence immediately preceding that of the connective (27) or in some non-adjacent sentence (28).

- (26) The federal government suspended sales of U.S. savings bonds because Congress hasn't lifted the ceiling on government debt. (Prasad et. al., 2008, p.11).
- (27) Metropolitan Houston's population has held steady over the past six years. And personal income, after slumping in the mid-1980s, has returned to its 1982 level in real dolar terms. (Prasad et. al., 2008, p.12).
- (28) Mr. Robinson of Delta & Pine, the seed producer in Scott, Miss., said *Plant Genetic's success in creating genetically engineered male steriles doesn't automatically mean it would be simple to create hybrids in all crops*. That's because pollination, while easy in corn because the carrier is wind, is more complex and involves insects as carriers in crops such as cotton. "It's one thing

to say you can sterilize, and another to then successfully pollinate the plant," he said. Nevertheless, he said, he is negotiating with Plant Genetic to acquire the technology to try breeding hybrid cotton. (Prasad et. al., 2008, p.11).

# 3. Types and extent of arguments

A connective can take arguments of several types such as simple clauses (a matrix clause, a complement clause or a subordinate clause) (29), non-clausal arguments such as VP coordinations, or nominalizations (30), and multiple clauses (31).

- (29) A Chemical spokeswoman said *the second quarter charge was "not material"* **and that no personel changes were made** <u>as a result</u>. (Prasad et. al., 2008, p.12).
- (30) She became an abortionist accidentally, *and continued* because it enabled her to buy jam, cocoa and other war-rationed goodies (VP coordination) (Prasad et. al., 2008, p.13).
- (31) Here in this new center for Japanese assembly plants just across the border from San Diego, turnover is dizzying, infrastructure shoddy, bureaucracy intense. Even after hours drag; "karaoke" bars, where Japanese revelers sing over recorded music, are prohibited by Mexico's powerful musicians union. Still, 20 Japanese companies, including giants such as Sanyo Industries Corp., Matsushita Electronics Components Corp. and Sony Corp. have set up shop in the state of Northern Baja California. (Prasad et. al., 2008, p.14).

During the annotation process, in order to identify how far an argument stretches, the annotaters adhered to the Minimality Principle (Webber et. al., 2005). Minimality principle requires the annotaters to select the parts of a segment as an argument that is minimally necessary to interpret the relation established with the connective as in (32). Any other segment that provides useful information for that interpretation is considered to be supplementary to Arg1 or Arg2.

(32) <u>Although</u> **started in 1965**, Wedtech did not really get rolling until 1975 (SUPPLEMENTARY when Mr. Neuberger discovered the Federal Government's Section 8 minority business program). (Webber et. al., 2005 p.9).

#### Blühdorn (2008)

One of the researchers whose work is an important source for identifying the structural features of the DCs is Blühdorn (2008). Blühdorn (2008) studies subordination and coordination in syntax, semantics and discourse through the analysis of DCs. He states that the hierarchical connection of clauses is traditionally defined as subordination while the non-hierarchical connection of clauses is defined as coordination. He uses the terms subordination and coordination to describe connections in syntax and in semantics and he prefers to use the terms symmetrical (non-hierarchical) and asymmetrical (hierarchical) for the connections of conceptual entities such as events and propositions. On the other hand, for the connection of rhetorical units such as utterances and speech acts in discourse, he also uses the terms hierarchical and non-hierarchical. His main purpose in his study is to identify whether there is any parallelism between coordination versus subordination in syntax, symmetrical versus asymmetric connection of concepts in semantics and non-hierarchical versus hierarchical connection of rhetorical units in discourse. Whether there is such a parallelism in syntax, semantics or discourse is actually out of the scope of the present study. However, the features of syntactic connections realized with the use of DCs are relevant for the study because the first part of the study concerns the structural properties of DCs.

Blühdorn (2008) divides syntactic connections into three: coordinative, subordinative and adverbial connections. Coordinative connections are realized by coordinating conjunctions such as "and". The expressions a coordinative conjunction links are of the same formal and/or functional category and the coordinators are constrained as to their linear position in relation to the coordinands (the two segments connected with the coordinator). For example, he states, in German they must be positioned in the middle of the connected segments, "with a slightly stronger affinity to the right one" as in (33) and (34) below (2007, p.5). Therefore, coordinators establish connections by linear ordering.

(33) Ihr kauft ein *und* wir warten hier an der Ecke.

(You can go shopping <u>and</u> we'll wait here at the corner) (Blühdorn, 2008, p.4).

(34) \*und wir warten hier an der Ecke, ihr kauft ein

(and we'll wait here at the corner, you can go shopping) (Blühdorn, 2008, p.4).

As far as the subordinative connections are concerned, one way to establish these relations is to use subordinative conjunctions. Unlike coordinative conjunctions, subordinative conjunctions affect the morphosyntactic format of one of their relata (the subordinate clause) because the relation between the conjunction and its internal argument (the subordinate clause) is described as government. Blühdorn (2008) exemplifies this with the case in German and states that "subordinating conjunctions select V-final order of their internal argument; in many languages they require certain tense and/or mood forms of the subordinate verb" (p.5). Thus, they constrain their internal arguments and they connect their relata by government. On the other hand, these conjunctions do not affect the morphosyntactic format of their external arguments (the main clause). They have a fixed serial position in relation to their internal but not to their external argument. For example, in German, they are at the left margin of their internal argument. Therefore, Blühdorn (2008) states that subordinating conjunctions are structurally asymmetric. Thus, reversing the order of the relata leads to a significant change in meaning. Moreover, unlike the relata of coordinative conjunctions, the relata of subordinating conjunctions belong to different morphosyntactic categories such as main and subordinate clauses. While coordinative conjunctions connect expressions of any category non-hierarchically by linear sequence, subordinating conjunctions connect only clauses hierarchically by government and embedding. Subordinating conjunctions structurally embed their internal argument into their external argument and they can be moved freely in their external argument together with their internal argument as in (35).

(35) Wir warten, <u>solanga</u> ihr einkauft, hier an der Ecke.
(we'll wait, <u>while</u> you go shopping, here at the corner) (Blühdorn, 2008, p.4).

The last type of connection in syntactic terms is adverbial connections established by adverbial connectives. Adverbial connectives are syntactic constituents of one of their relata but they do not have a syntactic relation with their other relatum. Unlike coordinating and subordinating conjunctions, adverbial connectives can move freely in the relatum of which they are a constituent and they connect their relata by reference leading the interpreter to look for the necessary information to interpret the clause with the conjunction in some preceding or following context. The example (36) below shows an adverbial connective that connects two clauses anaphorically. The example also shows that adverbial connectives can move freely in their internal argument.

(36) Die Pinguine waren braun-gelb. Die Giraffen <u>dagegen</u> waren schwarzweiß. [the penguins were yellow-brown. the giraffes, <u>in contrast</u>, were black and white] (Blühdorn, 2008, p.10).

As can be seen from the above mentioned studies regarding the structural properties of DCs, the researchers agree on the syntactic classification of DCs and how DCs from different syntactic class behave in different ways in discourse. The three researchers whose work has been described regarding the structural properties of connectives classify these linguistic elements of discourse into grammatical classes mainly as coordinating, subordinating and adverbial connectives and each grammatical class of connectives has their own structural properties in relation to the position of the connective in discourse, the location of the discourse segments it connects and the way the connective relates the two discourse segments, structurally or anaphorically. That is, they have the grammatical status of the main class they belong to.

On the other hand, there are different aspects of DCs discussed by the researchers which contribute to the study and our understanding of DCs. Fraser's (1998, 1999) account concentrates on the semantic and pragmatic functions carried by discourse markers. DMs for him are all linguistic elements that encode clues which signal the potential communicative intention. Webber et. al. (2005) analyze DCs focusing on their syntactic realizations in discourse in addition to their semantic functions and they provide a detailed description of the types and extent of arguments DCs relate.

Their categorization of structural and sense realizations of DCs is adopted in the present study.

Although Blühdorn's (2008) analysis of DCs does not aim to describe the structural and sense realizations of DCs but concentrates on the parallelism or lack of parallelism between the syntactic and semantic connections in discourse, his study is important in that it contributes to our understanding of the relation between syntax and semantics of DCs. As discussed earlier, he argues that there is actually no parallelism between the syntactic and semantic connections. This finding implies that a DC from a particular grammatical class may not function semantically in the same way in every discourse and thus, each DC is to be examined in its own context.

#### 2.3.6 Sense Realizations of DCs

DCs are also examined in relation to their sense realizations at the microstructural level of discourse. Majority of the researchers classify DCs according to the meaning categories such as additives, contrastives and temporals.

#### Halliday and Hasan (1976)

Halliday and Hasan (1976) created a taxonomy of types of coherence relationships and the cohesive devices that indicate them. They offer 4 types coherence relations i.e., additive, adversative, causal, temporal.

#### 1) Additive relations

and, or, nor, similarly, likewise, in the same way, on the other hand, by contrast, as opposed to this, to put it another way, I mean, in other words, that is, that is to say, thus, for instance, for example, by the way

#### 2) Adversative relations

but, however, yet, although, on the contrary, at least, rather, instead, in any/either case/event, whether...or not, any/either way, anyhow

#### 3) Causal relations

hence, thus, so, accordingly, therefore, consequently, because of that, as a result (of that), in consequence (of that), on account of this, and, for this reason, as a result (of this), in consequence (of this), arising out of this, with this intention, with this in mind, for this purpose, to this end, because, for, in that case, in such an event, then, that being the case, in other respects, aside/apart from this, and otherwise

### 4) Temporal relations

then, and then, next, afterwards, after that, subsequently, previous, at the same time, simultaneously, then, at last, finally, in the end, eventually, at first, first of all, to begin with, next, second, finally, then, up to this point, hitherto, up to now, here, at this point, hereunder, henceforward, from now on, in short, in a word, to put it briefly, to sum up, to return to the point, anyway, to resume

# Fraser (2005)

Similarly, another researcher who studied the sense relations established with DCs is Fraser (2005). He says that although there are over 100 DMs in English, he has found only four basic sense categories reflected in their use, with sub-classifications within each of these basis relations. These relationships are as follows:

# 1) Contrastive markers (CDMs)

but, alternatively, although, contrariwise, contrary to expectations, conversely, despite (this/that), even so, however, in spite of (this/that), in comparison (with this/that), in contrast (to this/that), instead (of this/that), nevertheless, nonetheless, (this/that point), notwithstanding, on the other hand, on the contrary, rather (than this/that), regardless (of this/that), still, though, whereas, yet

## 2) Elaborative markers (EDMs)

and, above all, also, alternatively, analogously, besides, by the same token, correspondingly, equally, for example, for instance, further(more), in addition, in other words, in particular, likewise, more

accurately, more importantly, more precisely, more to the point, moreover, on that basis, on top of it all, or, otherwise, rather, similarly, that is (to say)

# 3) Inferential markers (IDMs)

so, after all, all things considered, as a conclusion, as a consequence (of this/that), as a result (of this/that), because (of this/that), consequently, for this/that reason, hence, it follows that, accordingly, in this/that/any case, on this/that condition, on these/those grounds, then, therefore, thus

### 4) Temporal markers (TDMs)

then, after, as soon as, before, eventually, finally, first, immediately afterwards, meantime, meanwhile, originally, second, subsequently, when

Regarding the meaning of connectives, as mentioned earlier in this chapter, Fraser argues that DMs have procedural meaning, which means that if deleted, DMs do not affect the propositional content of the segments. However, in that case, the reader will be left with no guidance to the relationship between the two segments. That is, DCs have a facilitating function for the reader to infer the meaning the writer intends to convey.

# Prasad, et. al. (2008)

Sense relations established between the two discourse segments with a connective have also been analyzed in PTDB corpus. For this project, Prasad, et. al. (2008) classified the sense relations into four categories as temporal, contingency, comparison and expansion regardless of the DCs all of which have their subcategories. The hierarchy of relations is presented in Figure 3 below taken from Prasad et. al. (2008).

The sense categories used here involves the subcategorization of the senses which allows further investigation for differences in use. Moreover, the starting point of the hierarchy of connectives is not the DCs themselves but the relations. This implies that a particular DC can function in different ways in different contexts. The

hierarchy of relations proposed by Prasad et. al. (2008) involves four main categories as temporal, contingency, comparison and expansion. However, for the purposes of the present study, mainly the comparison category is used as the connectives examined in the study is contrastive class.

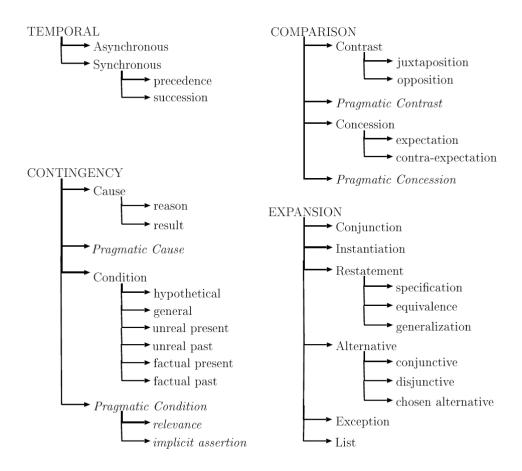


Figure 3. The Hierarchy of Sense Relations (Prasad et. al., 2008)

#### a. Juxtaposition

This relation holds "when the connective indicates that the values assigned to some shared property are taken to be alternatives" (Prasad et. al., 2008, p.32) In the following example, one shared predicate takes two values (69% and 85%) and the shared predicate *rose to X amount* applies to two entities (the operating revenue and the net interest bill)

(37) Operating revenue rose 69% to A\$8.48 billion from A\$5.01 billion. But the net interest bill jumped 85% to A\$686.7 million from A\$371.1 million. (Prasad, et. al., 2008, p.33)

# b. Opposition

This relation applies when the values assigned to some shared predicate are the extremes in a scale or the antonyms.

- (38) Most bond prices fell on concerns about this week's new supply and disappointment that stock prices didn't stage a sharp decline. **Junk bond prices moved higher,** however. (Prasad, et. al., 2008, p.33)
  - c. Pragmatic contrast

This relation applies when there is a contrast between an argument and an inference drawn from another argument. In the following example, the author implies that in addition to quantity, quality needs to be explained.

- (39) "It's just sort of a one-upsmanship thing with some people," added Larry Shapiro. "They like to talk about having the new Red Rock Terrace one of Diamond Creek's Cabernets or the Dunn 1985 Cabernet, or the Petrus. Producers have seen this market opening up and they're now creating wines that appeal to these people." That explains why the number of these wines is expanding so rapidly. But consumers who buy at this level are also more knowledgeable than they were a few years ago. (Prasad, et. al., 2008, p.33)
  - d. Expectation and contraexpectation

Expectation relation is said to be found when Arg2 creates an expectation that Arg1 denies. On the other hand, when Arg1 creates an expectation that Arg2 denies, the relation is contraexpectation. Similar to pragmatic contrast, pragmatic concession relation requires an inference drawn from one of the arguments.

- (40) <u>Although</u> the purchasing managers' index continues to indicate a slowing economy, it isn't signaling an imminent recession, said Robert Bretz, chairman of the association's survey committee and director of materials management at Pitney Bowes Inc., Stamford (expectation) (Prasad, et. al., 2008, p.34)
- (41) The Texas oilman has acquired a 26.2% stake valued at more than \$1.2 billion in an automotive-lighting company, Koito Manufacturing Co. But he

has failed to gain any influence at the company. (Contraexpectation) (Prasad, et. al., 2008, p.34)

# e. Expansion

This relation is a different class with its subtypes in Prasad et. al. (2008) but for the purposes of the study, the subtypes are not used in the analysis. This relation is found if Arg2 expands the discourse. In this type of relation, both arguments have the same topic but Arg2 provides some additional and detailed information on the same topic or restates what is said in Arg1.

(42) Food prices are expected to be unchanged, but energy costs jumped as much as 4%, said Gary Ciminero, economist at Fleet/Norstar Financial Group.

He also says he thinks "core inflation," which excludes the volatile food and energy prices, was strong last month. (Prasad, et. al., 2008, p.37)

Regarding the sense categorization of DCs, Prasad et. al. (2008) provided quite a comprehensive classification of relations with their subrelations which are realized with the use of DCs. The present study examines the contrastive DCs so the classification by Prasad et. al. (2008) with the subrelations of Comparison is more relevant for the purposes of the pesent study.

#### 2.3.7 Previous Studies of DC Use by L2 Learners

The acquisition and the appropriate use of DCs has been reported as one of the problem areas for L2 learners of different languages and especially for the learners of English by various researchers (e.g., Milton and Tsang, 1993; Tang and Ng, 1995; Granger and Tyson, 1996; Altenberg and Tapper, 1998; Chen, 2006; Yeung, 2009)

Yasuko (1989) examined the use of connectives by Japanese learners in English academic papers. He analysed the connectives using the categories of connectives combining the Halliday and Hasan's categorization with that of Quirk et. al. (1972) and Ball (1986). He found out that each connective type was subject to certain types of errors. Japanese learners tended to overuse additive connectives and he stated that such an overuse in writing might be due to the colloquialism. On the other hand, they tended to omit adversative connectives and he explained this use with the

lack of awareness on the part of the learners that adversative relation is usually marked and needs a connective. He also reported that causal connectives created a problem area for Japanese learners as they used them when they were not necessary and they did not use them when actually they were necessary. He explained the overuse with transfer from L1 and the different ways an argument is developed in Japanese and in English.

Similarly, Milton and Tsang (1993) analyzed the corpus of Chinese learners of English for the use of cennectives and compared their use with that of native speakers in the American Brown Corpus, its British counterpart, the LOB corpus and HKUST corpus consisting of extracts from first-year university Computer Science textbooks. This study revealed that there was a high ratio of overuse of connectives by nonnative learners. Milton and Tsang classified the problems of connector use into two: misuse and redundant use and they provided student samples of writing to describe these uses for *moreover* and *therefore*. They stated that the problems in the teaching of coherence, teaching of writing, and the writing habits and attitudes of learners that they bring from their previous education.

Tang and Ng (1995) investigated how Chinese learners handled connectives in their writing and they collected 32 pieces of writing from the Science and Arts departments. The results showed that science students used fewer connectives and that the listing, resultative and contrastive connectives were used significantly more than others. Tang and Ng (1995) listed the top ten most frequently used connectives and in the list *and* and *however* were the first two connectives. They also examined the position of the connectives in the sentences and found out that two groups of learners had different preferences for the same connectives regarding the position of the connective. For instance, although *besides* and *however* were mostly used in the sentence initial position by both groups of learners, *therefore* was used mostly in initial position by science students whereas arts students preferred to put it in noninitial position. In the discussion part of their work, the authors stated that the students had difficulty in building logical arguments, developing and organising

ideas and due to this difficulty, there was a high frequency of connectives in their writing.

In the same vein, Granger and Tyson (1996) compared a sample (89,918 words) of the French mother-tongue sub-component of the ICLE corpus with a sample (77,723 words) of writing from the control corpus of English essay writing. As many previous studies suggested an overuse hypothesis, the researchers also started with this hypothesis. The study revealed that the learners seemed to overuse connectors which corroborate the argument (*indeed, of course, in fact*), give examples (*for instance, namely*), and add points to the argument (*moreover*). On the other hand, there was an underuse of connectors which contrast (*however, though, yet*) and develop the argument (*therefore, thus, then*). For the cases of overuse, the researchers suggested the effect of the mother tongue and they explained the inappropriate uses of connectives with the lack of awareness of stylistic matters, and lack of detailed description of connectors in dictionaries. In addition to these findings, the study also revealed different syntactic positioning of connectors, with significant overuse of sentence initial connectors and other L2 studies show that this use is not language specific.

Another group of L2 learners whose connective use was examined in the literature is Korean learners. Cho (1998) investigated the relationship between the use of connectives and the learners' length of study. Eigtheen samples of writing were collected and examined for the misuse, overuse, underuse and grammar errors. The study confirmed that length of study had an effect on the number of connectives used but it did not lead to producing greater number of subordinators. The group who studied English for a longer period of time produced wider range of connectives but the length of study had also an effect on incorrect uses. Some connectives were overused and there were grammar errors with some others such as *because*. On the other hand, the incorrect uses of *but* was reported to be evenly distributed among all categories of errors. From these findings, Cho (1998) suggested that learners should be taught when not to use connectives and be aware of the grammatical constraints of individual connectives. As the study showed that

many of the errors were caused due to the transfer of conventions of speech to writing, Cho (1998) also suggested that learners should understand the appropriate register for writing.

Martinez (2004) investigated the use of discourse markers by Spanish learners of English. She conducted two studies. In the pilot study, she asked seven adult learners to write an essay on an applied linguistics topic and she examined the conclusion parts of these esssays. The study revealed that discourse markers were used extensively by participants. They had no problems using markers in appropriate ways. However, although all participants used some discourse markers, some participants employed a wider range of markers than others. The pilot study also showed that essays that were written in better English included more markers and the ones which showed a weaker command of the English language included fewer markers. After this study, Martinez (2004) decided to analyse the use of discourse markers by native speakers of Spanish writing in their mother tongue and to compare the use of discourse markers in Spanish and in English. The participants were again asked to write an essay but this time in Spanish. Although the findings in the latter study were similar to the findings of the pilot study, this time there was more variety within the types of discourse markers used. This study showed that native speakers of Spanish used discourse markers extensively and in appropriate ways both in Spanish and in English.

Ting (2003) analyzed the cohesive errors in the writing of Chinese tertiary EFL students using Halliday and Hasan's (1976) framework. For the study, 80 essays were selected, analyzed for the cohesive errors and also marked by two raters. Regarding the errors in conjunction, the author stated that this type of errors were extensively found in student essays. Specifically, errors in use of adversatives and additives were more common than errors in using causals and temporals. On the other hand, the author reported that there was no significant difference between the good essays and the poor essays in the use of subcategories of conjunction and this implies that the use of conjunctive ties is a general problem for all students with a Chinese first language background. The results of the study showed that there was

an overuse of additive conjunctions, and misuse in the use of some adversative conjunctions.

Another researcher who worked on DCs in L2 writing is Leung (2005). He compared the use of three major conjunctions and, or and but by Chinese and American university students. The material used for the study was taken from The International Corpus of Learner English (ICLE) of American English, The HKUST (Hong Kong University of Science and Technology) Corpus of Learner English and The HKBU (Hong Kong Baptist University) Corpus of Learner English. The author examined the use of three conjunctions regarding their position in discourse and their discourse functions. For the discourse function analysis, the author listed the functions of each conjunction. The results of the study showed that Chinese learners still had problems regarding the use of three conjunctions and the author stated that confusion, L1 interference, overlapping of some connectors, or minor errors could be found in the corpora. Though the author discussed the uses of and and or in detail, for the purposes of the present study the results regarding the use of but are more relevant. It was found out that but was used in the clause-initial position for most of the time in the corpora. Sentences with but in the sentence initial position were usually preceded by a long sentence of the related subject matter and this conjunction was used to show a contrast for most of the time. On the other hand, the study revealed that nonnative learners used three conjunctions less often than the native speakers but they used more connectives than the native speakers. When the number of connectives used in the corpora was analyzed, it was observed that nonnative speakers used certain connectors more such as after, before, then, however, and besides and the author argued that this might be the case due to L1 transfer and the overemphasis on certain connectors during the teaching process.

Choi (2005), in his dissertation, examined in what ways Korean learners of English and native speakers of English write English argumentative essays in terms of three variables: errors, textual organization and cohesion devices and identified the problems Korean learners face. For the study, Choi (2005) collected the argumentative essays from 46 students from each group. One of the variables he

examined in text analysis was the use of cohesive devices among which he also examined the use of connectives and it was observed that both groups used connectives the most among the other cohesive devices.

Warsi (2001) examined the acqusition of English contrastive DCs by Russian learners. In an initial study, he chose 10 Russian learners and 10 native learners and he compared their use of connectives by giving them a cloze test. In this cloze test, the learners were asked to decide whether the given sentences were linkable or not with the given connectives and the results showed that there were differences between the answers provided by nonnative learners and native learners. He stated that these differences in the subjects' performances could be attributed to different factors such as proficiency levels, exposure to the target language and language transfer.

Still another researcher who analyzed connective use by L2 learners is Fei (2006). Fei focused on the effect of the use of adverbial connectors on Chinese learners' English writing quality. For this study, Fei used the subcorpus of Chinese learner corpus which involved the writings of leaners from different proficiency levels. This corpus-based study showed that learners with higher proficiency used more tokens and types of adverbial connectives and that they performed better in the use of DCs in terms of stylistic awareness in their writings. On the other hand, Fei found that all the nonnative learners tended to overuse these connectives which might be explained with L1 transfer and classroom teaching.

Chen (2006) explored the use of conjunctive adverbials in two corpora compiled by the author, one that consists of 23 papers by Taiwanese learners and the other being the control corpus that consists of 10 journal articles. For the study, Chen (2006) adopted Celce-Murcia and Larsen-Freeman's (1999) simplified version of Halliday and Hasan's (1976) classification. It was found that L2 learners slightly overused connectors and that many L2 learners misused *besides* and *therefore*. One of his suggestions at the end of the study was to raise students' sensitivity on register differences.

In a recent study, Ying (2007) investigated the similarities and differences in the usage of discourse markers among native speakers of English, nonnative Chinese students and nonnative Japanese students. The researcher collected 300 compositions in total which were expository and narrative. The results showed that there was a significant difference between the nonnative learners and the native learners regarding the use of discourse markers. On the other hand, there was no such difference between the Chinese learners and Japanese learners. It was found that nonnative learners used less types of discourse markers than the native learners. Moreover, the researcher observed several cases of misuse of discourse markers by the nonnative learners and these misuses were considered to be due to L1 interference.

Tapper (2005) investigated how advanced Swedish EFL learners used adverbial connectives in argumentative essays in comparison to how American University students used them in their writing. The data were taken from the Swedish subcorpus of ICLE and the control corpus of American university student essays. The results of the study revealed that Swedish learners used far more connectives and according to Tapper (2005), this might be due to the effect of learners' native language. Moreover, Swedish learners were found to use slightly more types of connectives and Tapper (2005) hypothesized that this might be due to an emphasis of variety in connective use in the textbooks. In relation with the semantic categories of connectives, it was found out that contrastive relations were most frequently used in both corpora. On the other hand, Swedish learners tended to overuse clarifying and corroborative categories and Tapper (2005) stated that the reason for the high frequency of clarifying category was the influence of L1 and the reason for the high frequency of corroborative category might be a shared learner language feature since other studies with learners having different L1s also reported such an overuse. When individual connectives were examined, it was observed that however was the first connective in the top ten most frequent connectives list in both corpora. In the second part of the study, the writings from each corpus were assessed for the writing quality and it was found out that Swedish learners were as good as American learners in terms of the writing quality and that a high frequency of connectives was not an indicator of good writing quality for either group of student writers.

In a recent study, Altunay (2009) investigated the use of connectives in written discourse by Turkish ELT department students. She collected the argumentative essays of 132 first year students from the English Language Teaching B.A. program at a Turkish university. For the classification of DCs, Halliday and Hasan's categories were adapted and for discourse appropriateness and structural correctness Cho's (1998) rubric was elaborated and modified. Altunay (2009) examined the connectives for appropriate use, misuse, overuse and underuse, grammatical and punctuation errors. According to the study, the most frequently used top ten connectives were and, but, if, so, because, when, in conclusion, first of all, however, and firstly. British National Corpus was used to compare whether native learners also used the same connectives frequently and this analysis showed that and, but, if, so and when were used frequently. The author explained the high frequency of certain connectives in L2 learners' essays with the high frequency of the same connectives in English and the text type the students produced. As far as the coherence relations are concerned, it was found out that causal relations were used more followed by additive and adversative relations. When individual connectives were examined, it was observed that 78% of all the buts were used to indicate Adversative relation, Concessive category, and 16% of it was used for Adversative Relation, Contrastive category. The study indicated that participants of the study used the concession sense of "but" more frequently than its contrast sense. For the concession category, participants used but more often than other concession category connectives. For instance, however was used less than but. Altunay (2009) stated that the other connectives that can be used for concessive relation were also not frequent in BNC when compared to the use of "but". When the inappropriate uses of connectives were examined, it was found that half of these uses were misused. According to the author, this may be because students have not acquired the meanings of some of the connectives. The students often think that all the connectives within the same category can be used interchangeably. As far as the structural errors are concerned, it was found out that punctuation errors were more

frequent than grammatical errors. In the conclusion part of her study, the author stated that Turkish ELT department students' acquisition of connectives was not complete because of the lack of variety of connectives in their essays, the misuse of some of the connectives, the presence of grammatical and punctuation errors, lack of awareness on how to substitute the connectives, lack of awareness on the distinction between subordinate, coordinate and adverbial connectives, not using multi word connectives, lack of some infrequent connectives of English in student essays, and the gap between what learners say and what they want to say.

As this is the most relevant study to the present study regarding the data source and the topic of investigation, some limitations of the study and the issues that were not examined in the study will be mentioned here so that the contribution of the present study to the literature can be better stated. One of the limitations of Altunay's study (2009) concerns the data source. The essays examined in the study were written by one group of students at one university, which poses a question about the generalizability of the results. In the present study, the generalizability issue is taken into consideration in that a Turkish learner corpus which was formed with the essays of students from a few universities in Turkey was examined.

A topic that was out of the scope of Altunay's study (2009) but that is investigated in the present study is the use of DCs in argument development particularly focusing on their interpersonal metadiscourse functions. This aspect of DC use is significant because DCs are used not only for establishing semantic relations between discourse segments but also for more global aspects of discourse such as argument development. Learners' use of DCs in argumentation to manage the moves in discourse such as introducing claims, signalling counterarguments and refutations has implications regarding how they organize the discourse.

One questionable aspect of Altunay's study (2009) is her categorization of inappropriate use of DCs. Under the inappropriate use category, she included misuse, overuse and underuse. She stated that the connective is regarded as overused when it is used where the connection between sentences is so obvious that

it does not require any connective. She also stated that the connective is regarded as underused when a connective is not used where a connective is needed. However, it is not accurate to regard connective underuse or overuse as inappropriate because DCs are used to make an already present relation explicit rather than to create a relation. Regarding a DC as overused in the study implies that the relation between the two segments of discourse is obvious and thus, there is no need for the connective. Similarly, regarding a DC as underused implies that a connective is actually needed between the two segments of discourse as the relation is not obvious. Learners have a choice to make the relation explicit or not for their readers and to emphasize the present relation with the use of a DC. However, such overuse and underuse of DCs cannot be regarded as inappropriate uses.

One study which concerns DC use by Turkish learners of English but with a different focus is by Dülger (2001) who evaluated the university students' essays in terms of DC use both in a product-oriented writing course and a process-oriented one. The study was conducted during a term and in the first half term, the students were offered a product-oriented writing course while in the second half term they were offered a process-oriented writing course. The same students in each term were asked to write an essays and their essays were evaluated regarding their DC use. She concluded that the essays written in a process-oriented writing course were better regarding the DC use. They included higher number and more variety of DCs. Although this study concerns the DC use by Turkish learners of English, it has a rather different focus than the present study in that Dülger's study merely investigated the frequency and the variety of DC use in relation to the type of course offered and it did not examine the use of DCs in syntactic and semantic terms, and the use of DCs with their interpersonal metadiscourse functions in argument development.

As can be seen from the above analysis of previous L2 studies which concentrated on the use of DCs, a common result is the overuse and underuse of some DCs together with misuse. The studies showed that L2 learners from different L1 backgrounds tended to overuse DCs in their writing. There are also studies which

showed that while some DCs were overused, some others were underused (e.g., Yasuko, 1989; Ting, 2003; Leung, 2005; Altunay, 2009). That is, overuse and underuse phenomena depended on the type or function of DCs and in many of the studies, overuse and underuse of DCs by L2 learners were explained with the effect of L1. Some studies also examined the position of the connective in discourse and it was found that *but* was used clause-initially whereas *however* was used sentence-initially (e.g., Tang and Ng, 1995; Leung, 2005). On the other hand, there are also findings in some studies that are in contrast to the findings in some other studies. For instance, there is a contradictory finding regarding the use of overall types of DCs by L2 learners. Some studies reported an overuse of the entire range of DCs in nonnative writing (e.g., Milton and Tsang, 1993; Granger and Tyson, 1996; Fei, 2006 and Tapper, 2005) whereas the other studies as mentioned earlier found both an underuse and an overuse of different types of connectives. The above review of L2 studies on DC use also reveals that there has been quite few studies of DC use in writing by Turkish learners of English at any level of proficiency.

It is clear from the types of the previous L2 studies mentioned here that there are very few studies which examined both the metadiscourse functions of the DCs in argumentation and the structural realizations of the DCs at the microstructural level of discourse in L2 writing. Majority of the studies focused on the semantic classification of DCs and examined the frequency counts and misuses of the DCs that belong to specific semantic class. The present study, however, examines three DCs in depth with their structural properties and their metadiscourse functions at both levels of discourse in L2 writing. Such an analysis has the potential to reveal patterns of use not observed in previous studies. In addition to that, to the researcher's knowledge, there is no similar study regarding the writings of Turkish learners of English.

### 2.4 Summary

This literature review is intended to set a background to the theoretical issues and the analysis of the present study. It has described the relation of the corpus research to discourse analysis and the characteristics of argumentation. It also reviewed the literature on DCs. This was necessary since the present study refers to each of these fields of study.

Throughout this review, it has been emphasized that with the use of learner corpus research, a more accurate picture of L2 interlanguage can emerge. More specifically, the aim of this review was to suggest that the combination of discourse analysis with corpus-based research constitutes a methodology which has the potential to provide a comprehensive description of features of discourse. This review has also focused on the features of argumentation in written discourse. It has described the characteristics of successful argumentation, the role of discourse connectives and the lexical items in argumentation. It has also set a background to the analysis of the dominant argumentation pattern in the essays and the interpersonal metadiscourse functions of DCs in this pattern of organization (i.e., the claim-counterargument-refutation pattern).

### **CHAPTER III**

#### **METHODOLOGY**

The goal of the study is to account for the way Turkish learners and native speakers use *but*, *however* and *although* in their argumentative essays. The study aims to reveal the role of these three contrastive DCs in structuring the argumentative discourse by examining their structural realizations as well as their textual and interpersonal metadiscourse functions. In the light of the aims of the study, the current chapter is devoted to the description of the methodological issues concerning the study.

### 3.1 Research Questions

The study aims to answer the following research questions:

- 1) Is there any difference in the frequency of *but*, *however* and *although* between the corpora?
- 2) What are the characteristic features of the essays written by the native speakers and Turkish learners of English in relation to the structural properties of *but*, *however* and *although* and do the corpora differ regarding these features?
- 3) What textual metadiscourse functions (sense relations) in argumentation do the three DCs serve in the corpora and is there any significant difference in the discourse-segment-linking functions of the three DCs?
- 4) What interpersonal metadiscourse functions do the three DCs serve in the corpora within the claim-counterargument-refutation (CCR) pattern of organization and is there any significant difference in the interpersonal metadiscourse functions of the three DCs in the CCR pattern between the corpora?

#### 3.2 Data Sources

The study is based on the contrastive analysis of two corpora. The L2 learner corpus is the Turkish component (TICLE) of International Corpus of Learner English (ICLE) and the native learner corpus is the American component (ALOCNESS) of the Louvain Corpus of Native English Essays (LOCNESS) which is used widely by researchers for comparison with ICLE.

#### **3.2.1 TICLE**

ICLE contains argumentative essays written by learners of English from several mother tongue backgrounds (Bulgarian, Chinese, Czech, Dutch, Finnish, French, German, Italian, Japanese, Norwegian, Polish, Russian, Spanish, Swedish, Tswana, Turkish). The ICLE project was launched in 1990 by Professor Sylviane Granger, Centre for English Corpus Linguistics, Catholic University of Louvain, Belgium. The purpose of the project is to compile computer corpora of argumentative essays written by advanced EFL learners with different mother tongues and thus to provide an empirical resource for large-scale comparative studies of the interlanguage of advanced EFL learners with widely different L1 backgrounds. The target of each national team is to collect a corpus of at least 200,000 words, consisting of argumentative essays of between 500 and 1000 words written by advanced EFL learners, typically university students in their 3rd or 4th year of English studies.

Granger and Tyson (1996) define the area of research they are involved in with learner corpora as "contrastive interlanguage analysis" (CIA). This analysis involves comparing and contrasting the use of certain features of language by non-native and native speakers of the language in a comparable situation. They maintain that the aim of this methodology is to identify and distinguish between L1-related and universal features of learner language. In this way, they argue, they will be able to shed light on advanced interlanguage and on the role of transfer for the different mother-tongue backgrounds. There are four variables controlled in the ICLE corpus: type of learner as EFL, stage of learner as advanced, text type as essay writing and a comparable native corpus.

The Turkish subcomponent of ICLE consists of 224 argumentative essays written by Turkish learners of English from three different universities in Turkey. The students were given alternative topics to choose from and were asked to write their argumentative essays on the topic they chose. The topics provided for the students were similar to the ones provided for ALOCNESS essays. The essays were required to be at least 500 words long (up to 1000 words) and none of the errors by the students were corrected on the essays. For the purposes of the present study, the first 120 essays were selected to include for the analysis. The following table shows the topic variety in the first 120 essays from TICLE analyzed in the present study.

Table 2. The Topics and the Numbers of Essays in TICLE

Topics	Essay Numbers
Death penalty	1, 103, 104, 105, 106, 119
Suicide	2, 6, 10, 37
Sex equality	3, 5, 34, 35, 38, 102, 110, 112, 113, 115, 116, 120
Cheating	4, 7, 111
Violence on television	8
Air pollution	9
Great inventions and discoveries of 20th century and their impact on people's lives	11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33
Pre-marital sex	36
Money as the root of all evil	39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 107, 108, 109, 118
Whether universities prepare students for the real world	58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73
Abortion	74, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101
Euthenesia	75, 76, 78
Nuclear energy	77, 78, 79, 80, 81, 82, 83, 84, 114, 117
Divorce	85, 86, 87, 88, 89

#### 3.2.2 ALOCNESS

LOCNESS is a corpus of native English essays made up of British pupils' A level essays (60,209 words), British university students' essays (95,695 words) and American university students' essays (168,400 words, 232 essays). It involves 324,304 words in total. LOCNESS is a comparable corpus to ICLE in that the participants are also university undergraduates, the discourse mode is argumentative writing, essays are averaging the same length and are dealing with similar topics. Since this corpus is larger than TICLE, to equalize the wordcount of the two learner corpora, one of the subcorpora of LOCNESS, the subcorpus of American students' essays (ALOCNESS), was selected for the study and 120 essays from this subcorpus were analyzed for the present study. The following table shows the topic variety in the first 120 essays from the subcorpus of American students' essays in ALOCNESS analyzed in the present study.

Table 3. The Topics and the Numbers of Essays in ALOCNESS

Topics	Essay Numbers
Controversy in the classroom	1
Euthanasia	2, 29, 33, 37
Capital punishment	3, 11, 16
Affirmative action	4
Yoga	5
Nuclear power	6
Values and consequences of school interaction	7
Pride or segregation	8
Surrogate motherhood	9
Federal intervention for the regulation of drug prices	10
Prozac: the wonder drug	12
Homosexuality	13
Drug testing of athletes	14
Prayer in schools	15, 17, 18, 22, 26
Animal testing	19

Table 3 (continued)

Sex equality	20
The distribution of condoms to sexually active teens in high school	21
Aids	23
Orphanages	24
Profit: good or evil	25
Freedom of the press	27
Sex education at schools	28, 42
The welfare system	30, 78
How to increase enrollment at universities	31
Adoption	32, 43
Televising of executions	34
Abortion	35
Attempts to escape death	36
Corporal punishment	38
Censorship	39
Genetic research	40
Adolescents	41, 74
Cheating	44
O.J. Simpson	45
Suicide	46
Money as the root of all evil	47, 48, 51, 54, 61, 69, 70, 71
A man / woman's financial reward versus their contribution to the society in which they live	49, 50, 52, 56, 57
Whether crime pays	53, 55, 58, 60, 63, 64, 65, 72, 73
Feminists' doing more harm to the cause of woman than good	59, 62, 66, 67, 68
Water pollution	75
Legalization of marijuana	76
Homelessness	77
Divorce	79
Great inventions and discoveries of 20th century and their impact on people's lives	80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120

In the selection of the 120 essays from each corpus, the topic was not used as a criterion because if it had been the criterion, the number of essays from TICLE to be involved in the analysis would have been quite limited. In the compilation of the corpora, the students were asked to choose a topic among a variety of topics to write an argumentative essay. However, the variety of topics chosen in TICLE do not always match the variety of those chosen in ALOCNESS. Therefore, the essays analyzed for the present study were not selected according to their topics.

In the study, American students are not considered to be a norm which nonnative speakers of English strive for. However, ALOCNESS is used for comparison purposes for several reasons. Native novice writers in ALOCNESS form a good control group for the study as they are at similar ages with similar educational level with the selected group of nonnative learners. As Hyland and Milton (1997, p.138) argue, it is not fair to compare nonnative writing with some unrealistic standard of "expert writer" models such as academic research articles which have different textual patterns than classroom writing such as argumentative essay writing. In the same vein, Gilquin and Paquot (2008) state that "native student writing is arguably a better type of comparable data to EFL learner writing if the objective of the comparison is to describe and evaluate interlanguage(s) as fairly as possible" (2008, p.45). Another reason to use native novice student writing is the discourse mode of the essays in TICLE. There is no exact equivalent discourse mode as argumentative text in professional writing as argued by Gilquin and Paquot (2008). That is, regarding the organization, the argumentative essay as a discourse mode taught in EFL classrooms is not found in professional writing.

Regarding the comparison of nonnative writing with native writing, Hunston (2002) argues that native speaker norm as the standard is realistic: it is "what native/expert speakers actually do rather than what reference books say they do" (pp. 211-212). Granger (2004), in her discussion on the contrastive interlanguage analysis (CIA), holds that most computer learner corpus research has involved advanced EFL learners who are "getting close to the end point of the interlanguage continuum and who are keen to get even closer to the NS norm" (p.133). Granger (2004) states that

for this category of learners in particular, the areas in which learners differ from native speakers and which therefore requires teaching can be identified. Thus, native speaker corpus is selected for comparison purposes as this corpus provides the exact equivalent of the essays in TICLE.

## 3.3 Procedures of Data Analysis

The analysis in the present study involves the analysis of DCs both at the microstructural and the macrostructural levels of discourse. Contrastive DCs were selected for the analysis for two reasons. First of all, as the discourse mode of the essays is argumentative writing, it is expected that contrastive DCs are used frequently because in persuasive writing, the learner has to contrast ideas, provide counterarguments and refute them. In that respect, the analysis of contrastive DCs will also provide insights into the management of macrostructural discourse functions, i.e., the use of the CCR pattern in argumentation. The other reason for choosing the contrastive DC category was the cognitive complexity of this group of relations for the learners, as reported in the literature. For example, Soria (2005) argues that contrastive relations are cognitively more complex than others as they involve an additional negative component and that lexical signalling for this type of relation is required more when compared to other relations to ease the reader's comprehension. In her study, which was on the constraints governing the use of DCs in oral and written discourse production and comprehension, Soria found that when there is no marking of the relation, the recognition of the correct relation reduces and this reduction is the highest with the contrastive type of relations. She argues that this result is due to the need for the lexical marking required for the inference of the contrast. She concludes that lexical marking has a significant role in easing the reader's inference of the relation. Moreover, as cognitively complex relations are acquired later than the cognitively more simple relations and as the cognitively complex relations require more processing effort, these relations were assumed to be more difficult to use in writing. It is due to these reasons that they were selected for analysis in L2 learners' essays. Still another reason for choosing contrastive DCs was that in other L2 studies reviewed in Chapter 2, this category of relations was reported to be frequently used by L2 learners despite their cognitive complexity.

A coordinating conjunction (*but*), a subordinating conjunction (*although*) and a discourse adverbial (*however*) were selected for analysis. These DCs were found to be the most frequently used contrastive DCs in both corpora, justifying the selection for analysis. They are also reported to be the most frequent contrastive DCs used in argumentative texts in other studies (e.g., Tapper, 2005; Barton, 1995; Tang and Ng, 1995). The number of contrastive DCs used in the 120 essays in TICLE and in the 120 essays in ALOCNESS are shown in Table 4 below.

Table 4. The Number of the Most Frequently Used Contrastive DCs in TICLE and ALOCNESS

<b>Discourse Connectives</b>	TICLE	ALOCNESS
but	390	180
however	74	125
although	56	41
on the other hand	34	14
while	11	42
instead	5	14

Before continuing any further, some clarification as to how the term *discourse* connective (DC) is used is in order. After a description of this term and the term argument, brief information about the annotation of but, although and however is provided.

A DC is a word, phrase or pair of phrases which relate two discourse segments such as events, states, facts, situations, questions, commands etc. The related clauses or sentences are termed as *arguments* of a connective (there will be more on this below). A DC signals a type of semantic relation between two discourse segments, has some role in marking discourse coherence and guides the reader to a specific interpretation of the segments it connects. A DC also has a syntactic realization. The syntactic realization of a DC concerns its position in discourse, the ordering of

the arguments it relates, the types of its arguments, and the location of the first argument in discourse. DCs may have different syntactic realizations. A DC can be explicit or implicit in discourse. As the present study is limited to the explicit realizations of the three DCs, the implicit realizations of DCs will not be discussed. A detailed description on implicit DCs in English can be found in Prasad et. al. (2008).

An *argument* of a connective is a text span with at least one clause-level predication (usually a verb) in the present study as discussed by Prasad et. al. (2008). Therefore, certain text spans that do not relate abstract objects are not considered to be the arguments of the connective. Abstract objects (AOs) can be eventualities such as events and states, fact-like objects such as situations and facts, proposition-like objects such as desires, questions and commands, as in Asher (1993). The lexical items that relate non AOs such as noun phrases are not discourse connectives and hence not taken into the analysis. Examples (41) and (42) below show the use of but relating non AOs. These are not in the scope of the present dissertation. In example (43), verb phrases are coordinated; since verb phrase coordination is not a discourse-level coordination, such cases are also out of the scope of the dissertation. In the examples from the corpora, the DC is underlined and the name of the corpora from which the example was taken is mentioned in paranthesis at the end of the example with the essay number following the name of the corpus. Also, each analyzed DC was numbered according to its sequential occurence in each corpus as shown with the DC *however* in example (44) below.

- (41) A person is born alone, lives and crowd<sup>1</sup>, <u>but</u> may be with feeling of loneliness. (TICLE, 2)
- (42) Because it is not only the computers <u>but</u> also the internet which makes the life easier. (TICLE, 12)
- (43) Teachers only say "cheating is bad" <u>but</u> never explains why it is a bad behavior. (TICLE, 7)

No correction is made on the errors in the essays.

The first step in the analysis of DCs was manual annotation of all instances of *but*, *however* and *although* in the first 120 essays in both corpora. In the annotation process, the principles of the PDTB, as set by Prasad et. al. (2008), were followed and, the argument that is syntactically bound to the connective is labelled as Arg2 and shown in bold whereas the other argument is labelled as Arg1 and shown in italics. Each connective that denotes a discourse relation takes only two arguments. In order to determine how far an argument stretches, a minimality principle is taken into consideration. That is, arguments that are minimally necessary for interpreting the relation are selected as Arg1 or Arg2. The remaining related but not minimally necessary information is taken as supplementary information as shown in square brackets in (44).

(44) That sounds like a nice picture. However(10) these statistics are flawed because {55 percent of what American consumers paid for health care was directly out of pocket, mostly because Americans were getting prescriptions outside of hospitals} (ALOCNESS, 10)

## 3.3.1 The Analysis of Structural Realizations of Three DCs

The analysis in the first part of the study consists of the analysis for the structural realizations of the three DCs in discourse. For the structural analysis, several categories of structural properties were identified mainly referring to Webber et. al. (2005). The structural analysis mainly concerned the linear ordering of both arguments to a DC, position of the DC in discourse, types of the two arguments and the location of the first argument. The typology of structural properties gleaned from both corpora are summarized in the following table.

Table 5. The Typology of the Structural Properties of DCs

Linear order of args.	Arg1-Arg2	Arg2-Arg1		
Position of connective	Clause initial	Sentence initial	Free in Arg2	Sentence final
Type of Arg1	Part of a clause	Clause	Multiple sentences	
Type of Arg2	Part of a clause	Clause	Multiple sentences	
Location of Arg1	Same sentence	Previous (adjacent) sentence	Multiple previous sentences	Nonadjacent sentence/ clause

This typology was developed and used in the PDTB project. It was adopted for the present study as it provides a precise categorization of the structural properties. Such an analysis is aimed at revealing the patterns of connective use by native speakers and nonnative learners and the differences between two groups of students. Such an analysis also brings a deep dimension to the study of DC use. As it will be clear in Chapter 4, Turkish learners do not always exhibit the same pattern of use in the structural properties of the DCs analyzed. Such results are descriptively valuable as they suggest where exactly the structural differences in DC use lie in nonnative writing.

After annotating each of the three DCs in the corpora, every occurence of the three DCs was examined in the light of the structural properties mentioned in Table 5. Each structural property was coded with 1 or 0. For example, if a connective was clause-initial, the researcher coded it 1 implying that this property, that is, the clause initial position, was present. The remaining subcategories such as the sentence initial position, free-in-Arg2 position and sentence final position were coded 0 implying that these features were absent.

Below are examples from both corpora to illustrate the structural properties of the connectives.

- a. Linear order of Arguments
- Arg1-Arg2 ordering
- (45) Richard Bliss, a strong advocate of creation science, used a control group and an experiment group who were about the same before the experiment, but(4) after the experiment, the group that learned for a two-model approach had more positive attitudes, learned very much about evolution, and argued significantly better than the other group. (ALOCNESS, 1)
- Arg2-Arg1 ordering
- (46) <u>Although(1)</u> men and women are said to have the equal rights, in all societies of the world, the men are one step forward from women (TICLE, 3)
- b. Position of the connective
- Clause-initial position
- (47) This statement gives a good reason for schools to conatin religious courses <u>but(23)</u> it does not give ideas on how to get this religion back into the curriculum. (ALOCNESS, 15)
- Sentence-initial position
- (48) Not all the citizens can afford to buy it. <u>But(32)</u> when it will be cheaper more people can use it and benefit from its advantages. (TICLE, 12)
- Free in Arg2
- (49) Jessica was two and a half years old, a time when a child recognizes his or her parents for food, shelter, and the other necessities of life. At that stage, <a href="https://however(34">however(34)</a>, the child cannot yet comprehend abstract concepts such as love. (ALOCNESS, 32)
- Sentence-final position
- (50) Some people would argue that this is for purposes of crime control. **This function is not being accomplished** <u>however</u>(85) (ALOCNESS, 76)

- c. Type of Arg1
- Part of a clause
- (51) If a man attracts to interfere someone's right they are first warned, then they may apply some punishment. But(3) it's not death penalty. (TICLE, 1)

#### Clause

(52) On the earth, people are trying to live in peace and comfort. <u>But(7)</u>, in order to achieve the peace and comfort, they are to fit several basic principles at the same time. (TICLE, 3)

# Multiple sentences

(53) In 1914 El Paso, Texas, enacted perhaps the first United States ordinance banning the sale or possession of marijuana; by 1931 twenty-nine states had outlawed marijuana. In 1937 Congress passed the marijuana Tax Act, effectively criminalizing the possession of marijuana throughout the United States. In 1970 the Comprehensive Drug Abuse Prevention and Control Act finally differentiated marijuana from other narcotics and reduced federal penalties for possession of small amounts. As directed by Congress, President Richard Nixon appointed a bipartisan commission to study marijuana. In 1972 the Schafer Commission issued its report, advocating the decriminalization of marijuana for personal use- a recommendation that Nixon rejected. However, eleven states, containing a third of the country's population, decriminalized marijuana in the 1970's, and most states weakened their laws against it. The 1980's however(82) saw an enormous turnaround on the views on marijuana. (ALOCNESS, 76)

- d. Type of Arg2
- Part of a clause
- (54) They are equal in most sides <u>but(13)</u> they are not equal physically so their not being equal physically causes this argument. (TICLE, 5)

# Clause

(55) Rather, the problem can be solved only by providing more training and retraining of low-skilled workers for the kinds of jobs demanded by our advancing technology. However(93), the job training must be realistic. (ALOCNESS, 78)

# Multiple sentences

There was no instance of connective use where the Arg2 is multiple sentences.

- e. Location of Arg1
- Same sentence

(56) There are still a few orphanages running today, <u>however(22)</u> the number is no where near it was one hundred years ago. (ALOCNESS, 24)

#### Previous sentence

(57) In Shriver's argument, like Methvin, he presents his claim at the beginning. <u>But(56)</u> unlike Methvin, Shriver's claim is clear and effective. (ALOCNESS, 26)

## Multiple previous sentences

(58) Firstly, it is not easy to purchase, everybody can't effort it. Secondly, although it saves peoples' time, it can captivate people by having sit them in front of it and deal with it for a very long time, and thus person-computer relationship starts and continues till that person decides to get a new friend made of flesh and bones instead of this machine. Thirdly, this machine leads the human beings to loneliness, gradually they become isolated from the other people and thus it causes a lot of psychological problems as a result you must spend too much money to the doctors. But(66) in addition to this negative sides, it has got good skills which will make you pleased (TICLE, 28)

#### Nonadjacent sentence

(59) *Before, I personally wouldn't like them.* The voices of their bells would make me crazy, especially when it is ringed in busses and crowded places. <u>But(44)</u> now I understand that it is a big necessity for businessmen, for students.... in fact today, for everyone. (TICLE, 16)

As for the statistical analysis of the structural realizations of three DCs, Pearson's Chi-square test was run to analyze the differences between the corpora. This analysis aimed at revealing whether the three DCs were used structurally in different ways in the corpora. Pearson's Chi-square test calculates a single test statistic that summarizes the amount of differences between variables (Berk and Carey, 2009) The test compares the observed data to the expected data which the model produces according to the expectation that the variables are independent. Wherever the observed data doesn't fit the model, the likelihood that the variables are dependent becomes stronger. Thus, the Chi-square test is meant to test the probability of independence of a distribution of data and it does not give any details about the relationship between them. Therefore, once the relation between the two variables is determined using the Chi-square test, other methods can be used to explore their interaction in more detail.

To analyze the relations among data in more detail, further analysis was run on the same data using Log-linear analysis. Haan and Van Hout (1986) in their study on statistics and corpus linguistics state that log-linear analysis enables the researchers "to determine which variables or combination of variables (interactions) influence a frequency distribution, even in the analysis of complex, multidimensional crosstabulations" (p.81). Howitt and Cramer (2008) also maintain that log-linear analysis uses chi-square but it allows the researcher to study the associations between several variables rather than only two as in chi-square analysis. Therefore, in order to determine which cells produced the difference, the residual, or the difference, between the observed count and the expected count is a more reliable indicator.

As will be observed in the tables reporting the Log-linear analysis results in Chapter 4, there are three terms used to report the findings: count, expected count and standard residual. The observed count is the actual count of the cell whereas the expected count of the cell is the count if there were no relationship between the two variables. The standardized residual value is useful in determining which cells of a contingency table contribute most to a significant chi-squared test. Using a level of significance of 0.05, the critical value for a standardized residual would be -1.96 and +1.96 indicating whether we observed more cases than we expected, or fewer. Thus, standardized residual that has a larger value than +1.96 means that the cell was over-represented in the actual sample, compared to the expected frequency. Standardized residual that has a smaller value than -1.96 means that the cell was under-represented in the actual sample, compared to the expected frequency. At the end of the standardized residual analysis, if there are cells where the observed and expected counts are drastically different, that provides clear evidence that the variables aren't independent.

# 3.3.2 The Analysis of Textual Metadiscourse Functions of Three DCs

In addition to the above mentioned structural features, the three DCs were also analyzed in relation to their textual functions in the 120 essays from each corpus. In the present study, the textual functions of DCs, as stated in Chapter 1, refer to what Prasad et. al. (2008) call "sense relations". The sense relations were mainly adopted from Prasad et. al. (2008) for two reasons. Firstly, the manual provides a comprehensive categorization of relations established with contrastive connectives. Secondly, as mentioned earlier in the current chapter, it is rather difficult to categorize DCs according to general senses without any subclassifications. The starting point of the classification of senses by Prasad et. al. (2008) is not the DCs but the senses themselves, which implies that any DC might be used with any of the senses in the categorization. This being the case, it is more plausible to examine each connective in its context and to determine which specific sense it is used for.

The sense classification used here involves the subcategorization of senses which allows further investigation for differences in use. The hierarchy of relations proposed by Prasad et. al. (2008) involves four top-level tiers as temporal,

contingency, comparison and expansion. However, for the purposes of the present study, mainly the comparison tier is used as the connectives examined in the study is from the contrastive class. Table 6 shows the comparison tier and the sub-tiers of senses as contrast and concession. As the table shows, contrast and concession tiers are further classified into sub-tiers. In addition to these, a new category is included in the analysis as the expansion category from the PDTB manual (Prasad et. al., 2008) during the inter-rater reliability analysis sessions with a second rater. In this dissertation, all these relations were used in the annotation of the three DCs.

Table 6. Senses and Their Subcategories

- a. Contrast
  - a.1. Juxtaposition
  - a.2. Opposition
  - a.3. Pragmatic contrast
- b. Concession
  - b.1. Expectation
  - b.2. Contraexpectation
  - b.3. Pragmatic concession
- c. Expansion
- d. Unclear/ambigious meaning

In the following section, each sense category is decribed and exemplified with sentences from the corpora.

- a. Contrast
- Juxtaposition

This relation holds, as shown in the example below, when there is a shared predicate (to cite statistics) and it applies to two entities (two sides to an argument) with a contrast relation.

(60) Both sides cite statistics and offer various other reasons for their stance on the issue. However(12), the opposing side offers more accurate statistics as

well as more valid reasons for the abolition of the death penalty. (ALOCNESS, 11)

#### Opposition

This is another contrast relation where the values assigned to some shared predicate are the extremes in a scale or the antonyms (to be guilty and not to be guilty).

(61) When someone kills somebody he is guilty, <u>but(1)</u> when the government apply this punishment, it's not a guilt. (TICLE, 1)

### Pragmatic contrast

This relation applies when there is a contrast between an argument and an inference drawn from another argument. The student contrasts a computer making transactions at a bank and a human being doing the same job. Arg1 is about the computer and Arg2 is about the human interaction. In Arg2, the reader infers that transactions at the bank were carried out by humans once upon a time, which may be less efficient but much better for the student.

(62) Yes, it might be more efficient to have a computer make your transaction at a bank, <u>but(141)</u> I miss the human interraction between people. (ALOCNESS, 82)

#### b. Concession

## Expectation

This relation is present when Arg2 creates an expectation that Arg1 denies.

(63) Although(2) many concepts in science can be supported by a tremendous amount of evidence and are accepted by many people, they are still ideas and it is possible they could be wrong (ALOCNESS, 1)

# Contraexpectation

When Arg1 creates an expectation that Arg2 denies, the relation is contraexpectation.

(64) We are learning English <u>but(196)</u> most of English Language Teaching students cannot speak properly (TICLE, 63)

# Pragmatic concession

Similar to pragmatic contrast, pragmatic concession relation requires an inference drawn from one of the arguments. In the following example, Arg1 creates an expectation that with good intentions, Kirchner does his best for his son. In Arg2, we infer that staying where his son is happy and loved is the best for the son, which the father did not realize. Thus, our expectation in Arg1 is denied in Arg2.

(65) Perhaps Kirchner's intentions are good, but(71) if he knew what was best for his son, he would realize Richard should stay where he is happy and loved. (ALOCNESS, 32)

# c. Expansion

This relation is a different class with its subtypes in PDTB manual (Prasad et. al., 2008) but for the purposes of the present study, the subtypes are not used in the analysis. This relation is found if Arg2 expands the discourse. In this type of relation, both arguments have the same topic but Arg2 provides some additional and detailed information on the same topic or restates what is said in Arg1.

(66) In fact, it is not difficult to learn how to use it, <u>but(58)</u> you should save a little time to learn. (TICLE, 22)

As for the statistical analysis, Pearson's Chi-Square test and Log-linear analysis was run to reveal the patterns of use and any differences in use between the corpora. Chi-square test aimed at finding whether there is any significant difference in use between the corpora and the log-linear analysis revealed which types of senses caused the differences in the data.

# 3.3.3 The Analysis of Interpersonal Metadiscourse Functions of Three DCs

An analysis of the interpersonal metadiscourse functions of three DCs was carried out on a smaller sample of essays from the corpora. In particular, the study examined the role of three DCs in the CCR pattern of argumentation. As stated in Chapter 2, the organizational aspect of argumentative writing is a general problem of L2 learners of English while writing an argumentative essay. The role of DCs at the macrostructural level of discourse was discussed in Chapter 2, where it became clear that DCs are important lexical items for discourse structuring as they also

signal discourse moves in addition to their sentence-linking functions. Therefore, in the present study, three contrastive DCs were analyzed for their functions in argument formation and development.

The present study was inspired by Barton's (1995) and Hyland's (2004) studies on metadiscourse in writing. Barton (1995) emphasizes the importance of the interpersonal metadiscourse functions of DCs and states that the use of connectives with their interpersonal metadiscourse functions is important as this demonstrates a sensitivity to the opinions' of the audience by acknowledging the reader's response to the discourse and marking what the writer anticipates will be unexpected. Both Barton (1995) and Hyland (2004) argue that DCs are often taught referring to their textual metadiscourse functions and ignoring the interpersonal metadiscourse functions in L2 classrooms but interpersonal metadiscourse functions serve as a means of facilitating communication between the writer and the reader. In particular, contrastive DCs in argumentation can shape the macrostructural level of discourse in that DCs have roles in strengthening and developing the claims, introducing the counterarguments to the thesis of the essay and introducing and developing the refutations to the counterarguments. Therefore, the analysis in the present study focused on CCR pattern of organization.

For the analysis regarding the interpersonal metadiscourse functions of DCs at the macrostructural level of discourse, 40 essays among 120 were selected for a detailed analysis from each corpus. In the selection of this subcorpus, the topic variety was kept as much as the same as it was among 120 essays. Table 7 below shows the topic variety and the essay numbers in the new subcorpus of TICLE and Table 8 shows that of ALOCNESS.

Table 7. The Topics and the Essay Numbers in 40 Essays from TICLE

Topics	Essay Numbers
Suicide	2, 6, 10
Money as the root of all evil	44, 45, 46, 47, 48
Whether universities prepare students for the real world	59, 60, 67, 68
Nuclear energy	82, 83, 114
Abortion	91, 92
Death penalty	1, 103, 104
Sex equality	3, 113, 115, 116
Cheating	4, 7
Great inventions and discoveries of 20th century and their impact on people's lives	11, 12, 13, 14, 15, 16, 17, 18, 19, 20

Table 8. The Topics and the Essay Numbers in 40 Essays from ALOCNESS

Topics	Essay Numbers
Controversy in the classroom	1
Euthanasia	2, 29
Capital punishment	3, 11, 16
Affirmative action	4
Yoga	5
Nuclear power	6
Values and consequences of school interaction	7
Pride or segregation	8
Surrogate motherhood	9
Federal intervention for the regulation of drug prices	10
Prozac: the wonder drug	12
Homosexuality	13
Drug testing of athletes	14
Prayer in schools	15, 17, 18, 22
Animal testing	19
Sex equality	20
Money as the root of all evil	54

Table 8 (continued)

Great inventions and discoveries of 20th century and their impact on people's lives	80, 81, 82, 83, 117, 118, 119
Aids	23
The distribution of condoms to sexually active teens in high school	21
Orphanages	24
Profit: good or evil	25
Freedom of the press	27
Sex education at schools	28
The welfare system	30
Legalization of marijuana	76
Whether crime pays	65
Corporal punishment	38

In this phase of the study, a further coding process was carried out. Each occurence of the three DCs was highlighted manually and examined to decide whether the argument where the DC is used is a claim, counterargument or refutation in the essay. This was determined comparing the arguments in the essay with the thesis of the essay, using the lexical items in Table 9 below and some other means in the discourse segments which signal the nature of the statement as a claim, a counterargument or a refutation. Some of the linguistic means in Table 9 were taken from Jordan's list of items the writer uses to indicate doubt and certainty (in McCarthy, 1991), from McCarthy himself (1995) and from Hyland and Milton (1997). The rest of the lexical items in the table were added by the researcher. For example, a statement was coded as a counterargument if it argued for an idea that was against the argument in the thesis of the essay. In the same vein, a counterargument was signalled with certain lexical items in some essays such as opponents, but, disagree, opposing etc. Moreover, a statement or sequence of statements were regarded as claims if the arguments in the statements were in support of the thesis of the essay. The claims were also signalled with certain lexical items or phrases in some essays. A statement, for example, was considered to be a claim if it cited a source that was used to support the thesis. All the relevant lexical items in the essays were underlined. Table 9 shows the categories used in the second phase of the annotation procedure.

Table 9. The Categories of Lexical Items Used to Analyze the Argumentative Nature of the Essays and Their Examples

The Category of Lexical Items	Examples
A. Modal verbs (McCarthy, 1995)	must, can, will, may, should, might, could
B. Lexical items carrying modal meanings (Jordan in McCarthy, 1991; Hyland and Milton, 1997)	Verbs: Appear, assume, doubt, guess, look as if, suggest, think, claim, consider, believe, seem, say, emphasize  Adverbs: Actually, certainly, inevitably, obviously, possibly, probably, perhaps, apparently, evidently, usually, always  Adjectives: Likely, perhaps, clear  Nouns: Doubt, possibility
C. Lexical items describing problem and solution (McCarthy, 1995)	Difficulty, concern, drawback, problem Solution, solve, answer, consequence, outcome, result
D. Lexical items describing claims	Strong, important, effective, valid
E. Lexical items describing counterarguments	Weak, controversial, problematic
F. Other lexical items signalling the argumentative nature	Opponents, proponents, opposing, refutation, argument, debate, controversy, agree, disagree

The following examples from the corpora illustrate how the arguments were classified as claim, counterargument or refutation. In example (67), the student argues that capital punishment does not benefit anyone. The student presents an opposing view and refutes it by saying that the opposing view does not have any evidence and that many criminals do not ever have fear of death. While the student is presenting the counterargument, s/he uses a lexical expression, *main claims of the advocates*, which signals an opposition. Moreover, in the second sentence, s/he

signals refutation with the lexical expressions *does not have much evidence* and *can therefore easily be refuted*. The contrastive DC in the third sentence introduces the opposing view again and the Arg1 of the DC refutes the view. With the expressions *it is simply impossible* and *it is clear that*, the student expresses his/her certainty on the issue. The underlined parts show the linguistic means used in determining the parts of the CCR pattern.

(67) ...one of the main claims of the advocates (COUNTERARGUMENT) of capital punishment focuses on the idea of the death penalty acting as a deterrent. This is a concept that does not have much evidence to support it and can therefore easily be refuted (REFUTATION). While many believe that the death penalty is the most effective deterrent, it is not a proven fact (REFUTATION). It is simply impossible for the average person to get inside the mind of a criminal and see what he or she fears most. (REFUTATION) It is clear that an individual is deterred by what he or she fears most, but(9) for many violent criminals there simply is no fear. (REFUTATION) (ALOCNESS, 3)

In example (68), the thesis is that prayers should not be allowed in public schools and here, the student presents an opposing view to the thesis. As the reader knows that the writer is against prayers, s/he takes the first sentence below as an opposing view to the writer's argument. This opposition is signalled with the lexical items supporters and the opposing view continues in the second, third and the fourth sentences. This continuation is signalled with according to, in addition and according to the supporters. In the next paragraph, the student starts to refute the counterargument. The signal for the refutation comes with the word weaknesses and with the actual content of the sentence where the student questions the representativeness of the poll mentioned in the counterargument.

(68) A main claim that the <u>supporters</u> of prayer in public schools point to is the statistic that, on a regular basis, polls show that 75% or more of Americans favor the return of prayer to schools (COUNTERARGUMENT). <u>According to</u> the American Center for Law and Justice, an estimated 12,000 Bible clubs are at work in the United States public schools. In addition, 177,000 participants

belong to Student Venture, an organization that helps to establish school prayer groups. These numbers, <u>according to the supporters</u>, are to reflect the desire to return prayer to public schools and are reason to support its return (COUNTERARGUMENT).

There are some <u>weaknesses</u> in this reasoning. First of all, the statistic that maintains that 75% of Americans support the return of prayer to public schools is never accounted for. For all the reader knows, the polls that are being referred to may have been using a biased population sample, one that is not representative of the general public (REFUTATION). (ALOCNESS, 17)

In example (69) below, the student supports euthenesia and presents an opposing view signalling the opposition with the phrase *the people who are against to euthanasia*. The student continues to present the opponents' view by using *in the other words*. S/he starts the refutation with the phrase *I think* and argues that the opposing view is *wrong*.

(69) Also the people who are <u>against</u> to euthanasia think that some of these people (ill people) were not in the right state of mind to take their own decisions (COUNTERARGUMENT). <u>In the other words</u>, they are saying that any person who is mentally challenged should suffer and be in pain because they are not as smart as rest of us. <u>I think</u> that this very <u>wrong</u> and that something should be done to stop it (REFUTATION). (TICLE, 82)

After the nature of the statement was determined in the manner explained above, the function of the particular DC in that discourse segment was examined. The possible discourse structuring functions were found to be of three types, as expected: (a) introducing or strengthening the claim, (b) introducing a counterargument and (c) introducing or strengthening a refutation. In that analysis, a DC was highlighted manually in the selected essay and its function in the CCR pattern was determined as (a), (b) or (c) above. Then, the DCs used for each function were counted to identify for which functions the three DCs were used in the corpora.

The examples below show *but* and *however* in claims, counterarguments and refutations. In example (70), the student supports euthenesia so the DC is used to strengthen the student's claim.

(70) Nowadays human rights is the most important subject in the world so that human have right to choose how to live, <u>but(267)</u> euthanasia is not seen as human right (DC IN THE CLAIM). (TICLE, 82)

In example (71), the student argues that there is no gender equality in the world and that man is always superior to woman. The student compares the situation of the man and the woman in the society. While s/he is doing so, s/he emphasizes her/his point with the use of a contrastive DC.

(71) The widow women have difficulties in their societies because of the bad label given to them. <u>However</u>(63), we see that such a bad point isn't connected to men (DC IN THE CLAIM). (TICLE, 113)

In example (72), the student is in support of the use of nuclear power and s/he presents a counterargument first and refutes it. While refuting the opposing view, the student uses a contrastive DC in the refutation part of the discourse segment.

(72) Opponents beat the nuclear waste issue to death, and it is the hardest point for the advocates to deal with. The fact is, there is waste from nuclear power plants, the waste is radio active, and it does last a long time. What the opponents stress, are the dangers of this waste product on humans and the environment. The proponents know nuclear waste is harmful and acknowledge that, <u>but(15)</u> their argument is that there is just so little of it out there, and today's storage techniques are so advanced, there is nothing to worry about (DC IN THE REFUTATION). (ALOCNESS, 6)

In example (73), the student supports prayers in public schools and starts with a claim. With the use of a contrastive DC, the student signals a contrast to the previous view and presents a counterargument.

(73) Proponents of prayer in public schools believe that a religious infusion is needed to balance the lack of values and the increasing rate of violence in

society. The opponents hold, <u>however</u>(16), that prayer in public schools would destroy the separation of church and state, and that prayer will not be able to end the ills of society (DC IN THE COUNTERARGUMENT). (ALOCNESS, 16)

## 3.3.4 The Analysis of the Other Lexical Items in Argumentation

The analysis of the three contrastive DCs in the CCR pattern of organization led the researcher to examine the linguistic means apart from the DCs that have a role in conveying the argumentative nature of the essays. It is worth noting that reliance on the means other than DCs was a pattern used less often in TICLE than in ALOCNESS. The essays in ALOCNESS involved more linguistic means (cf. Table 9) used to signal the argumentative nature of the essays.

To examine the extent to which the essays in both corpora conformed to the argumentative nature of the discourse mode, 40 essays that were analyzed earlier for the interpersonal metadiscourse functions of three DCs were reexamined for the linguistic means categorized in Table 9 above. The lexical items that belong to each category were highlighted manually in each essay and were counted. The results were evaluated with the independent samples t-test. This statistics showed whether the means of the lexical items in two corpora were statistically different. The examples below illustrate how the categories in Table 9 were analyzed in the corpora. In example (74), there are linguistic means (namely nouns and verbs) describing the problem and the solution, which implies that the student is telling a problem and searching for a solution in the essay and a modal verb was used to strengthen the student's argument.

(74) At this point, the role of the government is to find the <u>solution</u> of this <u>problem</u> and then according to the founded <u>solutions</u> the government <u>should</u> <u>solve</u> the main <u>problem</u>. (TICLE, 1)

In example (75), the student talks about a debatable topic emphasizing this with the nouns *debate* and *controversy* and uses the verb *seem* with modal meaning for hedging.

(75) This <u>seems</u> to be the latest <u>debate</u> about the creation/evolution <u>controversy</u>. (ALOCNESS, 1)

In example (76), the student mentions an opposing viewpoint to the thesis of the essay and describes the counterargument with the adjectives *weak* and *unsupported* to weaken the argument.

(76) The <u>claim</u> that the death penalty is a superior deterrent is simply <u>weak</u> and <u>unsupported</u> (ALOCNESS, 3)

In the last example below, the student introduces a rationale behind a mother's desire to have abortion with lexical items that convey doubt (the modal *may* and the verb *seem*), and then states his/her own opinion signalling a contrast with the previous statement, where s/he uses *but*.

(77) Abortion <u>may seem</u> to be the easiest way at the begining <u>but(312)</u> I <u>believe</u> that it becomes a wound of conscience which leads till the end of life (TICLE, 91)

## 3.3.5 Inter-rater Reliability Analysis

As explained in the sections above, three sets of annotations were carried out: (a) structure and sense (textual metadiscourse functions) annotations of three DCs in 120 essays, as explained in sections 3.3.1 and 3.3.2 (b) annotations on the subcorpus of 40 essays showing interpersonal metadiscourse functions of DCs in the CCR pattern in argumentation as shown in section 3.3.3 (c) annotations on the subcorpus of 40 essays showing the other lexical items (apart from the three DCs) signalling the argumentative nature of the essays as shown in section 3.3.4. A reliability analysis was carried out on all three sets of annotations. In all the annotations, the first rater was the researcher herself. The second rater was a graduate student knowledgeable in DCs in Turkish and English.

For the first annoation process, the researcher described the process of analysis to the second rater in detail before the analysis started. Then, two raters analyzed randomly selected 30 essays (25% of the total of 120 essays) separately and discussed the analysis together so that a concensus can be reached on unclear issues before starting with the actual analysis. For the inter-rater reliability analysis, Wilcoxon test was used for the analysis which aims to identify the difference between the raters. Each separate structural category and sense class was calculated separately for reliability analysis. The results showed that there was no significant

difference between the ratings of the two raters (P>0.05). That is, the ratings were reliable as shown in Table 10.

Table 10. Wilcoxon Test Results for Inter-rater Reliability for Structure and Sense Annotations

Structural and Sense Realization Categories	Wilcoxon Asymp. Sig. (2- sided)
Order of arguments	1,000
Position of the connective	1.000
Type of Arg1	,317
Type of Arg2	,317
Location of Arg1	1,000
Contrast-Juxtaposition	,102
Contrast-opposition	,317
Contrast- pragmatic contrast	,655
Concession-expectation	,317
Concession-contraexpectation	,180
Concession-pragmatic concession	1,000
Expansion	1,000
Unclear/ambigious meaning	,157
	No difference (P>0.05)

As for the second set of annotations, an inter-rater reliability analysis was carried out with the same raters on 20 essays (50% of the 40 essays in total). Table 11 below shows that there was no significant difference between the analyses of the raters. The rest of the essays were annotated by the first rater along the principles specified.

For the third set of annotations, i.e., the analysis of the various linguistic means used in the essays that convey the argumentative nature of the essay, an inter-rater reliability analysis was carried out on the 20 essays with the same raters (50% of the

40 essays in total). Table 12 below shows that there was no significant difference between the analyses of the raters. The rest of the essays were annotated by the first rater along the principles specified.

Table 11. Wilcoxon Test Results for Inter-rater Reliability for the DCs in the CCR Pattern

	TICLE	ALOCNESS
DC Use in Different Parts	Wilcoxon	Wilcoxon
of CCR Pattern	Asymp. Sig. (2-sided)	Asymp. Sig. (2-sided)
DC for claim	,917	,850
DC for counterargument	,890	1,000
DC for refutation	1,000	1,000
	No difference (P>0.05)	No difference (P>0.05)

Table 12. Wilcoxon Test Results for Inter-rater Reliability for Other Linguistic Means

	TICLE	ALOCNESS
The Categories of Lexical Items	Wilcoxon Asymp. Sig. (2-sided)	Wilcoxon Asymp. Sig. (2-sided)
Modal verbs	1,000	1,000
Lexical items with modal meanings	,964	,850
Lexical items for the problem-solution pattern	1,000	1,000
Lexical items describing claims	1,000	1,000
Lexical items decribing counterarguments	1,000	1,000
Other lexical items signalling the argumentative nature	,980	1,000
	No difference (P>0.05)	No difference (P>0.05)

# 3.4 Summary

This chapter addressed the methodological issues concerning the study and aimed at detailing the process of analysis carried out to answer the research questions set at the beginning of the study. It was explained that in this corpus-based study, one of the aims was to analyze the use of *but*, *however* and *although* at the microstructural level of discourse in the argumentative essays of two corpora. The other aim was to reveal the role these DCs play in the macrostructural level of discourse, that is the CCR pattern, in argumentation. To achieve the first aim, the chapter presented the structural and sense realizations of the three DCs and the interpersonal metadiscourse functions they serve in the corpora with examples. The chapter also showed how native American speakers and Turkish learners manage the claim-counterclaim-refutation discourse pattern at the macrostructural level of discourse through the use of DCs.

In the next chapter, the results of the quantitative analysis will be presented and conclusions will be drawn.

#### **CHAPTER IV**

#### RESULTS AND DISCUSSION

This chapter is devoted to the presentation of the results and the discussion of the findings. Each section describes the findings of the study concerning a specific type of analysis followed by a discussion section for that particular type of analysis. Firstly, the findings of the descriptive statistical analysis are presented to show the general pattern of DC use in both corpora. Secondly, the findings of the analysis of structural and sense realizations of each DC are presented in a separate section. Lastly, one section is devoted to the findings of interpersonal matediscourse analysis on three DCs and another one to the findings of the analysis of other lexical items that are used in argumentation.

# 4.1 The Overall DC Use in the Corpora

# **4.1.1 Results**

At the beginning of the study, some descriptive statistical analyses were carried out to clarify the general tendency of the use of *but*, *however* and *although* in both corpora. First type of analysis concerned the difference between the number of connectives used in the corpora and the ratio of the connective use to the word count of the essays. For this analysis, 2 independent samples t-test was used and the results are presented in Table 13 below. The results showed that for *although*, the number of the connective used and the ratio of the connective to the word count in each corpus did not differ significantly. On the other hand, for *but* and *however*, the number of the connectives and the ratio of the connective to the word count of the essays differed significantly. It was found that Turkish learners tended to use *but* more frequently and the ratio of *but* to the word count in TICLE confirmed this finding. On the other hand, *however* was used more frequently in ALOCNESS and

the ratio of the connective to the word count in ALOCNESS was significantly higher when compared to the ratio in TICLE.

Table 13. Difference Between the Number and Ratio of DC Use in the Corpora

Independent Samples T-test Sig. (2-tailed)					
Number Ratio					
although	,186	,073			
however	,013				
but	,000	,000			

Another analysis concerned the frequency of each DC in each corpus. Table 14 displays the frequency counts of each DC and the standard residual values for each DC which aims to show the significant difference in the frequency counts between the corpora. The statistical analysis indicated that although *but* was the most frequent DC of the three DCs analyzed in both corpora, there was an overuse of this DC in TICLE (<sup>2</sup>SR: 2,5). On the other hand, *however* was underused in TICLE (SR: -4,0).

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As mentioned in Chapter 3, in the Log-linear analysis, the observed count of the DC and the expected count (the count if there was no relationship between the two variables) is compared to retrieve the Stadard Residual value (SR) for a difference. Using a level of significance of 0.05, the critical value for a standardized residual would be -1.96 and +1.96. Standardized residual that has a larger value than +1.96 means that the cell was over-represented in the actual sample, compared to the expected frequency. Standardized residual that has a smaller value than -1.96 means that the cell was under-represented in the actual sample, compared to the expected frequency

Table 14. The Frequency of *although, but* and *however* and Their Standard Residual Values in TICLE and ALOCNESS

Discourse		Corpo	Corpora		
Connectives		ALOCNESS	TICLE	Total	
	Count	41	56	97	
although	Expected Count	38,4	58,6	97,0	
	Std. Residual	,4	-,3		
	Count	180	390	570	
but	Expected Count	225,7	344,3	570,0	
	Std. Residual	-3,0	2,5		
	Count	120	74	194	
however	Expected Count	76,8	117,2	194,0	
	Std. Residual	4,9	-4,0		

A third analysis was run to reveal the frequencies regarding the sense relations conveyed by *but*, *although* and *however* in the corpora. The independent samples t-test analysis revealed that there was a significant difference in the subrelations of the contrast relation (P<0,05). This difference is due to the preference of the juxtaposition relation in ALOCNESS and the preference of the opposition relation in TICLE. In other types of senses, no significant difference was observed. Table 15 presents these results.

Table 15. The Frequency of the Sense Relations, Their Standard Residual and Chi Square Values in TICLE and ALOCNESS

Sense Categories		ALOCNESS	TICLE
	Count	95	79
Juytonosition	Expected Count	68,9	105,1
Juxtaposition	Std. Residual	3,1	-2,5
	Chi-square	,000	
	Count	102	200
Opposition	Expected Count	119,6	182,4
Оррозіцоп	Std. Residual	-1,6	1,3
	Chi-square	,010	
	Count	10	25
Progmetic contract	Expected Count	13,9	21,1
Pragmatic contrast	Std. Residual	-1,0	,8
	Chi-square	,173	
	Count	23	44
Expectation	Expected Count	26,5	40,5
Expectation	Std. Residual	-,7	,6
	Chi-square	,358	
	Count	45	66
Contra-expectation	Expected Count	44,0	67,0
Contra-expectation	Std. Residual	,2	-,1
	Chi-square	,829	
	Count	9	10
Pragmatic concession	Expected Count	7,5	11,5
Pragmatic concession	Std. Residual	,5	-,4
	Chi-square	,484	
	Count	50	90
Expansion	Expected Count	55,5	84,5
Lapansion	Std. Residual	-,7	,6
	Chi-square	,298	

#### 4.1.2 Discussion

When the analysis was carried out on individual connectives, it was observed that among the three contrastive DCs, *but* was the most frequently used DC in both corpora. The high frequency of *but* in both corpora is probably due to the fact that this DC is a more general DC that can also replace the other two DCs. Although *but* is a DC that can also replace the other two DCs, in L2 educational settings, it is generally described as a DC preferred in informal writing than in formal academic writing. Thus, L2 learners are often encouraged to prefer some other more formal contrastive DCs such as *however* instead of *but* in academic writing. Despite this emphasis in instructional settings, it is interesting to observe the high frequency of *but* in TICLE when compared to *however*.

The general high frequency use of *but* than *however* and *although* is also supported by Fraser (1998) who divides the contrastive discourse markers into three main classes, where each class places restrictions on the relationship between the sentences they connect. The largest class is headed by *but* and it imposes the least restrictions. For instance, Fraser states that *but* can always replace *however* but not vice versa, as the restrictions imposed by *however* are greater than those for *but*. This observation may explain the high frequency of *but* in both corpora. Similarly, Altunay (2009) found that *but* is the most frequently used DC among others in her study.

The use of the three DCs might also be related to the genre. In their comprehensive study of the grammar of English in spoken and written discourse, Biber, Johansson, Leech, Conrad, and Finegan (1999) report that *but* is the second most frequently used coordinator after *and* in three genres: conversation, fiction and news. They state that it is the third frequently used one in academic discourse. This is a piece of evidence in support of the importance of genre in the choice of connectives. They argue that the lower frequency of *but* in academic discourse may be due to the use of other more formal DCs such as *however* and *although* to express the same relation with *but*. The findings of the present study regarding ALOCNESS are in line with the findings about the use of formal DCs by native speakers. In the present

study, native speakers tended to use *however* more frequently compared to the Turkish learners. This tendency can be related to the native speakers' awareness of the genre and discourse mode requirements and the stylistic differences in the use between *but* and *however*. Biber et. al. (1999) also report that to mark contrast, *however* is often the preferred DC in academic prose due to stylistic factors. Turkish learners tended to use *however* less frequently compared to the native speakers and preferred *but* instead because as mentioned earlier, *however* is a more formal DC with more constraints on its use when compared to *but*. In the same vein, Tapper (2005) state that many of the learner subcorpora in ICLE contains writing that is more informal than the writing of native English-speaking student and one feature of informality might be preferring less formal DCs to the formal ones.

#### 4.2 The Connective but

# 4.2.1 The Structural Analysis Results

In order to observe the use of the individual DCs regarding the structural properties in each corpus, Chi-square analysis and Log-linear analysis were performed. The Chi-square analysis on *but* showed that there was no significant difference in its use between the corpora regarding the structural properties. The results are shown in Table 16 below.

Table 16. Pearson Chi-square Test Results for the Structural Differences in the Use of *but* Between TICLE and ALOCNESS

<b>Structural Properties</b>	Pearson Chi-Square Value Asymp. Sig. (2-sided)
Order of arguments	0,497
Position of connective	0,036
Type of Arg1	0,561
Type of Arg2	0,099
Location of Arg1	0,090
	No difference (P>0.05)

The Log-linear analysis results showed a more detailed picture of *but* in the corpora. The results are presented in Table 17 (For the percentages of the observed and

expected counts, see Appendix A). This analysis showed that *but*s often showed similar patterns of use in the corpora. Firstly, in both corpora, the argument ordering was the Arg1-Arg2 order, as expected. Secondly, the position of the DC was found to be clause-initial (c-initial) in both corpora, as in example (78). A noticeable difference in *but* use between the corpora was that in TICLE, *but* was used in sentence-initial (s-initial) position more frequently compared to the same use in ALOCNESS, as in example (79).

As for the types of the arguments, the frequency analysis showed that in both corpora, both arguments of *but* were full clauses. The arguments can also be parts of clauses as in (78) and (80), often implying a shared-argument structure, or multiple clauses/sentences as in (82).

- (78) There are of course many other things computers are used for, but(140) a lengthy list is not necessary as everyone already knows (except for people in 2nd & 3rd world countries) how abundant computers are. (ALOCNESS, 80)
- (79) Not all the citizens can afford to buy it. But(32) when it will be cheaper more people can use it and benefit from its advantages. (TICLE, 12)
- (80) If a man attracts to interfere someone's right they are first warned, then they may apply some punishment. But(3) it's not death penalty. (TICLE, 1)
- (81) Before, I personally wouldn't like them. The voices of their bells would make me crazy, especially when it is ringed in busses and crowded places. But(44) now I understand that it is a big necessity for businessmen, for students... in fact today, for everyone. (TICLE, 16)
- (82) After counting all these positive sides, we should also take it for granted that it has got "side-effects". Firstly, it is not easy to purchas, everybody can't effort it. Secondly, although(10) it saves peoples' time, it can captivate people by having sit them in front of it and deal with it for a very long time, and thus person-computer relationship starts and continues till that person decides to get a new friend made of flesh and bones instead of this machine. Thirdly, this machine leads the human beings to loneliness, gradually they become isolated from the other people and thus it causes a lot of psychological

problems as a result you must spend too much money to the doctors. But(66) in addition to this negative sides, it has got good skills which will make you pleased. (TICLE, 28)

Table 17. The Standard Residual Values for the Structural Properties of *but* in TICLE and ALOCNESS

Structural Categories		ALOCNESS	TICLE
Order of arguments	Arg1-Arg2	-1,902	5,559
	Arg2-Arg1	-4,486	-5,574
Position of the DC	Clause-initial	2,187	6,302
	Sentence-initial	-5,992	-1,303
	Free in Arg2	-2,238	-2,768
	Sentence final	-1,025	-1,266
Type of Arg1	Part of a clause	-1,420	1,997
	Clause	-2,826	2,861
	Multiple sentences	-,706	-,512
Type of Arg2	Part of a clause	-1,929	3,258
	Clause	-2,765	2,111
	Multiple sentences	-,724	1,343
Location of Arg1	Same sentence	,258	3,353
	Previous sentence	-3,855	1,497
	Multiple previous sentences	-1,265	-,176
	Nonadjacent sentence\clause	-2,702	-1,193
No difference	of use: 1,96 < Standard	d residual value (	SR) <-1,96

# 4.2.2 The Sentence-Initial but

In TICLE, sentence initial *but* (SIB) was found to be quite frequent. Therefore, another area of research in this thesis was the use of the SIB. Table 18 shows the percentages of the SIB in TICLE and in ALOCNESS.

Table 18. The Frequencies of the SIB and the CIB in TICLE and ALOCNESS

	SIB		C	IB
	Tokens Percentages		Tokens	Percentages
TICLE	152	39,07%	237	60,92%
ALOCNESS	51	28,33%	129	71,66%

When the structural properties of the SIB were investigated in the corpora, it was discovered that Arg1 of the SIB was an adjacent sentence for most of the time, as shown in Table 19 below.

Table 19. The Different Locations of Arg1 of SIB and Their Frequencies in TICLE and ALOCNESS

	SIB			
<b>Locations of Arg1</b>	TICLE	ALOCNESS		
Same sentence	.8%	2.4%		
Previous sentence	75.2%	69.0%		
Multiple previous sentences	14.0%	19.0%		
Nonadjacent sentence	9.9%	9.5%		
Total	100.0%	100.0%		

The qualitative analysis on the functions of SIB showed that in TICLE, the function of the SIB did not seem to be different than the function of the CIB. That is, the SIB was used for establishing a contrast relation as in (85) and only in a few examples for topic shift ("expansion" in the current study) as in (86):

(85) As a result if you have a lot of money and you know how to use it you are one of the most lucky persons in the world you can have anything you wanted. But (134) if you don't be conscious about it, money can lead you towards bad things, events or attitudes and try not to be the slave

of money, try to make less the superiority, masterity of the money in your life as much as you can. (TICLE, 44)

(86) Wouldn't it be grate if a teachable attitude could be better, but we have conditioned "the schools are out", "we have got the summer" so the teachable attitude is stopped untill they get back to school. But (183) what about the learning rather than fulfiling the assignments given by the teacher. (TICLE, 62)

In ALOCNESS, the SIB was less frequent than the SIB in TICLE and when it was used, it was often followed with a question sentence as its Arg2 to indicate topic shift.

(87) It is common to simply ask a physician "for something" when sickness occurs. But(20) what about more complex conditions in humans? (ALOCNESS, 12)

In both copora, there were cases where Arg1 of the SIB was nonadjacent as shown in Table 19 above. Such use was also found in the literature in the light of the notions of subordination and coordination in discourse. Webber and Prasad (2008) showed that the discourse relation of the intervening material between the two arguments of the SIB was subordination for most of the time. In both TICLE and ALOCNESS, the material intervening between Arg1 and Arg2 of the SIB indeed elaborates on the first argument of the connective. Two examples are provided below:

- (88) Before, I personally wouldn't like them. The voices of their bells would make me crazy, especially when it is ringed in busses and crowded places. But(44) now I understand that it is a big necessity for businessmen, for students... in fact today, for everyone. (TICLE, 16)
- (89) People who inherit money or live off the interest of investors often seem to spend their time in search of a new thrill, some sort of excitement that money cannot buy. Having almost unlimited wealth changes people, both those who

are born into wealth and those who earn their own money early on. But(104) do they have the right to live this way? (ALOCNESS, 57)

Furthermore, in (90), the student explains the result of Arg1. In all three examples from the corpora, the intervening materials function as elaborative or explanatory discourse units and they do not introduce a totally new topic.

(90) When a man kills a person, we think he is a murderer. He should be punish and go to prison. Because he killed a person. But(228) when abortion is made, nobody is interested in this situation (TICLE, 74)

# 4.2.3 The Results of Sense Analysis

The last type of analysis on the three DCs in the corpora concerns the senses conveyed by each DC and in this section those established by *but* are provided. Table 20 below illustrates the number and the percentage of *but* regarding each sense category. It also provides the chi-square results for any significant difference between the corpora.

According to the table, in TICLE, *but* was most frequently used to convey a contrast sense with its subsenses, followed by the expansion sense. The connective was used mostly to convey an opposition relation in TICLE, as in (83) below. The second sense frequently conveyed by this DC (expansion), is illustrated in (84).

- (83) They think that if they get good marks, they are the winners but(9) they feel as if they lose the war if they get bad marks. (TICLE, 4) (opposition)
- (84) On the earth, people are trying to live in peace and comfort. But(7), in order to achieve the peace and comfort, they are to fit several basic principles at the same time. (TICLE, 3) (expansion)

The table also shows that the two of the sense categories, namely the juxtaposition and opposition relations, differred between the corpora and this difference was significant. The DC was used more for juxtaposition relation in ALOCNESS whereas it was used more for opposition relation in TICLE. On the other hand, when the percentages of the senses established with *but* in ALOCNESS were examined, the general tendency was found to be the same with TICLE. That is, the

most frequent sense category was contrast with its various subcategories, followed by the expansion relation.

Table 20. Senses Established by but in TICLE and ALOCNESS

Sense Categories		ALOCNESS	TICLE	Total	Pearson Chi- Square
Invetoposition	Count	59	64	123	,000
Juxtaposition	percentage	48,0%	52,0%	100,0%	
Opposition	Count	47	158	205	,001
Opposition	percentage	22,9%	77,1%	100,0%	
Dua amatia aantuust	Count	7	21	28	,442
Pragmatic contrast	percentage	25,0%	75,0%	100,0%	
Experien	Count	0	1	1	,497
Expectation	percentage	,0%	100,0%	100,0%	
	Count	26	62	88	,655
Contra-expectation	Percentage	29,5%	70,5%	100,0%	
Pragmatic	Count	6	9	15	,477
concession	percentage	40,0%	60,0%	100,0%	
E	Count	32	74	106	,723
Expansion	Percentage	30,2%	69,8%	100,0%	
Ambiguous	Count	2	6	8	,687
	percentage	25,0%	75,0%	100,0%	
Total	Count	180	395	575	
Total	Percentage	31,3%	68,7%	100,0%	

# 4.2.4 Discussion on but Use

In this part of the study, the findings of the structural and sense realizations of *but* in the two corpora will be discussed.

The analysis results showed that there were both similarities and differences in *but* use at the microstructural level of discourse between the corpora; however, the similarities outweighed the differences. There was no significant difference

concerning the argument ordering of the DC and the c-initial use of the DC. Moreover, in both corpora, the DC took part of a clause and multiple clauses as its first argument and multiple clauses as its second argument. Another structural category where there was no difference in use concerns the location of the first argument of the DC. On the other hand, the use of the DC differed between the corpora regarding some structural properties. For instance, although the DC was commonly used as a c-initial DC in both corpora, it is more often used in the s-initial position in TICLE. Moreover, the type of the both arguments was less often a clause in ALOCNESS. Another difference concerned the type of the second argument. In TICLE, the DC took part of a clause more often as its Arg2, which implies that Arg2 of *but* was a shared argument with another DC more often in TICLE.

The higher frequency of SIB in TICLE deserves attention. Given that Turkish learners have had years of instruction not favoring s-initial coordinating conjunctions especially in academic writing and that they have not much exposure to reading academic English before university education, high frequency of SIB use in Turkish learners' writings is interesting. Although SIB was more frequent in TICLE than in ALOCNESS, this was not a use restricted to TICLE. The interesting finding about SIB in both corpora is that SIB use was not constrained by any particular syntactic or sense realization in the corpora. Recently, there have been studies investigating the acceptability of SIB and reporting the high frequency of SIB in native English written discourse. For instance, Bell (2007) examines the use of SIB in academic discourse. He analyzes a corpus of over one million words of academic prose taken from 11 academic journals. He maintains that SIB was very frequent in academic prose both at paragraph initial position and at paragraph internal position but its use was constrained by its function in discourse. He finds that it is used for most of the time to add a further element to the previous set of arguments, to shift the topic domain and to mark off idea units. Biber et. al. also state that there is a "prescriptive reaction against beginning an orthographic sentence with a coordinator" but sentence-initial coordinators are very common in actual texts (1999, p.83). On the other hand, their findings reveal that SIB is less

frequent in academic prose though still present, which supports the effect of genre in the use of connective.

In a survey study on s-initial and and but (SIAB), Yoneoka (1998) examines some references on English grammar. These sources are 42 references including general and academic writing texts, grammar, usage and style reference books, and dictionaries. She concludes that a general consensus on SIAB use in academic writing does not yet seem to have been reached. She shows that some of the reference sources never addressed the use of SIB while others constrained its use. The sources that discuss the SIB use constrain its use to specialized conditions of emphasis, frequency of use and genre. According to these sources, SIB can be used when there is a special emphasis for the second sentence. It can also be used more in informal texts and spoken discourse but it should not be used frequently. Thus, it can be seen that SIB use is constrained by other factors rather than the type or location of its first argument. At the end of her study, Yoneoka (1998) summarizes her findings stating that there is disagreement as to whether such usage should be constrained, and if so, how. There is also some acknowledgement that SIB usage is not universally accepted and may not be extended to more formal writing, and especially academic writing.

There are studies in literature on SIB use in native texts that discuss its syntactic realizations. For instance, Webber and Prasad (2008) state that multiple sentence and nonadjacent Arg1 for *but* is observed in the PDTB corpus when the connective is SIB. Similarly, Quirk et. al. (1972) in their discussion of s-initial *and* and *but*, contend that there are cases where only s-initial use of these connectives is possible and this case is when a final sentence links more than one previous sentence as in the following example:

It was a convention where the expected things were said, the predictable things were done. It was a convention where the middle class and middle aged sat. It was a convention where there were few blacks and fewer beards. *And* that remains the Republican problem. (p. 651)

Considering the above mentioned studies, in a discussion of SIB use in native English discourse and in reference sources, it can be said that SIB use is not an error but is constrained by some factors such as the location of its first argument (nonadjacent or multiple previous sentences), genre (academic versus nonacademic), function (for emphasis or for topic shift) and frequency of use.

As far as the high frequency of SIB use in TICLE is concerned, some possible explanations can be provided. L1 transfer is not a plausible explanation for the Turkish learners' tendency to use SIB. Turkish allows a wide positioning of connectives. For instance, *ama* "but" in Turkish can be used at sentence-medial, sentence-initial and sentence-final positions. Thus, if it was due to L1 influence, Turkish learners would be expected to position the connective in the discourse using the wide range of possibilities Turkish offers for *ama* "but". However, this is not the case in TICLE corpus.

It might be suggested that SIB use in TICLE might also be attributed to the focus of instruction in the classrooms. However, this explanation would not be plausible either because in the classrooms, the instruction emphasizes the use of CIB rather than SIB.

The general tendency to place *but* c-initially and an occasional tendency to use SIB brings to mind another, more possible explanation. The reason for such a use might be the available written input English learners encounter as Biber et. al. (1999, p.83) state that in actual texts, s-initial coordinators are very common. On the other hand, Milton (1999) argue that students resort to s-initial position to increase the information weight because of their inadequate syntactic control. High frequency of SIB use might also be a reflection of Turkish learners'more informal writing style in English. In a study on L2 writing by Silva (1993), features of L2 writing are summarized referring to previous studies. Silva states that there are many studies which reported numerous stylistic differences between L1 and L2 writing. In general, L2 writing is found to be less complex, less mature and stylistically

appropriate. Thus, SIB use might be due to Turkish learners' preference for less formal connectives.

Regarding the syntactic properties of SIB, it was observed in the present study that both groups of students used SIB more with an adjacent Arg1. Thus, nonadjacency of the argument or its location in multiple previous sentences was not a distinguishing factor in the corpora for SIB use. On the other hand, genre might be a factor that explains the lower percentage of SIB in both corpora when compared to CIB use. Although approximately 40% of *buts* in TICLE were sentence initial, there was a lower percentage of SIB in ALOCNESS. Thus, an awareness of the genre they are writing in might lead both groups of students to use less SIB than CIB. Genre argument is more applicable to explain the case of SIB in ALOCNESS rather than TICLE. The higher percentage of SIB in TICLE might be explained with a lack of awareness on the genre requirements regarding SIB use.

Another factor that may account for SIB use is the function of the structure. The present study showed that the use of SIB with its expansion meaning, which is similar to the topic shift function mentioned by Bell (2007), was not frequent in the corpora. On the other hand, regarding the emphasis function, it was very difficult to decide whether SIB is used to emphasize Arg2 and to argue that in CIB use, there is no such emphasis. For instance, in example (91) where SIB is used, there is a clear contrast between the arguments and for sure, the student may want to emphasize this contrast. In example (92), there is also contrast between the arguments but it is not possible to claim that the student does not emphasize Arg2 due to CIB use. Thus, the function of emphasis is rather difficult to decide. An analysis of *but* in spoken discourse, which is not in the scope of the present dissertation, might resolve the issue.

- (91) Some people don't really care whether or not Marquette has grass. **But**(65) other students from out of town view it differently. (ALOCNESS, 31)
- (92) ...when someone kills somebody he is guilty, **but**(1) when the government apply this punishment, it's not a guilt. (TICLE, 1)

There are many cases of SIB where there was no particular function different than the functions CIB was also used for as in the above examples. This implies that in both corpora, SIB is often used in the same way as CIB is used.

#### **4.3** The Connective *however*

# 4.3.1 The Structural Analysis Results

The first part of DC analysis was the analysis for the structural realizations of the DC in discourse. The significance levels in the structural properties of *however* between the corpora are presented in Table 21. These results showed that there was a significant difference between the corpora concerning the position of the DC and no difference in other structural categories.

Table 21. Pearson Chi-square Test Results for the Structural Differences in Use of *however* Between the Corpora

Structural Categories	Pearson Chi-Square value Asymp. Sig. (2-sided
Order of arguments	0,144
Position of connective	0,009
Type of Arg1	0,090
Type of Arg2	0,204
Location of Arg1	0,099
	No difference (P>0.05)

A more detailed analysis of the structural properties are presented in Table 22 below with the Log-linear analysis findings. It was observed that in general, the DC was used in the same way in both corpora. The results regarding the argument ordering for the DC were as expected. The argument order for the DC however was Arg1-Arg2 order. The results concerning the position of the DC are interesting in that however was mostly a s-initial DC in both corpora as in (93). Though it was also used c-initially, this use was less frequent in both corpora. As for the types of the arguments, though in both corpora, the DC took parts of clauses and multiple

sentences as its left argument as in (96), the first arguments were generally full clauses as in (94). On the other hand, the corpora showed various uses of the DC concerning the location of Arg1. Arg1 can be in the same sentence, in the previous sentence, in multiple previous sentences and in a nonadjacent sentence or clause as in (93). It was for most of the time in the previous sentence, which also confirmed the s-initial use of the connective. Moreover, the DC also occured in a nonadjacent discourse unit in both corpora. The only difference in *however* use between the corpora concerns the sentence-final use and the free-in-Arg2 use of the DC. These uses, as in (95) and (96), were significantly more frequent in ALOCNESS when compared to the same uses in TICLE.

- (93) AIDS as a disease is actually relatively young, and therefore is not fully understood. We know how people can contract the disease, and we know the inevitable effects of this horrible illness when someone does contract it. However(21) in the short time that HIV and AIDS have been around hundreds, perhaps even thousands, have been denied a job, have been denied health insurance, and worst of all have been denied their dignity (ALOCNESS, 23)
- (94) I believe that the public has a right to be informed about anything and everything that they want to be informed about, and people want to be informed about the death penalty. *Therefore, media should have access to report on executions*. However(27), there access should be restricted to exclude any and all devices which could endanger security or safety of the people involved. (ALOCNESS, 27)
- (95) Jessica was two and a half years old, a time when a child recognizes his or her parents for food, shelter, and the other necessities of life. At that stage, however(34), the child cannot yet comprehend abstract concepts such as love. (ALOCNESS, 32)
- (96) In 1914 El Paso, Texas, enacted perhaps the first United States ordinance banning the sale or possession of marijuana; by 1931 twenty-nine states had outlawed marijuana. In 1937 Congress passed the marijuana Tax Act, effectively criminalizing the possession of marijuana throughout the United States. In 1970 the Comprehensive Drug Abuse Prevention and Control Act

finally differentiated marijuana from other narcotics and reduced federal penalties for possession of small amounts. As directed by Congress, President Richard Nixon appointed a bipartisan commission to study marijuana. In 1972 the Schafer Commission issued its report, advocating the decriminalization of marijuana for personal use- a recommendation that Nixon rejected. However, eleven states, containing a third of the country's population, decriminalized marijuana in the 1970's, and most states weakened their laws against it. The 1980's however(82) saw an enormous turnaround on the views on marijuana. (ALOCNESS, 76)

Table 22. The Standard Residual Values for the Structural Properties of *however* in TICLE and ALOCNESS

<b>Structural Categories</b>	ALOCNESS	TICLE	
Order of arguments	Arg1-Arg2	6,094	-3,711
	Arg2-Arg1	-2,597	-3,214
Position of the DC	Clause-initial	-3,827	-6,213
	Sentence-initial	7,650	,153
	Free in Arg2	11,765	-,988
	Sentence final	6,099	-,738
Type of Arg1	Part of a clause	,625	-,048
	Clause	4,203	-1,295
	Multiple sentences	3,590	1,230
Type of Arg2	Part of a clause	,155	-,973
	Clause	5,232	-1,426
	Multiple sentences	-,423	-,522
Location of Arg1	Same sentence	-4,343	-7,228
	Previous sentence	10,173	-,686
	Multiple previous sentences	3,891	1,104
	Nonadjacent sentence\clause	5,499	3,770
No difference of us	e: 1,96 < Standard re	esidual value (SR)	) <-1,96

#### 4.3.2 The Sentence-Initial however

S-initial *however* (SIH) occurred in both corpora as well as c-initial *however* (CIH). Table 23 shows the tokens and the percentages of SIH and CIH uses. While calculating the percentages, other possible locations of the DC in the corpora were also taken into account. However, it is clear that rather than the free-in-Arg2 use and the sentence-final use, SIH and CIH uses were more frequent. That explains the reason these uses are not represented in the table. The percentages in the table confirmed that *however* was frequently used in s-initial position in the corpora.

Table 23. SIH and CIH Use in the Corpora

	SIH			СІН
	Tokens Percentages		Tokens	Percentages
TICLE	58	82,85%	11	15,71%
ALOCNESS	83	70,33%	14	11,86%

The structural property analysis of SIH showed that for most of the time, it took an adjacent sentence as its left argument. Moreover, the function of SIH did not seem to be different than that of CIH and it was also used in contrast, concession and expansion senses. On the other hand, there were also cases where Arg1 was nonadjacent to the connective and as in the analysis for SIB, the discourse relation of the intervening material between Arg1 and Arg2 was found to be subordination as shown in the examples below. In the examples, the intervening material elaborates on the reason of Arg1:

(97) One of my friends wanted to wear the dress special for Santa Claus. He had thought that this idea would have been both effective in teaching and this would have been a good way of drawing students attention. However(18), the school director strictly rejected this idea by implying that we do not have Santa Claus in our culture (TICLE, 58)

(98) As a student, I believe that establishing honor codes is the best method for combating cheating. Establishing true competition allows students to excel

honestly. I have seen others cheat and get a better grade as a result. If we had an honor code at Marquette, I would feel an obligation to myself and to my university to turn cheaters in. However(56), when taken in account the effects of peer pressure, honor codes are weakened (ALOCNESS, 44)

In (99), the student explains the result of Arg1.

(99) Abortion is an operation to end a pregnancy, causing the baby inside to die. It was more common in our country fifteen years ago, as most of the people in our country were not aware of the ways of how to avoid pregnancy. So, they were often getting pregnant and then they were having abortion when they didn't want the baby. However(39), today, most of the people are educated in our country and so they are conscious of the harm of abortion. Also, they are aware of the ways of avoiding their getting pregnant. (TICLE, 93)

In three examples given here, the intervening materials function as elaborative or explanatory discourse units and they do not introduce totally new topic.

# 4.3.3 The Sense Analysis Results

The sense analysis results showed that there was no significant difference between the corpora concerning the senses established with *however* as shown in Table 24. The general tendency in both corpora was to use *however* for the opposition subtype of contrast relation more frequently than the juxtaposition sub-type of contrast relation as in (100).

(100) Thus, a large group of opponents to nuclear power are formed, they fear this new entity, seeing it as a dangerous and powerful threat to their lifestyles. However(6), the proponents see this new form of power as a great way for the United States to become independent from the Middle East's plentiful oil deposits which was a main issue in the Persian Gulf War. (ALOCNESS, 6)

Table 24. Senses Established by *however* in TICLE and ALOCNESS

Sense Categories		ALOCNESS	TICLE	Total	Pearson Chi-Square
Invitanceition	Count	28	13	41	,339
Juxtaposition	Percentage	68,3%	31,7%	100,0%	
Onnosition	Count	49	36	85	,287
Opposition	percentage	57,6%	42,4%	100,0%	
Pragmatic	Count	3	3	6	,544
contrast	percentage	50,0%	50,0%	100,0%	
Contra-	Count	0	2	2	,070
expectation	percentage	,0%	100,0%	100,0%	
Evenantation	Count	16	3	19	,035
Expectation	Percentage	84,2%	15,8%	100,0%	
Pragmatic	Count	3	1	4	,584
concession	Percentage	75,0%	25,0%	100,0%	
Eveneration	Count	18	12	30	,820
Expansion	percentage	60,0%	40,0%	100,0%	
Ambigious	Count	3	4	7	,292
	percentage	42,9%	57,1%	100,0%	
Total	Count	120	74	194	
Total	percentage	61,9%	38,1%	100,0%	

#### 4.3.4 Discussion on however Use

The study showed that *however* was a s-initial connective. In both corpora, *however* was mostly used in s-initial position but such a use was much more frequent in ALOCNESS. The qualitative analysis also revealed that SIH and CIH uses were not different in the corpora. SIH was used in the same way CIH was used. Regarding the position of the DC, in both corpora there were wider possibilities for *however*. The general tendency was to place the DC s-initially but in ALOCNESS, it can also be used in the free-in-Arg2 and sentence-final positions more frequently.

The high frequency of SIH use in both corpora is an interesting finding. There is also some data in the literature on the SIH use in professional writing. For instance,

Yoneoka (1998) compares British writing with American writing and reportes a difference in s-initial *but* and *however* use. She states that the use of SIH is more common in the American style of written academic English than in British one, and the opposite is true for SIB. This finding suggests that SIH and SIB uses vary depending on the type of English. In the present study, the comparative corpus belongs to the American students. Therefore, the preference for SIH rather than CIH might be explained with the type of English examined.

As far as the high frequency of SIH by Turkish learners is concerned, there is an evidence from another study for the L1 influence in such use. Zeydan (2008) investigates the use of four contrastive discourse connectives in a subcorpus of the Middle East Technical University (METU) Turkish Corpus. *Oysa* "however" and *ama* "but" were among the DCs examined in the study and the findings showed that although *ama* was frequently used in clause-initial position, *oysa* often appeared at sentence-initial position. The finding in relation to *oysa* in Turkish supports the finding regarding the *however* use in Turkish learners' essays. This suggests that the high frequency of SIH use in TICLE might be attributed to the high frequency of *oysa* use in Turkish writing. There might also be other factors explaining SIH use but this issue is beyond the scope of this study.

There was not a significant difference in use between the corpora in relation to the types of arguments. Although it was not a statistically significant difference, there was a slight difference concerning the location of Arg1 in discourse. It was found that in ALOCNESS, Arg1 of *however* can be in multiple previous sentences and a nonadjacent discourse unit more often compared to the use in TICLE.

# 4.4 The Connective *although*

# 4.4.1 The Structural Analysis Results

The structural analysis showed that there was not a statistically significant difference in the structural properties of the DC between the corpora as shown in Table 25.

Table 25. Pearson Chi-Square Test Results for the Structural Differences in use of *although* Between the Corpora

Structural Categories	Pearson Chi-Square value Asymp. Sig. (2-sided
Order of arguments	0,086
Position of connective	0,118
Type of Arg1	0,145
Type of Arg2	0,217
Location of Arg1	0,243
	No difference (P>0.05)

A more detailed analysis of the structural realizations of the DC with the Log-linear analysis is presented in Table 26 below. The statistical analysis showed that the argument ordering of the DC was Arg2-Arg1 for most of the time in both corpora. That is, the DC was used in s-initial position. Regarding the types of the arguments of the DC *although*, there was no significant difference between the corpora and the arguments were for most of the time full clauses. Similarly, there was no difference between the corpora regarding the location of Arg1, and Arg1 was the same sentence with the DC for most of the time. These findings can be observed in the following example:

(101) Although(1) men and women are said to have the equal rights, in all societies of the world, the men are one step forward from women (TICLE, 3)

Table 26. The Standard Residual Values for the Structural Properties of *although* in TICLE and ALOCNESS

Structural Categorie	S	ALOCNESS	TICLE	
Order of arguments	Arg1-Arg2	-5,143	-5,376	
	Arg2-Arg1	17,885	15,050	
Position of the DC	Clause-initial	-3,148	-2,492	
	Sentence-initial	4,062	1,823	
	Free in Arg2	-,921	-,258	
	Sentence final	-,423	-,522	
Type of Arg1	Part of a clause	-1,917	-1,096	
	Clause	1,651	,357	
	Multiple sentences	-1,583	-1,956	
Type of Arg2	Part of a clause	-1,821	-1,357	
	Clause	1,106	-,114	
	Multiple sentences	-,299	-,369	
Location of Arg1	Same sentence	4,094	3,839	
	Previous sentence	-3,112	-4,225	
	Multiple previous sentences	-1,525	-1,885	
	Nonadjacent sentence\clause	-1,706	-2,108	
No difference of use: 1,96 < Standard residual value (SR) <-1.96				

# **4.4.2** The Sense Analysis Results

The sense analysis results with the Pearson Chi-square findings are presented in Table 27. As shown in this table, there was no significant difference between the corpora regarding the senses established with this DC.

In both corpora, *although* seems to be used more frequently in expectation relation than any other type of relations. This relation is present when Arg2 creates an expectation that Arg1 denies as in (102) and the contra-expectation relation holds in very few cases as in (103):

(102) Although(2) many concepts in science can be supported by a tremendous amount of evidence and are accepted by many people, they are still ideas and it is possible they could be wrong (ALOCNESS, 1)

(103) His family way very proud of him, although(26) they did not know much about what he was doing. (ALOCNESS, 49)

Table 27. Senses Established by *although* in TICLE and ALOCNESS

Sense Categories		ALOCNESS	TICLE	Total	Pearson Chi- Square
Juxtaposition	Count	8	2	10	,011
	Percentage	80,0%	20,0%	100,0%	
Opposition	Count	6	6	12	,562
	Percentage	50,0%	50,0%	100,0%	
Pragmatic contrast	Count	0	1	1	,390
	Percentage	,0%	100,0%	100,0%	
Expectation	Count	23	41	64	,079
	Percentage	35,9%	64,1%	100,0%	
Contra-	Count	3	1	4	,176
expectation	Percentage	75,0%	25,0%	100,0%	
Pragmatic	Count	0	4	4	,081
concession	Percentage	,0%	100,0%	100,0%	
Expansion	Count	1	2	3	,750
	Percentage	33,3%	66,7%	100,0%	
Total	Count	41	57	98	
	Percentage	41,8%	58,2%	100,0%	]

There were also some cases where the DC was used for a contrast relation as in the following example:

(104) Although(17) they do not have the right to film or take pictures during the actual event of the execution, or to film any member of the execution staff, they do have a clear right under the First Amendment to inform the public of the executions. (ALOCNESS, 27)

# 4.4.3 Discussion on although Use

One clear finding was related with the linear order of arguments of *although*. In both corpora, the linear order of arguments was Arg2-Arg1 for most of the time.

That is, the subordinate clause was preposed in both corpora. The sense analysis results showed that *although* was used for the expectation relation for most of the time where Arg2 creates an expectation that is denied in Arg1. Therefore, the high frequency of Arg2-Arg1 order might be due to the fact that in the concession type relation, the writer prefers to present the expectation that is denied later in Arg1. It might be that reading the expectation first and the denial of the expectation later is easier to process for the reader.

This finding is quite similar to the finding by Prasad, Miltsakaki, Joshi, and Webber (2004) in their study of the PDTB corpus. They report that when they examined all instances of *although* and *eventhough* in the corpus, in 46% of the occurences, the linear order of the arguments were Arg1-Arg2 and in 54% of the occurences, the linear order was Arg2-Arg1. Moreover, when Williams and Reiter (in Prasad, et. al., 2004) examined 342 texts from the PDTB corpus, they reported that 77% of the instances of the concessive relations appeared in the order Arg2-Arg1. Within the DCs establishing the concessive relations, there were eleven instances of *although*, three instances of *eventhough* and the others were the instances of *but*, *however* etc. (in Prasad, et. al., 2004).

Within the Relevance theoretical framework, Iten (2000) provides a comprehensive explanation for the difference in use between the structures P although Q and Although Q, P in its concession meaning. Iten explains her argument with the following example:

(43) Peter went out although it was raining. Q although P

(44) Although it was raining, Peter went out. Although P, Q

In *P although Q*, the hearer processes Q and then *although* indicates that there is an inference from P that s/he has to suspend because it would result in a contradiction. When reading P the assumption that people do not usually go out if it's raining becomes immediately accessible. This assumption licenses an inference from *it was raining* to *Peter didn't go out*, which would contradict the proposition expressed by Q (i.e. *Peter went out*). One last interesting observation in this account is the

difference in acceptability or ease of processing between utterances of the form Q although P and Although P, Q. According to Iten (2000), there is a tendency to prefer utterances of the form Although P, Q,. It seems plausible that the subordinate clause precedes the main clause particularly in concession meaning. The subordinate clause expresses an expectation that is denied by the main clause. It is easier for a reader to recognize the denial of an expectation that is already mentioned.

# 4.5 The Interpersonal Metadiscourse Functions of Three DCs in the CCR Pattern

#### **4.5.1 Results**

The present study showed that in addition to the textual functions the three contrastive DCs serve, they have interpersonal metadiscourse functions as reported in the literature (Schiffrin, 1987; Barton, 1995). The analysis of the interpersonal metadiscourse functions of the three DCs showed that in both corpora the three DCs were mostly used to introduce claims in support of the writer's main argument as shown in the examples from the corpora below. Table 28 displays the mean scores of these functions in the corpora and the level of significance between the mean scores.

Table 28. The Interpersonal Metadiscourse Functions of *but*, *however* and *although* in the CCR Pattern

	Mean Scores		Level of
Interpersonal metadiscourse functions in CCR pattern	ALOCNESS	TICLE	Significance $(p < 0.05)$
Supporting claims	2,75	3,70	0,483
Introducing counterarguments	0,30	0,05	0,000
Introducing/strengthening refutations	0,90	0,33	0,047

In each example, both arguments of the DC are in support of the thesis. Although there may be a contrast relation between the two discourse segments, the DCs present the claims in support of the thesis. That is, the contrast relation is present not because the student intends to state a counterargument or refutation but because the student emphasizes the claim with the contrast relation. The function of that discourse segment is to support the thesis further with a contrast relation:

- (105) Another inequality in our society resulting from our ethical principles is seen in the most important period of all individuals, in which the children are acquiring their sexual identities. <u>Although(2)</u> there are magnificent celebrations for boys under the name of "sünnet düğünü", the passing of the little girls from the childhood to the youth is kept secret (TICLE, 3)
- (106) The proponents know nuclear waste is harmful and acknowledge that, <u>but</u>(15) their argument is that there is just so little of it out there, and today's storage techniques are so advanced, there is nothing to worry about. (ALOCNESS, 6)
- (107) On the earth, people are trying to live in peace and comfort. <u>But(7)</u>, in order to achieve the peace and comfort, they are to fit several basic principles at the same time. (TICLE, 3)
- (108) In my opinion the knowledge which is learnt theoretically, is exposed to be forgotten and its permanence is very little value. <u>However(22)</u>, I think if we present education in a practical way and enable their participations to the lessons, it will be more permanent. (TICLE, 65)

On the other hand, the contrastive DCs are also known to function as a device to state the counterargument to one's own argument and to signal the start of a refutation in argumentative writing. The present study revealed that the three DCs were used less frequently in the stated functions in the corpora. In ALOCNESS, the refutation technique with the use of *but* and *however* was more often used when compared to the use in TICLE. The following examples display the use of *but* and *although* in counterargument and refutation. In example (109), the student is against prayers in public school and uses *although* to state the opponents' argument after

which s/he states a refutation. In (110), the student is against the idea that euthenesia is a sin and uses *but* to signal a refutation to the idea that it is a sin.

(109) Although(10) supporters of prayer in public schools are trying to inspire youth to return to religion and the morals that go along with religion, they would actually be doing the students a great disservice by forcing a bland prayer upon them.

(110) Again people think that euthanasia is sin <u>but(272)</u> the sin is actually belong to them because they prevent euthanasia and they suffered ill people in pain. (TICLE, 82)

The qualitative analysis on the functions of the DCs in argumentation revealed that the lower percentage of DC use in CCR pattern was not an issue on its own because it was observed that even without these DCs, this pattern of argumentation was not followed in TICLE. In TICLE, the arguments were developed with the statement of claims rather than counterarguments and refutations to these opposing views.

#### 4.5.2 Discussion

The study revealed that the function of the DCs in the argumentation in the corpora was mainly to develop the arguments in support of the thesis of the essay. This is an interesting finding as one would not expect the writer to introduce the claim statements that are used to support the thesis with the contrastive DCs. The contrastive DCs are often expected to be used introducing a counterargument to the thesis or at the start of a refutation to a counterargument as in such cases there is clearly a contrast between the two segments of discourse: a counterargument presented against a claim or a refutation against a counterargument to the thesis. However, the present study showed that both the native speakers and the Turkish learners used the three contrastive DCs more often for introducing claims in support of the thesis than for the counterarguments or refutations.

The study also showed that the counterargument-refutation pattern of argument development was not a preferred pattern in TICLE. It is interesting to see that although the corpora consisted of argumentative writing, in TICLE, the students did

not state the counterarguments and refute them as often as the native speakers. The acknowledgement of counterarguments and refutation of these arguments is an important feature in argumentation but the essays in TICLE did not confom to this pattern of argument development.

The lower percentages of cases in TICLE where the counterarguments were stated and refuted might be attributed to various different factors which need to be investigated in another study. Therefore, it will suffice here to mention only a few that might have contributed to the above mentioned problem in L2 writing. One reason could be the students' developing competence regarding the requirements of argumentative writing and an awareness of reader-oriented focus in writing. Acknowledging the reader's possible objections to the thesis of the essay and refuting these objections with logically developed arguments requires the writer to be reader-oriented. This feature is a crucial aspect of argumentation and persuasion. However, the ability to construct more complex argumentative relations such as counterarguments and refutations seems to develop later as the students become more competent in writing. Another reason of the underuse of counterargumentrefutation type of organization by Turkish learners when compared to native speakers might be the inadequate L2 resources. Schoonen, Snellings, Stevenson, and Gelderen, (2009) state that "below a certain threshold of FL linguistic knowledge, the writer will be fully absorbed in struggling with the language, inhibiting writing processes such as planning or monitoring" (p.81). When students become more competent of L2, their attention to organization and development of argument increases, which in turn increases the quality of the texts. Therefore, good L2 proficiency is necessary, though not sufficient, for development of L2 writing. Still another reason to explain the underuse of counterarguments and refutations might be that the students know the necessity of including these types of arguments in their writing but they may not have the adequate L2 resources to express the ideas or may not know the way to express such arguments. In that case, the source of the problem might be the L2 instruction.

#### 4.6 The Other Lexical Items in Argumentation

#### **4.6.1 Results**

This analysis aimed at revealing the argumentative nature of the essays in the corpora and the lexical resources other than the contrastive DCs used to develop arguments and to signal the argumentative nature of a writing. An important observation during the analysis for the contrastive DC use in the CCR pattern that inspired an analysis on other lexical items was that native speakers tended to use some lexical items that strengthen the argumentative nature of the discourse mode whereas such lexical items seemed to be underused by Turkish learners. This analysis concerned the search for the lexical items that were expected to be present in the essays as argumentative texts. An independent-samples t-test was conducted to compare the use of these lexical items in TICLE and in ALOCNESS.

Table 29 below shows the mean scores of each category in each corpus and the level of significant difference between the corpora. As shown in Table 29, there was a significant difference in the frequency of use between the corpora in 5 of the lexical categories examined. These categories concerned the use of lexical items carrying modal meanings, contrastive DCs in counterarguments, lexical items to describe claims and counterarguments and those that signal the argumentative nature of the text. These results suggest that the essays examined in TICLE and ALOCNESS showed different patterns of use regarding the lexical items that were expected to be used in argumentative writing.

As can be observed in the table below, the highest mean score among the categories of lexical items in both corpora was the use of modal verbs. This finding suggests that the modal verb category was used more frequently than any other category of lexical items in the essays. The modal verb category was followed by the category of lexical items carrying modal meanings in both corpora. However, the mean score for the latter category in ALOCNESS was significantly higher than that in TICLE. This finding suggests that in the essays from ALOCNESS, the lexical items carrying modal meanings were used significantly more than the essays in TICLE.

Table 29. The Lexical Items that Signal the Argumentative Nature of the Essays

Category of Lexical	Mean Scores		Level of	
Items	ALOCNESS	TICLE	Significance (p < 0.05)	
Modal verbs	14,83	13,58	0,432	
Lexical items carrying modal meaning	14,70	7,83	0,000	
Problem-solution pattern	2,15	0,90	0,010	
Lexical expressions to describe claims	0,88	0,00	0,000	
Lexical expressions to describe counterarguments	0,68	0,00	0,000	
Other lexical items signalling the argumentative nature	6,93	0,85	0,000	

The examples below show the uses of the modal verbs and the lexical items carrying modal meanings. In example (111), the student argues against the application of capital punishment by the government and makes a strong assertion with the use of *should* to discuss how the problem can be solved. The use of the lexical item here strengthens the claim the student makes. In example (112) and (113), the student expresses certainty of the claim with the use of *clear*, *actually* and *obvious*. On the other hand, in (114), the student introduces a counterargument to the use of nuclear power plants with the verb *assume* which implies doubt on the part of the writer. The student, then, refutes the argument making the refutation stronger with a certainty expression *actually*.

- (111) At this point, the role of the government is to find the solution of this problem and then according to the founded solutions the government should solve the main problem. (TICLE, 1)
- (112) Whether or not a reader agrees with the trueness of the Bible, it is <u>clear</u> that it has been established over time and is accepted all over the world. (ALOCNESS, 5)

(113) Some of them are <u>actually</u> insufficient in preparing the students for real world. It is <u>obvious</u> that these universities demand extending their proficiency in practicality. (TICLE, 59)

(114) People see the large exhaust towers associated with nuclear power plants and <u>assume</u> that they are releasing lethal gases into the air. <u>Actually</u> the towers are nothing more then large water cooling towers that emit nothing but water vapor and steam. (ALOCNESS, 6)

The present dissertation also examined the lexical items used to signal the problem-solution pattern of organization. Although there was no significant difference found between the corpora, the mean scores showed that lexical items in this category were used more often in ALOCNESS. This may suggest that the native speakers view the debatable issues as problems themselves or as creating problems to which they try to find solutions.

The use of any contrastive DC in claims, counterarguments and refutations was also investigated. It was observed that the contrastive DCs used in the CCR pattern were mostly but, however and although rather than the other contrastive DCs such as eventhough, in contrast, whereas, etc. It was shown that these contrastive DCs were more often used for claims rather than any other function in both corpora. On the other hand, they were also used for counterarguments and refutations in ALOCNESS more often than in TICLE. The analysis of the lexical items in Table 29 above in ALOCNESS clearly indicated that the essays in ALOCNESS conformed to the requirements of the discourse mode regarding its argumentative nature

In the following examples, (115) and (116) show the use of the DCs in the claim part of argumentation. In (117), the function of the connective is to present the counterargument to the general claim in the essay. The examples (118) and (119) show the use of the connectives for the refutation part of the argument:

- (115) In my point of view they do not see the exams as a war since they have nothing to lose. <u>But(10)</u> there is one thing that they have to struggle with in the exams and it is cheating. (TICLE, 4)
- (116) Beside these inventions there were so many health inventions in the 20th century like vaccines of plaque and hydrophobia, penicillin aspirin and so on. <u>However(6)</u> ultrasound was one of the inventions which really changed the people's life. (TICLE, 18)
- (117) <u>Although</u>(36) people think traditional way of marriages have more problems the results are changing in recent years. (TICLE, 86)
- (118) There is a strong movement in the United States to bring back prayer to the schoolhouse. The argument used to support the use of prayer in public schools, <u>however(19)</u>, relies too heavily on shaky speculation, fallacies, and fanaticism for effectiveness. (ALOCNESS, 22)
- (119) This may seem like an encouraging thought <u>but</u>(40) it nevertheless displays naïveté and wishful reasoning. (ALOCNESS, 22)

Still another finding regarding the lexical items used in argumentation was that in ALOCNESS, the use of lexical items to describe claims and counterarguments was significantly higher than the use in TICLE. The following examples show how these descriptive lexical items were used. In (120) and (121), the students are describing the strength of a claim in support of the thesis whereas in (122), the student weakens the strength of the counterargument with the use of negative words to describe it.

- (120) Those advocating the two-model approach not only present a <u>strong</u> argument, but they are also <u>effective</u> with the reasoning. (ALOCNESS, 1)
- (121) I think the argument that is portrayed by those who are in opposition to surrogate motherhood is very <u>credible</u>. (ALOCNESS, 9)
- (122) The claim that the death penalty is a superior deterrent is simply <u>weak</u> and <u>unsupported.</u> (ALOCNESS, 3)

The last category of lexical items examined in the essays was those that were not classified under any of the previous lexical item categories above but that also signal the argumentative nature of discourse. Regarding this category, the two corpora differed significantly. It was found that those lexical items were more often used in ALOCNESS than in TICLE. The following examples from the corpora show the use of these lexical items. In (123), the student introduces the topic as debatable creating two opposing groups. In (124), the student signals that there is a counterargument being introduced with the lexical items underlined. In (125), the student first introduces the topic as debatable with words such as *debated*, *controversial*, *dispute*, and *issue*. Then, s/he mentions the two opposing views to the issue.

- (123) The issue involving prayer in public schools has caused <u>conflict</u> to arrise between two <u>opposing</u> groups know as the Civil Liberties Group and the Conservative Religious Group. (ALOCNESS, 15)
- (124) Some <u>opponents</u> of this <u>argument</u> say that universities prepare students for real world and the reason for students not to be real searching individuals is that they must work in order to gain money and lead their lives so there is no time for them to deal with anything else. (TICLE, 68)
- (125) The scene from above is one that is being <u>heatedly debated</u> around the country. The <u>issue</u> of prayer in public schools has once again become <u>controversial</u> even after the 1962 Supreme Court decision that prohibited prayer in the public school classrooms. Because the <u>dispute</u> centers on religion and the first Amendment that prescribes freedom of religion, this <u>issue</u> has attracted two very <u>opposite</u> viewpoints. <u>Proponents</u> of prayer in public schools believe that a religious infusion is needed to balance the lack of values and the increasing rate of violence in society. The <u>opponents</u> hold, however(16), that prayer in public schools would destroy the separation of church and state, and that prayer will not be able to end the ills of society. (ALOCNESS, 17)

### 4.6.2 Discussion

### **4.6.2.1** Modality

As discussed in Chapter 2, expressing modal meanings is an important aspect of academic writing. The writers can strengthen or weaken the force of the statements with the use of these lexical expressions. The writer's choice of lexical items

definetly conveys some information about certainty and uncertainty of the writer about the statements. Hyland and Milton (1997) hold that the high value modal forms such as *always, never, certainly* and *actually* express certainty and other less determinate forms such as *possibly, probably, seem, would* and *perhaps* express qualification (hedging). Therefore, a writer's choice of a certainty marker can signal the nature of the statement as a claim or a counterargument. The use of such markers in argumentation can indicate the extent of the writer's conviction in the truth of the statement. It can also convey a degree of "deference and modesty to the audience" (Hyland and Milton, 1997, p.183) because the use of hedges or other uncertainty markers can help demonstrate a sensitivity to the views of the reader.

The study showed that the essays in TICLE and ALOCNESS depended mostly on the modal verbs to express certainty and qualification. On the other hand, the essays in ALOCNESS equally depended on the other lexical items expressing modal meanings. Turkish learners' dependence on modal verbs more than the other lexical items expressing modality and the significant difference in use between the two corpora concerning the other lexical items expressing modal meanings can be explained with various factors. However, as the investigation of these factors is beyond the scope of the present study, only some possible explanations will be provided here. One factor that might explain the reliance on modal verbs in TICLE is the Turkish learners' developing L2 linguistic competence. The lexical items of modality are various. For instance, Hyland and Milton (1997) point out that most often, L2 learners experience uncertainty in how to employ lexical verbs appropriately in stating claims and counterarguments. These verbs can be used by writers both to report their own claims or ideas and to demonstrate the attitude writers have towards others' claims. Similarly, Bloch (2010) argues that L2 learners often find it difficult to choose among the wide variety of these verbs that "can satisfy both the syntactic requirements of their sentences and, perhaps more importantly, to express their attitudes towards the claims" (p.221). Therefore, experiencing such difficulties with other lexical means of expressing modality, L2 learners might prefer to use modal verbs more than the other categories of lexical items presented in Table 29 above.

Another reason for the underuse of lexical items expressing modality may be the focus of instruction in the classrooms. Turkish learners of English have been learning the use of modal verbs even from the very early stages of language learning. However, the role of other lexical items expressing modality in argumentation does not receive as much attention as modal verbs receive in L2 instruction. The way these lexical items can be used to strengthen claims and to weaken counterarguments is largely ignored. As a result of this emphasis, Turkish learners might be depending on modal verbs to express certainty and qualification.

On the other hand, as novice writers, L2 learners might exprience problems in reflecting the audience awareness through the use of lexical items. The audience needs and expectations should be acknowledged in any discourse mode but in particular in argumentative writing because the purpose of this writing is to convince the reader towards a particular way of thinking. Therefore, the student is expected to make strong claims and to acknowledge the possible counterarguments, which need to be presented with a certain degree of certainty and qualification. Moreover, the genre the students are expected to write in also requires the students to convey a degree of modesty and deference to the audience. Thus, awareness of the audience requires an appropriate use of lexical items expressing modality.

# **4.6.2.2.** Lexical Items Describing the Claims and the Counterarguments and Those Others Signalling the Argumentative Nature

The present study showed that in ALOCNESS, the lexical items describing claims, and counterarguments and those other lexical items that have a role in signalling the argumentative nature of the text were more frequent as compared to the use in TICLE. This finding implies that Turkish learners did not strengthen the claims and weaken the counterarguments with lexical items expressing their own viewpoints about those arguments. Moreover, they did not often signal the debatable nature of the topic they chose. This can be easily observed when the essays are examined in detail. Such an analysis showed that Turkish learners in general did not acknowledge the possible counterarguments and did not often introduce their topics as debatable in their essays.

The lack of counterargument-refutation pattern in the essays in TICLE might be attributed to various factors, which is out of the scope of the persent study. However, some possible explanations can be provided here. For example, these findings might be attributed to Turkish learners' developing awareness of discourse mode requirements. The discourse mode they are writing in requires the writers to strenghten their claims and to weaken the counterarguments with refutations. While they are doing so, they need to use the appropriate lexical items that will enable the writers to convey such organization and to realize the purpose of the discourse mode. However, the findings of the present study suggest that Turkish learners tended to develop their arguments by stating their claims and by frequently using the modal verbs rather than other categories of lexical items examined. They did not acknowledge the possible opposing views and thus, did not weaken these views. The factors underlying such a tendency in Turkish learners' argumentative essays can only be clarified through further analysis, which can be the focus of future research on the analysis of CCR pattern in Turkish learners' essays.

The discourse mode awareness also requires audience and purpose awareness. When learners have inadequate awareness of audience and purpose, they do not produce texts with counterarguments and with various lexical items expressing degrees of certainty and qualification. Lee (2006) summarizes the causes of the problems L2 learners experience in argumentative writing as "incomplete understanding of rhetorical situations, such as writers' purpose and audience variables in an academic discourse community" and "lack of skills in manipulating the use of interpersonal resources of English such as genre structure, the grammar of mood and modality, evaluative language, contextualisation cues of opinion markers, and citations" (p.10). Lee (2006) argues that skilled writers have an awareness of the needs of their readers and structure their texts accordingly by making their texts more considerate of and accessible to readers.

To sum up, the findings concerning the use of contrastive DCs in CCR pattern and the lexical items signalling the argumentative nature of the essays suggest that the contrastive language in the essays in ALOCNESS involved the use of various different lexical items to convey the argumentative nature of the discourse mode. Moreover, the counterargument-refutation pattern of argumentation was used more often in ALOCNESS to develop arguments. Within this pattern of argumentation, the three contrastive DCs were used more often when compared to the use in TICLE. On the other hand, in TICLE, there was an underuse of the counterargument-refutation pattern of argument development and the arguments were mostly developed with the statement of claims. As this pattern of argumentation was less frequent, the use of the three DCs in this pattern was also less frequent when compared to the use in ALOCNESS. In addition, there was a frequent use of modal verbs than any other lexical category in TICLE.

### 4.7 Summary

The present study revealed interesting patterns of use regarding the three contrastive DCs in argumentation. While the first part of the study reported findings in relation to the structural and sense realizations of the DCs in the microstructural level of discourse, the second part reported findings in relation to the interpersonal metadiscourse functions of the same DCs in the macrostructural level, that is, the CCR pattern of argumentation. The findings from ALOCNESS and TICLE were presented in a comparative way to shed light on the differences and similarities of DC use by native speakers and Turkish learners of English. This chapter showed that the use of three DCs did not differ between the corpora regarding the first part of the analysis while some differences were observed regarding the second part of the analysis. It can be concluded that the essays in ALOCNESS and TICLE showed similar patterns of *but*, *however* and *although* use in terms of their structural and sense realizations. On the other hand, it was found that the essays in the corpora showed different patterns of *but*, *however* and *although* use in the CCR pattern of argumentation.

### **CHAPTER V**

### CONCLUSION

In the present study, a learner corpus (the Turkish subcomponent of ICLE) and a native speaker corpus (The American subcomponent of ALOCNESS) were analyzed comparatively regarding the use of three contrastive connectives (but, however, although) both at the microstructural and the macrostructural levels of discourse. In the present study, a discourse connective is defined as a word, phrase or pair of words which relate two discourse segments such as events, states, facts, situations, questions, commands etc., and it is drawn from three grammatical classes (coordinating conjunctions, subordinating conjunctions and adverbial connectives). The selection of the particular connectives analyzed in the study was motivated by the fact that they were frequently used in argumentative discourse, that they were the most frequently used contrastive connectives in both corpora in the study and that each of them represented a different syntactic class. The connective but is a coordinating conjunction, although is a subordinating conjunction and however is a discourse adverbial. These connectives encode discourse relations of the comparison type in PDTB's sense hierarchy (Prasad et al., 2008). In Halliday and Hasan's (1976) terms, the three connectives are categorized as adversative connectives showing concession (denial of expectation). In Fraser's (1998) terms, the core meaning conveyed with but and however is simple contrast, which also includes the concession meaning. Although, on the other hand, conveys concession relation and adversative relation (the incompatibility is between an implication of the first clause and an implication of the second clause) (Iten, 1998).

It was hypothesized that since these connectives are the most frequently used connectives in the corpora used in this dissertation, their investigation would yield interesting results about how Turkish learners form contrastive discourse relations

in argumentative essays. The use of these discourse connectives was investigated at two levels. At the microstructural level, the structural properties and sense categories (i.e., the textual metadiscourse functions) in TICLE were analyzed in comparison to the American subcomponent of ALOCNESS. At the macrostructural level, the study comparatively examined the use of the connectives in the claim-counterargument-refutation pattern of argumentation in relation to their interpersonal metadiscourse functions. This chapter will summarize the main findings, conclude the study with possible implications of the findings and end with some future research suggestions.

In this section, the findings of the study and the interpretation of these findings will be summarized. The findings regarding the microstructural level will be presented first, followed by the findings of the macrosructural level analysis. The summary of the findings will be followed by the summary of the interpretation of these findings.

# 5.1. Summary of the Findings

# **5.1.1.** The Microstructural Level Analysis

The descriptive statistical analysis of the discourse connective use revealed the following: *but* was the most frequent connective of the three connectives analyzed in both corpora, *but* was overused in TICLE and *however* was more frequent than the others in ALOCNESS.

Regarding the structural properties of *but*, the main findings are as follows. Firstly, it was a clause-initial connective in both corpora. A noticable difference between its use in the corpora was that *but* was also used sentence-initially more in TICLE. The function of the sentence-initial *but* and clause-initial *but* in both corpora did not seem to differ, which shows that the sentence-initial *but* did not have any special function or structural property different than that of the clause-initial *but* in the corpora. The structural analysis of the sentence-initial *but* in the corpora revealed that it differed from the use of the sentence-initial *but* in authentic texts analyzed in other studies in the literature (e.g., Quirk et. al., 1972; Bell, 2007; Yoneoka, 1997, 1998; Biber et. al., 1999; Webber and Prasad, 2008). The research on authentic

texts showed that sentence-initial but is used when the second argument is linked with more than one sentence (Quirk et. al., 1972), and that the sentence-initial but takes multiple sentences and nonadjacent Arg1 (Webber and Prasad, 2008). Moreover, it can be used when there is a special emphasis on the second argument. It can also be used more in informal texts and spoken discourse (Yoneoka, 1997, 1998). It is mostly used to add a further element to the previous set of arguments, to shift the topic domain and to mark off idea units (Bell, 2007). It is less frequent in academic prose though still present (Biber et. al., 1999). However, the findings of the present study showed that the sentence-initial but took an adjacent sentence as its Arg1, it was used for establishing simple contrast relation between Arg1 and Arg2, and its use was quite frequent in both corpora.

The analysis of *however* in the corpora showed that it was a sentence-initial connective in both corpora. The location of the connective was not restricted to the sentence-initial position and it was also used clause-initially. The position of the connective as clause-initial or sentence-initial did not exhibit any differences in the structural or sense realizations of the connective in discourse. That is, the connective was used in similar ways in both positions in the corpora. The corpora showed various uses of the connective concerning the location of Arg1. Arg1 was in the same sentence, in the previous sentence, in multiple previous sentences and in a nonadjacent sentence or clause. The only difference in *however* use concerns the sentence-final use and the free-in-Arg2 use of the connective. These uses were significantly more frequent in ALOCNESS when compared to those in TICLE.

The connective which did not exhibit any differences between the corpora was *although*. The argument ordering of the connective was Arg2-Arg1 for most of the time in both corpora, the connective took full clauses as its arguments, and was in the same sentence with its Arg1.

Regarding the sense analysis of the three discourse connectives at the microstructural level, there was not any difference between the corpora. Both groups of students tended to use *but* and *however* in their contrastive sense more

often than their concessive sense and *although* in its expectation sense. Thus, it can be concluded that the three connectives serve similar textual functions in the corpora.

### 5.1.2. The Macrostructural Level Analysis

Moving on to the macro-level properties, the study revealed that in both corpora, the three discourse connectives were mostly used for the claim statements rather than for the counterarguments or refutations. On the other hand, it was found that these discourse connectives were used significantly more for the counterarguments and the refutations in ALOCNESS than in TICLE. Further analysis on the claim-counterargument-refutation pattern of organization in TICLE revealed a related fact; namely that the counterargument-refutation pattern was used less often in TICLE than in ALOCNESS. So, while the arguments in TICLE were developed with the claim statements rather than with the statement of counterarguments and the refutation to these arguments, the essays in ALOCNESS adhered more to the requirements of the discourse mode, i.e., a variety of linguistic choices were employed.

Secondly, the analysis of lexical choices revealed that the essays in ALOCNESS carried more properties of the argumentative mode than the essays in TICLE from another perspective. The difference stemmed from the fact that in ALOCNESS, there were more frequent use of lexical items carrying argumentative functions (e.g., the lexical items carrying modal meanings, those used to describe claims and counterarguments, those signalling the argumentative nature of the text such as *controversy, argument, to disagree*). The higher frequency of such lexical items and the more frequent use of the claim-counterargument-refutation pattern in ALOCNESS show that American students adhered to the requirements of the argumentative writing in terms of lexicon and the expected pattern of argumentation whereas Turkish learners largely failed to do so.

To sum up, the conclusion from the microstructural level analysis is that the argumentative essays of Turkish learners of English and the American students did not differ significantly regarding the use of three discourse connectives. The

students tended to use these connectives often in similar ways at the microstructural level of discourse although few differences were observed as discussed in more detail in Chapter 4. However, the existing differences did not change this general finding (but see Section 5.1.2 for more discussion). However, at the macrostructural level of discourse, differences can be observed between the corpora regarding the use of three connectives in the claim-counterargument-refutation pattern and the argumentative nature of the essays.

### **5.1.3. Possible Explanations for the Findings**

The main difference at the microstructural level concerned the frequency of *but* and *however* use in the corpora. The high frequency of *but* as a contrastive connective in both corpora might be attributed to the fact that this connective is a more general connective that can also replace the other two connectives.

One constraint on connective choice in writing is the formality of the genre and the discourse mode. *But* as a contrastive connective is a more informal one when compared to *however*, as stated by Biber et. al. (1999). In formal argumentative essays such as the ones included in the two corpora examined, one would expect a lesser use of *but* and a higher preference of *however*. However, in Turkish learners' essays, the choice of *but* and *however* does not seem to be influenced by such formality requirements as there is a significant overuse of *but* and underuse of *however* in TICLE compared to ALOCNESS. Therefore, it can be concluded that Turkish learners' frequent use of *but* and *however* is not influenced by the genre and discourse mode constraints.

Overall, the findings regarding the structural and sense analysis of the three connectives did not reveal significant differences. There are only a few categories where differences were observed. One difference concerned the sentence-initial uses of *but* and *however*. The sentence-initial *but* and sentence-initial *however* were frequent but their use was not constrained by any structural properties or functions in the corpora. This finding suggests that neither Turkish learners nor American students used sentence-initial *but* and sentence-initial *however* considering the constraints on their use as reported in the literature.

As for the analysis at the macrostructural level, the findings imply that Turkish learners' essays did not fully conform to the requirements of the argumentative writing. An analysis of the quality of the essays (e.g., an analysis of the grades the essays received) was not conducted in the present study and therefore, the study does not claim any relation between the quality of the essays and the use of these lexical items or the pattern of argumentation followed. However, as discussed in Chapter 2, the argumentative writing as a discourse mode requires the acknowledgement of the possible counterarguments and refutation of these arguments. Moreover, as also argued in Chapter 2, the contrastive language and lexical items expressing modality are crucial aspects of argumentation. Therefore, it can be expected that the lack of these features will have a negative effect on the quality of writing. An analysis of teachers' or readers' comprehension of students' argumentative essays should be carried out in further research.

Although there might be several factors that contribute to the problem concerning the argumentative nature of the TICLE essays, the study does not aim to investigate these factors, as this is beyond the scope of the study. Therefore, it will suffice to state some possible factors here that might explain the reasons of the usage patterns in the corpora. One possible explanation for the less argumentative nature of TICLE essays may be that the students might experience difficulties in applying their knowledge of the discourse mode into writing, which might be due to the L2 instruction. In L2 classrooms, the discourse mode requirements might not be a crucial focus, the students might not have enough exposure to the samples of argumentative writing and they might not have enough practice in applying the requirements of the discourse mode into actual writing.

Another problem in the TICLE essays was that the lexical items that were expected to be present in an argumentative writing were used significantly less than they were used in ALOCNESS. This underuse of lexical items contributed to the problem in the overall argumentative nature of the essays in TICLE. Argumentative writing is not a very simple discourse mode to write in as it requires the writer to

manage claims and counterarguments simultaneously with the appropriate linguistic devices which have textual and interpersonal metadiscourse functions. As a result, the use of these lexical items is another main area to be emphasized in L2 classrooms.

# **5.2 Implications for Teaching**

The findings of the present study have implications for the field of English Language Teaching because it sheds light on the argument development patterns and the argumentative nature of the essays written by Turkish learners of English. It also provides insights into the structural properties and functions of connectives at the macrostructural and the microstructural discourse levels.

The problematic aspects found in the macrostructural level analysis can be solved with effective L2 instruction. The instruction in the classrooms can focus on the genre and discourse mode requirements of various text types. The instruction can clarify how lexical choices and organization patterns are shaped with the choice of a particular genre and discourse mode. As the present study concerns argumentative writing, the goal of argumentation and what this goal presupposes regarding the topic choice, thesis formation, the role of counterarguments and the argumentative nature of the essay can be explicitly taught. The instruction can focus on the awareness of the audience and its role in the organization of argumentation and the lexical choices.

The study showed that Turkish learners heavily depended on *but* as a contrastive discourse connective, and the modal verbs in argumentation. On the other hand, the native speakers depended not only on the three connectives and the modal verbs but also on other lexical items expressing modality. L2 learners' awareness might be raised about the significance of the wide range of linguistic resources to establish and maintain a relationship with the readers, to express one's evaluations, stance and point of view because the way writers express their attitude in argumentation can be achieved through such linguistic choices. Moreover, the L2 instruction can focus on the fact that academic argumentation requires the writer to boost and hedge their claims and the opposing views, and the learners should have enough

practice in using linguistic devices which will serve those functions. L2 teachers should raise an awareness of these issues.

The study showed that a common argumentation pattern preferred by Turkish learners is the statement and development of claims in support of the thesis without acknowledging opposing viewpoints. Therefore, while the focus of L2 instruction is on discourse mode requirements, the need to integrate both the supporting claims and the opposing views together with their refutation can be emphasized and practised. In that way, students learn to coherently manage conflicting arguments in a text with the use of appropriate linguistic devices that will signal argumentative moves in discourse.

As far as the connective use in argumentation is concerned, the instruction can emphasize the role connectives play in organization of the ideas and the moves the writer makes between larger discourse segments other than the low-level discourse relations. The instruction can focus on the multifunctional nature of the connectives and emphasize that the use of connectives with their interpersonal metadiscourse functions is important for acknowledging reader expectations. The instruction can indicate that connectives not only function at the microstructural level of discourse to relate two discourse segments, but also at the macrostructural level to organize arguments and to structure the moves the writer makes within the essay. The use of contrastive discourse connectives is an indespensable feature of argumentation. The writer uses contrastive connectives to call attention to the claim, to signal the move from one discourse segment to a different one and to signal a move from the counterarguments to the refutation of these arguments. Such functions can be explicitly highlighted in instruction for the students to manage different types of arguments more effectively in writing.

Although criticism is valued in argumentative writing, the opponents' arguments are critizised or refuted without being impolite and without violating the solidarity of the writer and the reader. This can not only be achieved with the appropriate use of contrastive connectives but also with the lexical items expressing modality as

discussed earlier in Chapter 4. Therefore, teachers may work with the learners to clarify the multifunctional uses of different lexical expressions such as connectives and modality-expressing lexical items and their role in successful argumentation.

Concerning the structural and sense realizations of connectives in discourse, the possibilities that each connective allows in discourse can be taught. Although Turkish learners did not have serious problems in relating two adjacent discourse segments with a connective, the types of arguments and the location of the first arguments did not show variety in TICLE. Therefore, students' awareness can be raised, for instance, on the fact that *however* and *but* might relate discourse segments that are not adjacent, that *however* can be located at various different places in the second argument and that the sentence-initial *but* and the sentence-initial *however*, as reported in the literature, can be used particularly for certain functions and with certain syntactic realization. Thus, although learners' use of connectives at the microstructural discourse level is not problematic, there are still aspects that can be improved with instruction.

### **5.3 Implications for Further Research**

The present study is restricted to the use of three contrastive connectives in argument development. To better understand the whole picture of L2 connective use in argumentation, further research can go beyond three connectives. With the analysis of other connectives in Turkish learners' essays, a complete picture of the connective use in argumentation can emerge. In addition to increasing the variety of connectives in the analysis, the role of other lexical items that are expected to be present in argumentation can be examined. For instance, future studies can investigate the role modality plays in L2 learners' argumentative essays and the way they hedge and boost their arguments in the essays.

In further research, other discourse modes of student writing can also be examined. Argumentation is a very common discourse mode in academic writing and requires competence not only in writing skills but also in effective argumentation skills. However, other discourse modes such as expository writing also need investigation

regarding connective use so that connective usage patterns in other text types can emerge.

Still another research area concerns the analysis of argumentation pattern and argumentative nature of essays written by students at different levels of proficiency. Since the data for the present study consisted of two student corpora, an analysis taking different proficiency levels into account was not possible. However, an analysis taking different level of proficiency into account has the potential to reveal other possible argumentation patterns and functions of connectives in argumentation, which may not have been observed in the present study. Moreover, the way Turkish learners develop arguments, and the functions of connectives in argumentation might be compared with the use in Turkish. Such an analysis would shed light on L1 transfer effect in connective use and in argument development. Finally, in order to understand the differences in the way argumentation is developed, professional writing from different languages might be compared. For instance, Turkish professional writing might be compared with English professional writing to investigate the similarities and differences in argument development and the connective use and the findings can be used to analyze Turkish learners' essays in English. Finding the differences and similarities in usage patterns will in turn inform L2 instructors.

### **5.4 Limitations**

The study has its own limitations. One of these limitations concerns the nonnative speaker data source, i.e., TICLE, which was collected from three universities in one region of Turkey. Nevertheless, the results will shed light on the use of three connectives in argumentation by Turkish learners of English at universities at a similar proficiency level.

The analysis regarding connectives was carried out manually on 120 essays from each corpus, and only three most frequent connectives in the data were analyzed. A limitation of connectives in terms of their type and number was necessary since the starting point of the research was a deep understanding of connectives belonging to different syntactic classes. This limitation allowed a detailed analysis of both the

structural features and the textual and interpersonal metadiscourse functions of connectives. However, the results of the analysis on three contrastive connectives may not be representative of connective use in general in the corpora.

Lastly, the dissertation examined the connectives to show the functions of connectives in clause linking as well as sentence linking in argumentative essays. However, it does not claim that only connectives can explain discourse coherence or argument development in discourse. Other linguistic devices which have a role in discourse coherence and argument development also need to be examined. However, it is clear that as a linguistic device, discourse connectives function both at the microstructural and macrostructural levels of discourse, both of which have implications for discourse coherence.

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# APPENDIX A

# THE LOG-LINEAR ANALYSIS RESULTS OF THE STRUCTURAL PROPERTIES OF BUT, HOWEVER AND ALTHOUGH

Table 30. The Log-Linear Analysis Results of the Structural Properties of but in TICLE and ALOCNESS

Structural Categories		ALOCNESS			TICLE			
		Observed	Expected	Standard	Observed	Expected	Standard	
		Percent	Percent	Residual	Percent	Percent	Residual	
Order of arguments	Arg1-Arg2	20,9%	23,7%	-1,902	45,2%	36,1%	5,559	
	Arg2-Arg1	,0%	2,3%	-4,486	,0%	3,5%	-5,574	
Position of the	Clause-initial	15,0%	12,5%	2,187	27,5%	19,1%	6,302	
connective	Sentence-initial	5,9%	12,7%	-5,992	17,7%	19,4%	-1,303	
	Free in Arg2	,0%	,6%	-2,238	,0%	,9%	-2,768	
	Sentence final	,0%	,1%	-1,025	,0%	,2%	-1,266	

Table 30 (continued)

Type of Arg1	Part of a clause	1,7%	2,5%	-1,420	5,1%	3,8%	1,997
	clause	17,8%	21,7%	-2,826	37,7%	33,2%	2,861
	Multiple	1,4%	1,7%	-,706	2,3%	2,6%	-,512
	sentences						
Type of Arg2	Part of a clause	1,3%	2,3%	-1,929	5,5%	3,4%	3,258
	Clause	19,6%	23,6%	-2,765	39,5%	36,0%	2,111
	Multiple	,0%	,1%	-,724	,2%	,1%	1,343
	sentences						
Location of Arg1	Same sentence	14,9%	14,6%	,258	26,9%	22,2%	3,353
	Previous sentence	4,3%	7,8%	-3,855	13,6%	11,9%	1,497
	Multiple previous	1,0%	1,6%	-1,265	2,3%	2,4%	-,176
	sentences						
	Nonadjacent	,7%	2,0%	-2,702	2,3%	3,0%	-1,193
	sentence\clause						
No difference of use: 1,96 < Standard residual value (SR) <-1,96							

Table 31. The Log-Linear Analysis Results of the Structural Properties of *however* in TICLE and ALOCNESS

		ALOCNESS				TICLE			
Structural Categories		Observed Percent	Expected Percent	Standard Residual	Observed Percent	Expected Percent	Standard Residual		
Order of	Arg1-Arg2	13,7%	8,1%	6,094	8,1%	12,3%	-3,711		
arguments	Arg2-Arg1	,0%	,8%	-2,597	,0%	1,2%	-3,214		
Position of the	Clause-initial	1,6%	4,3%	-3,827	1,3%	6,5%	-6,213		
connective	Sentence-initial	9,6%	4,3%	7,650	6,7%	6,6%	,153		
	Free in Arg2	2,0%	,2%	11,765	,1%	,3%	-,988		
	Sentence final	,5%	,0%	6,099	,0%	,1%	-,738		
Type of Arg1	Part of a clause	1,0%	,8%	,625	1,3%	1,3%	-,048		
	clause	11,1%	7,4%	4,203	5,6%	11,3%	-1,295		
	Multiple sentences	1,5%	,6%	3,590	1,3%	,9%	1,230		
Type of Arg2	Part of a clause	,8%	,8%	,155	,8%	1,2%	-,973		
	Clause	12,9%	8,0%	5,232	7,3%	12,3%	-1,426		
	Multiple sentences	,0%	,0%	-,423	,0%	,0%	-,522		
Location of Arg1	Same sentence	1,7%	5,0%	-4,343	1,0%	7,6%	-7,228		
	Previous sentence	8,2%	2,7%	10,173	3,6%	4,1%	-,686		
	Multiple previous sentences	1,5%	,5%	3,891	1,2%	,8%	1,104		
	Nonadjacent sentence\clause	2,2%	,7%	5,499	2,3%	1,0%	3,770		

Table 32. The Log-Linear Analysis Results of the Structural Properties of although in TICLE and ALOCNESS

		ALOCNESS			TICLE			
Structural Categories		Observed Percent	Expected Percent	Standard Residual	Observed Percent	Expected Percent	Standard Residual	
Order of arguments	Arg1-Arg2	,6%	4,0%	-5,143	1,7%	6,1%	-5,376	
	Arg2-Arg1	4,2%	,4%	17,885	4,5%	,6%	15,050	
Position of the	Clause-initial	,6%	2,1%	-3,148	1,7%	3,2%	-2,492	
connective	Sentence-initial	4,2%	2,2%	4,062	4,4%	3,3%	1,823	
	Free in Arg2	,0%	,1%	-,921	,1%	,2%	-,258	
	Sentence final	,0%	,0%	-,423	,0%	,0%	-,522	
Type of Arg1	Part of a clause	,0%	,4%	-1,917	,3%	,6%	-1,096	
	clause	4,8%	3,7%	1,651	5,9%	5,6%	,357	
	Multiple sentences	,0%	,3%	-1,583	,0%	,4%	-1,956	
Type of Arg2	Part of a clause	,0%	,4%	-1,821	,2%	,6%	-1,357	
	Clause	4,8%	4,0%	1,106	6,0%	6,1%	-,114	
	Multiple sentences	,0%	,0%	-,299	,0%	,0%	-,369	
Location of Arg1	Same sentence	4,6%	2,5%	4,094	6,3%	3,8%	3,839	
	Previous sentence	,1%	1,3%	-3,112	,0%	2,0%	-4,225	
	Multiple previous sentences	,0%	,3%	-1,525	,0%	,4%	-1,885	
	Nonadjacent sentence\clause	,0%	,3%	-1,706	,0% Standard r	,5%	-2,108	

### APPENDIX B

### **CURRICULUM VITAE**

# **Personal Information**

Name, Surname : Didem Özhan

Date of Birth : May 08, 1979

Nationality : Turkish

Marital Status : Married

Home number : +31 70 7853671

GSM Phone : +31 64 5962118

E-mail : ozhandidem@gmail.com

Address : Distelweide 63, 2272 VR, Voorburg, Netherlands

# **Education**

Sep., 2004 – Cont. Middle East Technical University, Ankara

Doctor of Philosophy, Department of Foreign

Language Education

Sep., 2001 – Jun., 2004 Middle East Technical University, Ankara

Master of Arts, Department of Foreign Language

Education

Sep., 1997 – Jun., 2001 Middle East Technical University, Ankara

Bachelor of Arts, Department of Foreign Language

Education

### **Prizes and Awards**

- Finished PhD. courses with a high honor degree
- Graduated from MA with a high honor degree
- Ranked first at the department in the BA graduation

### **Reseach interests**

- Second/Foreign language acquisition
  - ➤ L2 proficiency in four skills, L2 writing, the use of language in academic settings
- Curriculum development
- Program evaluation

### **Work Experience**

Sep., 2001 – Nov., 2008

Middle East Technical University, Department of Modern languages Faculty Member - Instructor of English

- Teaching courses of Academic English
  - o Development of Academic Reading and Writing Skills I
  - o Development of Academic Reading and Writing Skills II

These first-year English for Academic Purposes (EAP) courses are learner-centered courses and focus on the skills of academic reading, writing, listening and speaking. They revolve around thematic modules and aim at developing critical thinking skills, which enable students to become confident lifelong learners.

Academic Presentation Skills

This research-based course aims at developing academic oral presentation skills by engaging students in classroom discussions following advanced reading texts in and outside the classroom.

Working in the testing committee

This committee prepares the midterm and final exams of the three courses offered by the department.

Working in the materials development committee

This committee develops the course materials including the supplementary tasks and reading texts.

Working in the METU Proficiency Exam committee

As a part of this committee, I participated in the evaluation process of the exam papers each semester.

### **Trainings, Certificates and Conferences**

- Certificate for Overseas Teachers of English from University of Cambridge (Sep., 2001)
- In-service teacher training at the Middle East Technical University, Department of Modern Languages (Sep., 2002 Jun., 2003)

### Papers presented at conferences

- Özhan, D. (2004). In Search of a Taste of Coherence in Academic Writing. Paper presented at the 3rd International Joint ELT Conference: Theory and Practice of TESOL, Trakya University, Edirne-Turkey.
- o Özhan, D & Zeyrek, D. (2006). Overpassivization in the Interlanguage of Turkish learners of English. Paper presented at the 16th Annual Conference of the European Second Language Association: The Theories of Second Language Acquisition and Their Implications, Boğaziçi University, Antalya, Turkey.
- o Özhan, D. (2007). The Learnability Problem of the Unaccusative Verbs. *Paper presented at the American Association of Applied Linguistics* 2007 Annual Conference, Costa Mesa, California, USA.
- Ozhan, D. (2010). Syntactic Properties of Discourse Connectives in the Writings of Turkish learners of English and Native Speakers. Paper presented at the 10th International Conference of the Association for Language Awareness, Kassel, Germany.
- Özhan, D. (2011). An Analysis of Discourse Connectives but and however in writings of English Native Speakers and Turkish Learners of English. Paper presented at the Learner Corpus Research 2011 Conference, Louvain, Belgium.

### **Theses**

- MA Thesis: "Using Grice's Cooperative Principle and its Maxims for Analyzing Coherence: A Study on Academic Writing", 2004.
- BA. Thesis: "The Importance of Games in Vocabulary Teaching", 2001.

### **Language Skills**

Turkish (native), English (fluent)

### **Computer Skills**

MS Office (Word, Excel, Powerpoint, Outlook, Visio)

#### APPENDIX C

#### **TURKISH SUMMARY**

### Giriş

Başarılı bir dil öğrenimi, o dilde iletişimsel yeterliliği gerektirdiğinden, ikinci dil öğrenme süreci, uzun ve karmaşık bir süreçtir. Yabancı dil öğretiminin en önemli amacı da öğrenciye bu yetiyi kazandırmaktır. Artık günümüzde yabancı dil öğreniminde, iletişimsel yeterliliğin gerekliliği bilinmektedir. Ne var ki, bu yetiyi kazanmak da o kadar kolay değildir çünkü başarılı bir dil öğrenme süreci dört farklı alanda iletişimsel yeterlilik gerektirir: dilbilgisi, toplumdilbilim, söylem ve stratejik alan (Canale ve Swain, 1980; Canale, 1983). Bu tez, bu dört iletişimsel yeterlilik alanlarından biri üzerine bir çalışmadır: Yazılı söylemde iletişimsel yeterlilik.

Yazılı söylemde iletişimsel yeterlilik, akademik başarı için çok önemli bir gerekliliktir. Akademik yazının kendine özgü bir takım kuralları vardır ve akademik yazı yazan birinin bu kurallara uygun bir metin yazması beklenir. Aynı şekilde, yabancı dil öğrenen bir öğrencinin de, kullandığı metin türünün özelliklerini göz önünde bulundurarak, bağdaşık bir metin yazması beklenir.

Akademik çevrede en sık kullanılan yazı türlerinden biri tartışma yazı türüdür ve bu tez bu tür öğrenci yazılarını incelemektedir. Tartışma yazılarında, yazarın bir tezi ve bu tezini savunan iddiaları vardır. Yazar, bu iddiaları uygun bir şekilde savunmak, karşıt görüşleri belirtmek ve bunları çürütmek durumundadır. Başarılı bir tartışma yazısında, iddiaların nasıl organize edildiği de iddianın kendisi kadar önemlidir. Bir başka deyişle, böyle bir yazıda, yazar hem iddialarını uygun bir şekilde geliştirip savunmalı hem de bu iddialarını organize edip uygun bir dil kullanarak metine biçim vermelidir. İddiaların genel yapıda organize edilip sunulması üstsöylemde

gerçekleşirken, metin içinde iki iddianın birbiriyle bağlanması tümce düzeyinde gerçekleşmektedir. Tartışma yazılarında beklenen yapı, ana tezin çeşitli iddialarla desteklenmesi, karşıt görüşlerin belirtilip çürütülmesi şeklindedir (Coirier, Andriessen ve Chanquoy, 1999); bu çalışma kapsamında böyle bir yapıya iddiakarşıt görüş-çürütme (İKÇ) metin yapısı denilmiştir.

Tartışma yazılarının önemli bir özelliği de zıtlık gösteren dilbilimsel yapıların kullanımıdır. Yazar, metin içindeki bağdaşıklık ilişkilerini farklı yapılar aracılığıyla okuyucuya aktarmak durumundadır ve bu dilbilimsel yapılar, organizasyonunun çözümlenmesi için önemlidir. Kısacası, metnin üstsöylem yapısı ve tümce düzeyindeki yapısı, dilbilimsel yapılarla gerçekleşmektedir. Yazar, bu yapıları kullanarak, bir fikre karşı kendi tavrını gösterebilir ve bahsettiği fikre karşı duyduğu belirsizlik veya kesinliği ifade edebilir. İngilizce'de bu yapılardan bazıları, kip yardımcı fiilleri, kiplik belirten diğer çeşitli ifadeler ve bağlaçlardır. Bu çalışmanın esas konusu üç çesit bağlaç olmakla beraber, bahsedilen diğer yapılar da çalışma kapsamında incelenmiş ve bunların tartışma yazısındaki kullanım amaçları, bağlaçların kullanımlarıyla kıyaslanmıştır. Bu çalışmanın konu ettiği farklı yapısal sınıftan üç bağlaç (but "ama", however "oysa", although "rağmen"), metin içindeki bağdaşıklık ilişkilerini gösteren yapılar olarak, geniş kapsamda incelenmiştir. Bağlaçların hem üstsöylemde hem tümce düzeyinde çok önemli görevleri vardır. Tümce düzeyinde bağlaçlar, tümceler arası ilişkileri göstererek okuyucunun çıkarımlarını sınırlandırmakta ve onu bir tür metin ilişkisine yönlendirmektedir. Üstsöylem düzeyinde ise, metinin genel yapısının şekillenmesinde rol oynayan bağlaçlar, metinin daha geniş yapıları arasındaki ilişkileri işaret ederek, metin organizasyonuna katkıda bulunurlar.

Bu çalışmada bağlaç, anlamca birbiriyle ilgili tümceleri bağlamaya yarayan sözcüklerdir. Bağlaçların incelenmesi konusunda iki temel yaklaşım vardır: Bağdaşıklık kuramı ve bağıntı kuramı. Bağdaşıklık kuramına göre bağlaçlar, metindeki bağdaşıklık ilişkilerini işaret etmek suretiyle metnin okuyucu tarafından algılanmasında önemli rol oynarlar (Halliday ve Hasan, 1976; Schiffrin, 1987; Fraser, 1999; Schoroup, 1999). Bu yaklaşıma göre, metinler bağdaşıktır, belli

sayıda bağdaşıklık ilişkileri vardır ve bir metni anlamak için bu ilişkilerin kavranması gerekmektedir. Bağıntı kuramına göre ise bir metini anlamak için bağdaşıklık ilişkilerini çözmek ne gereklidir ne de yeterlidir çünkü söylem bilişseldir, metinle ilgili değildir. Bağlaçlar, metin içerisindeki anlama katkıda bulunmazlar fakat okuyucuyu belli bir anlama yönlendirirler. Bu anlamda, bağlaçlar, okuyucunun metinden çıkaracağı anlamları ve yorumları kısıtlarlar (Sperber ve Wilson, 1986; Blakemore, 1992; Rouchota, 1996; Blakemore, 2000).

Bağlaçlara yaklaşımda etkili olan her iki kuram da, bir yazar için bağlaç bilgisi ve kullanımının çok önemli olduğunu göstermektedir. Yine her iki kuramda bağlaçların okuyucu için sınırlayıcı bir etkisi vardır. Bu iki yaklaşımın da, bağlaçların metin içindeki rollerini ve okuyucu için önemini anlamamız açısından önemi vardır.

Bağlaçların metin içinde, üstsöylem belirleyiciliği görevi vardır. Bu görev, hem tümce düzeyinde metin içi anlamsal ilişkileri işaret etmeyi hem de daha geniş metin yapısında metnin yapısına katkıda bulunmayı içerir. Yani, üstsöylem belirleyicileri iki ayrı grupta incelenebilir: Tümce düzeyindeki ilişkileri gösteren üstsöylem belirleyicileri ve yazarın yaklaşımını gösteren üstsöylem belirleyicileri (Vande Kopple, 1985).

Bu çalışmaya ilham veren bir çalışma Barton (1995)'un çalışmasıdır. Bağlaçların üstsöylem belirleyiciliği özellikleri konusunda bir çalışma yapan Barton (1995), daha önce bu konuda yapılmış bir çok çalışmanın, bağlaçların sadece tümce düzeyindeki görevlerini incelediklerini belirtmiştir. Bu nedenle kendisi, zıtlık ifade eden bağlaçların tartışma yazılarında iddiaların ve karşıt görüşlerin ifadesinde kullanım şekillerini incelemiştir. Çalışmada, bu bağlaçların iddiaların ve karşıt görüşlerin ifade edilmesinde kullanılan üstsöylem belirleyiciliği görevleri incelenmiştir. Barton (1995), bağlaçların üstsöylemdeki görevlerinin, yazarın yaklaşımını göstermek ve yazarın okuyucusunun beklentilerini dikkate aldığını göstermek açısından çok önemli olduğunu vurgulamaktadır. Çalışma, zıtlık ifade eden bağlaçların tartışma yazılarındaki iki farklı iddia türünün ifadesinde üstsöylem

belirleyiciliği görevleri olduğunu göstermiştir. Barton (1995)'un çalışmasında işaret ettiği bulgular, yabancı dil öğrenen öğrenciler için de önemli bulgulardır. Yabancı dil öğretiminde de bağlaçlar, metin içi bağdaşıklık ilişkilerini kurma ve gösterme görevleriyle öğretilmektedir fakat bağlaçların üstsöylemdeki görevleri çoğunlukla göz ardı edilmektedir (Hyland, 2004). Bu nedenle, bu tez, öğrenci ödevlerinde kullanılan üç bağlacın (*but* "ama", *however* "oysa", *although* "rağmen") hem tümce düzeyinde metin içi anlamsal ilişkileri gösterme görevlerini hem de tartışma yazılarında sık kullanılan iddia-karşıt görüş-çürütme metin yapısı içerisindeki üstsöylem belirleyiciliği görevlerini incelemeyi amaçlamaktadır.

Daha önce yapılmış olan çalışmalar, bağlaç kullanımının, yabancı dil öğrenen öğrenciler için çok kolay olmadığını göstermektedir (örneğin Milton ve Tsang, 1993; Tang ve Ng, 1995; Granger ve Tyson, 1996; Altenberg ve Tapper, 1998; Bolton, Nelson, Hung, 2002; Chen, 2006; Yeung, 2009). Bu çalışmaların çoğunda, bağlaçların ya gereğinden az veya fazla ya da yanlış kullanıldığı görülmüştür. Teze ilham veren bir gözlem de, geçmişte yapılmış çalışmalar içerisinde, Türk öğrencilerinin bağlaç kullanımına yönelik çalışmaların sayısının çok az olmasıdır. Bir diğer gözlem ise, var olan çalışmaların konusunun, bağlaçların kullanım sıklıkları ile tümce düzeyinde anlamsal olarak doğru kullanılıp kullanılmadıkları olmasıdır. Geçmiş çalışmaların incelenmesi, bağlaçların tümce düzeyindeki kullanımları kapsamında yapısal özellikleri ve üstsöylemdeki görevleriyle tartışma yazısındaki rollerinin çalışmaların kapsamı dışında kaldığını göstermektedir.

#### Yöntem

#### Araştırma soruları

Bu tezde amaç, İngilizce öğrenen Türk öğrencilerin ve anadili İngilizce olan öğrencilerin tartışma yazılarında sık kullandıkları ve zıtlık ifade eden üç bağlacın (but "ama", however "oysa", although "rağmen") hem tümce düzeyindeki hem üstsöylemdeki kullanımlarını incelemek ve iki grup öğrencinin kullanımlarını karşılaştırmaktır. Tümce düzeyi kullanımında, bağlaçların yapısal ve anlamsal özellikleri incelenirken, üstsöylemde, bağlaçların İKÇ yapısındaki kullanımları incelenmektedir. Yapılan analiz, iki derlemden ayrı ayrı alınan 120 ödevin

irdelenmesine dayanmaktadır: İngilizce öğrenen öğrencilerin ödevlerinden oluşan uluslararası öğrenci derleminin Türkçe alt derlemi (TICLE) ve Anadili İngilizce olan öğrencilerin ödevlerinden oluşan Louvain derleminin Amerikan alt derlemi (ALOCNESS). Bu amaç kapsamında, çalışma aşağıdaki araştırma sorularına yanıt bulmayı hedeflemektedir:

- 1) İki derlem arasında, üç bağlacın kullanım sıklığı açısından bir fark var mıdır?
- 2) Bu bağlaçlar yapısal kullanımları bakımından ne tür özellikler göstermektedirler ve derlemler arasında kullanım farkı var mıdır?
- 3) Bağlaçlar hangi anlamsal ilişkiler için kullanılmaktadır ve derlemler, bağlaçların kullanıldıkları anlamsal ilişkiler açısından farklılık gösterirler mi?
- 4) Bağlaçlar, iddia-karşıt görüş-çürütme metin yapısında hangi üstsöylem belirleyiciliği görevleriyle kullanılmaktadır ve bu kullanımlarda iki derlem farklılık gösterir mi?

## Veri kaynakları

Çalışmada iki derlem kullanılmıştır. TICLE, Profesör Sylviana Granger tarafından Louvain Üniversitesi'nde yürütülen bir Uluslararası İngilizce Öğrenci Derlemi (ICLE) projesinin alt derlemlerinden bir tanesidir. Bu derlemin her bir alt derlemi, farklı bir anadile sahip, İngilizce'yi yabancı dil olarak öğrenen öğrenci gruplarının tartışma söylem kipindeki yazılarından oluşmaktadır. Bu çalışmada, tartışma yazıları bir çeşit söylem kipi olarak kabul edilmiştir ve bu bakımdan Smith (2003)'in "discourse mode" terimi kullanılmıştır. Her bir alt derlem, toplamda yaklaşık 200.000 kelimeden oluşmakta ve her bir ödev, üniversite eğitiminde 3. veya 4. sınıfta olan öğrenciler tarafından yazılmış olup yaklaşık 500 ile 1000 kelimeden oluşmaktadır. Tüm öğrencilere verilmek üzere çeşitli konular belirlenmiş ve öğrenciler istedikleri konuyu seçip o konuda bir tartışma yazısı yazmışlardır. Türk öğrencilerin ödevlerinden oluşan ve bu çalışmada kullanılan TICLE, 224 tartışma yazısından oluşmuş ve Türkiye'nin üç farklı üniversitesinde okuyan öğrencilerden toplanmıştır. Bu çalışmada, TICLE'nin ilk 120 ödevi analize dahil edilmiştir.

Diğer derlem, anadili İngilizce olan öğrencilerin ödevlerinden oluşan Louvain derleminin Amerikan alt derlemidir (ALOCNESS). LOCNESS, Amerikan ve İngiliz öğrencilerin ödevlerinden oluşmuş, ICLE derlemi ile aynı ölçütler göz önünde bulundurularak toplanmıştır. Bu nedenle, LOCNESS, ICLE ile karşılaştırma amaçlı kullanıma uygun bir derlemdir. Tezde, LOCNESS'in alt derlemlerinden biri, Amerikan öğrencilerinin ödevleri, kullanılmıştır. Bu alt derlemin de ilk 120 ödevi analize dahil edilmiştir. Analiz sonuçlarının karşılaştırılması için yine bir öğrenci derleminin seçilmesindeki sebep bu grubun yaş ortalamasının ve eğitim durumunun Türk öğrencilerle çok benzer olmasıdır. Karşılaştırma amaçlı anadili İngilizce olan bir grubun seçilmesinin sebebi ise, sınıflarda yazdırılan tartışma yazılarına denk düşebilecek, deneyimli yazarların yazıları içinde bir söylem kipinin olmamasıdır.

#### Veri analizi

Analiz, bağlaçların, hem tümce düzeyinde hem de üstsöylemdeki kullanımlarını içermektedir. Analiz için zıtlık ifade eden bağlaçların seçilmiş olmasının sebebi, öncelikle söylem kipinin tartışma yazı türü olmasıdır. Bu tip söylem kipinde zıtlık ifade eden bağlaçların sık kullanıldığı bilinmektedir. Ayrıca Soria (2005)'nın da belirttiği gibi, bu grup bağlaçlar, bilişsel zorluğu olan bağlaçlardır. Bu grup bağlacın, diğerlerinden bir farkı, bu bağlaçların anlamında ayrıca bir olumsuzluk ifadesi olması ve bu zıtlık ilişkisinin, bir söylemde açıkça ifade edilmesinin gerekliliğidir.

Tezde üç farklı bağlaç incelenmiştir: bir yana sıralamalı bağlaç (*but* "ama"), bir alta sıralama bağlacı (*although* "rağmen") ve bir söylem belirteci (*however* "oysa"). Bu bağlaçlar her iki derlemde de en sık kullanılmış zıtlık belirten bağlaçlardır. Tezde, bağlaç, anlam yönünden, zıtlık, neden-sonuç, düzeltme, örnekleme, gibi anlam bağları kuran tümce ya da tümcecikleri birbiriyle ilişkilendiren sözcük/sözcük öbekleridir. Yapısal yönden bağlaçlar, sadece iki üye alırlar ve üye olarak seçilecek metin aralıkları soyut nesne, yani olay, olgu, durum, gerçek, olasılık, soru, dilek, emir, önerme olmalıdır (Asher, 1993). Bağlaçların işaretlenmesinde PDTB (Penn Discourse TreeBank, Prasad ve diğ., 2008) ilkeleri kullanılmıştır. Bağlaçların

üyelerine 1. üye ve 2. üye denmektedir. Bu üyelerin belirlenmesi, hem bağlaç anlamıyla ilişkili görülen metin aralıklarının bulunmasını hem de metin aralığı kapsamının belirlenmesi için anlamsal bir ilke olan yeterlik ilkesinin göz önünde bulundurularak metin aralığının belirlenmesini içerir.

Tezdeki ilk analiz, üç bağlacın her iki derlemden seçilen ödevlerde işaretlenmesini ve bağlaçların üyelerinin belirlenmesini kapsar. Bağlaçların yapısal özelliklerinin belirlenmesinde yine PDTB ilkeleri kullanılmıştır (Webber ve diğ., 2005). Bu analiz şu kategorilerde gerçekleşmiştir: Üyelerin sıralanışı (1. üye-2. üye, 2. üye-1. üye), bağlacın tümce ya da tümcecikler içindeki yeri (tümcecik başı, tümce başı, 2. üye içinde serbest, tümce sonu), her iki üyenin türü (tümcenin bir parçası, tümce, tümce grubu) ve ilk üyenin bağlaca göre yeri (aynı tümce içinde, bitişik bir önceki tümcede, bitişik bir önceki tümce grubunda, bağlaca bitişik olmayan bir tümce ya da tümcecikte). Bu yapısal özelliklerin her iki derlemdeki kullanımları arasında fark olup olmadığının belirlenmesi için Pearson Ki-kare testi kullanılmıştır. Ancak, bu test, çıkan farkın hangi kategorilerdeki farklı kullanımdan kaynaklandığını gösteremediği için, aynı veri üzerinde ikinci bir istatistik analiz yöntemi olarak Log-lineer analizi kullanılmıştır.

Bu yapısal özellik analizinin ardından, bağlaçların tümce düzeyinde kurdukları anlamsal ilişkiler incelenmiştir. Bu analiz için de yine PDTB'nin (Prasad ve diğ., 2008) zıtlık bağı kategorisi ve bu bağın altkategorileri (zıtlık, beklentinin tersinlenmesi) kullanılmıştır. İşaretleyiciler arası uyum istatistiği için işaretlemeler yapılırken gerekli görülmesi sonucunda zıtlık anlam bağı kategorisi içinde yer almayan bir altkategori (açımlama) eklenmiştir. Yine bu anlamsal ilişki analizi için de hem Ki-Kare hem de Log-lineer istatistik analiz yöntemi kullanılmıştır.

Çalışmanın bir sonraki aşamasında, üç bağlacın İKÇ metin yapısındaki üstsöylem belirteci görevleri incelenmiştir. Bu analiz, her derlemden alınan 120 ödevden, 40 ödev seçilerek, bu 40 ödev üzerinde gerçekleştirilmiştir. Bu aşamada kullanılan 40 ödevin belirlenmesinde 120 ödevdeki konu çeşitliliği ilke olarak kullanılmıştır.

Bağlaçların üstsöylemdeki rollerinin incelendiği bu analizde, Barton (1995)'un ve Hyland (2004)'ın çalışmaları yönlendirici olmuştur.

Analiz aşamasında, öncelikle metin içinde bu üç bağlacın kullanıldığı yerler işaretlenmiş ve bağlacın İKÇ metin yapısının neresinde kullanıldığına karar verilmiştir (iddia, karşıt görüş veya çürütme). Bu görevlerin belirlenmesine yardımcı olması için kullanılan bir takım sözcük ve sözcük grupları şu şekildedir: kip yardımcı fiilleri (must, should, will, may gibi) (McCarthy, 1995) ve kiplik ifade eden diğer sözcükler (appear, assume, actually, obviously, likely, perhaps gibi) (Hyland and Milton, 1997), sorun ve çözüm ifade eden sözcükler (difficulty, problem, consequence gibi) (McCarthy, 1990), iddiaları ve karşıt görüşleri niteleyen sözcükler (strong, important, controversial, weak gibi), metinin tartışmacı yapısını gösteren diğer sözcükler (opponents, proponents, opposing, refutation, argument gibi).

Bağlaçların İKÇ metin yapısındaki analizi, araştırmacıyı bir başka analize yönlendirmiştir. Bağlaç analizi sırasında, zıtlık belirten bu bağlaçların yanı sıra özellikle ALOCNESS ödevlerinde, biraz önce bahsedilen ve metnin tartışmacı yapısını ön plana çıkaran sözcüklerin sık kullanıldıkları gözlenmiştir. Öte yandan, zıtlık ifade eden üç bağlacın dışındaki bu tür sözcükler TICLE ödevlerinde daha az kullanılmıştır. Her bir derlemden alınıp daha önce incelenen 40ar ödev, bu sözcüklerin kullanımı açısından bir kez daha incelenmişve sonuçlar bağımsız örneklem t-testiyle analiz edilmiştir.

Yöntemi anlatılmış olan bu incelemelerden önce, işaretleyiciler arası uyum istatistiği yapılmıştır. İlk işaretleyici araştırmacının kendisi, ikinci işaretleyici ise hem Türkçe hem İngilizce bağlaç kullanım bilgisine sahip, bir Türkçe derlem işaretlemesi projesinde işaretleyici olarak görev almış yüksek lisans mezunu biridir. İşaretleyiciler arası uyum istatistiği için Wilcoxon testi kullanılmış ve işaretleyiciler arasında yüksek oranda tutarlılık elde edilmiştir.

#### Sonuçlar

## Bağlaçların yapısal ve anlamsal kullanımları

İlk araştırma sorusu, derlemlerde, bağlaç sayıları arasında ve bağlaç sayısının kelime sayısına oranı arasında herhangibir fark olup olmadığıdır. *But* "ama" ve *however* "oysa" bağlaçlarının hem tüm derlem içinde kullanım sıklığı açısından hem de bu bağlaçların ödevlerdeki kelime sayısına oranı açısından iki derlem arasında anlamlı farklar elde edilmiştir. Bu sonuca göre, TICLE'de *but* "ama" kullanımı fazla iken, ALOCNESS'te *however* "oysa" kullanımı fazladır. Her iki derlemde de üç bağlaç içinde en sık kullanılanı *but* "ama" bağlacıdır. Bu bağlaç, yabancı dil öğretiminde çoğunlukla gündelik kullanımı yaygın bir bağlaç olarak anlatılmakta olmasına rağmen Türk öğrencilerinin bu bağlacı akademik yazılarda sık kullanımaları ilginçtir. Ayrıca, bu bağlaç, akademik yazılarda yazı dilinde tercih edilen diğer bağlaçlara göre daha az kullanılmaktadır (Biber ve diğ., 1999). Bu çalışmadaki derlemlerde söz konusu bağlacın en sık kullanılan zıtlık ifade eden bağlaç olmasının başlıca sebebi, bu bağlacın diğer zıtlık ifade eden bağlaçların yerine kullanılabilecek daha genel bir bağlaç olması olabilir.

İstatistiksel analiz, but "ama" bağlacının yapısal özelliklerinin çoğunun iki derlemde de aynı olduğunu göstermektedir. Her iki derlemde de bu bağlaç, tümcecik başında kullanılan, iki tümceciği birleştiren ve 1. üyesi kendisiyle aynı tümce içinde yer alan bir bağlaçtır. Bunun yanı sıra, bu bağlaç TICLE'de daha fazla olmak üzere tümce başında da kullanılmaktadır. Tümce başı but "ama" özellikle TICLE'de sık kullanıldığı için araştırmaya değer bulunmuştur. Tümce başı but "ama" üzerinde yapılan analiz şu sonuçlar elde edilmiştir: (1) Bu kullanımda 1. üye, bağlacın olduğu tümceye bitişik bir önceki tümcedir (yanı bağlaca bitişik olmayan bir tümceye rastlanmamıştır), (2) but "ama" nın tümce başında kullanımının tümcecik başı but "ama" kullanımından, söylemdeki görevi açısından bir farkı bulunamamıştır.

Tümce başı *but* "ama" nın söylemdeki yeri konusunda yapılan bir kaç çalışma, bu kullanımın tümcecik başı kullanımından farklı bir rolü olduğuna işaret etmektedir.

Örneğin, Bell (2007) yaptığı çalışmada, but "ama" nın tümce başı kullanımında üç farklı amaç ortaya koymuştur: Daha önce bahsedilmiş fikirlere ek bir başka fikir sunmak, daha önce bahsedilmiş konudan bir başka konuya geçiş yapmak ve metin aralıklarını birbirinden ayırmak. Bir başka çalışmada Yoneoka (1998), tümce başı but "ama" kullanımının kullanım sıklığı, söylem kipi ve verilmek istenen vurgu ile alakalı olduğunu göstermiştir. İncelenen kaynaklarda tümce başı but "ama" nın, ikinci üyeye özel bir vurgu yapılmak istendiğinde kullanıldığı, gündelik dile yakın yazı türlerinde kullanıldığı ve tümcecik başı kullanıma göre daha az sıklıkta bulunduğu görülmüştür. Webber ve Prasad (2008) ise, bu yapının kullanıldığı durumlarda, genellikle 1. üyenin ya birden fazla tümceden oluştuğunu ya da bağlacın bulunduğu tümceye bitişik olmayan bir başka tümce olduğunu görmüşlerdir. Fakat TICLE ve ALOCNESS'te, tümce başı but "ama" kullanımı ile ilgili bahsedilen bu kısıtlamalardan hiçbirine rastlanmamıştır.

Derlemlerde, *but* "ama" bağlacıyla kurulan anlam ilişkileri incelendiğinde, bu bağlacın çoğunlukla beklentinin tersinlenmesi ilşkisinden ziyade zıtlık anlam bağı kurmak için kullanıldığı görülmüştür.

Yapılan analizler, *but* "ama" bağlacının aksine, *however* "oysa" bağlacının her iki derlemde de tümce başında kullanıldığını göstermektedir. *However* bağlacında, her iki üye de genellikle tek bir tümcedir ve 1. üyenin bulunduğu yer çeşitlilik göstermektedir. İlk üye, bağlaçla aynı tümcede, bitişik bir önceki tümcede, birden fazla tümcede (ALOCNESS'te daha yoğun) ve bitişik olmayan bir tümcede (ALOCNESS'te daha yoğun) görülebilmekle beraber, genel kullanımda, 1. üye bitişik bir önceki tümcedir. Daha önce de bahsedildiği gibi, bu bağlaç genel olarak tümce başı bir bağlaç olarak kullanılmıştır. Fakat, tümcecik başı kullanımından yapısal ve anlamsal yönden bir farkı yoktur.

However bağlacının derlemlerde kurduğu anlam ilişkilerine gelince, bu bağlacın da zıtlık ilişkisi kurmak için kullanıldığı görülmüştür.

Derlemlerdeki *although* "rağmen" kullanımında ne yapısal açıdan ne de anlamsal açıdan bir fark bulunabilmiştir. Her iki derlemde de, bağlacın üyelerinin sıralanışı 2. üye-1. üye şeklindedir ve kurduğu anlam ilişkisi beklenti ilişkisidir. Bağlacın üye sıralanış sırası önemlidir ve bu kullanım bağlacın kurduğu anlam ilişkisiyle de bağlantılıdır. Beklenti anlam ilişkisinde, 2. üye bir beklenti yaratırken, bu beklenti 1. üyeyle reddedilmektedir. 2. üyenin okuyucuya 1. üyeden önce sunulması da daha sonra reddedilecek olan bir beklentiyi önceden verebilmek açısından gereklidir. Prasad ve diğ. (2004)'nin deneyimli yazarların yazılarında yaptıkları inceleme de bu kullanıma benzer bir kullanımı göstermektedir. PDTB derleminde de *although* ve *eventhough* bağlaçlarının üye sıralanışı, çoğunlukla 2. üye-1.üye şeklindedir.

Bağlaçların İKÇ metin yapısındaki görevleri, her iki derlemde de çoğunlukla iddiaları geliştirmek ve bu fikirlere vurgu yaparak onları kuvvetlendirmektir. Bu bağlaçların bağladıkları üyeler arasında zıtlık ilişkisi olmasına rağmen, iddiaların anlatımında kullanıldıklarında, genel yapıdaki görevlerinin iddiaları kuvvetlendirmek olduğu görülmüştür.

İncelenen üç bağlaç, ayrıca karşıt görüşlerin ifade edilmesinde ve bu görüşlerin çürütülmesinde de kullanılmaktadır. Derlemlerdeki analizler, TICLE'de anlamlı bir farkla az bulunmasına karşın, ALOCNESS'te bu kullanımların da varlığına işaret eder. Bir başka analiz de, TICLE'de bağlaçların karşıt görüş-çürütme metin yapısında daha az kullanımlarının, bu metin yapısının incelenen ödevlerde kullanılmamasından kaynaklandığını göstermektedir. Bu açıdan, tez, incelenen TICLE ödevlerinin, bir tartışma yazısında beklenen metin yapısına uygun yazılmadıklarını göstermektedir çünkü daha önce de belirtildiği gibi, olası karşıt görüşlerin belirtilmesi ve bunların uygun bir şekilde çürütülmesi, bu söylem kipinin önemli bir özelliğidir.

TICLE ödevlerindeki bu eksikliğin farklı sebepleri olabilir fakat bu sebeplerin araştırılması tezin kapsamının dışında kalmaktadır. Bu nedenle, burada, sadece bir kaç olasılıktan bahsedilecektir. İlk olasılık, yabancı dil öğrenen öğrencilerin gelişmekte olan dil becerisi olabilir. Dil öğrenme sürecinde olan bu öğrencilerin,

söylem kipi gereklilikleri ve yazarın, okuyucu farkındalığının olması gerektiği konularında eksiklerinin olabileceği düşünülebilir. Bir diğer olasılık da, Schoonen, Snellings, Stevenson, ve Gelderen (2009)'in de belirttiği gibi, öğrencilerin dil gelişim sürecinde karşılaşabilecekleri, hedef dil kaynaklarının yetersizliği problemi olabilir. Böyle bir problemle karşılaşan öğrenciler, tümce düzeyinde kullandıkları dile yoğunlaşmaktan metindeki diğer bir takım önemli unsurları gözardı edebilmektedirler. Metinin okunulabilirliğini arttıran yapı ve organizasyonla ilgili bu tarz unsurların ihmali ise, genel metin yapısında problemlere yol açabilmektedir.

Daha önce de bahsedildiği gibi, üç bağlacın metin üstsöylemindeki görevleri incelenirken ALOCNESS ödevlerinde, TICLE ödevlerinde olmayan, sözcük kullanımına yönelik bir fark olduğu fark edilmiştir. Çalışmanın bir diğer aşamasında bu fark incelenmiştir. Bu sözcüklerin kullanım farkı, bağımsız örneklem t-testiyle analiz edilmiştir. İstatistik analize göre, incelenen sözcük kategorilerinden beş tanesinin kullanımında iki derlem arasında fark olduğu ve bu kategorideki sözcüklerin ALOCNESS ödevlerinde anlamlı bir farkla daha çok kullanıldığı görülmüştür. Bu kategoriler şunlardır: kiplik belirten sözcükler, karşıt görüş için kullanılan zıtlık belirten üç bağlaç, iddia ve karşıt görüşleri tasvir etmek için kullanılan sözcükler ve tüm bunların dışında kalan metinin tartışma yapısını yansıtan sözcükler.

Kiplik ifade eden kip yardımcı fiillerinin dışındaki diğer sözcükler, tartışma yazısı kapsamında önemlidir çünkü yazar, bu sözcükleri kullanarak kendi düşüncelerindeki ve metinde bahsettiği farklı görüşler konusunda kesinlik ve belirsizlik ifade etmektedir. Örneğin, kesinlik ifade eden bir sözcüğün seçilmesi, o düşüncenin kuvvetlendirilmesi açısından önemliyken, belirsizlik ifade eden bir sözcüğün seçilmesi ise yazarın o düşünce hakkındaki belirsizliği ifade etmesi ve dolayısıyla benimsemediği bir düşünceden bahsettiğini belirtmesi açısından önemlidir.

Her iki derlemde de kip yardımcı fiilleri yoğun olarak kullanılmışken, sadece ALOCNESS ödevlerinde kiplik ifade eden diğer sözcüklerin sıklıkla kullanılması

ve TICLE ödevlerinde bu sözcüklerin çok az sıklıkla kullanılmış olması ilginç bir bulgudur. Bu farkın sebeplerinden biri, Türk öğrencilerinin hedef dilde gelişmekte olan dil becerisi olabilir. Bu öğrenciler, bahsedilen sözcükleri kullanmakta zorlanabilirler çünkü bu sözcükler çeşit bakımından sayıca fazladır ve yazarın, hem kendi fikirlerini güçlendirmek için hem de karşıt görüşlere karşı tavrını göstermek için kullanabildiği sözcüklerdir. Bu konuda zorlanan öğrenciler, ödevlerinde kiplik belirten sözcüklerden ziyade, yine kesinlik ve belirsizlik ifade etmede kullanılabilecek kip yardımcı fiillerine yönelebilirler. Bir diğer sebep, öğrencilerin az deneyimli yazarlar olmaları olabilir. Öğrenciler, okuyucu farkındalıklarını sözcük kullanımlarıyla gösterme konusunda zorlanabilirler.

Çalışmanın bulgularından bir diğeri, iddia ve karşıt görüşleri tanımlayan sözcüklerin ALOCNESS ödevlerinde, TICLE ödevlerine kıyasla anlamlı bir farkla daha sık kullanılmasıdır. Bir başka deyişle, ALOCNESS ödevlerinde iddialar niteleyici bazı sözcüklerle güçlendirilirken, karşıt görüşler de diğer bazı niteleyici sözcüklerle zayıflatılmıştır. Aynı şekilde, ALOCNESS ödevlerinde, yazının tartışmacı yapısını işaret eden bir takım sözcükler de daha çok kullanılmıştır. TICLE ödevlerinde, bir tartışma yazısında olması beklenen bir takım sözcüklerin ALOCNESS ödevlerine kıyasla anlamlı bir farkla az kullanılması, kuşkusuz okuyucuyu da etkilemektedir. Bir metni, tartışma yazısı olduğunu bilerek okuyan okuyucuda, metnin yapısı ve kullanılan dil ile ilgili bir takım beklentiler oluşur. Bu beklentilerden bazıları, daha önce de bahsedildiği gibi, karşıt görüşlerin varlığının belirtilip bu görüşlerin çürütülmesi, ve bu yapılırken uygun bir dilin kullanılmasıdır. Tartışma yazı türünde dil kullanımıyla ilgili beklentilerden bir tanesi, sözcük seçimiyle ilgilidir. Daha önce de belirtildiği gibi, böyle bir söylem kipinde, yazarın sözcükleri kullanırken dikkatli davranması, kendisinin savunduğu iddiaları kuvvetlendiren, karşıt görüşleri zayıflatan, metnin tartışma yapısını yansıtan, gerektiğinde yazarın ihtiyatlı yaklaşımını gerektiğinde ise destekleyici yaklaşımını gösteren sözcükleri kullanması gerekmektedir.

Özet olarak, bu çalışma, iki derlem arasında, üç bağlacın tümce düzeyinde yapısal ve anlamsal kullanımları açısından büyük farklar olmadığını ortaya koymuştur. En

dikkat çekici fark, *but* "ama" ve *however* "oysa" bağlaçlarının iki derlemde kullanım sıklığı ve tümce başı *but* "ama" bağlacının kullanım sıklığında görülmüştür. Öte yandan tezin en önemli bulgusu, bu üç bağlacın, İKÇ metin yapısındaki üstsöylem görevleri açısından iki derlem farklılık göstermesidir. TICLE ödevlerinde bahsi geçen üç bağlacın üstsöylemdeki kullanımlarının azlığı, karşıt görüş ve çürütme metin yapısının bu ödevlerde daha az bulunmasından kaynaklanmaktadır. Bu ödevlerde, tartışma yazı türü, savunulan tezi destekleyici iddiaların belirtilmesi ve desteklenmesiyle geliştirilmiştir yani bu ödevlerde üç bağlacın üstsöylemdeki görevi, iddiaları geliştirmek yönündedir. Çalışmanın bir başka bulgusu ise, zıtlık belirten üç bağlacın dışında kullanılan ve söylem kipinin tartışmacı yapısını yansıtan diğer sözcüklerin kullanımıyla ilgilidir. ALOCNESS ödevlerinde, incelenen üç bağlacın yanı sıra, bahsedilen diğer sözcükler de önemli ölçüde kullanılmış ve bu kullanım, ödevlerin tartışmacı yapısını yansıtmıştır. Fakat, aynı sözcükler, TICLE ödevlerinde çok az miktarda kullanılmıştır.

# Çıkarımlar ve İleriye Yönelik Araştırma Konuları

Çalışmanın bulguları ışığında, yabancı dil öğretimi açısından önemli sonuçlar çıkarılabilir. Üstsöylemde karşılaşılan problemler, dil öğretimiyle aşılabilecek problemlerdir. Çalışma, yabancı dil öğretiminde, söylem kipi gerekliliklerine değinilme gereğine dikkat çekmektedir. Söylem kipi türünün, seçilecek sözcükleri ve metin yapısını ne yönde etkileyeceği gösterilebilir. Bu çalışmada incelenen söylem kipi, tartışma yazısı olduğundan dolayı, derslerde bu söylem kipinin, konu seçimi, tez tümcesi oluşturma, iddiaların seçilmesi, karşıt görüşlerin belirtilmesi ve yazının tartışmacı yapısının vurgulanması bakımından ne gerektirdiği üzerinde durulabilir.

Yabancı dil öğretiminde, öğrencilere, kullanmaları gereken sözcük çeşitliliği gösterilebilir ve bu çeşitlilik içinde nasıl seçim yapmaları gerektiği ve bu seçimin, okuyucuyu nasıl etkileyeceği üzerinde durulabilir. Zıtlık belirten bağlaçların, tartışma metin yapısındaki üstsöylem görevleri vurgulanabilir ve bu bağlaçların tartışma yazısındaki karşıt görüş-çürütme yapısındaki geçişler için ve vurgu amaçlı nasıl kullanılabilecekleri gösterilebilir.

Çalışmanın gösterdiği bir diğer bulgu, üç bağlacın tümce düzeyinde yapısal ve anlamsal kullanımlarıyla ilgilidir. Yapısal ve anlamsal kullanım açısından TICLE ile ALOCNESS ödevleri arasında önemli farklar bulunmamıştır. Ancak bağlaçların yapısal özellikleri bakımından, TICLE ödevlerinde *however* "oysa" bağlacının azlığı ve tümce başı *but* "ama" kullanımının sıklığı göze çarpmaktadır. Bu konuların da dil öğretiminde ele alınması iyi olacaktır.

Bu çalışmanın incelemediği ve ileriye yönelik araştırma konuları mevcuttur. Bu konuların da incelenmesiyle, Türk öğrencilerinin İngilizce'deki bağlaç kullanımına yönelik daha kapsamlı bilgimiz olacaktır. İleriye yönelik bir araştırmada, bağlaç çeşidi ve sayısı arttırılarak bu bağlaçların hem tümce düzeyinde hem üstsöylemdeki görevleri incelenebilir. Yine, bu inceleme, farklı bir söylem kipinde yapılabilir ve böylece Türk öğrencilerin bağlaç kullanımları farklı yazı türlerinde incelenmis olur.

Bir başka araştırma konusu ise, yabancı dil öğreniminde farklı seviyelerde olan Türk öğrencilerinin yazılarındaki bağlaç kullanımı olabilir. Böyle bir çalışma, bize, gelişmekte olan yabancı dil becerisinin bağlaç kullanımına etkisi konusunda bilgi verebilir. Bağlaç kullanımında anadilin etkisi konusunda bizi bilgilendirebilecek bir çalışma ise, aynı öğrencilerin hem anadilinde hem yabancı dilde yazacakları aynı konulu ödevlerin, bağlaç kullanımı açısından karşılaştırılmasıyla olabilir.

# APPENDIX D

# TEZ FOTOKOPİSİ İZİN FORMU

<u>ENSTİTÜ</u>			
Fen Bilimleri Enstitüsü			
Sosyal Bilimler Enstitüsü	<b>√</b>		
Uygulamalı Matematik Enstitüsü			
Enformatik Enstitüsü			
Deniz Bilimleri Enstitüsü			
<u>YAZARIN</u>			
Soyadı : Özhan Adı : Didem Bölümü : İngiliz Dili Öğretimi			
<b>TEZİN ADI</b> (İngilizce): A Comparative A although in the University Students' Argumon Turkish Learners of English and America	nentative Ess	ays: A Corpus-Base	
TEZİN TÜRÜ : Yüksek Lisans		Doktora	✓
<ol> <li>Tezimin tamamı dünya çapında erişime a tezimin bir kısmı veya tamamının fotokopis</li> </ol>	,	ynak gösterilmek şa	ırtıyla
2. Tezimin tamamı yalnızca Orta Doğ erişimine açılsın. (Bu seçenekle tezinizin Kütüphane aracılığı ile ODTÜ dışına dağıtı	fotokopisi	ya da elektronik	
3. Tezim bir (1) yıl süreyle erişime fotokopisi ya da elektronik kopyası K dağıtılmayacaktır.)	-	` ,	
Yazarın imzası	Т	arih	