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Foreword

This year's edition of the journal comprises eleven articles, ten full Research Articles and a Research Note. Thanks are extended primarily to the authors who have contributed to this issue of The Linguistics Journal, the Associate Editors, reviewers, and the Production Team that took meticulous care of all the technical details. This past year has been unique for the journal in that that we acquired two new Associate Editors, Dr. Thao Phan and Dr. Sara Liviero who have contributed significantly to the tailoring of the collection of articles in this issue. The number of submissions has been steadily increasing during the last several years, which improves the quality of The Linguistics Journal overall.

The first contribution entitled "The Use of Extraposition in the Written Production of Spanish Advanced Learners of English" by Elsa González-Álvarez and Susana Doval-Suárez focuses on one of the less studied second language acquisition issues. This research study aims at describing a Spanish advanced learner's discourse competence in L2 English by investigating the use of extraposition in written English. The results show that Spanish advanced learners overuse extraposition recognizing such grammatical patterns as formulaic expressions that are very easy to use as sentence openings, pragmatically unmarked, and also resembling L1 (Spanish) syntactic patterns, among other things.

The next Research Article, contributed by Intesar Elwerfalli, "The Difficulties in Acquiring the English Article System: The Role of Contrastive Analysis Hypothesis (CAH) and Explicit/Implicit Teaching Strategies", provides an elaboration on the complexities of learning the English article system by L2 learners; more specifically, Libyan learners of English. The author applies two opposing teaching strategies and different teaching/testing materials at the tertiary level of ELT: deductive teaching strategy (DT) and textual enhancement of input teaching strategy (TEI). The statistical analysis shows that explicit instruction improves the acquisition of the English article system by Libyan college students. However, TEI provides better results when measuring the development of the grammatical system of English and its lexical diversity. Therefore, both implicit and explicit teaching strategies need to be adopted in the teaching of the usage of the English article system.

Yi-Chun Christine Yang's study entitled "Noticing, Contrastive Analysis, and EFL Learners' Speech Production" aims to investigate whether there is improvement in EFL

students' speech production with regard to complexity, accuracy, and fluency. EFL learners' speech production in English is compared with their Chinese counterparts, and teaching techniques like explicit error correction of their utterances and teacher-student conferences are employed to help shed light on the speech production issues. The results show that students' accuracy and fluency improve, though the complexity is not significantly different.

In the next paper in the Research Article Section, "The Effect of Personal Familiar vs. Impersonal Less Familiar Topic on Expository Writing Task Performance", Fatemeh Mahdavirad explores similar topics as Yi-Chun Christine Yang in the previous article; namely, complexity, accuracy, and fluency but from a different perspective and in an Iranian EFL context. This study aims at finding out how these three phenomena are affected by writing about familiar and unfamiliar topics in EFL learning. As predicted by the research hypothesis, the participants produced writings with higher accuracy, complexity, and fluency on the personal familiar topic. This is in line with previous research and the improved overall effect is influenced by the fact that writing about familiar topics is less cognitively demanding. However, the author of this study claims that there is no trade-off between accuracy, complexity, and fluency in expository writing tasks, as has been shown by other studies.

The next article is "Topical Structure Analysis of Thesis Discussion Sections: A Cross-Disciplinary Study", where its author, Sara Nezami Nav, explores one of the most important textual features of students' writing. The study investigates 25 TEFL and 25 translation studies thesis discussion sections at an Iranian university in order to see which progressions are the most dominantly used topical progressions in each of the two sets of data and to find out whether writing in different disciplines affects students' writing with respect to topical relations. The results of the study support the hypothesis that disciplinary variations influence the topical structure of students' writings.

Mustafa Yildiz, in his paper entitled "A Cross-Linguistic Inquiry into the Potential Reasons for the Avoidance of English Phrasal Verbs: The Case of Turkish and Norwegian EFL Learners" looks at a problematic area of EFL acquisition for many learners of English as a foreign language – multi-word verbs. The study aims to answer the question of whether Turkish and Norwegian participants, whose native languages differ structurally (especially when it comes to phrasal verbs), avoid the implementation of phrasal verbs in English as an L2, and, if so, why that happens. The results show that the two groups of EFL learners differ when it comes to the implementation of specific groups of phrasal verbs. The reasons for this

are manifold: English proficiency, semantic complexity, language background, among other factors.

In her article "Lexical Bundles in ELF Business Meetings", Rachel Allan attempts to identify core lexical patterns occurring in a particular selection of business meetings where English is used as a Lingua Franca (ELF), and in a specific context. The analysis shows that some common bundles occur with similar frequencies to single words, and these are no different from native-speaker speech. However, the corpora used in this study mainly rely on ELF in Europe, and the author warns the reader that the implications of this study might be different if other continents were included. Furthermore, it seems that the core lexical bundles are used with higher frequencies than in English as a native language business meetings, one of the reasons for this being the more limited range of vocabulary employed in ELF.

The next article by Charles Marfo, "Prosody Drives Syntax: Prosody in the Focus and Topic Constructions of Akan", discusses the focus and topic constructions of the Akan language in connection to the phonology-syntax interface. The analysis focuses on two constructions, looking into an antecedent-anaphoric (anaphoric) relation that occurs. The relationship between syntax and phonology seems to rely on prosody. Additionally, Optimality Theory is employed to shed more light on the questions raised in this article.

The next to last article in this section, entitled "Comparison of Metadiscourse Markers in Arabic and English Research Articles in the Introduction and Conclusion Sections" by Hmoud Alotaibi explores an understudied area of metadiscourse of research articles and its characteristics as used by Arabic-speaking researchers who write either in Arabic or in English. It focuses specifically on the metadiscourse markers in the introductory and concluding sections of research articles. The findings point to cross-linguistic variation, where English texts are abundant in metadiscourse markers, unlike their Arabic counterparts.

The Research Article Section of this issue of The Linguistics Journal concludes with an article by Ourania Katsara. In a paper entitled "The Use of Linguistics in Indicating the Influence of Political Power in Shaping Politicians' Behaviour: The Case of Demetrios D. Bousdras", Katsara investigates the political discourse of one of the Greek politicians whose speeches date back to the early 1900s in the framework of several linguistic theories: appraisal theory, conceptual metaphor theory, and Fairclough's critical discourse analysis. The linguistic analysis of Bousdras's speeches presented in this study could assist in identifying forms of linguistic manipulation that are used in 20th-century Greece.

The last contribution presented in this volume is a Research Note entitled "The Development of Morphological Generators and Related Issues: The Case of Modern Greek.

Alexi, Papathanasopoulou and Papakitsos's article tackles computational linguistic issues: namely, the development of a morphological generator in Modern Greek, which is a concatenative language. The software design of a morphological generator depends on the morphological properties of the natural language in question and the morphotactics of the underlying language. This study exemplifies how morphological processes like inflection, derivation, and composition are handled in the development of the morphological generator for Greek.

We hope you find the articles and notes in the 2016 edition of the journal interesting, stimulating, and inspirational. Your own submissions and feedback are always welcome, and we look forward to receiving them.

Biljana Čubrović, Ph.D.
Chief Editor
The Linguistics Journal

The Use of Extraposition in the Written Production of Spanish Advanced Learners of English[1]

Elsa González-Álvarez[2] and Susana Doval-Suárez[3]

Abstract
Advanced learner production has been described as grammatically and lexically correct but still foreign-sounding. It has been suggested that this may be due to the overuse or underuse of certain structures or lexical items (Granger et al., 2002). The focusing device of extraposition has been shown to be over-represented in the English production of learners from different L1 backgrounds (Boström-Aronsson, 2001; Callies, 2009). By analyzing the Spanish component of the *International Corpus of Learner English* (ICLE) and the *Louvain Corpus of Native English Essays* (LOCNESS), the present study aims at comparing the use of extraposition by advanced Spanish learners and English native speakers in terms of frequency of use and discourse function. The results show that Spanish learners significantly overuse extraposition. Further significant differences were found regarding the form class of the extraposed component, with less frequent or unacceptable realizations being found only in the non-native speakers' (NNS) corpus. The fact that NNS use a similar inventory of functions for a similar stock of categories might indicate that they have learnt to use extraposition in a way that resembles NS use.

Introduction

The interlanguage (IL) of L2 learners with near-native competence has often been referred to as Advanced Learner Variety (ALV) (Bongartz, 2008; Labeau and Myles, 2009) and has been studied mostly with respect to grammatical (White and Genesee, 1996; van Boxtel et al., 2003) or phonological competence (Singleton and Lengyel, 1995). What emerges from most of the

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[1] This work is part of a wider project on Information Structure and other aspects of the Grammar-Discourse interface (grant numbers FFI2010-19380, FFI2013-40517-P and GRC2015/002 GI-1924).

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research carried out on advanced learners is that, although their production is mainly free from serious grammatical errors, it often sounds unidiomatic, with the reasons for this unidiomaticity or foreign-soundingness being difficult to identify.

The analyses of large samples of learner language gathered in learner corpora have shown that one of the reasons for this unidiomaticity comes from differences between native and non-native performance in the frequency of use of certain words, phrases and syntactic structures (Gilquin, 2001).

A number of studies oriented at discourse aspects of learner production have been conducted and evidence has emerged for the role of Information Structure (IS) as one of the core factors in determining acquisition at advanced levels. The term Information Structure (Halliday, 1967) has been used to refer to the complex interaction of numerous phenomena and principles that govern the organization of information in discourse and specifically to the use of syntactic structures to serve specific pragmatic functions. IS management is problematic at this level and learners have limited awareness of the appropriate use of lexical and syntactic focusing devices (Carroll et al., 2000; von Stutterheim, 2003). Rowley-Jolivet and Carter-Thomas (2005) also observed that, whereas NS writers and speakers appear to adapt their IS strategies in response to the genre, this was not necessarily the case for NNS (i.e., they differentiate far less between written and spoken modes than NS).

In spite of the observed difficulties in L2 IS management and its importance for successful communication, learners' knowledge of specific syntactic means to highlight information is an underexplored area in SLA research (Callies, 2009). Only a few studies have considered extraposition in detail (Boström-Aronsson, 2001; Dalton, 2011) or among other focusing devices (Callies, 2009), and they have found that it is over-represented in NNS written production partly because of L1 influence.

It must be added that there are no studies on the use of extraposition by Spanish (advanced) learners of English. Therefore, the aim of the present study is to contribute to the description of Spanish advanced learners' discourse competence in L2 English by investigating the use of extraposition in their written production. A comparison between these learners' and the native speakers' production will enable us to determine the extent to which this structure has been acquired and is effectively used to convey specific pragmatic functions in discourse.

Extraposition

Focus constructions (FC) are syntactic means of information focusing or information highlighting that can be understood as discourse motivated variations of the basic word order and represent more or less marked syntactic devices. Extraposition is a postposition syntactic process that characteristically involves moving a subordinate clause subject to the right, beyond the main predicate, and replacing the postponed element with a dummy pronoun to take over the vacated subject function (Collins, 1994; Gómez-González, 1997; Couper-Kuhlen and Thompson, 2008), as illustrated in (1) below (Kaltenböck, 2005:120):

(1)   a. *That John went to Paris* is surprising

        b. It is surprising *that John went to Paris*

The resulting construction in (1b) is made up of a matrix clause (i.e., "It is surprising") and an extraposed subordinate clause (i.e., "that John went to Paris") also called extraposed constituent (EC). The different structural patterns exhibited by the predicate in the matrix clause or matrix predicate (MP) have been identified, among others, by Collins (1994) and Gómez-González (1997), who found that the most common pattern was subject-predicator-complement, with the complement most commonly realized by an adjective phrase, noun phrase or adverb phrase (in this order of frequency). The second most common pattern was subject-predicator (active or passive). Much less frequent were examples of the patterns subject-predicator-object/complement and subject-predicator-indirect object (direct object) (agent).

Furthermore, three major types of extraposition can be distinguished in English, depending on the extraposed clause (Ward, Birner and Huddleston, 2002):

(a) Infinitival:
    (2)   It surprised me *to hear her say that*
(b) Declarative content clause:
    (3)   It didn't really bother me *that he was late again*
(c) Interrogative content clause:
    (4)   It is unclear *why they never answered my letter*

Ward, Birner and Huddleston (2002) add three more types to what they call the central case:

(d)　　*-ing*-clause:　a marginal type since, according to Gómez-González (1997) 'gerund-participial extrapose less readily, are uncommon except in informal speech, and are of dubious acceptance' (p. 99).

(5)　　It was stupid *telling my parents*

(e)　　NP: only a limited range of types can be extraposed, all with the structure '*the* ...N + relative clause'. They are a special case of 'concealed questions' more or less equivalent to interrogative clauses.

(6)　　It's extraordinary *the amount of beer he puts away*

(f)　　Extraposed object: involves moving the object position, over another complement (where the relation between the object and the complement is similar to the one existing between the subject and a predicate). In this case, there is no contrast between a basic version and a version with extraposition.

(7)　　He found it a great help *being able to talk*

Discourse approaches to extraposition have focused both on the interpersonal meanings expressed by the matrix predicates and on information structure, since the discourse motivation of this construction has its roots in different phenomena which explain both the end-positioning and initialization of different elements in the sentence (Gómez-González, 1997; van Linden, 2010).

On the one hand, the functional properties of *it*-extraposition have been described focusing on its theme and on the function of extraposition as a thematised comment (Dalton, 2011). Collins (1994) emphasizes the importance of the thematising function of extraposition, since the initialisation of an expression of the speaker's angle has the communicative role of foregrounding the modal expression thematically. Matrix clauses often include an evaluative element and extraposition allows the speaker/writer to make a commentary on the validity of the information placed in the extraposed component (EC) without appearing overtly in the text. Rowley-Jolivet and Carter-Thomas (2005) observe that placing this comment in initial position,

where given information is expected, makes evaluation more 'objective' and particularly difficult to challenge (and rhetorically more effective).

This semantic role of 'objectifying' a modality (Collins, 1994) is also discussed by Herriman (2000), who adds that the fact that the speaker's/writer's attitude is represented in the structural configuration of matrix finite clause 'makes available the Transitivity and Mood choices open to finite clauses and thereby the presentation of the attitudinal meaning as an explicit and negotiable proposition' (p.203). The source of this attitudinal meaning is concealed by assigning modal responsibility to the impersonal subject *it* (Herriman, 2000).

Thus, several authors have tried to identify the semantic categories expressed by the matrix predicate (Collins, 1994; Gómez-González, 1997; Herriman, 2000; Kaltenböck, 2005). Collins (1994) only includes in his categorization the dominant type of matrix predicate, i.e., that with an adjectival phrase, noun phrase or prepositional phrase, as predicative complement. This type can be subdivided into those with the following classes of complement:

1. Judgement (emotional and rational): *fascinating / a pity / true /clear, etc.*
2. Deontic conditions (obligation, desirability, permission, etc.): *better / necessary / desirable, etc.*
3. Potentiality: *possible / impossible, etc.*
4. Ease/difficulty: *easy / difficult / hard, etc.*
5. Usuality: *customary / usual / common, etc.*

Gómez-González (1997) includes all types of predicates, distinguishing two main types: (1) those which project some meaning or wording in order to (a) avoid an unqualified claim or to (b) ascribe to an unspecified source the responsibility for an assertion; and (2) those which thematise point of view. The second type is further subdivided into (a) modality (possible, probable, certain) and (b) modulation (desirable, required).

On the other hand, from a functional point of view, extraposition exemplifies the interaction of the structural and cognitive dimensions of IS: syntactic weight, information status, sentence position, and processing factors. Thus, this focus construction strongly interacts with the weight principle, since it is a means of postponing a heavy sentence constituent, usually a clausal subject, to a later position. Additionally, in line with the information principle,

extraposed clausal subjects predominantly contain new information whereas non-extraposed content clauses largely consists of given information (Miller, 2001; Ward, Birner and Huddleston, 2002; Kaltenböck, 2005).

The communicative use of *it*-extraposition, especially with regard to the information status of the extraposed clause, has been amply dealt with by Kaltenböck (2005). He adopted the concept of retrievability (recoverability) and, in this, he essentially followed Firbas (1992) and Geluykens (1991), who define given information as information that is retrievable (recoverable) from the preceding co(n)text and new information as information that is not thus derivable. Two types of *it*-extraposition were distinguished: given complement extraposition and new complement extraposition. He found 1,701 examples of extraposition in the British component of the *International Corpus of English* (ICE-GB), which comprises both written and spoken texts. The author found that, although the overall frequency of the second type was higher (71.5%), differences were observed between written and spoken texts with a frequency of 83.2% and 56.1% respectively (Kaltenböck, 2005).

In this regard, Collins (1994) stresses that the desirability of initializing a typically light and less informative matrix predicate is as important as the pressure to postpone a typically heavy and informative clause. As for the principle of end-focus, extraposition places new information in focus at the end of the sentence. Furthermore, in terms of processing, the subordinate clause is placed in a position where it is easier to process, reducing unnecessarily complex and informationally-packed subjects (Ward, Birner and Huddleston, 2002; Calude, 2008). Therefore, although the non-extraposed variants have been traditionally considered to be structurally more basic on syntactic grounds, since they preserve the canonical SVC word order, extraposition can be said to be pragmatically unmarked (Calude, 2008). Similarly, since instances of extraposed subject clauses significantly outnumber non-extraposed ones in authentic language corpora (Ward, Birner and Huddleston, 2002; Smolka, 2005), it is considered statistically unmarked (Kaltenböck, 2005).

As has been noted above, there is evidence that IS management is an important and problematic part of L2 knowledge, and that learners often have difficulties with the placing of focus (Bülow-Møller, 1996). One of the reasons for this seems to be that the discourse structure and the pragmatic principles of IS in the L1 may influence L2 acquisition in terms of avoidance (Plag, 1994), transfer, or overproduction (Schachter and Rutherford, 1979).

Thus, in spite of the fact that it is reasonable to assume that IS is a concept that exists in all languages, the formal linguistic means to express pragmatic effects are language specific even if pragmatic constraints are remarkably not. According to Siewierska (1994), the interaction of basic word order and the principles of information structure has consequences for the inventory of formal focus marking linguistic means in a given language and their degree of markedness.

English, with its rather fixed SVO word order, is positioned towards the grammatical end of the grammatic (GWO)/ pragmatic word order (PWO) typological continuum; that is, it uses word order to encode the grammatical relations within a sentence and is characterized, among other features, by subject prominence, occurrence of dummy subjects and a variety of structure-preserving operations to maintain the SVO order.

On the contrary, although Spanish has also been generally characterized as a language with basic SVO order in declarative clauses (Swiewierska, 1997), constituent ordering admits considerable variation in the position of main clause constituents, including the possibility of omitting the subject. Therefore, Spanish leans strongly toward the pragmatic end of the GWO/PWO continuum since this variation is 'one of the most important strategies that speakers have to express the informational status of specific elements' (Hannay and Martínez Caro, 2008:39). This is reflected by the fact that Spanish does not have a dummy subject and tolerates null subjects and VS constructions. Furthermore, the position of the subject before or after the verb is highly dependent on its pragmatic status.

As will be discussed later, typological differences existing between English and Spanish in this respect might be one possible source of difficulty in the acquisition of English focus constructions, such as extraposition.

Methodology

The aim of the present study is to compare the NS's and NNS's use of *it*-extraposition in English, both from a structural and functional perspective. The following research questions were formulated:

1. Are there any differences between NNS and NS in the general frequency of use of extraposition?

2. Are there any differences between NNS and NS in the structural properties of extraposition?

3. Are there any differences between NNS and NS in the discourse motivation of extraposition?

The data were extracted from two comparable written corpora (Granger et al., 2009):

a) The SPICLE, or the Spanish component of the *International Corpus of Learner English* (ICLE),[4] made up of 251 argumentative essays and 200,376 words.

b) The *Louvain Corpus of Native English Essays* (LOCNESS).[5] In order to make it comparable in extension to the SPICLE, we used a subcorpus of the LOCNESS (comprising 322 essays totalling 227,968 words) which included only university students (both British and American).

The first step involved the extraction of examples of extraposition by means of the software package Wordsmith Tools 5 (Scott, 2008). Since the corpus does not include part of speech tagging, this was carried out by a keyword search of the pronoun *it* which retrieved 7,870 instances*,* followed by a manual sorting of examples of *it*-extraposition, which yielded 437 instances of extraposition.

Secondly, the data extracted from both corpora were stored in an EXCEL database coded for the following variables (cf. section 2 above):

1. An independent variable: the subject's L1. Spanish (NNS) - English (NS)

2. A number of dependent variables (in order to answer the research questions):
   - Form class of extraposed constituent: finite, infinitival, -ing, NP

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[4] The ICLE comprises argumentative essays of over 3.5 million words written by higher intermediate to advanced learners of English from different L1 backgrounds: Bulgarian, Chinese, Czech, Dutch, Finnish, French, German, Italian, Japanese, Norwegian, Polish, Russian, Spanish, Swedish, Tswana, and Turkish. Each component contains at least 200,000 words, consisting of essays of between 500 and 1000 words written by advanced EFL learners, typically university students in their 3rd or 4th year of English studies.
[5] The LOCNESS comprises 232 argumentative essays written by American university students (168,400 words); 90 essays written by British university students (95,695 words); and 114 essays written by British A-level students (60,209 words), totaling 324,304 words. It provides control data in comparing native and non-native learners' writing, since the age group in both LOCNESS and ICLE is similar.

- Information status of extraposed constituent: new/given weight of extraposed constituent: number of words

- Semantic category of matrix predicate: Table 1 shows the semantic categorization which was adopted as a result of combining the taxonomies proposed by Collins (1994) and Gómez-González (1997)

Table 1 Semantic categorizations of the matrix predicate

Collins (1994)	Gómez-González (1997)	The present study[6]
	Projection	Projection
Judgement		Value judgement
	Modality:	
Potentiality	Likelihood	Epistemic modality
Usuality	Usuality	Usuality
Ease/difficulty	Ease or difficulty	Difficulty/ease
Deontic conditions (obligation, desirability, permission, etc.)	Modulation	Deontic modality

The last step involved carrying out statistical analyses in order to determine what combinations the learner used significantly more or significantly less than an NS. For the quantitative analysis, we used the PASW Statistics for Windows (Version 18.0). The Mann-Whitney U test was used to test for the existence of statistically significant differences between NS and NNS in the frequency of extraposition. The reason for choosing this non-parametric test, instead of the Independent-samples T-test was that the data under analysis did not exhibit a normal distribution as shown by the Kolmogorov-Smirnov (D=.374; p=0.0005) and Shapiro-Wilk (W=.672; p=0.0005) normality tests. For the same reason, the Mann-Whitney U test was also used to test for the existence of statistically significant differences between NS and NNS regarding the length of the extraposed element. Additionally, the Chi-square (χ^2) test was used to determine the existence of significant relationships between two or more nominal variables, such as the relationship between the speakers' L1 and the syntactic category of EC; the information status of

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[6] For a justification and illustration of the taxonomy adopted, see the subsection entitled 'Semantic Category of Matrix Predicate' below.

the EC; or the semantic category of the matrix predicate. It was also used to test whether the semantic category of the matrix predicate is a function of the syntactic category of the EC.

Results and Discussion

General Frequency

As we can observe in Table 2, the frequency of use of extraposition is higher in the NNS group. The Mann-Whitney U test revealed that this overuse was statistically significant (p = 0.005).

Table 2 General frequency of extraposition

	Total	%	Freq. per 1000 words
NNS	234	53.55	1.17
NS	203	46.45	0.89
Total general	437	100	1.02

These results corroborate those obtained in previous studies where Swedish (Boström-Aronsson, 2001) and Norwegian (Dalton, 2011) learners were also found to overuse extraposition. With Boström-Aronsson (2001), we think that learners may see this structure as a formulaic expression, easy to use as a sentence opening. It is also possible that NS use a wider range of linguistic means to express objective modality and attitudinal meanings, such as modal adverbs, modal verbs, comment clauses, etc. (Herriman, 2000), some of which could, in turn, be underused by NNS.

Another possible reason for this overuse could be traced back to L1 influence. As Martínez Caro (2007) observes, focus constituents are typically placed in final position in Spanish. Because of the relatively high degree of syntactic flexibility, the speaker may use different constructions involving subject-verb inversion for the final placement of elements in focus. Among these, attitude-reporting constructions with an extraposed (typically clausal) subject are frequent in Spanish (Martínez Caro, 2007).

Moreover, extraposition has been described as a pragmatically unmarked construction. One of the assumptions of functional-typological approaches to SLA (Eckman, 1977; Callies, 2009; Doval-Suárez and González-Álvarez, 2010) is that less marked structures are generally easier to acquire and more readily transferable from L1 to L2 than marked features, which are structurally and cognitively more complex.

In the following sections, the second research question is addressed, i.e., the question of whether there are any differences in the structural features of extrapositions produced by learners and native speakers.

Syntactic Category of EC

Table 3 shows the distribution of the different syntactic categories of the extraposed constituent (EC) found in our data.

Table 3 Syntactic category of EC

	NNS	NNS %	NS	NS %	Total	Total
content cl.	111	47.44	99	48.77	210	48.1
infinitival cl.	100	42.74	104	51.23	204	46.7
NP	12	5.13	0	0	12	2.7
-ing	3	1.28	0	0	3	0.7
Total	234	100	203	100	437	100

If we look at the figures for the overall frequency, we observe that, in line with previous studies (Collins, 1994; Gómez-González, 1997; Kaltenböck, 2005), extraposed content clauses predominate, accounting for 48% of all instances (example 1). This category is closely followed by infinitival EC (46.7%) (example 2). However, very few examples were found of the so-called marginal types (Ward, Birner and Huddleston, 2002): NP (example 3) and *-ing* (example 4). Finally, no examples of object extraposition were found.

(1)   It could be said *that international organizations, like Greenpeace, are doing a lot of work trying to improve laws and regulations about global environment in so many countries* [SPM04020][7]

(2)   It is rather difficult *to determine if the condemned rehabilitation is admissible or not* [SPM04018]

(3)   *It would be necessary *a great guard corp and also people who wanted to became part of this corp* [SPM03042]

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[7] The ICLE coding system used for each essay includes a language code (in this case, "SP" for Spanish) and an institution code (i.e., "M" for Complutense University of Madrid). Similarly, the LOCNESS coding system includes a national code (either "BR" for Britain or "US" for the US) plus a university code (i.e., "MR" for Marquette University). Additionally, the label "alevels" is used to code essays produced by British undergraduate subjects.

(4)   It is not nice *seeing one family always fighting just because they want to watch their own favourite programmes in different channels?* [SPM03018]

A comparison of NS and NNS reveals the existence of significant differences between the two groups in the distribution of the different types (χ^2=14.582; p=0.000). While the most frequent type in NNS was content clauses, infinitival clauses were slightly more frequent in NS. Examples of *-ing* and NP extraposition were only found in NNS's production.

On the one hand, the distribution of the two most frequent types (content and infinitival clauses) in the NNS corpus appears to come quite close to the tendencies observed for NS in previous studies. Thus, a similar frequency order was found by Collins (1994), Gómez-González (1997), Herriman (2000) and Kaltenböck (2005). However, these similarities have to be taken with care, given the differences existing between the corpora used in these studies.[8]

On the other hand, it should be noted that examples of marginal types are only found in the NNS group, which may point to a greater awareness on the part of the NS of the restrictions on the extraposition of the different syntactic categories. It has been observed that extraposed *-ing* clauses have a more restricted use than other types (Collins, 1994; Huddleston, 1984) and that they are uncommon outside informal speech (Quirk et al., 1985).

Similarly, if we take a close look at the examples of NP extraposition in NNS, we can observe that they are ungrammatical or questionable (see example 3 above). None of them have the structure '*the* ...N + relative clause', which is the only type of NP that can be extraposed in English. This type of extraposition might be influenced by the fact that, although a large number of extraposed subject constructions have a clausal subject in Spanish (often a more complex element than the initial verb and complement), less complex NP subjects also tend to appear finally (Martínez Caro, 2007).

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[8] The differences between the data analyzed in these studies are mainly connected with the type of medium (i.e., oral or written): a) some of these authors use both spoken and written data – for instance, Collins (1994) analyzed 302 examples of extraposition in the *Australian Corpus of English*, which contains 200,000 words and is evenly divided between writing and speech; and Kaltenböck's 2005 study focused on 1,701 examples of extraposition derived from the British component of the 1,000,000-word *International Corpus of English* (ICE-GB), which comprises both written and spoken texts; b) other studies focus exclusively on spoken data, such as Gómez-González (1997), who studied 105 examples found in the *Lancaster Spoken English Corpus* (LSEC), a corpus consisting of 49,285 words and including 10 textual categories of spoken BrE; c) finally, Herriman (2000) studies 2,152 examples of extraposition in the Lancaster-Oslo/Bergen (LOB) corpus, a one-million word corpus containing 500 text samples and 15 text categories all belonging to the written medium.

Another possible explanation could be teaching-induced hypercorrection. The strong SV orientation of EFL teaching makes learners add a dummy *it* to produce what they perceive as a 'correct' English structure.

Information Status of EC

One of the functions of extraposition is to preserve the unmarked distribution of information in English; that is, given information is followed by new information. Thus, the extraposed clause tends to contain new information whereas given information is presented in the matrix clause. This general tendency is followed by the subjects in the present study as reflected in table 4.

Table 4 Information status of EC

IS of EC	NNS		NS		Total	
Given	32	13.7%	40	19.7%	72	16.5%
New	202	86.3%	163	80.3%	365	83.5%
Total	234	100%	203	100%	437	100%

While new EC predominate in both groups, the intergroup comparison reveals a higher percentage of given EC in NS than in NNS, although differences are not statistically significant (χ^2=2.871, p=0.090). Again, these results follow the tendencies found in previous studies that have considered this factor. Thus, Kaltenböck (2005) found that irretrievable (new) complement clauses prevail (71.5%),with the difference increasing in written texts; where 83.2% of EC contained new information, and even more in academic writing and persuasive writing (i.e., press editorials), with 93% and 91% new EC respectively. These results are, according to the author, not surprising since in these text categories 'the emphasis is very much on conveying new facts and states-of-affairs (expressed by the complement clause). They are also less redundant than other text types' (Kaltenböck, 2005:130).

It should be added that, when EC contain given information, there could be other communicative motivations for extraposition such as the desirability of placing attitudinal meaning in thematic position and of placing heavy elements in final positions.

Information Structure and Syntactic Category of EC

Table 5 shows the distribution of given and new EC across the different syntactic categories of EC for each group of speakers.

Table 5 Information structure and syntactic category of EC

NNS	Given	%	New	%	Total NNS	%
content cl.	16	13.56	102	86.44	118	100
infinitival cl.	15	14.85	86	85.15	101	100
-ing	0	0	3	100	3	100
NP	1	8.33	11	91.67	12	100
Total general	32	13.68	202	86.32	234	100
NS	**Given**	**%**	**New**	**%**	**Total NS**	**%**
content cl.	24	24.24	75	75.76	99	100
infinitival cl.	16	15.38	88	84.62	104	100
-ing	0	0	0	0	0	100
NP	0	0	0	0	0	100
Total general	40	19.70	163	80.3	203	100

As expected, new ECs predominate in all syntactic types and in both types of speakers. However, if we compare the figures for the two main categories, content and infinitival clauses in NS and NNS, we find a different distribution of given and new ECs. Whereas the percentage of given ECs in NS is higher in content than in infinitival clauses, the opposite is true for NNS where the frequency of given ECs is slightly higher for infinitival clauses. A comparison of our results with Kaltenböck's (2005) shows that, again, NNS present similar tendencies as regards the syntactic categories that favour given ECs (infinitive: given 37%, new 63%; content clauses: given 16%, new 84%).

IS and Length of EC

Another important discourse motivation for the use of extraposition is that it allows the speaker to move heavy and complex clauses from subject (initial) position to final position where they are easier to process, since new information tends to be presented in greater detail. ECs containing new information tend to be longer than those containing given EC. Table 6 shows the extent to which NS and, more interestingly, NNS are guided by these principles in their use of extraposition.

Table 6 IS and length of EC

	Given		New	
	Mean length (number of words)	SD	Mean (number of words)	SD
NNS	10.65	6.893	14.02	7.739
NS	12.15	7.712	15.56	9.092
Total	11.47	7.336	14.70	8.391

In both groups, new EC are longer than given EC and, according to the Mann-Whitney U Test, these differences are statistically significant within both groups (p=0.009 for NNS; and p=0.020 for NS) but the difference is bigger in the NNS data. However, the Mann-Whitney U test revealed that the differences between groups were not significant (p=0.165).

Semantic Category of Matrix Predicate

It has been noted that the use of extraposition allows the speaker to express a personal comment or attitude towards the information conveyed in the EC, and present it 'as if it were some generally accepted view, rather than his/her personal judgement' (Kaltenböck, 2005:137). This has the effect of giving the attitudinal meaning an appearance of objectivity and makes it less contestable (Herriman, 2013).

As pointed out above, different categorizations have been proposed to classify the semantic meaning of the matrix clause. Examples (8) to (13) below illustrate the typology used in the present study, which is based on Collins (1994) and Gómez-González (1997) (cf. Table 1). It should be noted that in the category 'projection', we have included cases where extraposition was used to 'project some meaning or wording in order to avoid an unqualified claim (e.g, *it seems that...*) or to ascribe to an unspecified source the responsibility for an assertion (e.g, *it is said that...*)' (Gómez-González, 1997:102).

a) Epistemic modality:

(8) Dora and Kaliayev believe that it is possible to compensate for these murders through the giving of their own lives [337BRSUR1]

b) Deontic modality

(9) Why is it necessary to know something about the army if someone wants to be a translator or a lawyer? [SPM04028]

c) Difficulty/ease:

(10) It is difficult to justify killing of any kind [342BRSUR1]

d) Value judgement:

(11) It is interesting to see how different theories explain divorce and its consequences [497USARG]

e) Usuality

(12) It was usual for these youths to learn technical jobs such as plumbering [SPM03001]

f) Projection:

(13) It seems that with all his crying he has been playing an emotional blackmail on us [SPM01019]

Table 7 shows the frequency of the different semantic categories in NS and NNS data. Both groups produced examples of all the semantic categories and, although we can observe some variation in the frequency order of the different categories, no significant differences were found between both groups in their frequency of use (χ^2=14.77; p=0.039).

Table 7 Semantic category of MP

Semantic Category	NNS %	NS %
Deontic modality	17.95	19.70
Difficulty/ease	10.68	12.32
Epistemic modality	25.21	28.57
Usuality	4.27	0.49
Value judgement	16.24	11.33
Projection	25.64	27.59
Total	100	100

As can be seen in Table 7, the category 'projection' is, together with 'epistemic modality', one of the most frequently used by the subjects in our study. This category, which includes what Kaltenböck (2005) termed 'message conveying verbs', has, according to this author, the communicative function of presenting the new information in the complement clause 'as not having originated with the speaker him/herself. Rather than expressing his/her own idea/thought, etc., the speaker merely "reports" the message of the complement clause by attributing it to some

external source, which is usually left undefined' (p.146-147). This class of message conveying verbs is described by Kaltenböck (2005) as a special type of 'filler matrix predicate'; its main function being 'staging' or preparing the listener for the new information in the EC.

Although in many cases these clauses are informationally so weak that they could be omitted, they have the important function of signposting and structuring the flow of information. Interestingly, one of the examples the author gives for this category contains the verb 'seem' in the MP, which is, in our study, the most frequently used across all semantic categories by both NS and NNS (46 examples out of a total of 437; that is, 10.5% of all the words complemented by EC).

Furthermore, when compared with NS, NNS display a lower frequency of use of all the categories except for 'usuality' and 'value judgement'. Therefore, we analyzed all the examples included in these categories to find out if this difference was due to the overuse of a particular token by NNS. However, this was not the case, since, contrary to what would be expected, NNS show a greater variety in the selection of lexical items complemented by EC.

MP Semantic Category and EC Syntactic Category

Different semantic categories tend to be associated with different structural configurations in the MP, which, in turn, determines the syntactic types of the EC. Thus, it has been observed that some semantic categories are followed by both finite and non-finite clauses, while others take only finite or only infinitival complements (Collins, 1994; Kaltenböck, 2005).

According to Collins (1994), the explanation could be that, 'whereas finite nominal clauses express facts, by contrast infinitival clauses typically express the actions which entities may perform (or which may be performed upon them)' (p.18). Facts may be judged for their likelihood, whereas actions, unlike facts, may be considered easy or difficult (Kaltenböck, 2005).

The results reflected in Table 8 confirm this tendency. The Chi-square tests show that there exists a significant relationship between the semantic category of the matrix predicate and the form class of the extraposed element in both NNS (χ^2=120.519; p=0.000) and NS (χ^2=75.908 ; p=0.000). Therefore, it can be said that the restrictions outlined in previous studies seem to be observed by NS and, to some extent, also by NNS. Thus, there was only one instance of finite EC following MP expressing 'difficulty/ease' and only three instances of finite EC in the category 'usuality' in the NNS data, and no such instances were found in the NS data.

Table 8 MP semantic category and EC syntactic category

NNS	Form Class of EC									
	Content Clause		Infinitival Clause		NP		*-ing*		Total	
	N	%	N	%	N	%	N	%	N	%
Deontic modality (Desirability)	4	9.5	33	78.6	5	11.9	0	0	42	100
Difficulty/ease	1	4	24	96	0	0	0	0	25	100
Epistemic modality	44	74.6	15	25.4	0	0	0	0	59	100
Projection	50	83.3	4	6.7	6	10	0	0	60	100
Usuality	3	30	6	6.	1	10	0	0	10	100
Value judgement	14	36.8	21	55.3	0	0	3	7.9	38	100
NS	Form Class of EC									
	Content Clause		Infinitival Clause		NP		*-ing*		Total	
	N	%	N	%	N	%	N	%	N	%
Deontic modality (Desirability)	10	25	30	75	0	0	0	0	0	100
Difficulty/ease	0	0	25	100	0	0	0	0	0	100
Epistemic modality	30	51.7	28	48.3	0	0	0	0	0	100
Projection	51	91.1	5	8.9	0	0	0	0	0	100
Usuality	0	0	1	100	0	0	0	0	0	100
Value judgement	8	34.8	15	65.2	0	0	0	0	0	100

Conclusions

Advanced Learner writing has been shown to differ from NS writing in terms of the frequency of certain words or structures (Granger et al., 2002). Hence, it was our aim to explore Spanish advanced learners' use of extraposition, a type of focusing device that has been claimed to be over-represented in the written production of advanced learners with different L1 backgrounds (Boström-Aronsson, 2001; Callies, 2009; Dalton, 2011).

Our results confirm that Spanish advanced learners significantly overuse extraposition and, with Boström-Aronsson (2001), we claim that this phenomenon can be ascribed to the learners' tendency to see the structure *It is X that.../It is X to...* as a formulaic expression, easy to use as a sentence opening. Furthermore, since extraposition is a means by which objective

modality can be expressed, this over-representation in learner writing might additionally reflect differences between NS and NNS regarding the expression of modality. These differences may be ascribed to L1 influence, since, in Spanish, there is a tendency to place the subject in the end position. A further explanation for the over-representation of extraposition in our learner data might be connected to the fact that pragmatically unmarked constructions (like this) are generally considered to be easier to acquire.

Significant differences were also found between NS and NNS regarding the form class of the EC. Thus, while the most frequent syntactic type in the NNS group was content clauses, infinitival clauses predominated in NS writing. Not surprisingly, the only examples of EC realized by an *-ing* clause appeared in the NNS corpus, which may be due to the fact that the use of this form class is often claimed to be either more restricted (Collins, 1994; Huddleston, 1984) or uncommon outside informal speech (Quirk et al., 1985). Similarly, extraposed NPs, which, in most cases are considered as questionable, appear only in the NNS corpus, probably due to L1 influence (i.e., the Spanish tendency to postpone the subject) combined with teaching-induced hypercorrection (i.e., EFL teachers' emphasis on the compulsory status of the subject in English in contrast with Spanish, where it is omissible).

Despite these important quantitative deviations, NS and NNS use of extraposition has not been found to differ so much in other respects. Thus, no significant differences were found between NNS and NS regarding the information status of the EC, since new ECs predominate in both groups, even though the percentage of given ECs was higher in the NS group. Similarly, the distribution of new/given ECs across the different syntactic categories showed a similar tendency in both types of speakers, with new ECs predominating in all syntactic types, and content clauses showing the highest rate of given ECs, especially in NS production.

Furthermore, our results show the existence of a significant relationship between the length of the EC and its IS, since new ECs tend to be longer than given ECs in both groups; thus, revealing that there are no significant differences between NS and NNS in relation to this aspect either. Finally, in both groups, there is a significant relationship between the semantic and the syntactic category of the MP; thus, pointing to a functional specialization of the different syntactic categories realizing this element. Therefore, the fact that NNS use a similar inventory of functions for a similar stock of categories might indicate that they have learnt to use this focusing device in a way that quite resembles NS use.

It should be noted that the analysis of extrapositions undertaken here is only a first step, and the picture emerging can be improved upon by studying other types of texts, such as spoken texts or texts belonging to other genres. In general terms, more qualitative analyses of learner text may also be fruitful with regard to understanding how learners cope with the different discourse functions of extraposition.

Furthermore, and as has been stated above, the over-representation of extraposition in learner writing may reflect differences in regards to the expression of modality between NS and NNS. Therefore, it would be an extremely worthwhile task to carry out a detailed analysis of alternative ways of expressing modality to check whether this overuse is due to the underuse of other constructions that are present in the NS functional inventory. Additionally, the study of cases of non-extraposition could also serve to improve the description of the learners' discourse strategies. By taking all of these elements into account, it should be possible to provide a detailed description of one important component of the learners' pragmatic abilities.

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The Difficulties in Acquiring the English Article System:
The Role of Contrastive Analysis Hypothesis (CAH) and Explicit/Implicit Teaching Strategies

Intesar Elwerfalli[1]

Abstract
This study aims to explore the difficulties first-year Libyan students have in acquiring the English article system by using the following steps: the Contrastive Analysis Hypothesis (CAH), Error Analysis (EA) and two teaching strategies. The CAH was adopted to compare the article system in both English and Arabic in order to figure out if it can assist in predicting some difficulties that Libyan learners might be confronted with. Given the diversity in views of scholars regarding the effect of L1 in the acquisition of grammatical items, this study tests what role L1 may play when L2 Libyan learners of English acquire the English article system. The second part aims to investigate the effectiveness of two kinds of article instruction with an evaluation of the long-term effects. These teaching strategies were compared in order to measure the effectiveness of using the English article system appropriately, grammatical development, and lexical diversity. The experiment was administered to three groups of EFL first-year students at Garyounis University in Libya. One group received instruction based on the textual enhancement of input strategy (TEI). The second group was instructed based on the deductive teaching strategy (DT). The third group served as the control group (CG). They were given a similar test three times: the pre-test, post-test 1, and post-test 2. With regards to the effectiveness of using the English article appropriately, the results showed that group DT improved from pre-test to post-tests 1 and 2. The results of the measurement of lexical diversity showed that both groups TEI and CG presented better results than the DT group in post-test 1. In post-test 2, only the TEI group improved significantly. The results of this study were in support of implicit teaching strategies.

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Introduction

Several recent studies (Atay, 2010; Crompton, 2011; Kao and Chian, 2013) on the nature of second language speakers' interlanguage have concentrated on the acquisition of the English article system. There have been two major reasons for this concern. Firstly, English articles present difficult semantic and syntactic properties which require some time to comprehend. This allows researchers to follow the development of learners' knowledge of these properties as proficiency increases. Secondly, languages vary in terms of whether they have article systems or not. Such dissimilarities among languages allows researchers to assess the impact of L1 knowledge on developing knowledge in the L2.

The present study, thus, aims at understanding first-year Libyan students' difficulties in acquiring the English article system by following two steps: the Contrastive Analysis Hypothesis (CAH) and testing two teaching strategies; namely, deductive teaching and textual enhancement of input.

Literature Review

Contrastive Analysis Hypothesis (CAH)

Contrastive Analysis Hypothesis is one of the pioneering efforts in second language acquisition (SLA) research. It was first produced by Charles Fries (1945) and then developed by Lado (1957) and has been defined by a number of linguists. Brown (2000:207) defined Contrastive Analysis (CA) as 'studies of contrast between the native language and the target language which specifically examines the effect of native on target language'. Lado claimed that the difficulty of L2 acquisition might be predicted through the differences between L1 and L2.

CAH claimed that difficulties which arise whilst learning an L2 can be mainly due to mother tongue interference. This assumption relates to the transfer of native habits into the target language. Brown (2007:117) defined transfer as 'the interaction of previously acquired linguistic and/or conceptual knowledge with the present learning event to facilitate a new language learning'. For example, Arab learners of English may produce a sentence such as *My father doctor* without the auxiliary verb *be* and the indefinite article *a*. This could be due to the influence of their mother tongue, as the linguistic system in Arabic has neither the auxiliary verb

to be nor indefinite articles. Such an influence leads learners to negatively transfer the rules of their first language and employ them in the L2.

Transfer can be divided into two poles: negative transfer and positive transfer. Negative transfer refers to the use of previous linguistic knowledge while speaking an L2 which results in undesirable forms. This occurs when the L1 form which is used in L2 production is not part of the L2 norm, and the resulting utterance is erroneous. This kind of transfer (interference) hinders learning and execution of appropriate target language forms. Positive transfer, by contrast, is when an L1 form is used in the production of an L2. It is part of the L2 norm and, hence, facilitates the learning process.

Additionally, the results of a number of studies (Corder 1981; Rintell, 1984; Kellerman 1987; Odlin, 1989; Hall, 1990; Noor, 1996; Scott, 1997; Lakkis and Malak, 2000; Cook, 2001; Liu, 2002; Sarko, 2009; Ionin and Montrul, 2010) reveal that transfer plays a role in SLA. These studies show that L1 has an impact (either positive or negative) on L2 in the domains of phonology, morphology, and semantics. When L2 learners transfer L1 properties which are different from the L2, learning problems may arise. For instance, the result of Sarko's study (2009), which was conducted on Arabic and French learners of English, reveals that both Arabic and French learners use the definite article in a similar manner to English native speakers. The transfer of their L1 patterns to L2 was positive, the reason being that both the Arabic and French languages have similarities with English regarding article systems. Therefore, they transferred grammatical patterns from their L1 to L2 and this transfer is positive when there are similarities between the two languages and negative when there are differences.

There are, however, controversial views on the role of transfer in SLA. Theories such as the Full Access (without transfer) Hypothesis argue that L1 grammar is not the basis for the acquisition of L2; thus, there is no L1 transfer during L2 acquisition. The results of a number of studies (Dulay and Burt 1972; Kasper, 1992; Ellis, 1994; Cao, 2001; Sabourin, 2003) support this view.

It can thus be summarised that empirical research has presented different findings regarding the role of L1 on L2 learners. Some studies claim that L1 has an impact (positive or negative) on L2 and the differences between the two languages may predict these learning difficulties. Other studies claim that the differences between two languages do not necessarily result in learning difficulties and that the difficulties which arise are not always predicted by

CAH. On account of these varied opinions, the significance of CAH has been intensely debated and two versions of the CAH (the strong and weak versions) have emerged.

Strong and Weak Versions of Contrastive Analysis

Wardhaugh (1970) classified CAH into strong and weak versions. The strong version claims that: (a) interference from the learner's L1 is the key obstacle to L2 learning, (b) the greater the difference between L1 and L2, the greater the difficulties, (c) these difficulties can be predicted with the aid of systematic analysis, (d) the result of CA can be used as a reliable basis for the preparation of teaching materials, course planning, and the development of classroom techniques. It claims that the difficulties that learners face are reflections of their L1, that L2 learners transfer their L1 rules and implement them into L2. Hence, CAH allows researchers to predict and identify errors made by L2 learners.

The weak version, which is known today as cross-linguistic influence (CLI), refers to the explanations of errors. The distinction between the strong and the weak version of the CAH is the move from the predictive power of learning difficulty (strong version) to the explanatory power of the observed errors (weak version). Both versions of the CAH have strengths and weaknesses; the weaknesses have led to criticism on the part of a number of researchers (Khansir, 2012).

Criticism of the Contrastive Analysis Hypothesis

The main weakness of the strong version of the CAH is the accuracy of prediction (i.e., over-prediction and under-prediction). Another criticism is that errors are not only made through interference from L1 (Macht, 1998; Brown, 2000), and that transferring L1 habits is not the only reason for all errors an L2 learner may make in the L2. A number of studies (e.g., Dulay & Burt, 1974; Abbas, 1995) have shown that many errors predicted to cause learning difficulties for students actually did not. These studies also revealed that the influence of L1 on learners was much less than that said to be by CAH.

Based on the CAH, the present study compares the article systems in English and Arabic (learners' L1). The comparison examines the forms and functions of the article system in both languages. It is based on a collection of authentic texts to establish the similarities and differences between the two languages and predict the errors that Libyan learners of English may

make. According to the differences between the two languages' article systems, the following difficulties were predicted.

Potential Difficulties for Libyan Learners of English regarding the English Article System

The comparison of the forms and the uses of the article systems in both Arabic and English resulted in some difficulties. They can be summarized as follows:

(1)   The absence of the indefinite article in Arabic may be problematic for Libyan learners of English. A Libyan learner of English is likely to omit the indefinite article. For example, a Libyan student may write sentences such as:

         *This is book
         *She is teacher

(2)   A Libyan learner of English may confuse *a* and *an*. A Libyan learner is more likely to omit the indefinite article than the definite article.

         *This is a orange
         *I saw him a hour ago

(3)   As Arabic differs from English in that it does not have a phonologically overt exponent of indefiniteness, Libyan learners of English may tend to use the indefinite article whenever the definite article is not used.

         *I want a rice
         *There are a bags

(4)   Another difficulty that Libyan learners may experience is interference from the Arabic genitive construction.

         *Car the teacher
         The car of the teacher

(5)   In certain situations in English (i.e., idiomatic expressions), no article is needed, as in the phrases *in bed* and *by chance*. However, the definite article *al-* is usually required in Arabic in similar situations.

         *By the chance
         *Go to the bed at 9.30

(6)   The definite article *al-* is required in Arabic for names of the week, names of meals, certain names of towns, cities and countries. Accordingly, when writing an English sentence, a Libyan student may add *the* to such names.

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*I visited the India last year
*The breakfast, the lunch, and the supper are basic meals in the Kuwait

(7)   As Arabic allows the use of *al-* with a post-modifying relative clause and does not allow it with a post-modifying prepositional phrase, a Libyan student may omit *the* when referring to prepositional phrases in English.

*Size of the Arabic markets
*Price of the goods

(8)   Libyan students are likely to use *the* with names of institutions when referring to their main purposes.

*I do well in the school
*Doctor John goes to the hospital every day

(9)   Libyan learners of English may also tend to use the definite article with mass / abstract nouns and plural countable nouns which are used in a generic sense.

*The life is beautiful
*I like the bananas
*The dogs are useful to the man

(10)   In English, when writing words preceded by the preposition *by*, indicating a means of transport, the zero article is required, whereas, in Arabic, such words are confined to the definite article *al-*. For this reason, a Libyan student may insert the definite article.

*I go to the school by the bus

(11)   As abstract adjectives agree with nouns in definiteness in Arabic, a Libyan learner of English is likely to insert the definite article *the* to both adjectives and nouns in English.

*The respective the mother
*The official the language

(12)   The use of the definite article with superlative adjectives is obligatory in English but the situation is different in Arabic. The use of *al-* with the superlative adjectives is allowed only with plural nouns. Singular nouns that are preceded by a superlative adjective can be used only with the zero article. No use of *al-* is required. Such a difference between English and Arabic may lead a Libyan learner to write sentences such as:

*John is best student in my class

*Tipesti Hotel is oldest building in Benghazi

(13) A number of nouns (e.g., information, advice) are classified as non-countable in English and countable in Arabic. This mismatch is problematic and makes a Libyan learner's task more complex because they need to learn both the article system and noun distinctions.

*I have a good news
*I gave him an information

Additionally, nouns in English are countable or non-countable depending on the meaning and context in which they are mentioned. This feature may confuse a Libyan learner, as they may not recognise what the mentioned noun refers to. For instance, we expect these learners to write something like:

*The windows are made of the / a glass.

The criticism that the CAH is concerned only with learners' output has resulted in many researchers shedding light on learners' input and how adopting a certain teaching strategy may assist in mastering linguistic elements. It is believed that insufficient exposure to certain grammatical elements is a factor which presents a problem in language learning. For example, a teaching strategy which L2 teachers may adopt for a particular linguistic feature may either facilitate or obstruct the student's learning. Some strategies support explicit teaching, whereas others support implicit teaching through exposure to language whereby learners focus on both meaning and form. Hence, an examination of the literature concerning the treatment of grammar over time and the effects of teaching strategies follows below.

Theoretical Grounds of Grammar Instruction

The question of how grammar should be taught in an effective way has been a central issue in discussions and research in SLA (Ellis, 2006). The controversy of the effectiveness of explicit and implicit teaching of grammar has been questioned for decades. Basically, instruction can be direct (explicit) or indirect (implicit). Some researchers (Omaggio 1984; Swain and Nassaji, 2000; Swain and Lapkin, 2001) agree that explicit teaching methods are more beneficial for learners; others (Krashen, 1982) agree that implicit teaching methods are more helpful for

learners; and some researchers (Ellis, 1997; Simard and Wong 2004) believe that a combination of the two methods is beneficial for optimal learning.

According to Norris and Ortega (2000), explicit instruction is an explanation of rules (deductive/ metalinguistic), or direct attention to forms; whilst implicit instruction is not rule explanation, and does not direct attention to forms.

Explicit Teaching Strategies

Deductive Teaching

A deductive teaching strategy aims to provide learners with grammatical rules, describe how new structures are formed, what their components are, and in which type of context they can be used. The information is given by the teacher (teacher-centred) and requires grammatical patterns to be presented and followed by examples and, then, the learners practice them. It is based on the idea that the presentation of grammatical rules achieves optimal learning. This type of instruction provides clear clarification of grammatical rules; it is a direct method and may result in making the learning task easier and less intimidating.

A considerable number of studies, such as Norris and Ortega (2000), Erlam (2003) and Lin and Finestack (2009), have revealed that learners who receive deductive teaching outperform those who receive other strategies of teaching.

The deductive teaching approach has, however, been criticized by a number of researchers such as Richards (2002) on the basis that it provides fewer opportunities for learners to think and infer a concept for themselves. Shaffer (1989) believed that there may be a gap between teaching and learning. Students could deduce grammatical rules and practice them, but in real time communication may not disclose what they have learnt. Another criticism came from Sato (1990), who claimed that such instruction might lead to non-target-like use of target forms. Nassaji and Fotos (2004) pointed out that the inadequacies of deductive teaching approaches have resulted in other approaches to grammar instruction. One of these is textual enhancement of input.

Implicit Teaching Strategies

Textual Enhancement of Input

Textual enhancement of input is a technique that aims at:

Making learners aware of the new target language features and rules by highlighting them in the input – more or less concisely or elaborately, and with greater or lesser explicitness and intensity (Sharwood-Smith, 1994:179)

It is one of implicit focus on form teaching techniques. When applying implicit focus on form techniques such as textual enhancement of input, a teacher is attempting to draw learners' attention to a linguistic form implicitly without a direct grammar explanation. Izumi (2012) provided some of the techniques that are used to achieve implicit focus on form. These include input flooding, input enhancement, task-essential language, and recasting.

Long and Robinson (1998) pointed out that implicit teaching techniques include typographical textual enhancement. Input enhancement can be defined as any technique which is designed to draw learners' attention to target features by making them salient in context (Sharwood Smith, 1994; Takahashi, 2001; Wong, 2005). Drawing learners' attention to a particular target structure can be achieved through the manipulation of typography, such as different type faces and large font sizes, and by using typographic cues, such as underlining, italicizing, capitalizing, highlighting, colour coding, or bolding (Schmidt, 1990; Nunan, 2004; Yu, 2013). Such manipulations make the target structures prominent, thereby aiding learners to recognize their property in context.

A number of studies have been carried out to investigate the effectiveness of input enhancement techniques. For instance, White (1998) and Lee (2007) examined the role of different techniques of input enhancement. The results show that the group which received the visual input enhancement technique outperformed the group that received the input flood technique.

Although research has provided valuable insights on implicit instruction techniques, they have been criticized for various reasons. VanPatten (1990; 1996) claimed that, in implicit instruction techniques, learners, especially beginners, face difficulties in paying attention to form and meaning simultaneously, in which case they prioritize meaning over form in communicative activities. Moreover, Poole (2003) claimed that class size can be another problematic area for implicit instruction. Yu (2001) and Butler (2004) argued that some English teachers may lack a

high level of oral skills which is problematic when employing implicit instruction strategies, as it requires teachers to have native-like fluency.

Methodology

Participants

The research participants were 90 male and female first-year Libyan students who were majoring in English as a foreign language at Garyounis University, Benghazi, Libya. Each class included 30 students, aged 19-23. All students were native speakers of Arabic. They shared similar linguistic and socioeconomic backgrounds, educational systems, and fields of study. The participants belonged to a Libyan Arabic speaking community and started learning EFL before studying it as their major at university. They started learning English as a second language both in the preparatory and secondary stages, with a minimum of 6 years of previous English-learning experience. Based on a placement test (TOEFL), their English level was classified as intermediate. The intermediate level was chosen because learners are assumed to have sufficient linguistic knowledge to be able to concentrate on this part of grammar.

The participants were assigned to 3 groups: two experimental groups (deductive teaching (DT) and textual enhancement of input teaching (TEI), and the control group (CG). The participants were invited to take part in this study and the purpose of the study was explained to them. Following VanPatten and Cadierno (1993), Master (1994), and Allen (2000), all instruction was conducted in the participants' regular classrooms (the English input that they normally receive is through explicit teaching strategies). All participants had a normal schedule of other academic classes at the same time. The present study provided them with extra classes. The distribution of participants into the three classes was decided at random. Groups (DT, TEI) received a course on the article system in which they were subject to two different treatments; an explicit deductive grammar instructional strategy with group DT, and an implicit instructional strategy (textual enhancement of input) with group TEI for eight weeks. The control group CG was exposed to an intensive amount of article usage through the use of authentic texts.

The instruments employed in this study consisted of three tests: a pre-test, post-test 1 and post-test 2. The goal of post-test 2 was to find out whether the proficiency gains from instruction remained stable after six months or not. To collect data for the study, each test contained two

tasks: a multiple choice task and two short composition tasks (with a 100-word limit for each task).

The Multiple Choice Task

The multiple choice items were of two types: isolated sentences and a passage of integrated items. The multiple choice test had 30 items and was worth 30 points. One point was assigned for each correct answer and incorrect answers were assigned zero points. The three tests (pre-, post- 1, and post- 2) were scored by the researcher. The test items were adapted from Murphy (1998), Master (1994), and Eastwood (1999). In addition to leaving blanks for the relevant article, the researcher provided a choice of three articles and the participants were instructed to choose the most suitable article.

The multiple choice task was similar each time (three versions with the order counterbalanced). The researcher ensured that the same test format was used to retest article usage but the participant who had version (1) in the pre-test had different versions (2 or 3) in post-test 1 and post-test 2. In other words, each student received three different versions of each test.

The Composition Task

The goal of this task was to investigate the sources of the misuse of the English article system made by Libyan learners in this study. It aims to find out whether mother tongue interference causes students to make article errors or not.

Participants were given two topics in this task, and were asked to answer both of them. The two topics were: 1) *What did you do last weekend*? and 2) *Describe one of your relatives*. These questions were presented in all three tests. They were chosen so that the students could write different answers in each test. Although the tasks included written instructions, the researcher provided the participants with verbal instructions in English and Arabic before each task.

Procedure

The pre-test was given prior to the course, so that the results served to ascertain a baseline for all groups. Then, eight weeks later, after the course was completed, post-test 1 was given to measure

proficiency gains; post-test 2 was given to the students six months later to establish the long-term effects of the learning process.

In each test, the students were given 45-50 minutes to complete the test, sufficient for each participant to finish the test without rushing but not enough for him/her to think at length about his/her answers. All groups had 10 instructional sessions and each group had one session per week.

Instructional Materials

Group (DT)

Group DT was instructed in accordance with two popular grammar books. They were *Essential Grammar in Use* by Murphy (1998) and Oxford Practice Grammar by Eastwood (1999). The language of class instruction was English. Explanations in Arabic were given when students faced concepts that were too difficult to understand. The group received systematic article instruction throughout the nine weeks. The article system course concentrated on six main aspects, in the following order (from Master 1994):

(1)　　The countable - uncountable and singular - plural distinctions.
(2)　　The indefinite [a(n), Ø] - definite [the] distinction.
(3)　　The premodified - postmodified distinction.
(4)　　The specific - generic distinction.
(5)　　The common noun - proper noun distinction.
(6)　　The idiomatic phrase- nonidiomatic phrase distinction.

Group (TEI)

Group TEI was instructed with a focus on form teaching technique. It was an input enhancement strategy. In order to direct the learners' attention to the target features (the English article system), the researcher manipulated the learners' input to provoke development by deliberately engaging awareness and trying to raise learners' awareness.

Authentic texts (a set of materials in which all articles *a, an, the* and the zero article *Ø*) were adapted from the *English-Online* website (http://www.english-online.at/index.htm). A total of six-hour instructional packages of reading texts and activities was provided, 45 minutes per class.

Group (CG)

The procedure for this group was similar to that of group TEI. There were eight authentic texts from different fields, the only difference being that the articles in the texts for this group were not enhanced or enlarged.

Results

Results of the Multiple Choice Task

Before presenting the results, a comparison was needed of the three versions of the tests to make sure that they were equally difficult and no significant differences exist amongst them. The three tests were compared as follows:

The mean of all the scores of versions 1, 2 and 3 (see Table 1 below) were computed. SPSS results revealed that the three versions were equally difficult for all participants and there were no significant differences amongst them.

Table 1 Descriptive statistics of all scores of versions 1, 2 and 3

Version	N	Mean	SD
Version 1	90	17.51	4.710
Version 2	90	17.38	4.615
Version 3	90	17.59	4.811

Descriptive Statistics of the Three Tests

First, descriptive statistics of the three tests, together with the number of participants in each group, mean scores, and standard deviation are presented in Table 2. The data revealed that the treatment groups, (TEI and DT), regardless of various instruction methods, outperformed the third group, the (CG), in progress from pre-test, to post-test 1 and post-test 2.

Table 2 Percentages of correct uses of each group in the pre-test, post-test 1, and post-test 2

Test Group	Pre-Test		Post-Test 1		Post-Test 2	
	Mean	SD	Mean	SD	Mean	SD
TEI (n=30)	15.43	4.014	18.07	3.814	17.30	4.178
DT (n=30)	14.93	3.562	23.07	3.107	21.97	2.918
CG (n=30)	15.27	4.102	16.03	4.271	15.37	3.755

From Figure 1 below, it can be noted that teaching had an effect on the TEI and DT. However, after testing, participants in the DT group improved more than participants in the other two groups.
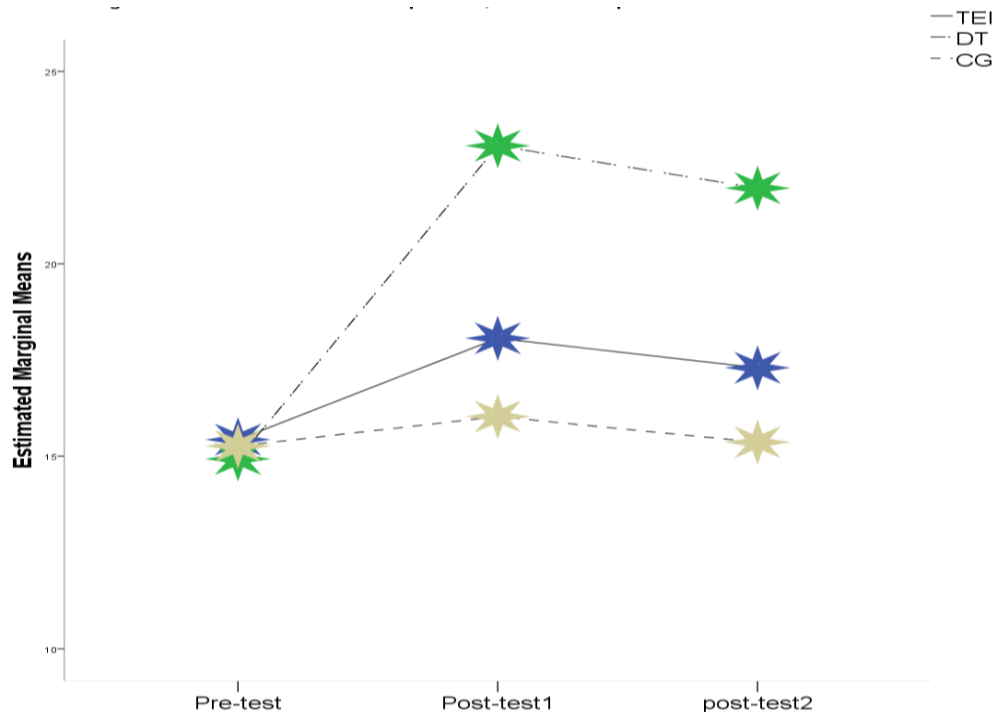
Figure 1 Mean of the three groups in pre-test, post-test 1, and post-test 2

Analyses of Pre-Test

To determine whether there were pre-existing differences amongst the three groups, a one-way ANOVA was performed on the pre-test scores of all groups. The ANOVA findings show that there were no significant differences between the performances of the three groups before the treatment: $F_{(2,87)}=.128$, $p=0.880$.

Analyses of Post-Test 1 and Post-Test 2

In this part of the analysis, three operations were carried out: (1) 3x3 repeated measures ANOVA (3 tests x 3 groups), (2) an independent samples t-test, (a follow-up analysis used to compare groups: *TEI* vs. *DT*, *DT* vs.*CG*, *TEI* vs. *CG* in the three tests), and (3) a paired samples t-test (a follow-up analysis was used to compare tests within the same groups). That is, for each group: *pre-test* vs. *post-test 1* and *pre-test* vs. *post-test 2*. As regards repeated measures ANOVA, an

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analysis of between-group comparison, within-group comparison and test*group interaction was performed to examine whether there were significant differences among the three groups. A 'between-group comparison' is an experimental design, where the three groups are assigned to three different tests (pre-test, post-test 1, and post-test 2) in the treatment. It examines any differences between the groups. A 'within-group comparison' is one where the same individuals participate in all of the experimental conditions. Repeated measures are taken from the same participants; hence, differences are examined within the subjects. Within-group analyses, (a paired-samples t-test) and between-group analyses, (an independent-samples t-test) were carried out.

Repeated Measures ANOVA

In contrast to the pre-test results, the ANOVA results revealed that there were significant differences amongst the three groups. Table 3 displays the main effects of the test, test*group and group results. The analysis of the test is significant with a large effect size [2]: $F(2,87)=127.371$, $p<0.001$, partial eta squared=0.594. This means that there are significant differences among the three tests when all groups are averaged together. However, this study is interested in establishing how the TEI, DT, and CG groups improved relative to each other. This can be observed by knowing the test*group analysis. As shown in Table 3, the interaction between the test and group was significant with a large effect size: $F(4,174)=48.016$, $p<0.001$, partial eta squared=0.525. This means that the groups had significantly different changes from pre-test to post-test 2.

Table 3 Repeated measures ANOVA: Test of within- and between-subject effects

Subject	df	F	Sig.	Partial Eta Squared
Test	2	127.371	.000	.594
Test*Group	4	48.016	.000	.525
Group	2	12.542	.000	.224

[2] According to Cohen's guideline (1988), an effect size of 0.10 signifies a small effect, an effect size of 0.25 signifies a medium effect, and an effect size of 0.40 signifies a large effect.

Moreover, the main effect of a group (between-group analysis) examines if there are significant differences between the three groups. The results indicate that there are statistically significant differences across the three groups with a small effect size: $F(2,87)=12.542$, $p<0.001$, partial eta squared=.224.

According to the recommendation of Corston and Colman (2000) and Cramer (2008), the t-test helps researchers to locate differences amongst their participants. To pinpoint where the differences lay across the groups, a follow-up analysis, (an independent samples t-test and paired samples t-test) was conducted and the results were as follows.

Independent Samples T-Test Analysis

An independent samples t-test was conducted comparing pre-test scores, post-test 1 and post-test 2 scores among the three groups.

Regarding the pre-test analysis, three levels were analysed: TEI vs. DT, TEI vs. CG, and DT vs. CG. The results revealed that there were no significant differences in the scores for level 1: $t(58)=.510$, $p=0.612$, level 2: $t(58 =-.336$, $p=0.738$, and level 3: $t(58)=.159$, $p=0.874$ (see Table 4).

Table 4 The results of independent samples t-test of the pre-test

Level	t	df	Sig.
TEI vs. DT	.510	58	.612
DT vs. CG	-.336	58	.738
TEI vs. CG	.159	58	.874

With respect to post-test 1 analysis, Table 5 shows that there were significant differences only between the first two levels, i.e., level 1: $t(58)=-5.567$, $p<0.001$, and level 2: $t(58)=7.294$, $p<0.001$, although not with level 3, where a different pattern was found: $t(58)=1,945$, $p=0.057$.

Table 5 The results of independent samples t-test of post-test 1

Level	t	df	Sig.
TEI vs. DT	-5.567	58	.000
DT vs. CG	7.294	58	.000
TEI vs. CG	1.945	58	.057

Similar to post-test 1 analysis, the post-test 2 analysis (Table 6) demonstrated that there were significant differences only between the first two levels. That is, level 1: $t(58)=-5.015$, $p<0.001$,

and level 2: t(58)=7.601, p<0.001. As for level 3, there was no significant difference between the TEI group and the CG: t(58)=1.885, p=0.064.

Table 6 The results of independent samples t-test of post-test 2

Level	t	df	Sig.
TEI vs. DT	-5.015	58	.000
DT vs. CG	7.601	58	.000
TEI vs. CG	1.885	58	.064

These results suggest that the three groups had similar scores before the treatments. However, in post-test 1 and post-test 2, significant differences were detected between groups, except for the TEI group and the CG. The DT group significantly outperformed the other two groups and made significant improvements in their selection of the English articles, both in post-test 1 and post-test 2.

Paired Samples T-Test Analysis

A paired-samples t-test was conducted to compare pre- vs. post-test 1 and pre- vs. post-test 2 for each group (see Table 7).

The results of the TEI group illustrated that the group had improved significantly in their performance from pre- to post-test 1: t(29)=-7.970, p<0.001, as well as from pre- to post-test 2: t(29)=-4.133, p<0.001. This result suggests that this group's performance developed after 6 months of instruction.

Likewise, the results of the DT group revealed that the performance of this group had significant differences from pre- to post-test 1: t(29)=-13.909, p<0.001, and from pre-test to post-test 2: t(29)=-11.105, p<0.001. This result suggests that, in the long term, the group's performance improved.

As regards the performance of the CG, the results showed that there were significant differences only between pre- and post-test 1: t(29)=-4.173, p<0.001, but not between pre- and post-test 2: t(29)=-.280, p=0.781. This result suggests that the group remained unchanged after 6 months of instruction. Although the group was taught by means of exposure to an intensive amount of authentic articles and comprehension questions about those articles, it improved in its use of the articles. This improvement may be because the students had their normal classes, (including grammar classes) along with the treatment.

Table 7 Results of paired samples t-test

Group			t	df	Sig.
TEI	Pair 1	Pre-Test - Post-Test 1	-7.970	29	.000
	Pair 2	Pre-Test - Post-Test 2	-4.133	29	.000
DT	Pair 1	Pre-Test - Post-Test 1	-13.909	29	.000
	Pair 2	Pre-Test - Post-Test 2	-11.105	29	.000
CG	Pair 1	Pre-Test - Post-Test 1	-4.173	29	.000
	Pair 2	Pre-Test - Post-Test 2	-.280	29	.781

The results of the paired samples t-test reveal that both groups (TEI and DT) improved in article use from pre-test to post-test 2 and the improvement remained for six months when post-test 2 was administered. However, for the CG, significant progress was noticed on the immediate post-test 1 but not on post-test 2. This group's performance did not improve after six months of instruction.

Results of the Composition Task

The scores of this task were collected by counting the number of nouns in each participants' paper and, subsequently, the correct use of the article was divided by the total number of all nouns. This step was conducted to normalize scores, because the participants produced some compositions that were longer than others. This procedure was applied to all participants. For instance, if a student used 15 nouns and only 6 correct articles, 6 is divided by 15 and 40% is the participant's score.

Descriptive Statistics

Table 8 Percentages of correct use of each group in the pre-test, post-test 1, and post-test 2

Test / Group	Pre-Test		Post-Test 1		Post-Test 2	
	Mean	SD	Mean	SD	Mean	SD
TEI (n=30)	48.27	8.638	54.07	8.890	50.77	9.295
DT (n=30)	48.23	10.371	63.40	11.416	62.17	10.515
CG (n=30)	48.23	10.105	50.53	10.471	46.83	11.329
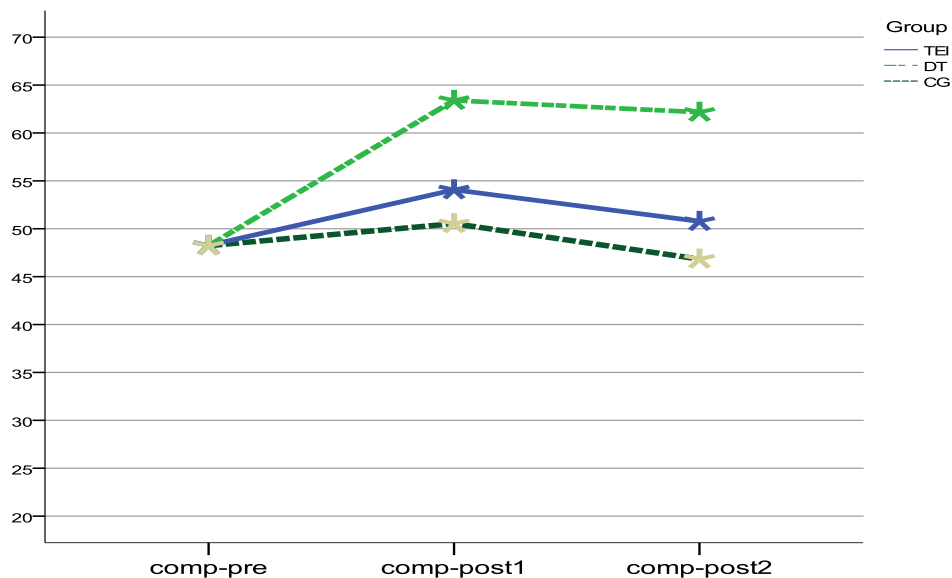
Figure 2 Mean scores of pre-test, post-test 1, and post-test 2

The above figure reveals that the effect of teaching on the TEI and DT groups improved performance from pre-test to post-test 2, whereas for group CG, the students' performance did not improve in post-test 2, and, the DT group's performance in post-test 2 was better than the TEI group's.

Inferential Statistics

Analyses of Pre-Treatment Performances

The ANOVA results showed that the scores did not differ significantly: $F_{(2,87)}=.000$, $p=1.000$.

Post-Test 1 and Post-Test 2 Results

An ANOVA was performed to find out the main effect of group, main effect of test and test*group interaction among the three groups. The results are presented in the following sections.

Results of Repeated Measures ANOVA

The ANOVA results revealed that there were significant differences amongst the three groups (see Table 9). The analysis of the test was significant with a large effect size: $F_{(2,174)}=59.722$, $p<0.001$, partial eta squared=0.407. This means that there are significant differences among the

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three tests. Moreover, the interaction between test and group was significant and the effect of this significance is of great importance: $F_{(4,174)}=23.495$, $p<0.001$, partial eta squared$=0.351$. This means that the groups had significantly different changes from pre-test to post-test 2. As with the main effect of group (between-group analysis), the results indicate that there were statistically significant differences across the three groups with a small effect size: $F_{(2,87)}=8.114$, $p<0.001$, partial eta squared$=.157$.

Table 9 Repeated measures ANOVA: Test of within- and between-subject effects

Subject	df	F	Sig.	Partial Eta Squared
Test	2	59.722	.000	.407
Test*Group	4	23.495	.000	.351
Group	2	8.114	.001	.157

To pinpoint where the differences lay across the three groups, a follow-up analysis (independent samples t-test and paired samples t-test) was conducted.

Independent Samples T-Test Analysis

The results of the pre-test analysis revealed that there were no significant differences in the scores for level 1: $t_{(58)}=.014$, $p=0.989$, level 2: $t_{(58)}=.000$, $p=1.000$, and level 3: $t_{(58)}=.014$, $p=0.989$.

With respect to post-test 1, analysis showed that there were significant differences only between the first two levels. That is, level 1: $t_{(58)}=-3.533$, $p<0.001$, and level 2: $t_{(58)}=4.549$, $p<0.001$. However, a different pattern was found in level 3: $t_{(58)}=1.409$, $p=0.164$.

Similar to post-test 1 analysis, post-test 2 analysis showed that there were significant differences only between the first two levels. These results suggest that the DT group made significant improvements in their selection of the English articles both in post-test 1 and post-test 2.

Paired Samples T-Test Analysis

The results from the TEI group revealed a significant improvement in their performance from pre-test to post-test 1: t(29)=-6.178, p<0.001. However, there was no significant difference from pre-test to post-test 2: t(29)=-1.770, p=0.087. This shows that this group's improvement remained six months later.

With respect to the DT group, the results showed that this group experienced significant improvement from pre-test to post-test 1: t(29)=-8.683, p<0.001, and from pre-test to post-test 2: t(29)=-8.029, p<0.001. This suggests that this group's performance improved after the treatment and remained 6 months later.

Regarding the CG, the results were similar to those of the TEI group, i.e., there were significant differences only between pre-test and post-test 1: t(29)=-5.229, p<0.001 but not between pre-test and post-test 2: t(29)=1.944, p=0.062. This suggests that the improvement of this group was retained 6 months later.

Discussion

In response to the third research question (Is explicit deductive teaching or implicit input enhancement teaching more effective in teaching the article system to Libyan learners of English?), the answer is that, although both teaching strategies proved to be effective in teaching the English article system to Libyan students, the DT group used the English article system appropriately. This group performed better at the end of the course and the effect did not diminish with time. Unlike the DT group, the improvement of the TEI group after 6 months of teaching was around the same as the CG. Results positively demonstrated that Libyan learners improve and become more accurate depending on the choice of the English article system after being taught by the DT method.

Further, when the two tasks are compared, Table 10 shows identical results between the two tasks in the three groups. The only difference was detected when using a paired samples t-test in which the pre-test was compared with post-test 2 in the TEI group in both tasks. The results of the multiple choice task showed that this group improved from pre-test to post-test 2, whereas in the composition task,they did not improve from pre-test to post-test 2

Table 10 Summary of the results of the analysis of the multiple choice task and the composition task

	Multiple Choice Task (MCT)		Composition Task (CT)	
Pre-Test Analyses	**TEI= DT= CG**		**TEI= DT= CG**	
Repeated Measures ANOVA	There are significant differences among the groups		There are significant differences among the groups	
Independent Samples T-Test	Pre	**TEI= DT= CG**	Pre	**TEI= DT= CG**
	Post1	**DT > TEI>CG**	Post1	**DT > TEI>CG**
	Post2	**DT > TEI>CG**	Post2	**DT > TEI>CG**
Paired Samples T-Test	**TEI**	**Pre vs. Post1**: improved	**TEI**	**Pre vs. Post1**: improved
		Pre vs. Post2: improved		**Pre vs. Post2**: not improved
	DT	**Pre vs. Post1**: improved	**DT**	**Pre vs. Post1**: improved
		Pre vs. Post2: improved		**Pre vs. Post2**: improved
	CG	**Pre vs. Post1**: improved	**CG**	**Pre vs. Post1**: improved
		Pre vs. Post2: not improved		**Pre vs. Post2**: not improved

Amongst vital issues in the research of SLA is the significance of L2 learners' errors. What are their sources? Are they due to the transfer of L1 grammatical structures into L2, or are they caused by some interlanguage (IL) grammar? This study has considered the issue of L2 learners of English; in particular, Libyan learners. It has attempted to understand the nature of their errors and their probable causes, which, in turn, may facilitate the practice of second language teaching.

What is specific to the English article system, which makes it problematic to acquire? Is there any specific complexity within the English article system or a contrastive factor in Arabic, which has a role in the acquisition of the English article system? In order to ascertain a probable explanation for the above questions, the following part of this study will determine the reasons behind the difficulty in learning the English article system.

Sources of Errors

It has been established that the sources of the errors made in this study were due to interlingual interference from the native language and intralingual interference within the same language (English). These sources seem to be the causes of the erroneous selection of the article. The intralingual errors may include: omission of the definite article, using the indefinite article (*a/an*)

with unmarked plurals, using the indefinite article (*a*/*an*) with marked plurals, using the indefinite article (*a*/*an*) with uncountable nouns, using the indefinite article (*a*/*an*) with adjectives, substituting the indefinite article (*a*/*an*) for the definite article, substituting *a* for *an*, omission of the indefinite article (*a*/*an*), and substituting the definite article (*the*) for the indefinite article (*a*/*an*). Interlingual errors may include: omission of the indefinite article (*a*/*an*), and substituting the definite article (*the*) for the indefinite article (*a*/*an*). Interestingly, the present study showed that Libyan learners overused the indefinite article commonly in some situations and omitted it in obligatory situations before and after the treatment. The following subsections provide more explanations of the causes of the errors.

The Effect of English Nouns

In English, nouns can be countable, uncountable, or both. These nouns require different ways of using them. For instance, countable nouns have plural forms which require determiners, whereas uncountable nouns do not have plural forms and usually do not need a determiner. As the English article system is one type of determiner, choosing which type of article to use is sometimes affected by the noun which the article is attached to.

The use of *a/an* with uncountable nouns and plural nouns. In the three tests in this study, Libyan learners used *a*/*an* with uncountable nouns and plural nouns. The reason for such errors could be attributed to the fact that Libyan learners have difficulty in developing insight into whether an English noun is countable or uncountable. Learners treated uncountable nouns as countable ones and overgeneralised the rule of using *a*/*an* before them. Moreover, as mentioned earlier, learners' use of *a*/*an* with plural nouns occurred with nouns that have two parts, (e.g., eyes, ears and hands). Learners probably used *a*/*an* with such nouns because they thought that *a*/*an* should be used, given that they were describing one singular person. In addition, some English nouns, (e.g., time and crime) are both countable (bound) and uncountable (unbound). A noun like *glass*, for instance, can be interpreted either as bound (*She broke a glass*) or unbound, (*This window is made of glass*). These nouns prevent learners from recognising whether the noun in a certain context is bound or not.

The use of *the* with generic nouns. In some examples, such as *I like _____ Italian food very much*, it is suggested that learners understand that the use of an adjective before a noun is a signal to use a definite article. Most participants used the definite article *the* to complete the example. Learners develop a rule for this, considering that the word *food* is specific because it is preceded by the expression *Italian*, which narrows down the meaning of *food*. The phrase *Italian food* refers to the notion of Italian food in general. Consequently, the definite article should be left out to avoid error.

From the above discussion, it can be concluded that Libyan learners know the rule of using *a/an* in some contexts but are unable to apply it because they are unable to identify which nouns to use in certain contexts.

The Effect of Definiteness and Specificity

The choice of article is affected by whether a noun phrase is specific and identifiable or not. A definite noun phrase refers to a particular individual in a specific reference indicating that both the speaker and hearer are familiar with what is being talked about. An indefinite noun is a noun phrase with general reference, indicating that the speaker does not identify things or people and the hearer does not know any details about the thing or person. Definiteness is associated with knowledge shared by the speaker and hearer (Ionin et al., 2004). Ionin et al. (2004) defined definiteness and specificity as follows:

If a determiner phrase (DP) of the form is:

(a) [+definite], then the speaker and hearer presuppose the existence of a unique individual in the set denoted by the NP.

(b) [+specific], then the speaker intends to refer to a unique individual in the set denoted by the NP and considers this individual to possess some noteworthy property.

Wong (2005) revealed that the definite article *the* [+def] could be used in singular contexts as well as plural contexts regardless of [+spe] or [-spe] features, and *a* [-def] can be used only in singular contexts regardless of [+spe] or [-spe] features. Therefore, the first type [+def] [+spe]

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context only requires the definite article *the*. Some of the sentences from the multiple choice task used in the present study belong to this type.

- I live in a house [-def, +spe] in a street [-def, +spe], the street [+def, +spe] is called 'Bear Street' and the house [+def, +spe] is beautiful but very old – more than 200 years old!
- Could you turn off the light [+def, +spe] when you leave?

The first example shows that when *house* and *street* are first mentioned, there is no assumption of the unique *house*/*street* between the speaker and hearer, and only the speaker knows which *house*/*street* is being referred to; thus, it is a [-def, +spe] condition, and the indefinite article *a* is used in front of the singular forms of the countable nouns *house*/*street*. However, in the second part of the sentence, *house*/*street* is mentioned for the second time; so, the hearer is expected to know the existence of a unique *house*/*street*. In addition, the speaker identifies the specific *house*/*street* in which he/she lives; therefore, this is a [+def, +spe] condition and the definite article *the* is used.

The second example requires the definite article *the* because both the speaker and hearer share mutual knowledge of the noun *light* which is being talked about. As regards this sentence, the percentage of errors made by learners was 60% in the pre-test, 57% in post-test 1 and 73% in post-test 2. Such responses reveal that all percentages before and after the treatment were not above chance. This means that error rates were high before and after the treatment. This indicates that Libyan learners face difficulty using the appropriate article when specificity is required.

As students' level of proficiency was similar before treatment, why did one group outperform the others? Did the teaching strategy used in each group have an effect? Can students benefit more from a specific teaching strategy, (explicit or implicit) that assists them in acquiring language and converts their explicit knowledge to implicit? The answers to these questions are presented below.

The English Article System and Systemic Form-Focused Instruction

The findings of this study provide experimental evidence of the usefulness of Master's (1997) pedagogical framework and demonstrate that the carrying out of article teaching is helpful to

students whose level is classified as intermediate. Moreover, the present study supports the claim of Master (1994:6) where he suggests that 'the English article system is teachable through systematic instruction'. The results of this study propose that the use of English articles can be raised using formal and systematic instruction regardless of the linguistic complexity of the grammatical items. More notably, the present study is noteworthy in that it tested the longevity of the teaching effects after instruction, and considered that the effect of instruction may endure.

Do Students Benefit more from Explicit or Implicit Teaching Strategies?
Teaching Strategies Used in this Study

The results of statistics revealed that the group that was taught through the deductive teaching strategy outperformed the group that was taught through the enhanced input strategy, which, in turn, performed better than the third group, (the control group) in their use of English articles.

Participant Scores

The following table (Table 11) presents the scores from the multiple choice task from each group. It shows the level of scores which were below chance, at chance and above chance.[3]

Table 11 Scores below, at, and above chance in the three tests of each group

G	Test	Chance →	Below Chance	At Chance	Above Chance
TEI	Pre-Test		2	24	4
	Post-Test1		Ø	19	11
	Post-Test2		Ø	24	6
DT	Pre-Test		3	25	2
	Post-Test1		Ø	5	25
	Post-Test2		Ø	8	22
CG	Pre-test		Ø	25	5
	Post-Test1		Ø	23	7
	Post-Test2		Ø	26	4

We can see in the TEI group that the scores in post-test 1 that are above chance were better than the ones in the pre-test. Although the scores in post-test 2 were lower, they remained better than the scores in the pre-test. This result proves that this group improved slightly when using English articles from pre-test to post-tests 1 and 2. For the DT group, the scores in post-test 1 and post-

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[3] The standard of chance was obtained as follows: 1-9=below chance; 10-19=at chance; 20-30=above chance.

test 2 that are above chance were much better than the ones in the pre-test. This result shows that this group improved considerably when using English articles from pre-test to post-tests 1 and 2. Regarding the CG, as shown, the scores in post-test 1 that are above chance improved slightly compared to the ones in the pre-test regarding the use of articles and the scores in post-test 2 were lower than those in the pre-test. This result means that the progress of this group in using English articles from pre-test to post-tests 1 and 2 was very slow.

From the above discussion, it can be concluded that the TEI and DT groups improved from pre-test to post-tests 1 and 2 in the use of the English article system. As for the CG, its improvement in post-test 1 did not remain 6 months later. However, since the time that was spent in teaching the three groups was 8 weeks, it is necessary to look at what aspects, other than the English article system, the students made progress in; that is, what benefit each group had from the teaching strategy used and whether the texts that were written by the students differed and improved from pre-test to post-tests 1 and 2. In order to identify this, two measurements were used: (1) the measurement of grammatical development using T-unit, and (2) the measurement of lexical diversity using *type-token ratio* (TTR).

The Measurement of Grammatical Development Using T-Unit

The type of sentences, word length, and how accurate the students' writings are (vocabulary and accuracy growth) is traced as a key facet of measuring language development and syntactic complexity in each group. A T-unit measurement is used to measure syntactic complexity. It is defined by Hunt (1964) as 'consisting of a main clause plus all subordinate clauses and non-clausal structures that are attached to or embedded in it'.

The procedure for calculating the average length of the T-unit was to divide each paragraph into T-units and, then, to divide by the total number of all words. For example,

Last weekend I do a lot of things. **#** First, all of my family go to beautiful place in Berga. **#** Second, we went to see the amazing view. **#** It is the sea. **#** I love to watch the sea and the sunset. **#** The third is visit my old friend and talked about the old nights. **#** I really miss all the things that related to Berga and with old friends. **#**

There are 7 T-units and 67 words; so, 67÷ 7=10 words per T-unit. Next, the average length of T-unit per participant was entered into SPSS, in order to conduct one-way ANOVA to determine any differences among the three groups before and after the treatment (see Table 12).

Table 12 Mean length of T-units

| Group | Mean Scores | | | | | |
| | Pre-Test | | Post-Test 1 | | Post-Test 2 | |
	Mean	SD	Mean	SD	Mean	SD
TEI	9.87	1.167	13.50	1.943	11.03	1.033
DT	10.13	1.196	11.83	1.262	10.30	1.343
CG	10.10	1.155	13.17	1.821	11.47	1.408

The results from the ANOVA revealed that there were no differences amongst the three groups before teaching the course. The students' levels in the pre-test were similar: $F_{(2,87)}=.461$, $p=0.632$. However, in post-test 1 and post-test 2, the findings disclosed that there were significant differences amongst the three groups. In post-test 1, $F_{(2,87)}=8.061$, $p<0.01$ and, in post-test 2, $F_{(2,87)}=6.450$, $p<0.01$. To locate those differences, a follow-up analysis, (independent samples t-test and paired samples t-test) was performed.

Comparison of Group Performances

Independent Samples T-Test

An independent samples t-test was conducted to compare the pre-test, post-test 1, and post-test 2 scores amongst the three groups. Regarding the pre-test analysis, three levels were analysed: Group TEI vs. DT, TEI vs. CG, and DT vs. CG. The results show that there were no significant differences in the scores.

- **Pre-Test Analysis:**
  Level 1 (**group TEI vs. DT**) $t_{(58)}=-.874$, $p=0.386$
  Level 2 (**group TEI vs. CG**) $t_{(48)}=-.778$, $p=0.439$
  Level 3 (**group DT vs. CG**) $t_{(58)}=.110$, $p=0.913$

The results of post-test 1 analysis show that there were significant differences only between the first and the third levels (i.e., group TEI vs. DT, and group DT vs. CG).

- **Post-test 1 Analysis:**

  Level 1 (**group TEI vs. DT**) t(58)=3.940, p<**0.001**
  Level 2 (**group TEI vs. CG**) t(58)=.686, p=0.496
  Level 3 (**group DT vs. CG**)   t(58)=3.30, p<**0.001**

Similar to the post-test 1 analysis, the post-test 2 analysis revealed that there were significant differences only between the first and the third levels.

- **Post-test 2 Analyses:**

  Level 1 (**group TEI vs. DT**) t(58)=3.128, p<**0.001**
  Level 2 (**group TEI vs. CG**) t(58)=-393, p=0.696
  Level 3 (**group DT vs. CG**)   t(58)=-3.285, p<**0.001**

The above mentioned results suggest that the three groups had similar scores before treatment. Conversely, in post-test 1 and post-test 2, significant differences were detected between group pairs, except for the TEI group and the CG. The mean scores of post-test 1 and post-test 2 show that both the TEI group and the CG presented better writings compared to those of the DT group. Although the mean scores of the TEI group and the CG were less in post-test 2, they remained better than those in the pre-test.

Paired Samples T-Test Analysis

A paired-samples t-test was conducted to compare pre- vs. post-test 1 and pre- vs. post-test 2 for each group. The results of the TEI group illustrated that the group had improved significantly in their performance from pre- to post-test 1: t(29)=-8.665, p<0.001, as well as from pre- to post-test 2: t(29)=-4.735, p<0.001. This result suggests that this group's grammatical development improved after 6 months of instruction.

However, the results of the DT group revealed that the performance of this group had significant differences only between pre-test and post-test 1: t(29)=-6.067, p<0.001 but not between pre-test and post-test 2: t(29)=-.530, p=0.600. This result suggests that, in the long term, this group's grammatical development remained unchanged.

Similarly to the TEI group, the results of the CG demonstrated that the grammatical development of this group had significant differences from pre-test to post-test 1: t(29)=-8.262,

p<0.001 and from pre-test to post-test 2: t(29)=-5.080, p<0.001. This result suggests that, in the long term, this group's grammatical development improved.

The results above illustrate that both groups (TEI and CG) improved their writings from pre-test to post-test 2 and the improvement remained until 6 months after post-test 2 was administered. However, with the DT group, significant progress was only noticed on the immediate post-test 1 and not on post-test 2.

The Measurement of Lexical Development Using Lexical Diversity

Johansson (2008:61) defined lexical diversity as 'a measure of how many different words that are used in a text'. A text has high lexical diversity when it includes many different word types and has low lexical diversity when it contains many similar and repeated word types. There are various measures of lexical diversity. For the purpose of this study, the type-token ratio (TTR) is employed. It is used in this study to examine changes in learners' vocabulary development. The example below illustrates how TTR is used.

> **The** last weekend **I** was **in Egypt**. **It very** nice place **to** spend your holiday **in. I went to** swimming and **then** watched action movie. **There are** many cinemas **in Egypt**. **Then I** visited **the** mall **in the** shopping. **It** was **very** big where **there are** numerous floors. **I** like **the** shopping **very** much.

The word count in the above text is 55. The amount of words in a passage is referred to as the number of tokens. However, numerous tokens are repeated. For instance, the token *in* occurs four times, whilst the token *Egypt* occurs twice.

In the 55 tokens in the text, there are 28 *types*. The TTR is the relation between the number of types and the number of tokens. Thus, in the above example, the calculation is as follows:

Type-Token Ratio (number of types ÷ number of tokens) = 28÷55=0.51

As the paragraphs used by students in this study were not of equal length, the shortest paragraph for each participant was chosen, ensuring the other paragraphs were of equal length to the

shortest paragraphs by the same participant. For example, a participant wrote 3 paragraphs in each test. 99 words were written in the first paragraph, 130 in the second, and 200 in the third. The shortest paragraph contained 99 words; so, this number was chosen for the second two paragraphs, in order to have an equal length for the three paragraphs. This procedure was applied to the ninety students involved in this study.

After conducting the TTR, the percentage was put into SPSS and one-way ANOVA was performed to establish if there were differences amongst the three groups. The results were as follows.

Table 13 Descriptive statistics of one-way ANOVA in the three tests

Group	Mean Scores					
	Pre-Test		Post-Test 1		Post-Test 2	
	Mean	SD	Mean	SD	Mean	SD
TEI	64.83	4.001	78.17	5.867	71.60	5.056
DT	65.40	4.264	73.40	3.114	67.90	3.633
CG	63.79	4.057	76.55	5.883	69.90	4.685

The ANOVA findings show that there were no significant differences between the three groups before the treatment: $F(2,86)=1.157$, $p=0.319$. However, they do reveal that there were significant differences between the three groups in post-test 1: $F(2,86)=6.738$, $p<0.01$ and post-test 2: $F(2,86)=5.089$, $p<0.01$. To locate the differences, a follow up test was performed using an independent samples t-test and a paired samples t-test.

Comparison of Group Performances

Independent Samples T-Test Analysis

Three levels were analysed in the three tests: level 1 (TEI vs. DT), level 2 (TEI vs. CG), and level 3 (DT vs. CG). The results of the pre-test indicate that there were no significant differences in the scores for level 1: $t(58)=-.531$, $p=0.598$, level 2: $t(57)=.992$, $p=0.326$, and level 3: $t(57)=1.482$, $p=0.114$.

With respect to post-test 1 analysis, the findings show that there were significant differences only between the first and third levels (group TEI vs. DT, and group DT vs. CG).

That is, level 1: t(58)=3.931, p<0.001, and level 3: t(57)=-2.584, p=0.012, but not with level 2, where a different pattern was found: t(57)=1,056, p=0.296.

By contrast to post-test 1 analysis, post-test 2 analysis demonstrated that there were significant differences only in the first level. That is, level 1: t(58)=3.931, p<0.001. However, between levels 2 and 3, there were no significant differences (level 2: t(57)=1.341, p=0.185, and level 3: t(57)=-1.833, p=0.072.

The above results suggest that before and immediately after, the students' levels were similar; only the TEI group and the CG improved and used wider vocabularies in their writing. However, after 6 months of instruction, only the TEI group remained unchanged and the students did not repeat many words in their writings.

Paired Sample T-Test Analysis

When comparing the pre-test with post-test 1 and the pre-test with post-test 2, the results illustrate that the three groups improved significantly in using wider vocabularies from pre-test to post-test 1 and from pre-test to post-test 2. The results were as follows:

(1)	**TEI group**	*pre - post-test 1*	t(29)=-9.542, p<0.01
		pre - post-test 2	t(29)=-7.024, p<0.01
(2)	**DT group**	*pre - post-test 1*	t(29)=-8.605, p<0.01
		pre - post-test 2	t(29)=-2.972, p<0.01
(3)	**CG**	*pre - post-test 1*	t(28)=-10.463, p<0.01
		pre - post-test 2	t(28)=-6.829, p<0.01

From the above discussion, it can be concluded that each teaching strategy has different effects. No teaching strategy has a distinct advantage over another. However, the purpose of teaching determines which strategy is more beneficial compared to another. For example, TEI groups and CG improved their writings and used wide vocabularies in the three tests, whereas the DT group developed their use of English articles more than the other two groups. Although a considerable amount of time was devoted to teaching the three groups in this study, Libyan learners still make

errors when using articles in English. What causes such difficulty? The following section presents some explanations.

Difficulty vs. Instruction

The English article system poses great difficulty for non-native learners, in general, and for Libyan learners of English, in particular. But does such difficulty entail that the English article system is beyond teaching? Second language theories have different views on how the English article system is taught for L2 learners: a deductive teaching approach advocates formal and systematic attention to isolated linguistic forms through rules, drills and error correction; a purely communicative teaching approach rejects such techniques and supports unconscious natural language exposure similar to children acquiring their first language. The enhanced input approach states that, for acquisition to take place, teachers should pay attention to both linguistic forms and meaning by providing learners with enhanced input techniques in context to help them notice the target forms.

Though there are numerous studies in the literature regarding the comparative examination of the effect of explicit teaching strategies, this study could be regarded as providing further support for implicit teaching strategies. The results of this study suggest a balanced approach, for the reason that traditional teaching may not lead learners to improve their writing and purely communicative teaching strategies may not lead learners to improve their use of grammatical items appropriately. Consequently, an enhanced input teaching strategy proved to be useful as it connects traditional teaching and communicative teaching. Learners in the TEI group improved both in their use of English articles and their writings.

It is also important to mention that the results of this study support the views of some researchers (Eastwood, 1999), who believe that the English article system should not be taught in isolation. The article system should be taught in context in a manner in which its functions can be understood and naturally acquired, which is better than the present method of viewing article usage as a group of abstract rules to be memorised. Implicit teaching strategies are recommended as an alternative to explicit teaching strategies, in that the former may assist learners, even slightly, to improve their use of the article system as well as their writing, whereas the latter may assist them in improving their use of the article system.

Looking at the results from another perspective, we see that, although the three groups in this study made progress in the use of English articles, this progress was modest. When the amount of time provided to teach the three groups is considered, the results should have been much better than they were. However, the question that should be asked is: What are the reasons behind the difficulty in acquiring the English article system? The results of this study reveal that not only teaching strategies affect the acquisition of the English article system but there are also other aspects that may affect such acquisition. These aspects can be summarized as follows:

- Libyan learners' inability to distinguish between countable/uncountable and singular/plural noun forms. Such a problem leads to misuse of the right article. Accordingly, when learners make such errors, the problem is not in the use of the article itself but in identifying the type of noun being used.

- The amount of time devoted to teaching the article system to L2 learners might not be sufficient. The English article system is complex, due to the vastness and complexity, and exceptions to its rules. Such a complication needs more time and the delivery of a sufficient teaching technique.

- Learners find certain concepts difficult to understand and they confirm their need to translate some of the items into their native languages as a last resort, in order to respond to the items.

- Teachers may feel that article errors are not problematic enough to pay attention to because they often do not cause communication to break down.

Conclusions

This study has sought to determine the complexity in learning the English article system by L2 learners, in general, and by Libyan learners, in particular. To understand the difficulty in learning the English article system, the researcher adopted the CAH and applied two teaching strategies (explicit and implicit), the DT and the TEI.

The CAH was adopted to compare the article systems in English and Arabic. The comparison resulted in 13 predictions which were expected to be made by Libyan learners of English. In connection with the effectiveness of teaching strategies in the process of learning, three different teaching strategies were used in this study to teach the English article system to

three groups of first-year Libyan students at the University of Garyounis. Two tasks were used in this study – namely, a multiple choice task and a composition task – as a measure of the process of learning. The TEI group received textually enhanced input teaching, the DT group was instructed by using deductive teaching, and the CG (the control group) was exposed to language through reading texts. The SPSS results revealed that the DT group performed better than the TEI group and the CG in using the English article system. With regard to the measurement of grammatical development, the TEI group and the CG outperformed the DT group. Moreover, when measuring lexical diversity, the TEI group showed better results than the other two groups.

Finally, it is hoped that the interpretations of the results of this study will contribute to the endless debate on the causes of errors (intralingual or interlingual sources) and in using explicit or implicit teaching strategies in teaching the English article system to L2 learners. Understanding the underlying causes of errors in using the English article could potentially inform research about facts on the teaching and learning of English articles in a more promising way.

Pedagogical implications

(1)   Minimal interference from L1 (interlingual errors) and insufficient competence of L2 (intralingual errors) are the key source of errors.

(2)   When accuracy is taken into account, second language teachers should concentrate on the most frequent errors and attempt to help learners overcome such errors by means of a variety of materials.

(3)   Teachers should be familiar with concentrating on form techniques, particularly implicit teaching techniques, because they manage the communicative environment in the language classes. Accordingly, it would be logical to assign some time to train teachers in this crucial skill.

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Noticing, Contrastive Analysis, and EFL Learners' Speech Production

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Abstract
The weak version of the Contrastive Analysis Hypothesis (CAH) addresses the comparison between learners' interlanguage (IL) and their mother language. It is assumed that, by identifying the similarities and the differences between the two languages, EFL students can notice the holes in their current oral ability. This study aims to, first, investigate whether there is any enhancement in EFL students' speech production concerning complexity, accuracy, and fluency by comparing EFL learners' speech production in English with its Chinese counterparts along with teachers' explicit error correction of their utterances in addition to teacher-student conferences. It expects to find how students' mother tongue (MT) affects their speech production in English through comparison and error correction. Twenty-four students participate in this study. A pre-test, post-test, and three treatments including students' transcripts of their audio-recordings, the teacher's explicit error correction, and teacher-student conferences are conducted to understand whether students make progress in their speech production and whether they are able to notice the hole in their oral ability after the treatments. During each treatment, students describe a picture story and transcribe their utterances as well as the Chinese translation of the utterances afterwards. The teacher's explicit error correction and teacher-student conferences are to help students be more aware of the errors in their utterances and notice the likely impact of their MT on the production. The results show that students' accuracy and fluency improve, though the complexity is not significantly different. Students make fewer errors and utter more words along with more error-free clauses, which is probably due to the teacher's error instruction and the conferences. The qualitative data suggest that the comparisons enable students to notice how their MT has affected their speech production and the discrepancies between their IL and the target language. Pedagogical implications are proposed for language teachers' references in the future.

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Introduction

It has long been recognized that ESL/EFL learners' native language has an impact on their learning of a second/foreign language. Among the second language learning theories proposed by researchers, Contrastive Analysis Hypothesis (hereafter CAH) was once central to the field because of its likely predictive role in locating SL/FL learners' difficulties in language learning. Dating back to the 50s and being rooted in Behaviorism, CAH compares the similarities and the differences between learners' native language and the target language to identify potential language issues that SL/FL learners may encounter; in particular, linguistic components (Fries, 1945). However, CAH has been criticized for focusing on the linguistic aspects of languages without considering other constraints, such as children's ability to create language in the process of language learning. Despite the decline in the use of CAH in the past decades, researchers remain interested in how such comparisons can be to some degree valuable to second or foreign language learning (e.g., Gilquin, 2008; Korman, Bech, Husby, and Wik, 2011; Oller, 1972; Zhang, 2005). Swan (2007), in a study attempting to defend for Lado's notion of Contrastive Analysis, argued that 'Lado gives ample consideration to learning difficulties which involve L2 elements with no L1 equivalent, and which cannot therefore be due to direct L1 "influence" or "crossover"' (p.416). In other words, CAH has been misinterpreted by scholars owing to the 'overprediction' or the 'underprediction' of L2 errors by L1 interference.

Drawn upon this notion of contrasting the differences and similarities but not predicting potential difficulties in L2 learning, a paradigm, error analysis (henceforth EA), took the place of CAH. In EA, errors are not treated as a learning behavior that should be avoided but a phenomenon to be examined in its own right to understand learners' current discrepancies between their interlanguage (IL) or 'their version of the target language' (James, 1998:5) and the target language (TL). Though EA offers researchers and language teachers more insights regarding the errors or mistakes that students make in the process of language learning, the influence of their native language still exists and its effect perpetuates especially when it comes to L2 learners' language production. Wardhaugh (1970) postulated two versions of CAH, in which the original proposition of the predictive roles of L1 on L2 learning was the strong version, whereas the two objects of comparison were not learners' mother tongue (MT) and the TL but their IL and their MT (James, 1998). From then on, several terms have been proposed to expostulate the weak version such as 'cross-linguistic influence' (Kellerman and Sharwood-

Smith, 1986), and 'language transfer' (Gass and Selinker, 1983). In the current study, the term 'cross-linguistic influence' will be utilized to indicate the effects of EFL learners' MT on their speech production (IL).

Studies related to cross-linguistic influence have drawn on several issues. For example, ESL/EFL learners' phonological transfer from their L1 to L2 which may have caused their pronunciation issues (Binturki, 2008; Huang and Radant, 2009; Kho, 2011), and its impact on other respects such as EFL writing (Bennu, 2008), corpus-based research (Callies, 2008; Granger, 2008), vocabulary learning (Laufer and Girsai, 2008), and syntactical transfer (Gorjian, Pazhakh, and Naghizadeh, 2012). The Contrastive Analysis Hypothesis claims that the more different the two languages are, the more likely that learners' would encounter difficulties. In a similar vein, Chinese and English are two quite different languages with respect to their grammar, pronunciation, and written forms. Hence, learners' errors can be related to the negative transfer of their MT to a great extent (Zheng and Park, 2013). Nevertheless, few studies examined students' Chinese counterparts behind the interlanguage (IL) that they produced in oral form and see how it may have impacted their EFL speech production. Additionally, teacher-student conferences (hereafter T-S conferences) may bear positive influence on learners' noticing of the impact of MT as well as that of errors in their spoken English.

According to the research above-mentioned, few studies investigated how the multiple comparisons between student's current interlanguage (IL), the Chinese counterparts of their IL, explicit error correction, and T-S conferences contributed to EFL learners' enhancement in L2 speech production concerning complexity, accuracy, and fluency (CAF) particularly. Thus, the purposes of the current study were to first investigate whether the comparisons between the three languages (i.e., IL, TL, and MT) were conducive to EFL students' speech production with respect to complexity, accuracy, and fluency, and, then, how students' MT had an impact on their speech performances in English.

Literature Review

Contrastive Analysis

The Contrastive Analysis Hypothesis (CAH), deriving from Behaviorism and Structuralism, compares the similarities and differences between language learners' first and target languages, and, possibly, a third language. On the one hand, CAH predicted that the difference between the

two compared languages would also become learning difficulties. On the other hand, CAH proposed that L1 interference would occur once the differences between the two languages were located. This interference caused by L1 would impede L2 learning. If the interference or barriers (Lado, 1957) could be removed, L2 learning would not be problematic. However, this strong claim was under much criticism because it neglected children's ability to create language as well as the complexity and the abstract linguistic rules behind a language. Simply contrasting the parallel linguistic rules of two languages was not sufficient for L2 learners to acquire the target language.

Nevertheless, the likely influence of CAH and L1 interference on second language acquisition has still drawn a lot of interest from teachers, educators, and researchers, and has been applied in translation theory to examine issues of equivalents between a specific L1 and L2 (El-dali, 2012). Thus, addressing the prominence of errors in language learning, transfer analysis, the weak version of CAH, refers to the explanation of diagnosis of 'a subset of actually attested errors – those resulting from MT interferences' (James, 1998:5). Simply put, the errors that can be defined as the result of the influence of learners' MT should be further analyzed to see the extent to which students' MT affects second/foreign language learning. Moreover, students tend to translate from their MT to the second language instead of thinking in the TL. In addition, the caveat of CAH lies in the explicit learning theories, such as the Noticing Hypothesis (Schmidt, 1990, 1995), which address the importance of learners' consciousness in noticing the gap between their current language knowledge and the input that they receive in the learning process. On the basis of the Noticing Hypothesis proposed by Schmidt, Izumi (2013) categorized noticing into different types. For example, one type of noticing refers to learners noticing the gap between their IL and TL or 'the difference between how the learner uses a language form and how a more proficient user uses it to convey the same idea' (p.27). As Chan (2004) concluded, the evidence of these Hong Kong Chinese students' transfer from Chinese syntax to English entails that Chinese ESL/EFL learners should pay more attention to the existing differences between Chinese and English, so as not to be affected by their native language when writing in English. With this research in mind, the similar conception can also be applied to EFL speech production.

Cross-Linguistic Influence

Research with respect to the comparison between Mandarin Chinese and English explored different respects, such as phonological awareness (Chen, Nguyen, Hong, and Wang, 2010; Kuo and Anderson, 2010; So and Best, 2010), morphological awareness (Pasquarel, Chen, Lam, Luo and Ramirez, 2011), the use of articles (Gelman and Tardif, 1998), construction of passive voice (Xiao, McNnery, and Qian, 2006), pragmatic competence (Chen, 1996; Chen, 2011), and spelling acquisition (Wang & Geva, 2003). Likewise, Schackne (2002) contended that a comparison between Mandarin Chinese and English could be conducive to Chinese learners learning English as a second/foreign language by illustrating some well-structured but semantically awkward sentences in which Chinese influence was quite strong. Larsen-Freeman (2006) investigated how an adult Chinese female student's native language has had an influence on her oral renditions through a course of written tasks in six months. It is suggested that the influence of Chinese is with the student here and there during the period. It could be concluded that the comparison between Chinese students' interlanguage (IL) and the TL (i.e., English) would promote their noticing of the discrepancies or the gaps between IL and TL, which may also contribute to the improvement of their language learning. However, further exploration is needed as to what the Chinese counterpart is behind EFL students' IL. It is very likely that students' MT more or less exerts influence on their oral performances and the comparison between the counterparts and their IL would, to some extent, raise their noticing or awareness of the IL that they produced and how their spoken English may have been affected by their MT.

Complexity, Accuracy, and Fluency

A plethora of research in complexity, accuracy, and fluency (CAF) has been administered to see how the constructs speak for second language learners' improvement in second language productive skills. CAF, though having been argued for vagueness in definitions, remain valuable in measuring the effects of language learning via either cross-sectional or longitudinal studies.

Complexity, as Housen and Kuiken (2009) indicated, is 'the most complex yet the least understood dimension' (p.463). For example, it can be categorized into different types, such as cognitive and linguistic complexity (Williams and Evans, 1998; DeKeyser, 2005), task complexity, and L2 complexity (Robinson, 2001; Skehan, 2001). Despite the different types, the current study defined complexity as the extent to which students use syntactic structures and

subordinate clauses in relation to the total number of clauses they produce (Housen, Kuiken, and Vedder, 2012). Accuracy, the construct that is probably the least arguable among the three (CAF), has also drawn attention with respect to the criteria to be adopted in order to evaluate the correctness of students' linguistic forms. Some suggest that the norm should be the standard target language used in the inner-circle countries, whereas others contend that it should include non-native usage of the language from outer-circle countries (Ellis, 2008; Pallotti, 2009; Polio, 2007). Due to the task type employed in the current study, accuracy was defined as the norm of the target language used in the inner-circle countries because the tasks employed in the study to elicit learners' utterances were true stories which occurred in English native-speaking countries. Fluency, another construct which allured great contention and is a measure to evaluate EFL students' proficiency, is often referred to as '…perceptions of ease, eloquence, and smoothness of speech or writing (Lennon, 1990; Chambers, 1997; Guillot, 1999; Freed, 2000; Koponen and Riggenbach, 2000; Hilton, 2008)' (Housen and Kuiken, 2009:463). In other words, different from accuracy and complexity which manifest multiple facets of language (e.g, syntactical and lexical level), fluency is principally a 'phonological phenomenon' (Housen, Kuiken, and Vedder, 2012:5) or 'performance phenomenon' (Lennon, 1998:391). Hence, it refers to the speaker's ability to show that one can plan and produce speech easily and efficiently without too many pauses or hesitations (Lennon, 1998).

As previously stated, CAF has been central to second language acquisition (SLA) in the past two decades and plenty of research has been conducted to examine the effects of differential factors on CAF, including task planning or task complexity (e.g., Ahmadian and Tavakolia, 2011; Ahmadian, 2011; Mehrang and Rahimpour, 2012), working memory (e.g., Ahmadian, 2012; Payne and Whitney, 2013; Wen, Mota, and McNeill, 2013), and learning contexts of various kinds (Mora and Valls-Ferrer, 2012). The majority of the findings from related studies suggest that there are trade-off effects among the triad (CAF) and it seems that EFL learners may have to achieve one or two of them at the expense of another or the other two. Similarly, the findings of the current study corresponded to the trade-off effect as well.

Stillwell, Curabba, Alexander, Kidd, Kim, Stone, and Wyle (2009) conducted the research regarding the relationship between self-transcribing tasks and students' noticing of their language performance regarding complexity, fluency, and accuracy. In each task, students had to transcribe their discussion and correct errors before turning it in to the teacher for further

correction. Students' own perceptions of their progress in complexity, accuracy, and fluency were elicited afterwards and the results showed that students made great improvement, though they failed to notice their improvement in complexity. However, the likely influence of students' MT on their IL was not considered during the transcribing tasks. Furthermore, Stillwell et al.'s study adopted 'idea units' from Larsen-Freeman (2006) as the measure of complexity, which is different from that used in the current study. The measure of complexity employed in the current study was adopted from Foster and Skehan (1996) and Skehan's (1998) conceptions of subordination to indicate the complexity of internal speech, since the latter measure has been more widely employed to examine L2 complexity.

Error Correction

Types of corrective feedback have long been explored to see whether they are beneficial to second language learning or development. Among them are recasts, elicitation, metalinguistic talks (i.e., explicit error correction), to name a few. Though Truscott (1996, 2004, 2007) and associated scholars contend that there is no use in providing explicit error correction, many studies indicate that explicit error correction plays an important role in enhancing EFL students' language learning. Sheen (2010) investigated the effects of different types of corrective feedback, including oral recasts, written direct correction, and oral metalinguistic talk on ESL learners' learning of English articles. The findings suggested that both the written direct correction and the oral metalinguistic talk outperformed the recast group. However, most of the studies in oral corrective feedback address the comparison of types of feedback without regarding how explicit error correction may have affected their second language development concerning CAF.

Teacher-Student Conferences

Teacher-student conferences have been utilized in ESL/EFL writing instruction as a teaching method in and/or outside of the classroom to provide learners with another venue to raise students' awareness of their writing issues with regard to grammatical, lexical, content-wise issues, and so forth (e.g., Hyland, 2003). Likewise, it is likely that the discussion between teachers and students would foster learners' noticing or awareness of errors that they made in utterances, and students can probe into their IL and the cultural knowledge domain from which

they retrieve to produce the output. Furthermore, the reflection on their linguistic errors may have accounted for their current development in IL. Hence, this study aimed to explore the following questions:

1. What can noticing and contrastive comparison do to help EFL learners identify their linguistic errors in English when comparing learners' utterances to their L1 counterparts?
2. To what extent can noticing and contrastive comparison between students' utterances and the target language enhance students' speech production regarding complexity, accuracy, and fluency?

Methodology

Participants

Twenty-four English majors from a single class at a university in Taiwan participated in this study. One of them was a senior while the others were sophomores and their ages ranged from 19 to 22 years old. All of the students in this class have learned English for at least seven years and were taking classes in various language areas and studying various literary works.

Instruments

In order to collect students' utterances, four picture stories were used in class as the pre-test, post-test, and the three treatments. All of the pictures are true stories and were presented as comic strips without any lines in each picture. After the pre-test and the three treatments were finished, the instructor conducted T-S conferences outside of the classroom to examine how the approaches may have contributed to students' enhancement in spoken English, in particular these errors that they made in their utterances in the three treatments. Following the T-S conferences was the post-test adopting the same picture prompt as in the pre-test.

Data Collection

Speech Generation Tasks

The tasks were embedded in an English Speech class. In order to minimize the effects of course instruction on the study, the pre-test, three treatments, and the post-test were conducted

consecutively without being interrupted by the course schedule to a great extent. The following is the procedure of data collection.

First, the researcher gave students a pre-test to understand their current proficiency level in spoken English and there was no time constraint. Then, students were assigned three different picture stories to describe in class as the treatments. During each treatment, each picture story was first audio-recorded by the instructor and students did not know what the story was about until the researcher distributed the picture prompt to them. Students had 3-5 minutes to prepare for the oral description of the story and each description had to be at least 3 minutes long. After each round of story description was completed, the teacher uploaded the audio-recordings to the e-learning system on campus and required each student to transcribe his/her own recording and concurrently translate their English transcripts into Chinese, so as to help students see the similarities and the differences between their own English utterances and the Chinese counterparts behind the utterances. Then, students turned in the transcripts to the researcher by email or in hard copies. After each transcribing task was completed, the researcher collected all of the erroneous utterances produced by students and provided the correct forms of these utterances in class. During the in-class instruction of students' errors, the researcher also emphasized the word order of students' erroneous sentences and how their utterances may have been influenced by their native language. Immediately after the instruction, students described the same picture again so that they could integrate what they had just learned in the instruction to describe the second version of the picture story more accurately. Their second version of the story was also audio-recorded. Upon completion of the three treatments, the researcher scheduled individual teacher-student conferences outside of the classroom to discuss with students respectively the sentences that students had uttered with the most errors, and compared the similarities and the differences between students' utterances and the target-like utterances in English. Additionally, the researcher asked students to find out how their utterances may have been affected by Chinese through comparison between their English transcripts and the corresponding Chinese sentences. After completing the three treatments and the T-S conferences, the researcher conducted the post-test and students' utterances were also audio-recorded.

Data Analysis

Measures to Quantify Students' Utterances in terms of the Three Dependent Variables:

Complexity, Accuracy, and Fluency

In order to examine whether students made any progress in their spoken English throughout the study, three dimensions – namely, complexity, accuracy, and fluency – were analyzed to find out whether the treatments fostered students' speech production.

Complexity. Regardless of the little agreement in the literature with respect to which measure of complexity encompasses the largest number of variance, the current study adopted the conceptions of complexity proposed by Foster and Skehan (1996) and Skehan (1998) in which subordination may show the internal complexity of speech. As Quirk and Greenbaum (1973) put forward, 'subordination is a non-symmetrical relation, holding between two clauses in such a way that one is a constituent part of the other' (p.39). Hence, dependent clauses were to understand the subordination of speech production. According to Mehnert (1998), Mota (2003), and Weisshemier and Mota (2009), dependent clauses include finite and non-finite clauses, subordinate clauses with subject deletions and finite verb deletion, and infinitive clauses without considering infinitives with modal verbs. The total number of dependent clauses produced by each student in both the pre- and post-tests was respectively divided by total seconds of the time taken to complete the task and then multiplied by 60 to show the number of dependent clauses that a student produced per minute. Last, a paired samples t-test was conducted to find if there was any significant difference between the pre- and the post-test in complexity.

Accuracy. Following Foster and Skehan (1996), Mehnert (1998), Fortkamp (2003), Mota (2003), and Weisshemier and Mota (2009), two measures of accuracy were utilized to understand the correctness of students' utterances in the pre- and post-tests: errors per 100 words and error-free clauses. Ensuing are the detailed descriptions of the measures:

> *Number of errors per 100 words (ACCURE).* The number of each student's errors in the pre- and the post-test, including repetition but not the errors immediately corrected by the student, was divided by the total words or semantic units produced in each test. Then, this figure was multiplied by 100 to show the number of errors per 100 words.

Error-free clauses (ACCURC). The number of error-free clauses was obtained by dividing the number of error-free clauses by the total number of clauses in each participant's speech samples in both tests.

One thing to note is that the analysis of errors per 100 words and error-free clauses included the errors of three types – syntactical, morphological, and lexical – along with the same errors which appeared in repetitions. Lastly, a paired samples t-test was conducted to find if there was any significant difference between the pre- and post-test in accuracy.

The inter-rater reliability of measuring students' accuracy was achieved by another researcher's re-examination of 50% of the data according to the definition of errors and error-free clauses above-mentioned and the agreement was 96%. The researcher and the cooperating researcher discussed the differences regarding their discrepancies of the errors and error-free clauses and then reached the final agreement.

Fluency. The measurement of fluency was based on the conceptions and the instrument developed from Lennon (1990), Ortega (1999), and Weisshemier and Mota (2009). The number was calculated in accordance with speech rate, pruned and unpruned. The unpruned speech rate was obtained by dividing all of the semantic units (complete and partial words) each student produced, including repetitions, by the time taken to complete the task in seconds. The result was then multiplied by 60 to express the number of words each student produced per minute. The pruned speech rate was calculated the same way but all of the repetitions were excluded in the calculation. Contractions, in both calculations, were considered to be one word. Finally, a paired samples t-test was conducted to find if there was any significant difference between the pre- and the post-test in fluency. The inter-rater reliability of measuring students' fluency was achieved by another researcher's re-examination of the speech rate of the two types and the agreement was 98%.

Qualitative Data

Teacher-student conferences were to understand students' perceptions of how the comparison between their utterances and the Chinese counterparts, along with the researcher's provision of the correct forms of their problematic utterances, enhanced the noticing of their problems in their oral English and how their spoken English may have been affected by their native language. The

researcher took notes during the conference with each student and asked every student to underline all of the sentences or phrases that they considered to have been influenced by Chinese and how their utterances could be more conformed to the target language.

Results

Complexity, Accuracy, and Fluency

The findings indicated that students' accuracy and fluency were significantly different whereas complexity was not ($t(23)$=.55, p>0.05), as can be seen in Table 1 and Table 2. Regarding the two measures of accuracy employed – errors per 100 words (ACCURE) and percentage of error-free clauses (ACCURC) – the former suggested that the number of students' errors in the pre- and post-test was generally decreased according to the means from the two tests (M=13.32, SD=0.60; M=10.89, SD=0.70) and the difference was significant ($t(23)$=2.58, p<0.05). The latter showed that the number of students' error-free clauses increased after the treatments (M=25.22, SD=17.31; M=35.71, SD=13.45) and, again, the difference was significant ($t(23)$=-2.459, p<0.05). Regarding fluency, students' speech rates, both unpruned (SRU) and pruned (SRP), increased per minute (unpruned M=185.29, SD=45.30; M=304.66, SD=70.55; pruned M=176.45, SD=43.46; M=280.83, SD=68.58). The gain also reached significance (unpruned $t(23)$=-8.581, p<0.00; pruned $t(23)$=-7.67, p<0.00).

Table 1 Descriptive statistics of errors per 100 words and error-free clauses in the pre- and the post-test

		M		SD	
		Pre-test	**Post-test**	**Pre-test**	**Post-test**
Complexity		3.38	3.18	.33	.17
Accuracy	**ACCURE**	13.32	10.89	.60	.70
	ACCURC	25.22	35.71	17.31	13.45
Fluency	**SRU**	185.29	304.66	45.30	70.55
	SRP	176.45	280.83	43.56	68.58

Note: ACCURE=error per100 words; ACCURC=error-free clauses; SRU=speech rate unpruned; SRP=speech rate pruned.

Table 2 Paired samples t-tests of complexity, accuracy, and fluency

		Paired Differences		T	df	Sig. (2-tailed)
		M	SD			
Complexity		.19	1.73	.55	23	0.58
Accuracy	ACCURE	2.43	4.6	2.58	23	0.02[*]
	ACCURC	-10.49	20.90	-2.60	23	0.02[*]
Fluency	SRU	-119.37	68.15	-8.58	23	0.00[*]
	SRP	-104.37	66.66	-7.67	23	0.00[*]

Note: ACCUR=error per100 words; ACCURC=error-free clauses; SRU=speech rate unpruned; SRP=speech rate pruned;

*p<0.05; **p<0.01.

Discussion

As a whole, students' accuracy and fluency were enhanced after the treatments. However, the complexity of their utterances was not improved, probably due to the small sample size, as well as the trade-off effects postulated by Skehan (1998); that is to say, because of limited attentional source, students would achieve two of the three dimensions at the expense of another one. Nevertheless, the task type as well as the researcher's emphasis on explicit error correction and the potential effects of T-S conferences may have led to the insignificant finding in complexity. The task type employed in the study is not conversation-based but monologues. Thus, it is not necessary for students to think what to respond to one's interlocutor but to figure out appropriate words, phrases, and sentences to describe the picture prompt. Furthermore, the researcher's emphasis on accuracy through the explicit error correction and students' better understanding with respect to the effects of their MT on their IL may have directed their attention to accuracy and fluency in the post-test. It is not conclusive whether students' insignificant difference in complexity is due to their limited attentional capacity or other mediating factors, such as their anxiety level when taking the pre- and the post-test, since several students mentioned that they felt anxious when talking to a recorder about the story during T-S conferences. An analysis of individual students' complexity revealed that low-ability students were able to utter complex syntactic structures, though they did not make much progress during the study. In contrast, several high-ability students' complexity even decreased, albeit they uttered more words with fewer errors and more error-free clauses.

Another factor which may have led to students' decrease in complexity is the transcribing activities. As Lynch (2007) indicates, the task assists students in retaining higher rates of accuracy. Additionally, the finding of complexity in the study is opposite to that in Stillwell et al.'s (2010) research and it is probably attributable to the different task types, since the speech generation tasks adopted in Stillwell et al.'s study are the discussions between students about the posters that they made while the speech tasks in the current study are monologues. On the other hand, the transcribing tasks help students self-reflect what they have said and enable them to identify the problems in their utterances when comparing their IL with the Chinese counterparts and, then, with the correct form provided by the teacher. This self-reflection on both their IL and the Chinese counterparts not only brings the teacher, the researcher, and the students closer, it promotes students' noticing of how their MT and their way of thinking when speaking in English have borne an impact on their speech production. During the teacher-student conferences, many students mentioned that, when they were describing the picture prompt, they first came up with a version of the story in Chinese and, then, translated it into English. Hence, they produced many erroneous utterances which included those such as 'there was an old lady lived with her pet pig' when the reference form of the sentence should be 'An old lady lived with her pet pig'. As Larsen-Freeman and Cameron (2008) suggest, this type of sentence is a direct influence of Chinese since it's 'the topic-comment word order of Chinese (Schachter and Rutherford, 1979)' (p.137). Put differently, the influence of students' MT still exists; the effects alleviated after the treatments, though they remain efficacious in enhancing EFL students' accuracy and fluency when producing speech and students' ability to manipulate their language knowledge has also been advanced.

Pedagogical Implications

The following are three pedagogical implications derived from the study. First, it is beneficial for language teachers to employ student transcribing tasks in oral classes so as to identify students' individual, as well as general, errors in their utterances. Through the transcribing tasks, students are able to reflect on what they have uttered and managed to recognize their gaps in the linguistic form when referring to the target language, as well as the holes in their current oral ability. Additionally, students become researchers of their language learning and begin to develop their ability to find what they need to improve in the process of second language development. An

advanced activity that language teachers can adopt in their classrooms is to pair students up to compare their own version of the story with their peers following a discussion about the similarities and the differences between the two versions. Students' interaction with their peers will foster their understanding of their peers' perspectives on the same story and, thus, enhance their critical thinking skills when interpreting the picture. Furthermore, it may also promote the complexity of their utterances in the long run.

Second, when utilizing picture-describing tasks in an EFL/ESL classroom, language teachers can offer students a word/phrase list at their disposal before they start to describe the picture. During the description task the teacher can encourage students to note what they do not know how to say in English, in Chinese, when attempting to tell the story. Then, the teacher can collect students' problems and generate a handout to show students how to say the expressions in complete and correct English sentences. The contrast between the Chinese expressions and the English equivalents will help students be more aware of the different logics between the two languages. Teachers can even show students in what way English native speakers think when they want to express certain ideas or thoughts in English through the comparisons.

Third, language teachers can add self-assessment following the transcribing task as a tool to help students understand their strengths and weaknesses to a greater extent when speaking in English. Immediately after students' transcripts are completed, the teacher can ask individual students to self-evaluate how well or badly they think their story is conveyed and what they can do to make the story more creative. Then, students can examine the utterances in the transcript and self-reflect on whether their utterances conform to the target language based on their current language knowledge. After that, the teacher can provide their feedback on students' transcripts during the T-S conferences to enhance students' understanding and noticing of their current oral ability and what they can do to improve it.

Conclusion

The findings of the study shed light on the effects of noticing and multiple comparisons on EFL students' enhancement in EFL speech production. It provides both researchers and language teachers with perspectives in terms of what can be administered in the instructional process to promote students' speech concerning complexity, accuracy, and fluency. Although students' complexity decreased or was neutral after the treatments, it was not suggested that the treatments

did not benefit students' spoken English in this respect. As mentioned previously, it is likely that teachers' explicit error correction and emphasis on accuracy unconsciously directed students' attention to produce more accurate language. However, there are several limitations to the study. One is the small sample size and the generalizability of the results has been constrained. Another limitation is the task type because the source of the data is not the dialogues or the conversations between or among students but monologues. The findings may vary if a different speech generation task was employed in the study. One more limitation is the lack of a control group. The findings of the study would be more convincing if a control group was included in the research design, though the data collected throughout the T-S conferences demonstrate that the comparison activities are conducive to students from their viewpoints. One final limitation is the potential influence of the class instruction on the study. The course instruction may have biased the findings in some respects, though the content of the course was not connected to the picture prompts. For future research, transcribing tasks along with students' self-assessment as well as a control group to find whether the treatments can still make significant differences are recommended.

Acknowledgements

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The Effect of Personal Familiar vs. Impersonal Less Familiar Topic on Expository Writing Task Performance

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Abstract
The main purpose of the present research is to investigate the effect of personal familiar vs. impersonal less familiar topic on task response characteristics of expository writing tasks. Working within the framework of task-based language teaching, the thirty-six upper-intermediate level EFL participants of the study performed two writing tasks: one on a personal familiar topic, and another on an impersonal less familiar topic. The written performance of each individual participant was scored for accuracy, complexity, and fluency of task response. The results of the statistical analysis indicated that the participants of the study produced more accurate, more fluent, and more complex writing in the task with the personal familiar topic. The findings highlight the importance of topic familiarity as a task complexity feature in grading and sequencing tasks in material development for writing courses and the necessity of considering this task feature for accomplishing accuracy, complexity, and fluency in expository writing task production.

Introduction

Although writing is considered an indispensable language skill, it is notoriously difficult to devise good writing tasks which are appropriate for EFL learners of varying proficiency levels while taking the task complexity dimensions into account. How topics can be grouped and sequenced based on their cognitive complexity for language learners is an important issue in task-based language teaching. A variety of design factors which contribute to task complexity (e.g., reasoning demand, number of elements, feedback, contextual support, planning time, task demand, and prior knowledge) and how they influence the language produced by learners

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regarding task performance characteristics of accuracy, complexity, and fluency have been the main focus of studies of many researchers (for a review of research, see Ellis, 2003; Robinson, 2001; and Skehan, 1998a). Variables related to rhetorical categories have been the focus of the majority of empirical studies on topic familiarity (for a review of research, see Yang, 2014). A large number of studies within the framework of task-based language teaching, on the other hand, have concentrated on different aspects of topic in oral tasks (Ellis, 2003; Robinson, 2001, 2003, 2007b; and Skehan, 1996). In other words, less attention has been paid to the effect of topic familiarity in writing tasks. Working within the framework of task-based language teaching, and focusing on the personality vs. impersonality dimension of topic, the present study investigates the way personal familiar vs. impersonal less familiar topic affects expository writing task performance in an EFL situation.

Literature Review

A large number of pedagogical innovations and language teaching investigations have been inspired by task-based language teaching. Moreover, many researchers have concentrated on the linguistic, cognitive, and interpersonal factors which contribute to the way tasks can provide the learners with learning opportunities. Among these factors, the ones which deal with the cognitive complexity of tasks have received special attention in the task-based literature.

Task-Based Language Teaching

Task-based language teaching (TBLT) is considered a practical teaching approach that fosters language learning in particularly authentic and meaningful ways by activating learners' existing language repertoire and increasing learners' language resources through performing tasks (Ellis, 2003). Tasks are activities that will be completed while using the target language communicatively by focusing on meaning to reach an intended outcome (Bygate, Skehan and Swain, 2001; Lee, 2000; Nunan, 1989; Prabhu, 1987; Richards and Rodgers, 2001; Skehan, 1996). TBLT promotes learning through the pursuit of learning outcomes. It focuses on meaning negotiation, rather than forms. Learners acquire language knowledge through performing tasks which create some challenges for language development. Thus, learners can use whatever language knowledge repertoire they have to achieve the task goals. Skehan (1998a) states that, in task-based instruction, 'meaning is primary […] the assessment of the task is in terms of

outcome' (p.98). The teacher's role in the TBLT classroom shifts to that of a facilitator, manager, or advisor, instead of controller or teller of knowledge.

Cognitive Complexity

Cognitive processing in TBLT is an important task feature. Cognitive complexity means 'the extent to which task characteristics can affect the allocation of an individual's attention, memory, reasoning and other processing resources' (Robinson, 2007a:17). According to Ellis (2003:10), learners use cognitive skills, such as 'selecting, classifying, ordering, reasoning, and evaluating information', while accomplishing a given task. The nature of the task and task product restricts the linguistic functions appropriate to the task.

Topic Familiarity

The cognitive complexity factor studied in the present research is topic familiarity. Topic familiarity is the only cognitive complexity factor that is explicitly shared in the writing literature and the two main cognitive complexity frameworks (i.e., Robinson, 2007a; and Skehan, 1998a) in the TBLT literature. In addition to rhetorical task, topic seems to cause great variations in writing performance. Even within the same rhetorical task, topic has been found to have a great effect on writing scores (Carlman, 1986; Clachar, 1999; Gabrielson, Gordon, and Engelhard, 1995; Hamp-Lyons and Mathias, 1994; Tedick, 1990) and on language production features, such as text length (Nold and Freedman, 1977; Tedick, 1990), syntactic complexity (Crowhurst and Piche, 1979; Tedick, 1990), lexical complexity (Reynolds, 2002), and grammatical accuracy (Clachar, 1999). Moreover, topic familiarity is one of the cognitive complexity factors that are dealt with in task-based language teaching literature (Robinson, 2007a; Skehan, 1998a). More knowledge and familiarity of topic is seen as cognitively less demanding than lower or no knowledge and familiarity.

Topic Familiarity and Second Language Writing Performance

Topic has a significant role in the development of a text. In addition, the degree of familiarity of the topic is an important issue in second language writing research. In the present research, the focus is on the relationship between topic familiarity and task response characteristics.

Personal vs. Impersonal Topics

As Hamp-Lyons and Mathias (1994) put it, personal topics are the ones in which 'the writers are asked to say how they feel about something or to use their own experience' and impersonal topics are the ones in which 'writers are expected to speak about groups and communities rather than about themselves and/or their families/experiences' (p.55). Hamp-Lyons and Mathias (1994) argue that impersonal topics are cognitively more demanding than personal ones. Regarding the influence of personal or impersonal topics on ESL writing, Spaan (1993) suggests that personal topics invite longer texts and linguistically more accurate texts. Yu (2007; 2010) also points out that impersonal topics elicit lexically significantly more complex language.

Task Complexity in TBLT

In the TBLT literature, there are two main hypotheses regarding the proposed effects of the cognitive complexity of tasks on task response characteristics of language production; namely, Robinson's Cognition Hypothesis (Robinson, 2001, 2003, 2005, 2007a, 2007b, 2010) and Skehan's Trade-Off Hypothesis (Skehan, 1992, 1996, 1998a, 1998b; Skehan and Foster, 1997, 1999, 2001, 2005). These hypotheses have not been formally distinguished for speaking and writing modalities. The majority of the existing studies in the literature examining the hypotheses concentrate on spoken tasks but only a few of them focus on written tasks (Robinson, Ting, and Urwin, 1995; Ellis and Yuan, 2004; Ojima, 2006; Ishikawa, 2006; Kuiken and Vedder, 2007, 2008; Ong and Zhang, 2010; Kormos, 2011).

Task Response Characteristics in TBLT

In the TBLT literature, accuracy, complexity, and fluency are the three task performance areas that have been examined in different research works. Accuracy refers to 'the extent to which the language produced in performing a task conforms with target language norms' (Ellis, 2003:339). Complexity means 'the extent to which the language produced in performing a task is elaborate and varied' (Ellis, 2003:340). Fluency refers to 'the extent to which the language produced in performing a task manifests pausing, hesitation, or reformulation' (Ellis, 2003:242). The three dimensions of accuracy, complexity, and fluency have their weight in both effective communication and language development. A major challenge in task-based language teaching

is pushing learners towards these performance goals, with proper selecting, grading, and sequencing of tasks based on task complexity factors.

There are a large number of studies in the TBLT literature investigating the impact of the cognitive complexity factors on task response characteristics; however, the majority of the studies concentrate on speaking tasks, and the factors in Robinson's and Skehan's frameworks that have been examined are limited to a few, with planning time and types of planning given the most attention (see Ellis, 2009, for a review). Few studies have investigated the impact of familiar vs. less familiar topics on written task performance.

Foster and Skehan (1996) and Skehan and Foster (1997) examined the familiar vs. less familiar dimension through speaking tasks of three different types; namely, a personal task (i.e., task on personal topics), a narrative task based on picture strips, and a decision-making task based on scenarios. The personal task is seen as having the most familiar content for the learners and the decision-making task is considered as having the least familiar content and, also, the most unpredictable for the participants. The two studies used different sets of tasks and both also examined the effect of planning. As for the effect of information familiarity on fluency, Foster and Skehan (1996) found the personal task, the most familiar one, generated the most fluent discourse as measured by the number of pauses and the total amount of silence in both the no planning and unguided planning conditions, and Skehan and Foster (1997) found the narrative task elicited the most fluent discourse as measured by the number of pauses in both no planning and planning conditions; yet, both studies reported lower fluency in performance on the decision-making task. Opposite results were reported for syntactic complexity as measured by the number of clauses per communication unit in both studies: the personal task in Foster and Skehan (1996) produced the lowest complexity in both planning conditions and the narrative task in Skehan and Foster (1997) resulted in the lowest complexity in both planning conditions, and the decision-making tasks, the tasks with the least familiar information, generated higher complexity in comparison to the personal tasks in both studies.

In a more recent study, Yang (2014) investigated the combined effect of two cognitive complexity dimensions; namely, rhetorical task varying in reasoning demand and topic familiarity varying in the amount of direct knowledge of topics. Four rhetorical categories – narrative, expository, expo-argumentative, and argumentative – writing tasks were employed. Three topic familiarity tasks – personal familiar, impersonal-familiar, and impersonal-less

familiar – were examined. The findings indicated that neither rhetorical task nor topic familiarity had an effect on accuracy and fluency of writing but that the argumentative writings were significantly more complex in terms of syntactic complexity features than the writings on the other rhetorical tasks, and the writings on the less familiar topic were significantly less complex in terms of lexical complexity than the writings on the more familiar topics.

The Present Study

A large group of empirical studies on topic familiarity have examined variations related to rhetorical categories (for a review of research, see Yang, 2014). The majority of the studies within the framework of task-based language teaching, however, have examined topic dimensions which influence accuracy, complexity, and fluency of learners' oral performance. This implies that less attention has been paid to the effect of topic familiarity in writing tasks. The current study investigates the way the personality vs. impersonality aspect of topic familiarity as a task complexity dimension affects task response characteristics of a particular rhetorical category; namely, expository writing task.

Research Question and Research Hypothesis

The present study addressed the following research question and research hypothesis:

Research Question

What is the effect of personal familiar vs. impersonal less familiar topic on the accuracy, complexity, and fluency of learners' performance in an expository writing task?

Research Hypothesis

Compared to an impersonal less familiar topic, a personal familiar topic has a positive effect on the accuracy, complexity, and fluency of learners' performance in expository writing tasks.

Participants

The study was conducted in an Iranian EFL context. The participants were 36 adult female EFL learners. All participants were state university undergraduate BA and BSc students majoring in different fields of study. They were interested in pursuing their studies at higher levels. As

English is an important part of the entrance exams of graduate levels for all MA and MSc programs at Iranian universities, they had enrolled for English courses in a private language school in order to improve their language skills. They had passed some English courses prior to their participation in the present study and, at the time of the study, their proficiency level was upper-intermediate. The participants took part in the study as part of the course assessment in their respective course at the language school. Their native language was Persian. The participants' ages ranged between 18-38, and the average was 22.

Procedure

Each participant was provided with two task prompts; a personal familiar topic and an impersonal less familiar topic for developing two expository writing tasks. Topic familiarity is defined in the present study as the amount of direct and explicit knowledge a writer presumably has in relation to a topic. In the present study, topic familiarity is operationalized at two levels: higher familiarity (personal familiar topic) and lower familiarity (impersonal less familiar topic). A personal topic is one where writers are invited to write about themselves and the relationship between the writing subject and their own life. An impersonal topic refers to one for which writers are invited to write about a group, or people in general in relation to the writing subject, or about objects and abstract concepts. The participants of the present study usually use internet resources to do their course assignments at university. Thus, the following topic was suggested for the first task:

> *Personal Familiar Topic*: Describe one of your personal experiences in which you used the internet for completing a university course assignment.

As, in some areas of the world, there is limited access to the internet and the university students in such areas are confronted with problems using up-to-date resources from the internet, the following topic was suggested for the second task:

> *Impersonal Less Familiar Topic*: What do you think are the possible problems that limited access or no access to the internet causes students who are completing a university course assignment?

First, the familiar topic task was administered. The allotted time for the performance of each task was 30 minutes. Participants were required to write a minimum of 150 words for each of the two written tasks. Each participant's written performance on both tasks was collected for further data analysis. The writing of one of the participants on the personal familiar topic and the writing of the same participant on the impersonal less familiar topic are included in the Appendix as writing samples.

Testing Instrument

In task-based research, certain measures of accuracy, complexity, and fluency have been developed to evaluate the quality of the participants' production (see Ellis, 2003:115-127). In the current study, the T-unit is used for scoring. A T-unit is defined as 'a main clause plus any subordinating clauses' (Hunt, 1965:20). Following Errasti (2003) and Larsen-Freeman (2006), accuracy was measured by the number of error-free T-units divided by the total number of T-units. Regarding syntactic complexity, a measure of the ratio of clauses to T-units was adopted (Mehnert, 1998; Yuan and Ellis, 2003; Ellis and Yuan, 2004). Fluency was measured as words per T-unit (Iwashita, 2006; Kuiken and Vedder, 2007). To test the research hypothesis and to explore the way topic familiarity affected task response characteristics of the participants, these three measures were employed to obtain every individual participant's score for accuracy, complexity, and fluency for each task. The raw scores were used for further data analysis.

Data Analysis

The data analysis results for accuracy, complexity, and fluency of language produced by participants in performing the personal familiar vs. impersonal less familiar task are presented in Tables 1, 2, and 3, respectively.

Table 1 Descriptive statistics for accuracy of the personal vs. impersonal topic

Topic Type	Mean	Std. Deviation
Personal	.6722	.19625
Impersonal	.6594	.18727

Table 2 Descriptive statistics for complexity of the personal vs. impersonal topic

Topic Type	Mean	Std. Deviation
Personal	1.2825	.12793
Impersonal	1.2594	.15465

Table 3 Descriptive statistics for fluency of the personal vs. impersonal topic

Topic Type	Mean	Std. Deviation
Personal	9.1597	1.73580
Impersonal	9.0575	1.62662

As Tables 1-3 show, compared to the impersonal one, the personal topic had a positive effect on the accuracy, complexity, and fluency of task performance. To test the research hypothesis, the results were compared using a paired samples t-test. Tables 4-6 display the results of the paired samples t-test for the accuracy, complexity, and fluency of task response in personal vs. impersonal topic tasks.

Table 4 Paired samples t-test results for accuracy of personal vs. impersonal topic

	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Accuracy	-.01278	.18683	.03114	-.410	35	.684

Table 5 Paired samples t-test results for task response complexity of personal vs. impersonal topic

	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Complexity	-.02306	.16060	.02677	-.861	35	.395

Table 6 Paired samples t-test results for task response fluency of personal vs. impersonal topic

	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
Fluency	-.10222	1.69706	.28284	-.361	35	.720

As Tables 4-6 show, concerning the impact of topic familiarity on task response characteristics of expository writing tasks, the research hypothesis was confirmed. According to the results of inferential statistics, compared to impersonal topic, personal topic had a significant positive effect on the participants' performance of the expository writing task in terms of accuracy (t=.410, p=0.684), complexity (t=.861, p=0.395), and fluency (t=.361, p=0.720). As displayed in Tables 4-6, the most significant difference was related to the fluency measure (p=0.720).

Discussion and Conclusions

To discuss the results of the study, we return to the research question which addressed the effect of topic familiarity on learners' performance in expository writing tasks. Dependent variables were accuracy, complexity, and fluency. The independent variable was personal vs. impersonal topic. The findings confirm the research hypothesis; that is, task response characteristics of the participants' expository writing task performance were positively affected by topic familiarity.

Based on the existing task-based teaching literature (Skehan, 1998a), topic familiarity decreases the cognitive demand a writing task imposes on the writer. As predicted by the research hypothesis, participants produced writings with higher accuracy, complexity, and fluency on the personal familiar topic. The findings are in line with previous studies which found that learners produced writings with greater accuracy on personal topics than less familiar impersonal topics (Spaan, 1993). The results also confirm the results of Spaan's (1993) study which suggested decreased fluency and complexity with increased task demand along the topic familiarity dimension. The findings of the present work are partially in line with those of Yang's (2014) investigation of the effect of topic familiarity, which argued for a positive influence for accuracy and fluency and a negative effect for this factor in achieving complexity. The findings are also similar to Tedick's (1990) study that suggested overall T-unit complexity is significantly greater for the writings on the more familiar impersonal task used. The much greater overall T-

unit complexity may be related to the need for the learners to make inferences of the less familiar context based on what they already know and what they have experienced, thus calling for the necessity to include more propositions and descriptions in the meaning-bearing units of sentences or T-units.

The findings of the study regarding the impact of increased cognitive complexity along the topic familiarity dimension can provide support for Robinson's Cognition Hypothesis (Robinson, 2001; 2003; 2005; 2007a; 2010) and Skehan's Trade-Off Hypothesis (Skehan, 1992, 1996; 1998; Skehan and Foster, 2001). Both of these models predict lower accuracy, complexity, and fluency when writers perform on tasks where they have lower content knowledge and familiarity, with Skehan predicting some forms of trade-off among the three dimensions of task response. The present study, however, did not find any trade-off effects in any of the measures.

The findings of the study have implications for syllabus design and material development. According to Robinson (2003), a major challenge in task-based language teaching is the issue of grading and sequencing pedagogic tasks; thus, data-based empirical research is necessary to determine the factors which influence task complexity. The findings of the present study are useful for selecting expository writing tasks. Because the personality or impersonality of topic in expository writing tasks contributes to the pedagogic outcomes of the task, it can be considered an effective factor in grading and sequencing pedagogic tasks in writing courses.

As in all classroom research studies, there was the inevitable limitation related to sample size and further research with larger samples is recommended to reach stronger conclusions. Studies, in which variables like participant factors and individual learner differences are taken into account, are also suggested. Also, the study should be replicated in different contexts. Additionally, measures other than those employed in the present study could be used to interpret the results. Writing task types other than the ones used in this study could also be examined.

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Appendix (Writing Samples)

Example of the Participants' Writings on the Personal Familiar Topic

Instruction: Describe one of your personal experiences in which you used the internet for completing a university course assignment.

An access to the internet is really beneficial for university students. I am an undergraduate student of psychology. Last year, one of our instructors assigned a term project for the cognitive psychology course. He emphasized that the students are required to use a variety of sources for accomplishing their papers and that they must include up-to-date information on the topic in their works. I began doing the project by referring to the college library. There were some good books on the topic. I borrowed two books which were more relevant. When I studied the copies, I found that I need some extra sources especially some new publications for doing the job. I was lucky because I could use the internet room of the college. Thus, I searched the topic and related areas in the internet. It was marvelous! There were so many materials on the topic. I could save very interesting texts in a flash memory. When I came back home, I continued my search using the internet service available at home. ISI articles written by prominent figures in the field, free e-books, papers published in international journal, encyclopedic texts on the topic are examples of the materials I could find. When I started writing the research paper, I tried to use a combination of various sources. Internet sources had some advantages over other sources including textbooks and library sources. They were more up-to-date. In addition they were easy to use because I did not have to go to the bookshop or library for getting access to them. When I finished the term project, I was sure my teacher would like my paper. It was written based on the most recent information on the topic!

Example of the Participants' Writings on the Impersonal Less Familiar Topic

Instruction: What do you think are the possible problems that limited access or no access to the internet brings to students for completing a university course assignment?

Today, internet access makes studying easier. A student can read the most up-to-date texts on any topic in any field of study via the internet. But if you live in an area of the world where there is a limited access or no access to the internet, the situation is different. Suppose that you are required to work on a term project for a university course. You have to rely on the resources available to you. You can refer to the college library and find some relevant books on the topic. If you are lucky enough you can borrow the book for a limited period of time. But sometimes, just after searching the catalogs and finding the book you want, you understand that another student, maybe one of your classmates who wants to do research for the same term project, had already borrowed the copy. Or you may go to a bookshop for the relevant publications. Occasionally you may find the books you need but most of the times, you will get disappointed as you understand that there are very few relevant books available or that the copies are not up-to-date publication. Therefore, you have to depend on the limited resources you have for writing your project.

Topical Structure Analysis of Thesis Discussion Sections:
A Cross-Disciplinary Study

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Abstract
This study explores the topical structure of MA thesis discussion sections written by TEFL (Teaching English as a Foreign Language) and English language translation graduate students at Kharazmi University of Tehran to find out whether the topical structure of students' academic writing is affected by disciplinary variations. Adopting the Topical Structure Analysis (TSA) model of Lautamatti (1987) and utilizing Schneider and Connor's (1990) guidelines, 25 TEFL discussion sections as representatives of applied linguistics and 25 English translation studies discussion sections as representatives of translation studies are analyzed in relation to their topical progression. The results of the study indicate that sequential progression is the most used progression in both groups, and extended parallel progression is the second most used progression. However, the results of the Chi-square test show that significant differences exist between the frequencies of sequential progression and extended parallel progression of the two sets of discussion sections, which can be indicative of the effects of writing in two different disciplines (i.e., applied linguistics and translation studies). The results bear some implications for writing teachers at different academic levels especially at undergraduate level in which students shape their basic writing skills relative to their specific disciplines.

Introduction

Traditionally, knowledge has been organized, produced, and used in a disciplinary landscape and disciplinary perspectives are different in the ways they structure, produce, and validate knowledge (Miller and Boix Mansilla, 2004). According to Becher (1989), disciplines are a set of academic tribes which have their own intellectual values and cognitive realms (as cited in

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Becher, 1994:153). Since 1970, the necessity of writing in different disciplines led the researchers to question the assumption that conventions of English discipline are universally applicable to writing in other disciplines; so, the specialists in different disciplines acknowledged that what is considered 'good' writing in their disciplines is not necessarily so in other disciplines (Lovejoy, 1991:316). In other words, 'research into academic writing has tended to confirm the existence of disciplinary differences relating to differing conceptions of the nature of knowledge and disciplinary culture, which may be realized in a variety of textual features' (North, 2005:433).

Literature Review

Systemic Functional Linguistics

One of the textual features which makes a text look coherent is the topical structure of the text. Topical Structure Analysis (TSA), which is a means of describing discourse structure, was first introduced by Lautamatti (1987) and, according to Noh (1985), it enables us [researchers] to see how topic flows develop in a text (Noh, 1985). Lautamatti's TSA borrows its conceptions from theme/rheme notions of Systemic Functional Linguistics and its well-known scholars. Danes (1974), Firbas (1974), and Mathesius (1975) are among the first who focused on the contribution of sub-topics of a text to the overall discourse topic (Shneider and Connor, 1990).

Mathesius divided a sentence into two parts; theme and enunciation and defined theme as 'what the sentence is about' and enunciation as 'what is said about the theme' (Witte, 1983:314). Later, Firbas, introducing the notion of 'Communicative Dynamism', replaced the enunciation with 'rheme', and he considered the rheme as having the highest level of CD because it contains the new information and makes communication move forward, which is not true about theme (Attelisi, 2012:48). Finally, Danes, considering the relationships of theme and rheme in a sentence and in the overall text, created a model which he called 'Thematic Progression' (Belmonte and McCabe 1997:17; Attelisi, 2012:49), which consists of: 'Linear Progression', which is created where the theme of a sentence follows from a previous rheme; the 'Derived Theme Progression', which is produced where a theme is taken out of a more global theme or which is called a 'Macro-theme' or 'Hyper-theme'; and the 'Continuous or Constant Progression', where the themes of sentences are kept the same in consecutive sentences (Carreon, 2006:164).

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Lautamatti's (1987) TSA Model

Drawing upon the theories of Prague linguists, Lautamatti in 1987 developed what she called 'Topical Structure Analysis' (TSA) in order to analyze the topic-comment relations in written texts (Knoch, 2007:110). According to her, three types of progressions in the text aid to its coherence being maintained (Knoch, 2007:110): 'Parallel Progression (PP)', where the topics of two following sentences are identical in reference, 'Extended Parallel Progression (EPP)', where two identical topics occur in two interrupted sentences, and 'Sequential Progression (SP)', where the comment of a previous sentence becomes the topic of the following sentence (as cited in Simpson, 2000:300).

Empirical Studies

Topical structure has been widely studied by different researchers (e.g., Schneider and Connor, 1990; Simpson, 2000; Lores, 2004; North, 2005; Carreon, 2006; Ebrahimi and Khedri, 2011; Caffarel-Cayron and Rechniewski, 2014) and in different settings, such as academic and media settings. Some researchers studied the relationship between genre or text type and the topical structure of texts. For example, Carreon (2006) analyzed the topical and physical structure of 20 students' journals as a sample of personal writing genre. Adopting Lautamatti's (1987) TSA, and adding the fourth progression found by Simpson (2000), she found that three types of sequential patterns – namely, sequential-parallel, simple sequential, and the extended sequential – were mostly used in students' journal writing.

Caffarel-Cayron and Rechniewski (2014) studied the relationship between media genre and thematic progression as one phase of their study. Using Danes' thematic progression model (1974), they analyzed the editorials taken from two well-known French newspapers – namely, Le Figaro and Liberation – and identified the relationships between the generic structure and topical structure of the French editorials.

Lores (2004) investigated the thematic structure of the academic writing genre. Using Davies' (1988) model of thematic structure, she investigated 36 abstract sections of research articles published in four well-known journals and found different uses of thematic organizations and theme choice in these different rhetorical structures. Her study further emphasizes the existence of a relationship between thematic developments and different generic structures.

The relationship between students' marks and their writing quality and topical structure has been studied by Schneider and Connor (1990). Using Lautamatti's (1987) TSA model, they analyzed three groups of essays written for the TOEFL Test of Written English; one high-rated group and two low-rated groups. They found that proportions of sequential and parallel progressions in these essays did differentiate between low-rated and high-rated essays, in the sense that high-rated essays contained a high degree of coherence building sequential progression and extended parallel progression, while low-rated essays contained more parallel progression.

Simpson (2000) did a comparative study of the thematic structure of 20 paragraphs in English and 20 paragraphs in Spanish utilizing Lautamatti's (1987) TSA model. The findings of her study show a high use of internal coherence in English paragraphs and a lack of use of immediate progression as a coherence tool in Spanish ones, and the researcher concludes that the perception of coherence in different cultures is different and changes from culture to culture. In the course of her analysis, Simpson found a fourth type of progression which she called extended sequential progression.

A rare number of studies investigated the effects of disciplinary variation on theme choice and thematic progression of students' writings. For example, North (2005), adopting a Hallidayan systemic functional approach, analyzed essays written for a history of science course by students with different disciplinary backgrounds (science and art) in a UK-based Open University to discover their thematic choice. The findings of her research were indicative of a significant difference between the theme choices of the students from these two different disciplines, in a way that art students achieved significantly higher grades than science students. In other words, art students achieved the average mark of 77.3, while the science students had an average of 66.9, which shows that the difference was significant at the one percent probability level. She then explains that art students made use of oriental themes (i.e., textual, interpersonal, with averages of 31.50 and 15.19, respectively) significantly more than science students (with an average of 24.28 for textual theme and 9.75 for interpersonal theme). However, she found no significant relationship between 'disciplinarity' and the use of 'thematic progression' between arts and science students' writings, and no relationship between 'particular TP patterns and argumentative or descriptive modes' could be detected in her study (North, 2005:347).

Ebrahimi and Khedri (2011), following the thematic progression pattern proposed by McCabe (1999), studied the thematic structure of 10 ISI article abstracts (five from chemical engineering as a representative of hard science and five from applied linguistics as a representative of soft science) to find out the effects of disciplinary variations on the thematic structure of the articles. The results of their study showed that the number of linear progressions of the abstract parts in the above-mentioned disciplines was significantly different and their study supports the hypotheses that academic research article abstracts are shaped by their disciplinary background.

Focus of the Present Research

Despite the fact that topical structure, as one of the important textual features of students' writings, has been studied from different perspectives, a rare number of studies like North (2005) and Ebrahimi and Khedri (2011) deal with the effects of disciplinary variations on the topical or thematic structure of texts. However, North (2005) studied students' essays at an undergraduate level, and Ebrahimi and Khedri (2011) collected their data from published, ISI research articles which are mostly written by students at graduate level. Furthermore, the results obtained by these researchers regarding the relationship between thematic structure and disciplinary differences seem to be contradictory. North (2005) found no relationship between students' essays and thematic structure, while Ebrahimi and Khedri (2011) found that there is a significant relationship between graduate students' writings and thematic structure. In order to further investigate the relationship between disciplinary variations and the topical structure of students' academic writing, this study aims to explore this issue in students' writing at the graduate level; so, it makes use of students' unpublished thesis discussion sections to investigate the phenomena.

As full members of their communities, graduate level students are expected to follow the conventions of their disciplines when writing their final thesis, so their writings can be good samples of disciplinary variations with regard to the topical structure of the texts. To this end, using Lautamatti's (1987) TSA model, the topical structure of students' academic writing is investigated to make students and teachers who deal especially with writing in English in Iranian universities more aware of these underlying structures which are influential in the coherence of

students' writings based on the conventions of the disciplines to which they belong. Accordingly, this study deals with two quantitative questions and presents one hypothesis:

- Based on Lautamatti's (1987) TSA model, what progressions are most frequently used in the discussion sections of TEFL and translation studies MA theses?
- Are there any significant differences between the two sets of data in relation to the topical progressions used?
- **Hypothesis:** There are significant differences between TEFL and English translation thesis discussion sections in relation to the topical progressions used.

Methodology

Research Method/Design

In line with the research questions, a quantitative-descriptive design is used to obtain the number of three progressions (i.e., parallel, sequential, and extended parallel) in the two sets of data under investigation, to make a comparison between their frequencies, and to describe the results and their implications.

Sampling

The data in this study consists of 50 discussion sections (25 from TEFL thesis manuscripts and 25 from translation studies thesis manuscripts) which were written by students in the Kharazmi University of Tehran. In this study, translation studies is considered as a discipline, though 'in Europe translation was seen for many decades either as simple linguistic transcoding (studied as a sub-discipline of applied linguistics, and only focusing on specialized translation), or as a literary practice (viewed as a branch of comparative literature and only concerned with the translation of canonical works of art)' (El-dali, 2011:33). It seems that, recently, it has been viewed as a discipline and, as Hatim (2001:8) puts it, '[translation studies] has gradually evolved into a discipline in its own right, or rather… into an 'inter-discipline', which draws on a wide range of other discipline and hence could be effectively described as 'a house of many room'' (as cited in El-dali, 2011:32). Furthermore, Baker (1998:277) states translation studies 'is now understood to refer to the academic discipline concerned with the study of translation at large, including literary and nonliterary translation' (as cited in El-dali, 2011:32). Because of the

restrictions in getting the permission to gather more data from other universities at the time of doing this research, all the samples were collected form only one university; so, the sampling strategy used in this study is 'convenience' sampling (Patton, 1990:180-181; Dornyei, 2007:129).

Data Collection and Analysis

All the discussions were selected from thesis manuscripts which were written in a 10-year time span from 2004 to 2014 in the Kharazmi University of Tehran. From the total number of 250 thesis manuscripts, only 50 of them have been selected for this study. The analysis in the current study was carried out in three stages: 1) identifying T-units as the units of analysis, 2) identifying topics in each T-unit and determining the progressions of topics in each discussion section, and, 3) charting the progressions and counting the total number of each progression.

The unit of analysis in this study is called the 'T-unit' which is found and defined by Hunt (1966) as 'one main clause plus whatever subordinate clauses happen to be attached to or embedded within it' (Hunt, 1966:737). The rationale behind using a T-unit as the unit of analysis lies in the fact that it differentiates between simple sentences and other sentences like compound ones (Schneider and Connor, 1990). In this study, it has been tried to use Schneider and Connor's (1990) guidelines (see Appendix) to identify the T-units.

For the analysis of T-units, the present research follows Lautamatti's (1987) TSA because, in this model, topic is considered as what the sentence is about and comment is defined as the rest of the sentence which contains some information about the topic; so, it is a discourse oriented definition to the concept of theme and not merely a text-based concept. After dividing the texts into T-units (as indicated by slashes), following Schneider and Connor's (1990) guidelines, they have been numbered and topics have been identified and underlined in each T-unit. Then, the progressions have been charted according to the guidelines.

Data Analysis Sample

The analysis is explained through these four paragraphs taken from the research data:

Wajnryb (2003) believes that <u>stories</u> provide a means of teaching and learning in general and, also, a means of teaching language specifically. **/1** He believes that <u>the value of</u>

<u>stories</u> is not restricted to the entertainment they offer **/2** but <u>they</u> appeal as a highly naturalistic means of teaching. **/3** In the last decade, <u>stories</u> have been increasingly used in more academic contexts of learning and teaching **/4** (Cooper, 1995; Richards, 1998; cited in Wajnryb, 2003). The purpose of this study was to investigate whether <u>the direct instruction of narratives in English</u> as a foreign language classroom would enhance learners' writing ability. **/5** Therefore, <u>the experimenter</u> selected two experimental groups and a control group randomly to observe the possible effects of narrative instruction on their writing progress. **/6** To show the average change for experimental groups from pretest to post-test, <u>the researcher</u> compared their scores on both tests using a one-way ANOVA test with the significant level set at 0.05. **/7** <u>The quantitative analysis of the data</u> obtained from learners' performance in both pretest and post-test revealed a considerable increase in the experimental groups' output regarding the overall quality of their writings $(F_{(2,105)}=32.916, p<0.05)$. **/8** Therefore, it can be concluded that <u>explicit teaching of narratives</u> had a significant effect on improving the learners' writing ability. **/9** <u>The results of the study</u> seemed to reject the null hypothesis and support the opposite view that direct instruction of narratives is effective in developing Elementary-level writing ability… **/10**

According to the guidelines, T-units 3-4 and 6-7 develop a parallel progression. In T-units 3-4, *they* and *stories* refer to the same entity in the real world and have identical meanings and in T-units 6-7, *the experimenter* and *the researcher* refer to the same person. T-units 1-2, 4-5, 5-6, 7-8, and 9-10 develop sequential progressions, because all the topics in these clauses (i.e., *the value of stories*, *the direct instruction of narratives in English*, *the experimenter*, *the quantitative analysis of the data*, and *the results of the study*) refer to completely different concepts. The topics in T-units 2- 3 and 8-9 (i.e., *they*, and, *explicit teaching of narratives*) refer back to the previous topics in T-units 1 and 5 respectively, which create extended parallel progressions. If we chart the four paragraphs taken from the above example from the research data, it would seem as follows:

   1. stories
   2.   the value of stories
   3. they

4. stories

5.   the direct instruction of narratives in English

6.   the experimenter

7.   the researcher

8.   The quantitative analysis of the data

9.   explicit teaching of narratives

10.   The results of the study….

Through charting the topical progressions, it will be easier to count the number of progressions used in each discussion section.

Statistical Procedures

After analyzing all of the discussion sections in the current study and before applying any statistical procedure, ten out of fifty discussion sections have been analyzed by another researcher who is a PhD. candidate in TEFL and is very well aware of the subject under study. Then, the inter-rater reliability was obtained through Kappa statistic which equals 84%. The English translation and TEFL discussion sections (as representatives of writing in two fields of translation studies and applied linguistics) are considered to be independent variables, and the three progressions in Lautamatti's (1987) TSA model (i.e., parallel progression, sequential progression and extended parallel progression) are considered as dependent variables, the frequencies of which this study hypothesized to change significantly across the disciplines mentioned above. Finally, a Chi-square test was run to obtain the differences between the two sets of discussion sections in relation to each dependent variable used.

Results

In Table 1, the frequency of the three types of progression in each set of TEFL and translation studies discussion sections is indicated.

Table 1 Frequency of parallel progression, sequential progression, and extended parallel progression in TEFL and translation discussions

Group	PP	SP	EPP	Total
TEFL	171	1025	300	1496
Translation	76	527	97	700

As shown in Table 1, in both sets of data, the number of sequential progressions exceeds the number of parallel and extended parallel progressions, and parallel progression is the least used progression. The number of extended parallel progressions in TEFL is slightly higher than in translation discussion sections.

Based on the descriptive statistics displayed in Table 2, it is revealed that the translation MA students (75.3%) made more frequent use of the SP than TEFL MA students (68.5%). The two groups made almost the same use of PP; i.e., 11.4% for TEFL and 10.9% for the translation group. The TEFL students used EPP (20.1%) more than the translation students (13.9%).

Table 2 Frequencies, percentages and std. residual; topical progression by major

			Topical Progression			Total
			SP	PP	EPP	
Major	TEFL	Count	1025	171	300	1496
		% within Major	68.5%	11.4%	20.1%	100%
		Std. Residual	-1.0	.2	1.8	
	Translation	Count	527	76	97	700
		% within Major	75.3%	10.9%	13.9%	100%
		Std. Residual	1.5	-.3	-2.6	
Total		Count	1552	247	397	2196
		% within Major	70.7%	11.2%	18.1%	100%

All of the Std. Residual values were lower than +/-1.96, except for the translation students' use of EPP (std. residual=-2.6>-1.96). These results indicated that the translation students' use of EPP is significantly below what was expected.

To investigate the significant difference between the frequencies obtained from two sets of data, a Chi-square (crosstabs) was run to compare the TEFL and translation students' use of topical progression. The results of the Chi-square (χ^2(df=2)=13.35, p<0.001) indicated that there were significant differences between the TEFL and translation students' use of topical progressions. Thus, the hypothesis was verified (see Table 3).

Table 3 Chi-square tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	13.359[a]	2	.001
Likelihood Ratio	13.825	2	.001
Linear-by-Linear Association	13.117	1	.000
N of Valid Cases	2196		
a. 0 cells (0%) have expected count less than 5. The minimum expected count is 78.73.			

After getting the results of the Chi-square, in order to find their effect size, a Phi test was run. According to Connolly (2005:79), 'Phi is a well-known and generally accepted indicator of effect size for simple 2x2 tables'. The result of the Phi test (p<0.05) indicated that the above-mentioned findings had a large effect size (see Table 4).

Table 4 Symmetric measures

		Value	Approx. Sig.
Nominal by	Phi	.078	.001
N of Valid Cases		2196	

Discussion

In relation to the first research question, the results indicated that the number of sequential progressions (SP) was significantly more than other progressions in both sets of data, which seems to be logical because of the nature of the discussion sections. According to Martinez (2003:119), discussion is 'perhaps the most argumentative and abstract' type of writing in which the students discuss and interpret the results. This is in agreement with Ferris (1994), who examined the topical structure of argumentative/persuasive texts written by freshman native and

non-native English speakers using Lautamatti's (1987) model and found that those students who gained higher scores used sequential progression mostly but basic writers made use of parallel progression for the most part. Furthermore, the results support the findings of the study by Gao (2012) in which, using Lautamatti's (1987) TSA, the researcher analyzed the argumentative essays written by undergraduates in Mainland China and their U.S. peers and found that both groups of writers used sequential progression mostly in their argumentative essays.

Regarding the second research question, the results of the Chi-square indicated that translation students tended to use more sequential progressions than TEFL students, while TEFL discussion sections contained more extended parallel progressions than translation discussions. It can be inferred from the results that translation students tended to expand the topics and add to the detail of their discussions more than TEFL students because, according to Schneider and Connor (1990:416), sequential progression 'helps to develop individual topics by adding details to an idea, thus contributing to the coherence of a text'.

The other finding of the Chi-square test is a difference between translation and TEFL discussion sections in relation to the extended parallel progression used; TEFL students tended to use it more than translation students. According to Carreon (2006:172) and Connor (1996:87, as cited in Gao, 2012:33), the use of extended parallel progression is representative of students' ability to return their discussions back to the main theme.

The outcomes of the current study are in line with the findings of Ebrahimi and Khedri (2011). The researchers found significant differences among the abstract parts of the RAs written by students from chemical engineering and applied linguistics in relation to the thematic progressions used; the abstracts were different in the choice of theme and the number of linear progressions. However, these researchers' data were chosen from soft and hard sciences which are epistemologically different. The current study reveals that these variations exist across the disciplines within soft sciences, too.

The results of this study, however, are not supported through the findings of the study by North (2005). The findings of her study showed that the students who had different disciplinary backgrounds – namely, arts and science – were different in their use of themes, in a way that art students used more oriental themes than science students. Her study revealed no relationship between the thematic progression and students' disciplinary background, though they were from arts and science backgrounds which seem to be highly different. One possible explanation for

this lack of relationship can be the fact that students were undergraduates who had not evolved into full members of their new communities yet. Although the current study makes use of writing samples within the soft sciences only, it reveals a significant relationship between these disciplines (i.e., applied linguistics and translation studies) and students' use of topical progression, and the reason behind it seems to be the fact that they are graduate level students who are expected to write professionally in their fields and, as Samaraj (2008:65) puts it, 'master's thesis writers do seem to have acquired some of the discursive values of their discipline' that leads to some variations in their writings.

Summary and Concluding Remarks

This study investigated the topical structure of students' thesis discussions in different disciplines to see how they are used by students with different disciplinary backgrounds. Specifically, using Lautamatti's (1987) TSA, it investigated 25 TEFL and 25 translation studies thesis discussion sections in the Kharazmi University of Tehran to see which progressions are the most prevalent topical progressions in each set of data and to find out whether writing in different disciplines affects students' writings with respect to topical relations. The findings of the study supported the effects of disciplinary variations in the topical structure of students' writings.

The outcomes of the present study might have some implications for both students and teachers, especially in Iranian universities. Students need to be aware of the fact that, for writing to be successful, it has to have proper topical relations among the sentences and, as Brown and Yule (1983) believe, in different genres of discourse, different sequences of themes or topics are preferred. Furthermore, as the work of Iranian researchers like Salteh and Sadeghi (2012) shows, 'most teachers' comments treat students' first drafts as final or finished drafts, the result being that surface-level features are given priority over higher-level concerns such as clarity, development and logic' (p.375). So, the present study and similar ones prove that students need to be assessed at discourse level, too. The writing teachers can take into consideration something above the surface level of students' writings and pay attention to the fact that writing in different disciplines demands different topical relations among the sentences and paragraphs which have been established as the conventions of writing in those disciplines.

Finally, the data in this study was chosen from only one university and the differences between only two disciplines were investigated; so, the results may have low generalizability.

For future researchers, it would be better to repeat this study with a larger sample and, in order to be able to thoroughly understand the effects of disciplinary variations on the topical structure of students' writing, it would be better to study the differences among three or more different disciplines.

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Appendix (Schneider and Connor's (1990) guidelines)

T-Units (T)

1. Any independent clause and all its required modifiers.

2. Any non-independent clause punctuated as a sentence (as indicated by end punctuation).

3. Any imperative

Parallel Progression (P)

1. Any sentence topic that exactly repeats, is a pronominal form, or is a synonym of the immediately preceding sentence topic.

2. Any sentence topic that is a singular or plural form of the immediately preceding sentence topic.

3. Any sentence topic that is an affirmative or negative form of the immediately preceding sentence topic (e.g., artists, no artists).

4. Any sentence topic that has the same head noun as the immediately preceding sentence topic (e.g., the ideas of scientists, the ideas of artists; the contributions made by scientists, the contributions made by artists).

Sequential Progression (S)

1. Any sentence topic that is different from the immediately preceding sentence topic; that is, not (1)-(4), or P.

2. Any sentence topic in which there is a qualifier that so limits or further specifies an NP that it refers to a different referent (e.g., a nation, a very small, multi-racial nation; referring to two different nations).

3. Any sentence topic that is a derivation of an immediately preceding sentence topic (e.g., science, scientists).

4. Any sentence topic that is related to the immediately preceding sentence topic by a part-whole relationship (e.g., these groups, housewives, children, old people).

5. Any sentence topic that repeats a part but not all of an immediately preceding sentence topic (e.g., science and art, science, art).

Extended Parallel Progression (Ex)

> Any sentence topic that is interrupted by at least one sequential topic before it returns to a previous sentence topic.

A Cross-Linguistic Inquiry into the Potential Reasons for the Avoidance of English Phrasal Verbs: The Case of Turkish and Norwegian EFL Learners

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Abstract
This study investigates whether Turkish and Norwegian EFL learners avoid English phrasal verbs. English proficiency level and semantic complexity of phrasal verbs are factors whose effect on learners' avoidance behaviour is investigated throughout the study. The results obtained from three different one-way ANOVA tests show that, while Turkish EFL learners avoid English phrasal verbs as a whole, Norwegian EFL learners do not avoid English phrasal verbs. That the avoidance of English phrasal verbs diminishes as English proficiency level gets higher is another finding yielded by the study. As for the semantic complexity of phrasal verbs, while Turkish EFL learners avoid figurative phrasal verbs, Norwegian EFL learners avoid literal phrasal verbs. It can be concluded that phrasal verb types are another factor having an effect on learners' avoidance of English phrasal verbs.

Introduction

Communication is one of the most remarkable human-specific features; it is language that provides human beings with opportunity. Some unexpected circumstances, such as not being able to remember the exact word or forgetting what to say, compel L2 learners to utilize communication strategies described by Faerch and Kasper as 'potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal' (1980:81). In other words, communication strategies are just an alternative for L2 speakers to apply against communicative inhibition to convey the intended message to the interlocutor. 'Avoidance', a way of circumventing target language grammatical rules and forms which have

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not yet been internalised by learners' underlying knowledge (Tarone, Cohen and Dumas, 1976:82), is one of the frequently-used communication strategies whose major source is purported as similarities and differences between L1 and L2 by Gass and Selinker (2008:138). In addition to similarities and difficulties between two languages, Patten and Benati (2010:66) add the 'difficulty' experienced by the speaker during communication as a factor causing avoidance. It can be said that all of these reasons mentioned emanate from L2 learners' lack of knowledge.

There are many structures and grammatical items to which L2 learners may resort to when using avoidance strategy during conversation in the target language; and avoiding phrasal verbs in some conversational situations may be one of the mostly frequently experimented cases by L2 English speakers due to their difficulty and absence in many of the world's languages. Phrasal verbs are verb and particle constructions forming a new lexical item together which totally differs from its components semantically (Darwin and Gray, 1999:65). With regard to the meaning of phrasal verbs, Celce-Murcia (2001:254) makes reference to two kinds of phrasal verbs as literal ones whose components help to find out the meaning of the verb-particle construction and figurative ones whose meaning has any slight relevance with its components. Celce-Murcia (2001:254-255) also characterizes phrasal verbs as widespread elements peculiar to informal spoken language instead of a formal written one and states that ESL/EFL learners mostly have trouble understanding the semantics, not the syntax, of phrasal verbs. The truth that phrasal verbs are grammatical items frequently used in informal speech strengthens the reality of the above-mentioned proposal in which phrasal verbs are identified as one of the typically avoided grammatical items during communication in the target language.

Statement of the Problem

Avoidance is a communication strategy applied to any linguistic element in the target language to prevent eventual errors once the speaker is confronted with difficulties emanating from the L2 itself or from similarities and differences between the L1 and L2. Phrasal verbs are one of these linguistic elements that some languages (e.g., Dutch, Swedish, Norwegian, Danish) show similarities to the English language with regard to possessing phrasal verb construction, while some languages (e.g., Turkish, Chinese, Hebrew) differ from English because they do not possess phrasal verb construction. The aim of the present study is not only to research into the issue of whether the use of avoidance strategy with English phrasal verbs by Turkish and

Norwegian L2 English learners is applied or not but also to compare the Norwegian and Turkish learners' avoidance strategy use with each other. Whether there are significantly meaningful differences between Turkish and Norwegian EFL learners with B1 and B2 English proficiency levels in terms of their avoidance strategy use with English phrasal verbs is the research problem of this study. The literature related to the use of avoidance strategy with phrasal verbs is very limited. Liao and Fukuya (2004:197), researching into the same issue with Chinese learners, alleged that there were only three studies related to the avoidance of phrasal verbs at that time. After that time (i.e., since 2004), the issue has been dealt with by Dagut and Laufer (1985) on Hebrew learners, by Hulstijn and Marchena (1989) on Dutch learners, by Laufer and Eliasson (1993) on Swedish learners, by Siyanova and Schmitt (2007) on several non-natives belonging to a non-Germanic group of languages, such as Chinese, Russian, Italian and Arabic, and by Ghabanchi and Goudarzi (2012) and Sara and Mohammadreza (2013) on Iranian learners. However, the literature still lacks enough information with regard to a deep analysis of the effect of several variables on the present issue. While some of the above-mentioned L1s – such as Dutch and Swedish – possess phrasal verbs, some of them – such as Hebrew, Chinese, Persian, Russian, Italian and Arabic – do not have verb-particle construction. Furthermore, there is only one study (Kayael, 2007) within the context of Turkish learners whose L1 lacks phrasal verb construction. Besides, comparing two different languages having different features with regard to the presence and absence of phrasal verbs gives the researcher the chance to test whether similarities and differences between the native language and target language have any effect on the avoidance of phrasal verbs. Moreover, each study cited above compares the avoidance of phrasal verbs by different learners with different L1 backgrounds. Those above-mentioned features, no doubt, both rationalize conducting such a study with Turkish and Dutch learners and supply a grain of contribution for the sake of filling the gap in literature.

Literature Review

It is possible to summarize the relevant body of research in this part of the study and deal with the issue with regard to three components: participants' proficiency level, data elicitation tools, and the results attained at the end of past studies. Learners' proficiency level and data collection methods have already been frequently investigated as variables in literature. On the one hand, advanced level English proficiency is tested in terms of whether it has any effect on learners'

avoidance strategy use with English phrasal verbs by Dagut and Laufer (1985) on Hebrew learners, Laufer and Eliasson (1993) on Swedish learners, Siyanova and Schmitt (2007) on a group of learners who are speakers of non-Germanic languages, such as Chinese, Russian, Italian and Arabic, and Kayael (2007) on Turkish learners. On the other hand, Hulstijn and Marchena (1989) on Dutch learners, Liao and Fukuya (2004) on Chinese learners, Ghabanchi and Goudarzi (2012), and Sara and Mohammadreza (2013) on Iranian learners investigate not only advanced but also intermediate English proficiency levels to compare and contrast the participants' tendency to use avoidance strategy with English phrasal verbs.

As for data elicitation tools, the entirety of the above-mentioned past studies utilize at least multiple choice tests to collect data. While Dagut and Laufer (1985), Hulstijn and Marchena (1989), Liao and Fukuya (2004), and Ghabanchi and Goudarzi (2012) make use of translation and memorization (recall) tests in addition to multiple choice tests during the data collection process, Laufer and Eliasson (1993) and Sara and Mohammadreza (2013) utilize only translation tests as an addition to a multiple choice test. Only Kayael (2007) makes use of fill-in-the-blank tests in addition to multiple choice tests and translation tests to measure the participants' working phrasal verb knowledge by expecting them to insert appropriate phrasal verbs into excluded parts of the fill-in-the-blank test (p.27).

With respect to the results, advanced level Swedish participants in the study of Laufer and Eliasson (1993) and advanced level Turkish EFL learners in Kayael (2007) do not use avoidance strategy with English phrasal verbs. In Kayael (2007), the non-native Turkish participants do not differ from native English speakers in the use of literal or figurative phrasal verbs. That is to say, Turkish EFL learners do not avoid any type of English phrasal verbs. Even their mean scores show that they use figurative phrasal verbs more frequently than native English speakers. However, the use of avoidance strategy leaps to the eye in the rest of above-mentioned studies in terms of phrasal verb types. Figurative phrasal verbs causing semantic difficulties as a theme of study are avoided in Dagut and Laufer (1985), Hulstijn and Marchena (1989), Liao and Fukuya (2004), Siyanova and Schmitt (2007), Ghabanchi and Goudarzi (2012), and Sara and Mohammadreza (2013).

With regard to the effects of the participants' proficiency level on avoidance strategy use, inconsistent results come to the surface. In Liao and Fukuya (2004) and Sara and Mohammadreza (2013), intermediate learners differ from advanced learners significantly,

meaning that less proficient learners' avoidance strategy use is meaningfully higher than proficient learners'. However, participants with advanced and intermediate English proficiency levels in Hulstijn and Marchena (1989) and Ghabanchi and Goudarzi (2012) do not differ significantly in their use of phrasal verbs. In other words, avoidance strategy use by two different proficiency levels is more or less the same.

The data elicitation type is another variable having an effect on participants' avoidance strategy use with phrasal verbs. Although any of three different data collection tools (multiple choice, translation, memorization) in Hulstijn and Marchena (1989) and any of two different data collection tools (multiple choice and translation) in Sara and Mohammadreza (2013) have an effect on Dutch and Iranian participants' avoidance of phrasal verbs, translation tests in Liao and Fukuya (2004) and translation and recall tests in Ghabanchi and Goudarzi (2012) have a significant effect on learners' avoidance of phrasal verbs. This means that Chinese and Iranian learners are inclined to use less frequent phrasal verbs with these data elicitation test types.

To sum up, it can easily be observed that phrasal verbs, especially figurative ones, are avoided by a clear majority of participants simply because of syntactical differences between learners' L1 and the target language itself, as in the studies of Dagut and Laufer (1985) with Hebrew learners, Liao and Fukuya (2004) with Chinese learners, Siyanova and Schmitt (2007) with a group of Chinese, Italian, Russian and Arabic learners, Ghabanchi and Goudarzi (2012) and Sara and Mohammadreza (2013) with Persian learners. As mentioned before, these languages do not have a grammatical structure like English phrasal verbs. Therefore, this difference gives rise to the avoidance of English phrasal verbs by Hebrew, Chinese, Russian, Italian, Arabic and Persian learners. However, the absence of phrasal verbs in one's L1 is not enough to account for the underlying reasons for the use of avoidance strategy. Even though Hulstijn and Marchena (1989) hypothesize that Dutch learners do not avoid phrasal verbs as a consequence of the presence of phrasal verbs in Dutch as in English, the results contradict what they hypothesised at the outset of the study. Contrary to Dagut and Laufer (1985), the researchers clarify the matter of Dutch learners' tendency to avoid phrasal verbs with similarities between Dutch and English and semantic difficulties stemming from English phrasal verbs by themselves. Thereby, it can be deduced that not only differences but also similarities between L1 and L2 may be the potential sources of avoidance of English phrasal verbs.

In a similar way to Liao and Fukuya's (2004) conclusion, the different types of phrasal verbs, data elicitation methods and learners' English proficiency level have a significant influence on learners' tendency to use avoidance strategy. Differences and similarities between L1 and the target language, and semantic difficulties arising from the target language itself are probable reasons causing avoidance of English phrasal verbs, stated by Liao and Fukuya (2004). However, as in Laufer and Eliasson (1993) with Swedish learners whose L1 shares phrasal verbs as a common characteristic with English and as in Kayael (2007) with Turkish learners whose L1 lacks phrasal verb construction, similarities and differences do not give the expected results in all cases. Swedish and Turkish learners' results, contrary to expectations, may take their source from participants' advanced English proficiency level. As it is utilized in numerous studies, proficiency level is a variable being examined as to whether it has any effect on learners' avoidance of phrasal verbs.

In light of the above-mentioned related literature, the researcher attempts to answer the following research questions throughout the present study:

(1)   Do Turkish and Norwegian learners avoid English phrasal verbs?

(2)   Is learners' avoidance of English phrasal verbs, if any, affected by their English proficiency level?

(3)   Do phrasal verb types have an effect on learners' avoidance of English phrasal verbs, if any?

Methodology

Participants

One of the non-probability random sampling strategies – convenience sampling –, which enables the researcher to let voluntary EFL learners attend to the study as participants, is used to form the sample of the present study. Three groups of 90 participants in total, 40 native speakers of English as a control group, 12 Norwegian EFL learners, and 38 Turkish EFL learners, participated in the present study. Turkish EFL learners are divided into two groups as intermediate (B1) and upper intermediate (B2) English proficiency levels. However, 12 Norwegian learners who got a score of 6 from IELTS (International English Language Testing System) form a group with B2 English proficiency.

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The researcher contacted 40 native English speakers through Surveycrest, a website for submitting online tests. The group of native speakers of English is composed of instructors and lecturers working in different universities in Turkey, such as Bilkent, Sabancı, Koç, and Anadolu University, and the College of Oasis International School in Ankara.

Turkish participants with B1 and B2 English proficiency levels are university students at Ondokuzmayıs University (O.M.U.) in Samsun, Turkey. The B1s are medical students studying at preparatory class, and the B2s are English Language Teaching (ELT) students studying at preparatory class in the School of Foreign Languages. All of the Norwegian participants are Master's and PhD students in the Department of Economics at the University of Bergen in Norway.

In order to determine Turkish and Norwegian participants' English proficiency levels, two different English tests are utilized and participants' scores are converted to common reference levels as B1 (intermediate) and B2 (upper intermediate) according to the Common European Framework of Reference for Languages (CEFR). The English proficiency of Norwegian EFL learners is determined according to their scores from IELTS. The learners having scores of 6 from IELTS form a group. A score of 6 from IELTS is treated as a B2 equivalent score of CEFR on the official IELTS website.[2] On the other hand, the English proficiency level of Turkish EFL learners is determined according to their scores obtained from English proficiency exams conducted by the School of Foreign Languages at O.M.U. In accordance with respective education and exam regulations adopted by the School of Foreign Languages at O.M.U, the scores obtained from English proficiency exams conducted by the School of Foreign Languages have one-to-one correspondence with those obtained from YDS, ÜDS, and KPDS conducted by the National Student Selection and Placement Center (OSYM). Namely, if a student gets a score of 70 from an English proficiency exam in the School of Foreign Languages, it is treated as an equivalent score of 70 from YDS, ÜDS, and KPDS, as prepared by OSYM. According to the foreign languages equivalence relations published by OSYM on February 14th, 2014, the score interval of 60-74 is treated as a B1 equivalent score of CEFR and the score interval of 75-94 is treated as a B2 equivalent score of CEFR. Because the scores from the English proficiency exam conducted by the School of Foreign Languages and the English proficiency exams conducted by OSYM have one-to-one correspondence, the students

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[2] http://www.ielts.org/researchers/common_european_framework.aspx

getting a score in the interval of 60-74 have a B1 English proficiency and the students getting a score in the interval of 75-94 have a B2 English proficiency.

Data Elicitation Tool

A fifteen-item multiple choice test, used in Liao and Fukuya (2004), consisting of 4 literal and 11 figurative phrasal verb types, is utilized to collect data from both native and non-native speakers of English in the present study. This multiple choice test is preferred because it works as the most suitable test among multiple choice tests utilized to collect data related to the informal use of spoken English but in written contexts. Liao and Fukuya (2004:203-204) make a distinction between multiple choice tests utilized in past studies and their own test by declaring that their test is devoted to making exam-takers feel as if they were uttering the written sentences in the multiple choice test in a casual speech by virtue of using shorter and more informal dialogues.

Each item in the test involves short and informal dialogues in which the verb is expected to be selected among four different options: the expected phrasal verb, its one-word equivalent, and two distractor verbs. Just before beginning the test, the participants are informed that each item in the test has more than one correct answer and that they are expected to choose the most suitable option coming to their mind most naturally.

Data Collection

In the first part of the data collection process, the native speakers of English are given the multiple choice test to determine what choice they opt for once they come across both verb-particle construction and one-word equivalent in the same situation. The results of this multiple choice test having been completed by native speakers of English are utilized to compare the data collected from non-native Norwegian and Turkish EFL learners. In the second part of the data collection process, both Turkish EFL learners with B1 and B2 level English proficiency and Norwegian learners with B2 level English proficiency take the same multiple choice test.

Data Analysis

Each participant's responses to the multiple choice test are analysed and their preferences for phrasal verbs or one-word equivalents are determined. Each participant is given a score, such as 8/15, 12/15, 15/15, according to their correct phrasal verb preferences. For example, if a

participant chooses nine phrasal verbs out of the 15-item multiple choice test, his/her raw score is 9/15. The raw scores are converted into numerical values varying from 0 to 1 to answer the first and second research questions; namely, to reveal whether Turkish and Norwegian EFL learners avoid English phrasal verbs and whether proficiency has any effect on avoidance behaviour. A one-way ANOVA (the first analysis) is run to reveal whether there are any statistically significant differences across native speakers, Turkish learners, and Norwegian EFL learners with regard to their avoidance of phrasal verbs.

In order to answer the third research question, two different one-way ANOVA (the second and third analyses) tests are conducted to reveal whether phrasal verb types (literal and figurative) have any significant effect on Turkish and Norwegian learners' phrasal verb usage. The multiple choice test consists of 11 figurative type and 4 literal type phrasal verbs. The participants' literal and figurative preferences are scored as 4/11, 7/11 for the figurative type and as 1/4, 4/4 for the literal type. For example, if a participant chooses 4 figurative phrasal verbs in total, his/her raw score of 4/11 is converted into the numerical value of 0.36. Or, if a participant chooses 2 literal phrasal verbs in total, his/her raw score of 2/4 is converted into the numerical value of 0.5.

Results

The multiple choice test consists of 15 items and there are 600 correct phrasal verb options (15 items x 40 participants) for native speakers of English. They chose 509 (84.8%) out of 600 phrasal verbs. Of these 509 phrasal verbs, 128 (25.2%) of them are literal and 381 (74.8%) of them are figurative. There are 180 correct phrasal verb options for Norwegian EFL learners and they opt for 131 (72.7%) out of 180 phrasal verbs. Of these 131 phrasal verbs, 20 (15%) are literal and 111 (84.7%) are figurative phrasal verbs. Among the total number of 255 phrasal verbs, Turkish learners with B1 English proficiency chose 48 (44%) literal and 61 (55.9%) figurative phrasal verbs; 109 (42.7%) in total. Turkish learners with a B2 English proficiency level chose 195 (61.9%) phrasal verbs in total, 59 (30%) literal and 136 (69.7%) figurative phrasal verbs, out of 315 true phrasal verb options. The above-mentioned percentages for literal and figurative phrasal verbs chosen by participants give the ratio of literal/figurative phrasal verbs chosen by the groups to the total number of phrasal verbs chosen by the same group (e.g., 128/509: the ratio of literal ones chosen by the native speaker group compared to the total

number of phrasal verbs chosen by native speakers of English). The following table depicts the occurrence of phrasal verbs and their one-word equivalents. The percentages of the total number of figurative and literal phrasal verbs chosen are computed according to their ratio of occurrence to the total number of figurative/literal phrasal verbs (e.g., 381/440 for figurative ones in the group of native speakers of English).

Table 1 Summary of the general raw data

Group	n	Phrasal Verb Type	Total Number of Verbs	Total Number of Phrasal Verbs Chosen	One-Word Verbs Chosen	Mistakes
Native Speakers	40	In total	600	509 (84.8%)	91 (15%)	-
		Figurative	440	381 (86.5%)		
		Literal	160	128 (80%)		
Norwegian B2	12	In total	180	131 (72.7%)	49 (27.2%)	-
		Figurative	132	111 (84%)		
		Literal	48	20 (41.6%)		
Turkish B1	17	In total	255	109 (42.7%)	101 (39.6%)	45 (17.6%)
		Figurative	187	61 (32.6%)		
		Literal	68	48 (70.5%)		
Turkish B2	21	In total	315	195 (61.9%)	111 (35.2%)	9 (2.8%)
		Figurative	231	136 (58.8%)		
		Literal	84	59 (70.2%)		

The distribution of the occurrence of correct phrasal verb options and their percentages are shown in the table below. Literal phrasal verbs and their occurrence and percentages are shaded.

Table 2 Specific factor analysis

Phrasal Verbs (right options)	Native Speakers	Norwegian B2	Turkish B1	Turkish B2
get up	*38 - 95%*	*9 - 75%*	*13 - 100%*	*21 - 100%*
showed up	36 - 90%	10 - 83%	7 - 54%	8 - 38%
brush up on	36 - 90%	8 - 67%	3 - 23%	4 - 19%
lets down	21 - 53%	8 - 67%	3 - 23%	9 - 43%
went off	31 - 78%	11 - 92%	1 - 8%	8 - 38%
hold on	34 - 85%	11 - 92%	5 - 38%	13 - 62%
put out	38 - 95%	12 - 100%	8 - 62%	19 - 90%
made up	40 - 100%	12 - 100%	9 - 69%	20 - 95%
give in	31 - 78%	6 - 50%	4 - 31%	15 - 71%
turn down	40 - 100%	10 - 83%	3 - 23%	12 - 57%
run into	39 - 98%	11 - 92%	1 - 8%	18 - 86%
show off	35 - 88%	12 - 100%	4 - 31%	10 - 48%
go away	**33 - 88%**	**5 - 42%**	**8 - 62%**	**15 - 71%**
take away	**31 - 78%**	**4 - 33%**	**9 - 69%**	**11 - 52%**
come in	**26 - 65%**	**2 - 17%**	**8 - 62%**	**12 - 57%**

In the first question, the right phrasal verb 'get up' is preferred by 38 native English speakers and it represents 95% of the total of native English speakers. The same option for the same question is preferred by 9 Norwegian EFL learners and it represents 75% of the total of Norwegian EFL learners.

A one-way ANOVA was computed to compare the mean scores of 4 groups of participants in response to the first and second research questions; namely, to investigate whether Turkish and Norwegian EFL learners avoid English phrasal verbs, and to examine the effect of English proficiency on avoidance behaviour. The findings of the first analysis, comparing the mean scores of four groups, yielded a statistically significant difference among four groups of participants with regard to their scores obtained from multiple choice tests ($F(3,86)=39.786$, $p<0.001$). Therefore, to determine which groups have significant differences in terms of their test scores, a Scheffe post-hoc test was run. Post-hoc results showed that four pairs were found to have a statistically significant difference with regard to their multiple choice test scores: native speakers (M=84, SD=12) and Turkish learners with B1 proficiency (M=0.42, SD=0.11) at $p<0.001$ level; native speakers and Turkish learners with B2 proficiency (M=0.61, SD=0.18) at $p<0.001$ level; Norwegian learners with B2 English proficiency (M=0.72, SD=0.12) and Turkish learners with B1 English proficiency at $p<0.001$ level; and Turkish learners with B1 English proficiency (M=0.42 SD=0.11) and B2 English proficiency (M=0.61, SD=0.18). These results mean that Norwegian learners with B2 English proficiency do not avoid English phrasal verbs. They do not significantly differ from native speakers with regard to their use of English phrasal verbs. However, contrary to Norwegian learners, both of the Turkish groups (B1 and B2 English proficiency) significantly differ from native English speakers in terms of their English phrasal verb usage. As for proficiency, this means that Turkish EFL learners with B1 and B2 English proficiency avoid English phrasal verbs. Their mean scores referring to their use of English phrasal verbs are significantly lower than those referring to native English speakers' English phrasal verb usage. Native English speakers use phrasal verbs twice as much as Turkish EFL learners with a B1 English proficiency level, according to the descriptive test results presented above. On the other hand, Norwegian EFL learners with B2 English proficiency level and Turkish EFL learners with B1 English proficiency level significantly differ from each other with regard to their phrasal verb usage. The use of English phrasal verbs by Norwegian EFL learners is higher than that of Turkish EFL learners. The results show that more proficient Turkish (B2)

and Norwegian EFL learners (B2) use English phrasal verbs much more than less proficient Turkish EFL learners (B1). The mean difference between the two different proficiency groups for Turkish participants is also statistically significant.

A second one-way ANOVA was conducted to answer the third research question as to whether the four groups differed significantly with regard to semantic complexity of the phrasal verbs when taking part in the same multiple choice test. Firstly, whether proficiency groups differed significantly in terms of their scores obtained from figurative phrasal verb types was investigated. The results indicate that there are statistically significant differences among four groups with regard to their figurative verb usages ($F(3,86)=65.709$ $p<0.001$). In order to find out which groups differed significantly from each other, Tamhane's T2 was used as a follow-up test. Post-hoc test results show that five pairs are found to have a statistically significant difference with regard to their multiple choice test scores from figurative phrasal verb usages: native speakers ($M=0.85$, $SD=0.10$) and Turkish learners with B1 English proficiency ($M=0.32$, $SD=0.09$) at $p<0.001$ level; native speakers and Turkish learners with B2 English proficiency ($M=0.58$, $SD=0.21$) at $p<0.001$ level; Turkish learners with B1 English proficiency and Norwegian learners with B2 English proficiency ($M=0.83$, $SD=0.12$) at $p<0.001$ level; Norwegian learners with B2 English proficiency and Turkish learners with B2 proficiency at $p<0.05$ level; and Turkish learners with B1 ($M=0.32$, $SD=0.09$) and B2 English proficiency groups ($M=0.58$, $SD=0.21$). The above-mentioned descriptive test results show that semantically opaque figurative phrasal verbs do not change the result that Norwegian learners do not differ from native speakers with regard not only to their phrasal verb use in general but, also, to figurative phrasal verb usage. The mean score obtained by native English speakers is slightly above that of Norwegian learners with B2 English proficiency and the mean difference is not statistically significant. However, both of the Turkish proficiency groups statistically differ from native English speakers. This means that Turkish EFL learners avoid not only phrasal verbs as a whole but also figurative ones in particular. Two different groups with the same English proficiency level, Norwegian and Turkish EFL learners with a B2 English proficiency level, have a statistically significant difference with regard to their figurative phrasal verb usage. Furthermore, more proficient Turkish EFL learners (B2) use much more figurative phrasal verbs than less proficient ones (B1) and the mean difference between these two groups is statistically significant.

A third one-way ANOVA was run to see whether proficiency groups differed significantly according to their scores with regard to their literal phrasal verb usage. The findings yielded a statistically significant difference among four proficiency groups with regard to their multiple choice test scores obtained from literal phrasal verb items (F(3,86)=7.710 p<0.001). To determine where the significant difference was, a Scheffe post-hoc was computed. According to the Scheffe follow-up test, three pairs were found to have a statistically significant difference with regard to the participants' multiple choice test scores from literal phrasal verb usages: native speakers (M=0.80, SD=0.24) and Norwegian learners with B2 English proficiency (M=0.41, SD=0.26) at p<0.001 level; Norwegian learners with B2 English proficiency and Turkish EFL learners with B1 English proficiency (M=0.70, SD=0.23) at p<0.05 level; and Norwegian learners with B2 English proficiency and Turkish EFL learners with B2 English proficiency (M=0.70, SD=0.21) at p<0.05 level. The descriptive results show that semantically transparent literal phrasal verbs cause different results, such that Turkish EFL learners do not avoid literal phrasal verbs; however, Norwegian EFL learners avoid literal phrasal verbs. The mean score of literal phrasal verbs obtained by Norwegian learners is almost half that obtained by native English speakers. The mean scores of both Turkish groups are higher than that of Norwegian learners. Furthermore, it is apparent that the literal phrasal verb use of Turkish learners is approximately equal. The two different groups with two different English proficiency levels do not differ significantly with regard to their literal phrasal verb usage.

Discussion

The results of the present study show, in brief, that both of the Turkish groups with B1 and B2 English proficiency avoid English phrasal verbs in general. However, Norwegian EFL learners do not avoid English phrasal verbs. As for English proficiency, Norwegian learners with B2 English proficiency and Turkish learners with B1 English proficiency, and Turkish learners with B1 and B2 English proficiency differ from each other with regard to their avoidance of English phrasal verbs. As for the semantic complexity of phrasal verbs, Turkish learners avoid figurative phrasal verbs; however, Norwegian learners do not avoid semantically opaque phrasal verbs. With regard to literal phrasal verbs, the opposite situation shows itself. While Norwegian learners avoid semantically transparent phrasal verbs, neither of the Turkish groups avoids those literal phrasal verbs.

The outcome of the only study about Turkish learners' avoidance of English phrasal verbs in the literature (Kayael, 2007) and that of the present study collide with one another. Although the learners with advanced English proficiency avoid neither English phrasal verbs as a whole nor figurative ones in Kayael's study (2007), the learners with intermediate and upper intermediate proficiency levels avoid English phrasal verbs in the present study. At this point, proficiency level draws attention as the most distinct reason. These results suggest that increasing proficiency levels of English is a factor removing the appearance of avoidance behaviour in Turkish EFL learners' English phrasal verb usage. The statistically meaningful differences in phrasal verb usage between Turkish learners with B1 and B2 English proficiency levels, and Norwegian B2 and Turkish B1 English proficiency levels support this implication.

The question of why Norwegian learners do not avoid English phrasal verbs can be associated with structural similarities between English and Norwegian with regard to having the grammatical structure of phrasal verbs. Both of these languages are Germanic languages and possess phrasal verbs, as in German, Dutch, Swedish, and Danish. The results attained in Laufer and Eliasson (1993), in which advanced level Swedish learners whose L1 consists of the same phrasal verb structure as in English do not avoid English phrasal verbs, support the argument asserting the effect of structural similarities between the two languages. It should not be forgotten that the participants in the present study and in Laufer and Eliasson (1993) have upper intermediate and advanced level English proficiency, respectively. An opposite situation occurs as the English proficiency level gets lower. The findings in Hulstijn and Marchena (1989) show that Dutch learners with intermediate English proficiency avoid English phrasal verbs. In another study, Kharitonova (2013) reaches the conclusion that Norwegian learners avoid English phrasal verbs and do not differ significantly from Russian learners whose native language does not include any similar structure to English phrasal verbs. The researcher does not convey the proficiency level of participants but does say that they are aged 13-14. It can be inferred that structural similarity between the mother tongue and English is not enough to explain, on its own, why learners with higher English proficiency levels do not avoid English phrasal verbs. The proficiency level directly intervenes in the results of the studies.

The semantic complexity of phrasal verbs was another factor whose effect on the avoidance of phrasal verbs was investigated. Even though Turkish learners avoid English phrasal verbs as a whole, and figurative ones in particular, they do not avoid literal phrasal verbs. On the

contrary, although Norwegian learners do not avoid phrasal verbs as a whole, and figurative ones in particular, they avoid literal phrasal verbs. According to Kellerman (cited in Hulstijn and Marchena, 1989:250), target language structures which are very similar to those of the L1 equivalent may cause learners to hesitate to use these structures with the purpose of preventing L1-based errors. Structural and semantical similarities may be the reason why Norwegian learners avoid using semantically transparent literal phrasal verbs. In the same way, Dutch learners in Hulstijn and Marchena (1989) avoid idiomatic phrasal verbs because the target English verbs are semantically and structurally similar to their counterparts in their native language. On the other hand, the result that Turkish learners avoid figurative phrasal verbs is in line with the studies in literature. Gaston (2004) conveys that Spanish learners whose native language does not consist of phrasal verb structure avoid figurative phrasal verbs; however, they prefer literal ones more than their one-word equivalents. Hebrew learners in Dagut and Laufer (1985), Chinese learners in Liao and Fukuya (2004), Persian learners in Sara and Mohammadreza (2013) and in Ghabanchi and Goudarzi (2012) use more literal phrasal verbs than figurative ones. This shows that semantic complexity is another factor affecting avoidance behaviour, as well as English proficiency level.

Conclusion

The present study aims at finding whether Turkish and Norwegian EFL learners avoid English phrasal verbs. The effect of English proficiency and the semantic complexity of phrasal verbs on learners' avoidance behaviour are the other two aims sought throughout the study. The results show that Norwegian learners do not avoid English phrasal verbs as a whole; however, they avoid literal phrasal verbs in particular. On the other hand, Turkish learners avoid English phrasal verbs as a whole but they do not avoid literal phrasal verbs in particular. The statistically meaningful differences between Norwegian learners with B2 English proficiency and Turkish learners with B1 English proficiency, and Turkish B2 and B1 learners with regard to English proficiency indicate that proficiency has a significant effect on learners' avoidance behaviour. The semantic complexity of phrasal verbs is another factor affecting avoidance of English phrasal verbs.

The present study comes to the forefront amongst other studies in the literature with the distinguishing feature of investigating two different groups which differ from each other with

regard to phrasal verb construction in their own L1s. This feature has offered the opportunity to test whether similarities and differences have any effect on the avoidance of English phrasal verbs. Another remarkable feature of the present study is that it is the second piece of research on avoidance of English phrasal verbs by Turkish learners. The literature has a serious lack of research on the same issue within the Turkish context.

It was time-consuming and troublesome to contact a satisfactory number of native speakers of English via email and have them complete the multiple choice test through the online website Surveycrest. Future researchers having the chance to form the participants intentionally, and to separate native speakers with regard to the nature of the English they speak (British English – American English) will have the opportunity to get more specific results in future inquiries into the avoidance of English phrasal verbs. It would be beneficial to reveal the different usage of phrasal verbs according to different dialects of English.

The native speakers participating in the present study were lecturers and instructors having an educational background of Master's and PhDs in the present study. Because phrasal verbs are frequently used in informal spoken contexts, collecting data from people having different educational backgrounds and majors may give different results.

As for the non-native speakers of English, it would be great if participants were divided into two groups as those having been to England or the USA for a while and those having never been there. Thus, future researchers may find the chance to test the effect of exposure to English on learners' avoidance of English phrasal verbs.

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Lexical Bundles in ELF Business Meetings

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Abstract
It is widely accepted that lexical bundles can provide useful insights into the characteristics of different types of discourse. However, studies have tended to focus on native speaker or language learner use, and English as a Lingua Franca (ELF), used as a common means of communication among speakers from different first-language backgrounds, has received limited attention in this respect. Given that ELF is widely used in a business context, the research reported in this paper is an initial attempt to characterize ELF used in one business community of practice by identifying the frequency and function of lexical bundles in a small corpus of ELF business meetings. It draws on a subcorpus of business meeting transcripts from the Vienna-Oxford Corpus of English (VOICE) to identify the most frequent two-, three-, and four-word bundles used, and compares these to lexical bundles used in ELF in other domains and in English as a Native Language (ENL) business meetings (Handford 2010). Results showed similar levels of use of frequent bundles in ELF business meetings to the comparative data, and a high degree of overlap. Many of the bundles used in ELF business meetings were the same as those used in general contexts, suggesting that there are stable core features in spoken ELF, although key bundles indicated certain differences. Furthermore, a number of the ELF business bundles corresponded to frequent ENL bundles. Many of the bundles used in ELF business meetings were associated with developing relationships, such as providing verbal feedback (*yeah yeah yeah, mhm mhm mhm*) hedging (*I don't know, I think that*), and making interpersonal references (*you know, you can see*), and vague expressions (*more or less, and so on*) were also common. Idiomatic expressions tended to be avoided, with the exception of *at the end of (the day)* which had a high frequency in ELF, as in ENL business meetings.

Keywords
English as a Lingua Franca, lexical bundles, corpus linguistics, business English, VOICE corpus

Introduction

The way words group together has long been of interest to linguists, even before the 'idiom principle' (Sinclair 1991:110) could be empirically tested. Now that advances in technology have

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made it relatively simple to identify frequently-used word combinations in large banks of corpora, these lexical bundles have attracted a great deal of attention. Lexical bundles offer further insight into different types of discourse, how we can describe and compare them, and, for the language learner, they can provide concrete evidence of what needs to be known to participate in these discourse types. As such, lexical bundles have mainly been studied in English as a Native Language (ENL) discourse (Biber, Conrad and Cortes, 2004; Biber and Conrad, 1999), and in learner language, to identify gaps in language use (Baker and Chen, 2010) or the progression of acquisition (Lenko-Szymanska, 2014). Increasingly, lexical bundles are also being examined from the perspective of expert users of English, mainly in academic domains (Carey, 2013; Hyland, 2008). So far, little attention has been given to lexical bundles in Business English as a Lingua Franca (BELF), although this may well be the context in which most ELF takes place. This is perhaps unsurprising. ELF is not a single language variety, but 'communication involving a number of interrelated complex systems' (Baird, Baker and Kitazawa, 2014:183), i.e., communication that is co-constructed, dynamic, and emergent, and, therefore, varies according to its context, so there is not a single variety, as such, to describe. However, looking at the features that develop among particular communities of practice may help to advance our overall understanding of how ELF works (Baird et al., 2014:183). Thus, in an attempt to contribute to this picture, the present study investigates the frequency and function of lexical bundles in a small corpus of ELF business meetings, with ELF as used in other contexts and ENL business language use as points of comparison, with a view to furthering our understanding of the language patterns that emerge in this context.

Lexical Bundles

The definition of lexical bundles applied here is simply 'the most frequent recurring sequences of words' (Biber, 2006:132), with frequency and range used as the only restrictions. Lexical bundles have been identified by many other terms, including *formulaic sequences* (Schmitt and Carter, 2004; Wray, 2002), *n-grams* (Stubbs and Barth, 2003), *lexical phrases* (Nattinger and DeCarrico, 1992), *lexical chunks* (O'Keeffe, McCarthy and Carter, 2007), and *clusters* (Handford, 2010). Definitions of these terms vary somewhat, but all refer to sequences of language that occur so frequently as to suggest they function as ready-made units, not requiring processing by the user (cf. Sinclair, 1991; Wray, 2002). One notable difference between

definitions regards meaningfulness. O'Keeffe, McCarthy and Carter (2007:64) require 'pragmatic integrity and meaningfulness regardless of their syntax or lack of semantic wholeness' for a word sequence to be considered a lexical chunk. Since word sequences are identified simply as recurring 'strings' of words by computer software, a phrase like *the moment the* will be treated in exactly the same way as the more meaningful *at the moment*. However, to edit lists of frequent bundles for meaningfulness adds an interpretive dimension that does not seem appropriate, particularly when considering ELF use. In any case, some degree of meaningfulness is very often inherent within a lexical bundle; they typically work as a unit (Biber, 2006:134) with a certain function. In conversation, for example, Biber and Conrad (1999) found that bundles tended to link two clauses (e.g., *I want to know, well that's what I*), whereas in academic prose, they were found to bridge two phrases (e.g., *in the case of, the base of the*).

Lexical bundles are important because they are used to shape discourse, whether written or spoken. Topics are introduced and changed, agreement and disagreement are signaled, and many other functions are carried out using formulaic language. Discourse is structured differently according to its genre and type, its mode, its level of formality, its context; the lexical bundles used need to fit that discourse. Such lexical bundles may be particular to a specific genre of discourse or speech community, and not knowing the appropriate formulaic language to use in a particular discourse type can be a barrier to entering it (Hyland, 2008:5). As a consequence, there has been a great deal of research in this field in the context of English for Academic Purposes (EAP), notably in the field of academic writing, where studies have identified formulaic patterns used in specific genres and disciplines (Biber et al., 2004; Hyland, 2008). Knowing about preferences in lexical bundle use can assist learners in gaining communicative competence in their field of study, and can help them join their community more effectively (Hyland, 2008; Seidlhofer, 2009). The same carries through to other discourse communities.

Although much of the research into lexical bundles has focused on written discourse, spoken bundles have also received attention. Biber (2006) carried out a large-scale investigation into university language, which included a focus on lexical bundles in spoken discourse. The study uses a detailed taxonomy of discourse functions to categorize the different types of bundles; basic classifications are *stance expressions, discourse organizers*, and *referential expressions*, with each type of bundle further subdivided. For example, *stance expressions* may be *epistemic,* such as *I don't know if,* commenting on the knowledge of the following

proposition, or *attitudinal,* such as *I want you to,* expressing attitude towards the proposition. Furthermore, they may be personal, as in the examples given, or impersonal, with no attribution, e.g., *it is possible to* (Biber, 2006:139-148, based on Biber, Conrad and Cortes, 2004). Analysing the data in this way can enable certain patterns to be identified; for example, it was found that lexical bundles are used to a much greater extent in classroom teaching than conversation, but while stance bundles are extremely common in both forms of communication, discourse organizers and referential expressions are much more common in classroom teaching. Biber's (2006) taxonomy has been widely adopted in the literature and is a useful point of reference for considering the lexical bundles in the present study.

Lexical bundles have received much less attention in a business context. Most of the research that has been done has been based on the Cambridge and Nottingham Corpus of Business English (CANBEC) (Handford, 2010; Handford and McCarthy, 2004; O'Keeffe et al., 2007). In the two earlier studies, when frequent three-word clusters from CANBEC were compared with those occurring in academic speech and social speech, certain functions were found to be more prevalent in spoken business language, i.e., speculating, hedging, being vague, specifying, describing change and flux, referring to collective goals, protecting face, and giving directives. Handford's (2010) study compared clusters from a business meeting subcorpus of CANBEC with those occurring in social speech with a view to examining the discursive practices taking place. Handford's (2010) findings will be discussed below with reference to the current study.

Lexical Bundles in English as a Lingua Franca

The studies in lexical bundles discussed so far derive their data from corpora based principally on the language of native speakers. However, studies into phrasal language use in ELF are becoming more common. One strand of research has examined the tension between the idiom principle and open choice in ELF users. Kecskes (2007:213), for example, found that 'lingua franca communicators avoid formulaic language'. By way of explanation, he suggests that native speaker communication takes place in much more closed social situations, while speech situations in lingua franca communication are more open social situations which do not encourage the use of formulaic language. His conclusions, however, are based on a very limited database (13,726 words) of ELF general language use. Using the Vienna-Oxford Corpus of

English (VOICE), Seidlhofer (2009:203-207) illustrates how ELF users tend to construct idioms from 'open choice', resulting in lexical chunks that differ somewhat from ENL use, e.g., *to my head* compared to *to my mind*, and suggests that, ultimately, these may become consistent lexical chunks in ELF usage. This creativity in the use of idioms and metaphor in ELF has been explored extensively by Pitzl (2009; 2012), who concludes that processes like idiomatizing and re-metaphorization are central to ELF language use.

Other studies in ELF have focused on the recurrent lexical sequences of interest in the present study, examining specific communities of practice to see what types of lexical bundles emerge in such closed situations. Carey's (2013) study into formulaic organizing chunks in academic ELF compared data from the English as a Lingua Franca in Academic Settings (ELFA) (2008) corpus of spoken English with that of the Michigan Corpus of Academic Spoken English (MICASE), finding that ELF users appear to store and retrieve interaction-organizing chunks in the same way as ENL users do, and, in fact, use the most common bundles with more frequency than native speakers; perhaps, he suggests, treating them as 'islands of reliability' (Granger 1998, cited in Carey, 2013:226). He also finds some evidence of approximation of form (e.g., *so to say* in place of *so to speak*) in less frequent chunks but these occur less frequently than hypothesized (Carey, 2013:226). A second study using the ELFA corpus examines a specific type of lexical bundle in comparison with native speaker use. Metsä-Ketalä (2012) compares vague expressions (such as *and so on*, *some kind of*) used in spoken language in an academic context by ELF users and native speakers, again using MICASE as a comparative corpus. The data shows that, overall, vague expressions are used almost twice as frequently by ELF users as by native speakers, although the range of expressions used is narrower (Metsä-Ketalä, 2012:263).

These studies have focused on academic ELF and, as previously noted, there has been little research carried out in the field of lexical chunks in spoken interaction in BELF. Jenkins, Cogo and Dewey (2011:299) point out in their research review of ELF that much BELF research has focused on how BELF speakers accommodate in various ways in order to ensure understanding and communicative efficiency. However, as Kankaanranta and Planken (2010:382) observe, there has been relatively little systematic research that attempts to determine patterns in BELF discourse. Their qualitative research brought them to the conclusion that:

apart from its potentially stable core features (see, e.g., Seidlhofer, 2001; Jenkins, 2000), BELF discourse is at the same time likely to be highly dynamic and idiosyncratic from one interaction to the next. With each new contact situation, participants will need to renegotiate their shared discourse practices in situ. (Kankaanranta and Planken 2010:382)

The dynamic nature of ELF and the consequent variation according to its community of practice has been acknowledged but, as I have argued and as studies like those of Carey (2013) and Metsä-Ketalä (2012) illustrate, targeted corpus-based language description can identify language patterns present within specific contexts and highlight differences in language use by other communities of practice, thereby contributing to our understanding of ELF use. Therefore, the study below examines lexical bundles in a number of BELF meetings and compares them to bundles in other contexts of use, with the aim of identifying any notable patterns in this discourse sample, which may, in turn, contribute to our understanding of BELF.

Corpora and Approach

Data from the VOICE corpus was used to investigate ELF language. This is a freely available, downloadable corpus of English as a Lingua Franca. According to the corpus description (VOICE, 2013), VOICE is a collection of transcripts based on audio-recordings of 151 naturally-occurring, non-scripted, face-to-face interactions involving 753 identified individuals from 49 different first language backgrounds using ELF. The recordings were carried out between July 2001 and November 2007. The interactions recorded are complete speech events from different domains (educational, leisure, professional) and of different speech event types (conversation, interview, meeting, panel, press conference, question-answer session, seminar discussion, service encounter, working group discussion, and workshop discussion). As this study focuses specifically on business interaction, a subcorpus of meetings within the professional domain (PBmtg) was used to examine BELF. The professional business domain represents communication connected with activities of making, buying, selling or supplying goods or services for money, and the meetings are defined as 'a speech event at which a clearly defined group of people meets to discuss previously specified matters' (VOICE website 2013). This resulted in a sub-corpus with 149,042 running words as calculated by Wordsmith Tools 6.0 (Scott, 2012), including eight meetings (three in-company and five inter-company meetings),

with 55 speakers represented. The meeting topics mainly relate to sales, promotion, and distribution issues. The lexical bundles in the rest of the VOICE corpus (855,080 running words, 143 transcripts) were identified to provide a reference point, to see whether the bundles used in the business meetings differed from those used in other discourse genres.

Results reported in Handford's (2010) study of lexical bundle use in ENL business meetings were used as a second point of comparison. The study was based on a subcorpus of CANBEC (Handford, 2010), which includes 912,734 words of authentic meeting data, taken from 64 meetings (both in-company and inter-company) recorded in 26 companies in the UK, continental Europe, and Japan. The majority of speakers are from the UK (226), with 35 speakers from other countries, and approximately 10% of the speakers in CANBEC use English as an L2.

A small corpus like PBmtg allows for a targeted analysis of a specific context of language use, whereby language patterns are visible, but the data is not so vast that specific contexts cannot be examined. Koester (2006:67) argues that smaller corpora are more suitable for this purpose, and Biber (1990:269) encourages researchers to exploit existing small corpora where larger corpora are unavailable, particularly when it comes to specific contexts of use. Moreover, in view of the nature of ELF as discussed earlier, findings here do not attempt to be conclusive but indicate patterns occurring in a specific BELF community of practice.

The analysis below first identifies the 20 most frequent two-, three-, and four-word bundles in PBmtg using Wordsmith Tools (Scott, 2012). Contractions such as *don't* were counted as single words. Raw frequencies were normalised to frequencies per 100,000 (f/100,000) in the results to assist comparisons across the different corpora. It was not necessary to determine a minimum frequency cut-off point as each lexical bundle occurs with a frequency within the range adopted within research of this kind, i.e., from 10 times per million words (Biber and Conrad, 1999) to 40 per million (Biber 2006:134). However, some frequent bundles appeared in a limited number of texts and were, therefore, considered to be topic-specific or represent an idiosyncratic use of language (cf. Biber, 2006:134). Many studies adopt a cut-off point of five texts (e.g., Biber, 2006); i.e., any bundles occurring in fewer than five texts are disregarded but, as Biber and Barbieri (2007:269) illustrate, it is necessary to adapt distributional requirements according to the size of the corpus. As the present corpus is relatively small and contains only eight texts, the threshold was set at three. Repetitions, hesitations (*er*), backchannels, and language signaling comprehension/agreement (e.g., *mhm)* were not removed,

in contrast to Handford's (2010) study, as these appear in a high proportion of the bundles, and can be argued to be relevant from an ELF perspective. Comparisons were then made with bundles in other corpora. To see if ELF use in business meetings can be differentiated from ELF in general, the PBmtg bundles were viewed in comparison to bundles from the rest of the VOICE corpus. Finally, comparisons were made between the PBmtg bundles and Handford's (2010) reported findings from his study of ENL business language bundles.

Frequent Lexical Bundles

The most frequent two-, three-, and four-word bundles are shown in Table 1. The most frequent 20 bundles were identified but, as certain bundles shared the same frequency, there are 21 different bundles shown in the three- and four-word bundle columns. Regarding the two-word bundles in Table 1, although many of them are syntactically fragmentary, they are indicative of common phrasings; bundles such as *this is*, *we have, you have, if you*, which are used to structure discourse, phrases which may indicate personal position (*I think)* or rephrasing (*you know, I mean*), and a number of hesitations (*and er, er the)* and repetitions (*the the, yeah yeah, mhm mhm)*. Many of these bundles represent fragments of the longer bundles, and we can see them echoed in the three-word bundles, with *we have* becoming *we have to, I think* becoming *I think that*. Single word repetitions such as *mhm* and *yeah* extend into three- and four-word bundles; there are also evident repetitions of short phrases such as *in the* and *of the*. Repetitions of this kind are characteristic of online processing, where words are repeated as fillers while the next item is being retrieved, and as backchannels, i.e., minimal response tokens (cf. Gardner, 2001:14), such as *mhm, yeah*, and *no* to show engagement in the discourse.

The longer lexical bundles tend to be more complete from a pragmatic perspective and, so, their functions are clearer. In the three-word bundles, *I don't know* occurs with the highest frequency. This is frequently used alone as a hedging mechanism to mitigate the force of a statement, or with *if*, *how* or *what* to make a question indirect, as in example (1):

(1)   and also I don't know if you are aware there in se- in serbia as well there is the [org19] association (PBmtg463:681)

Table 1 Most frequent two-, three-, and four-word lexical bundles in PBmtg corpus

Two-Word Bundles	f/ 100,000	Three-Word Bundles	f/ 100,000	Four-Word Bundles	f/ 100,000
this is	419	I don't know	93	yeah yeah yeah yeah	41
in the	331	yeah yeah yeah	93	the end of the	31
we have	325	a lot of	70	at the end of	30
you know	322	this is the	68	end of the day	23
of the	292	we have to	66	mhm mhm mhm mhm	13
the the	263	and this is	50	no no no no	13
yeah yeah	244	mhm mhm mhm	45	in the in the	12
I think	219	more or less	42	er I don't know	10
on the	211	the end of	40	for the for the	10
I mean	211	the the the	38	thank you very much	10
and er	201	you have to	38	of the of the	9
you have	201	no no no	37	and so on and	9
for the	199	this is a	37	I don't know how	9
mhm mhm	187	you can see	35	I know I know	9
and then	179	at the end	34	if you want to	9
if you	177	end of the	34	this is this is	9
have to	173	it will be	33	and this is the	8
er the	172	the er the	32	end of the year	8
is the	171	you know the	31	I don't know if	8
with the	152	I think that	30	more or less the	8
	151	you know er	30	or something like that	8

In the three-word bundle list, the phrases *the end of, at the end,* and *end of the* appear, sometimes used as time markers with *year* and *month* but they mainly represent fragments of the longer bundle *at the end of the day,* which occurs with a remarkably high frequency (23 f/100,000) for a six-word bundle and, thus, influences a number of the shorter bundles. Other frequent three-word chunks include markers of vagueness *a lot of* and *more or less*, indications of obligation *we have to*, *you have to*, of shared knowledge *you know the / you know er*, and explanation *you can see.* However, a number of the bundles have more of a referential role, e.g., *this is the/a*, *and this is*, and *it will be*.

The four-word bundles are largely extensions of the shorter bundles, with many repetitions evident, both of prepositional phrases, such as *in the in the* and *for the for the*, and single words, such as *yeah yeah yeah yeah* and *no no no no.* Clusters which have not previously appeared include the polite expression *thank you very much,* and two more vague expressions, *and so on and* and *or something like that*.

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To get a perspective on the frequency of these bundles, it is useful to consider them in relation to single words. As Table 1 shows, as lexical bundles increase in length, their frequency diminishes quite rapidly, so that even a two-word bundle could be expected to be much less frequent than a single word. However, the most frequent two-word bundle *this is* occurs with the same frequency as the single item *also*, which ranks as the 46th most frequent word in the PBmtg corpus. The top-ranked three-word bundle *I don't know* has the same frequency as the words *could* and *different*, which appear on the corpus word list in joint 145th place. Even those bundles with lower rankings occur with the same frequency as words that are commonly used (i.e., the most frequently occurring 1000 words in English), e.g., *more or less* occurs as often as *basically* (42 f/100,000). This suggests that these high frequency bundles, in some cases at least, are being retrieved and used as holistic units, a phenomenon that Handford (2010:129-131) observes in ENL business language.

Business ELF and General ELF Lexical Bundles

The first comparison made was between the BELF bundles and ELF spoken in other contexts, using data from the remainder of the texts in VOICE (see Corpora and Approach). This was carried out both by examining overall frequencies of the top ten bundles and by identifying the key bundles, i.e., those which occur with significantly greater frequency, in ELF meeting language compared to the other genres in VOICE. Key bundles were identified using the keywords functions in Wordsmith Tools (Scott, 2012), which uses the log likelihood ratio to calculate keyness. Information about both frequency and keyness offer potential insights into the data. High-frequency bundles tend to be made up of high-frequency words and, so, we can expect to find these occurring across a range of discourse types. However, they do not necessarily have the same function or importance in different genres, so it can be revealing to examine relative levels of frequency and investigate how the phrases are used. Keyness, on the other hand, identifies bundles which are significant within a particular genre, which may add to our understanding of how the discourse is structured. A high figure reflects greater significance; a positive figure shows an item which occurs significantly more in the corpus under examination and a negative figure means that it occurs significantly less than in the reference corpus. This quantitative analysis was complemented by a qualitative examination of the bundles in use, to compare the functions used.

Table 2 Most frequent two-, three-, and four-word bundles in VOICE
(lexical bundles also in the top ten PBmtg frequency lists are shown in bold)

Two-Word Bundles	f/ 100,000	Three-Word Bundles	f/ 100,000	Four-Word Bundles	f/ 100,000
I think	394	**I don't know**	95	I would like to	20
in the	375	you have to	65	**no no no no**	18
of the	372	**a lot of**	62	**thank you very much**	17
you know	256	I think that	55	**yeah yeah yeah yeah**	17
we have	255	**we have to**	53	**in the in the**	14
er er	234	**yeah yeah yeah**	46	I don't know if	11
have to	222	no no no	44	at the same time	10
I mean	215	I think it's	38	we are going to	10
this is	203	**the the the**	34	or something like that	9
and er	195	and I think	33	if you want to	9

Table 3 Positive and negative key bundles in PBmtg, referenced with VOICE

Two-Word Bundles	Keyness	Three-Word Bundles	Keyness	Four-Word Bundles	Keyness
mhm mhm	294	let you know	93	end of the day	60
this is	179	you can see	78	end of the year	44
this year	177	mhm mhm mhm	73	the end of the	44
last year	154	for this year	59	at the end of	40
I believe	120	this this is	57	you can see the	33
next year	98	from our side	56	we have to see	30
we will	91	we can offer	56	is the er the	30
to first	91	for next year	52	yeah yeah yeah mhm	30
this this	90	let me know	52	nothing to do with	30
which we	80	of the day	51	yeah yeah yeah yeah	26
that is	-82	and I think	-28	I would like to	-30
going to	-85	er er er	-28		
er er	-109	going to be	-28		
I think	-153	in terms of	-32		
sort of	-197	I would like	-34		

In terms of frequency, there was a great deal of overlap between the lexical bundles in the two corpora. Table 2 shows the ten most frequent two-, three-, and four-word bundles in the reference corpus; the majority of these also occur in the top ten bundles in PBmtg Table 1 (shown in bold). A search for key clusters showed that there are also a number of bundles used significantly more, or less in the case of the negatively key clusters, in the PBmtg corpus, as shown in Table 3. Each column of Table 2 will now be examined in turn.

Among the two-word bundles, most of the same clusters appear with high frequency in both ELF in general and in business meetings. Phrases such as *I mean*, *you know*, *we have*, *in the*, and *of the* are used in both discourse types with similar frequency levels. However, there is a

sizeable difference in frequency levels in other cases. Notably, *I think* is at the top of the frequency list for VOICE, occurring in general ELF usage almost twice as frequently as it does in PBmtg (394 compared to 219 f/100,000); it is negatively key (-153) in meeting language. In contrast, *this is* is positively key (179) in PBmtg; so, although it is one of the most frequent phrases used in general language (203 f/100,000), it is used much more in a business meeting context (419 f/100,000).

Other key two-word bundles include the relatively low frequency phrase *I believe* (54 f/100,000 in PBmtg), which tends to be used in the sense of *I think* in PBmtg in phrases such as *I believe it was* and *I believe you know,* in contrast to general ELF where it is used rarely (8 f/100,000) and mainly to express belief (*I believe that + will/could/should*). The bundle *we will* (128 f/100,000), associated with promising and predicting, is another key bundle in PBmtg, occurring in general ELF at a much lower frequency (49 f/100,000). Other key bundles include the time markers *this year*, *next year*, *last year*, signaling the important function of planning and reviewing in meetings. Repetitions occur as key bundles both positively, with *mhm mhm* (294) and *this this* (90) and negatively key (*er er*, -109). Another negatively key bundle is the vague marker *sort of* (-197). Perhaps what stands out most here is the nature of the most negatively key bundles, with the hedging phrases *I think*, *sort of*, *er er* all indicating a lack of certainty or precision.

Moving on to the three-word bundles, three of the top phrases occur with similar frequencies in both VOICE and PBmtg, *I don't know* (95 and 93 f/100,000), *a lot of* (62 and 70 f/100,000) and, to a lesser extent, *we have to* (53 and 66 f/100,000). In contrast, three top phrases in VOICE – *I think that*, *I think it's*, *and I think* (55, 38, and 33 f/100,000 respectively) – are much less frequent in PBmtg (30, 23, and 11 f/100,000), reflecting the negative keyness of the core phrase *I think*. The second-ranked two-word bundle occurring in VOICE, *you have to* (65 f/100,000), is much less frequent in PBmtg bundles (38 f/100,000), suggesting that a direct statement of obligation is less preferred in this discourse. Key three-word bundles in the ELF meetings include phrases that are more indirect in nature and aim to share knowledge and/or perspectives, e.g., *let you know* (93), *you can see* (78), *we can offer* (56), *from our side* (56), and *let me know* (52). In keeping with this indirectness is the vague expression *more or less*, which, although not characterized as key, occurs in the top ten three-word bundles in ELF meetings as shown in Table 1 (42 f/100,000 compared to 16 f/100,000 in general ELF). This is used in

PBmtg to indicate a lack of exactness in a variety of different areas, including decisions and quantities, as shown in (1) and (2):

(1)   The new concept of the website is <u>more or less</u> er decided… (PBmtg 414:2853)

(2)   but the good thing is that we hope you see we we have sold so far <u>more or less</u> we we have sold the half (PBmtg 463:416)

This, then, tempers the observations in the previous paragraph, showing that hedging takes place in PBmtg, but suggests a preference for certain phrases for this function.

Repetitions become prominent among the three- and four-word bundles in both ELF in general and in meeting discourse, and it is worth exploring these to see how they are used. The three-word bundle *yeah yeah yeah* occurs at around half the frequency rate in general ELF compared to meeting language (46 compared to 93 f/100,000), and the backchannel *mhm mhm mhm* occurs as a key bundle (73). This reflects the functions of *mhm* and *yeah* as continuers and acknowledgements (cf. Gardner, 2001:23ff) to indicate engaged listenership (Farr, 2003; McCarth,y 2002), clearly an important aspect of meetings. The repetition *no no no* occurs at only a slightly higher frequency in general ELF compared to PBmtg (44 vs. 37 f/100,000). In both contexts, there are multiple functions for the repeated *no*. It is used to signal disagreement (3), where its repetition may act as a softener, shown by the added hedging *I don't think so*, or for emphasis, as shown by the added reinforcement *I don't agree*, in (4). However, other functions are evident, such as to indicate self-correction (5), or as a politeness strategy to address face needs (6).

(3)   S2:   and do you think that er erm a rise in maltese can also influence er
        S1:   no no no I do- I don't think so I I
        (EDint 331:427-428)

(4)   S12:   no no no no I don't agree
        (EDwsd 302:542)

(5)   S1:   that means er we can skip the pro- process for stick lab- er label sticker

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S4:   oh you have sticker now

S1:   yeah I think so no no no no no we have a printing

(PBmtg 3:3397-3399)

(6)   S2:   [S3] can I take another coffee er

      S4:   yeah

      S3:   yes of course sorry sorry

      S2:   yeah

      S2:   no no no no problem

      (PBmtg 414:2361-2365)

It can be seen that these repetitions, although they may be lexically empty, are used to fulfil a range of communicative functions to maintain the flow in ELF discourse, and their high frequencies in PBmtg suggest that this may be particularly true of business meetings.

Examining the four-word bundles overall, it is clear that those at the top of the VOICE list occur with a lower range of normalized frequencies than in PBmtg, with the top three at 20, 18, and 17 f/100,000 in VOICE compared to 41, 31, and 30 f/100,000 in PBmtg. The larger size of VOICE, with its broader range of discourse types comes into play here; longer bundles are less frequent in general, and the size and range of the data mean that fewer of the same bundles are repeated. There are also fewer overlaps between the bundles in VOICE and PBmtg; apart from the repetitions, only one phrase occurs in both top ten bundles, which is *thank you very much.* Surprisingly, as it is a rather formal, polite phrase, this has a higher frequency in general ELF (17 f/100,000) as compared to meeting discourse (10 f/100,000). One phrase which occurs with a similar frequency in both corpora, although it is lower-ranked on the PBmtg list, is the vague expression *or something like that*, occurring 9 f/100,000 in VOICE and 8 f/100,000 in PBmtg. In both cases, this is used deliberately to express imprecision (7) but it can also indicate a strain in articulating a precise meaning, as shown in (8).

(7)   …on- once I had this er just exactly the same thoughts one year ago or something like that (EDsed 251:292)

(8)   so maybe we in the future we can erm yeah order it but then get it without a a
        without a system <u>or something like that</u> but (PBmtg 414:3438)

This, then, is another example of vague language which is also acceptable for hedging in ELF business meetings.

The stance bundles occurring in the top-ranked four-word bundles offer some insights into the similarities and differences between ELF in general and in business meetings. Beginning with the similarities, *I don't know if* occurs at a slightly higher frequency in VOICE (11 f/100,000 compared to 8 f/100,000) but two other phrases incorporating the central *I don't know* three-word bundle occur in PBmtg at similar frequencies, *er I don't know* (10 f/100,000), and *I don't know how* (9 f/100,000). *If you want to* occurs at the same frequency in both VOICE and PBmtg (9 f/100,000). However, other sentence frames in VOICE, *I would like to* (20 f/100,000) and *we are going to* (10 f/100,000) occur with very low frequencies in PBmtg and, in fact, *I would like to* appears as the sole negatively key four-word bundle (-30.33). Positively key sentence frames in ELF meetings include *you can see the* (33.33), extending from *you can see*, as discussed above, and *we have to see* (29.62), which tends to be used to hedge decisions, as in (9).

(9)   okay <u>we have to see</u> what what comes I mean there are some er weird scenarios in
        there <u>we have to see</u> how the er surcharges develop (PBmtg 300:1451)

This, again, points to the tendency to be more tentative, and avoid direct statements of intent in PBmtg.

Among the key four-word bundles in PBmtg, at the top of the list are *end of the day* (60) and *end of the year* (44), with two other associated bundles *the end of the* (44) and *at the end of* (40). While *end of the year* is a time marker, *end of the day* is associated with the six-word bundle *at the end of the day*, as noted earlier. The high frequency of this bundle suggests that it tends to be retained holistically and used as a set phrase. It is commonly used in summarizing or concluding, as shown in (10) and (11):

(10)   yeah it was but <u>at the end of the day</u> probably one or two persons and no more…
        (PBmtg 269:1077)

<blockquote>
(11)   and <u>at the end of the day</u> you decrease the margin (PBmtg 300:1077)
</blockquote>

The other key four-word bundle is the relatively low frequency (5 f/100,000) phrase *nothing to do with*, used to emphasize non-related items as shown in (12) and (13):

<blockquote>
(12)   and children are getting thicker and thicker and that has <u>nothing to do with</u> the with the calorie intake (PBmtg 414:1733)

(13)   I've one quick question it's got absolutely nothing to do with anything (PBmtg 280:324)
</blockquote>

In summary, there is evidence of a great deal of overlap between lexical bundles found in ELF in general and in those found in these business meetings, both in terms of the bundles used and the frequencies with which they are used. Repetition, associated with hesitation and backchannelling, stood out as a feature of all ELF language, and certain bundles were also common, such as *you know*, *I mean*, and *I don't know*. However, similarities decrease as the longer bundles are considered. The comparison of frequent bundles and key bundles suggests that certain features may be more characteristic of ELF business meetings. These include a stronger preference for impersonal phrasing such as *this is* and time markers like *this year*, *last year*, and, where personal stance markers are used, they focus on the speaker, e.g., *we will*, *from our side*, *we can offer*, or on sharing information, *let you know*, *we can see*. There is some evidence of reliance on business jargon, like *at the end of the day*, and specific hedges, such as *more or less* and *we have to see*.

Business ELF and Business ENL Lexical Bundles

To see what overlap exists in lexical bundles used in these ELF business meetings, and in language used in ENL business meetings, the frequency lists from the PBmtg corpus were compared to the results reported in Handford (2010) regarding lexical bundles in the CANBEC meeting subcorpus.[2] In Table 4, it can be seen that there is some overlap with PBmtg (shown in bold), particularly among the shorter bundles. At the top of the two-word bundle list, the phrases

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[2] Data shown here is based on results reported in Handford (2010:125-127), with normalized frequencies based on the corpus size cited. It was not possible to identify key bundles in this case, as the CANBEC meeting subcorpus is not accessible for general research purposes.

are used with greater frequency in ENL than in ELF business meetings; *you know* is used 383 times per 100,000 words, as compared to 322 in PBmtg, and *I think* has a frequency figure of 293 per 100,000 compared to 219 f/100,000. Other bundles, such as *I mean*, have a similar level of occurrence (217 and 215 f/100,000), while others again are more prevalent in PBmtg, most notably the prepositional expressions *in the* (331 compared to 206 f/100,000), *for the* (199 compared to 118 f/100,000), and *and then* (179 f/100,000 compared to 136 f/100,000). These tend to be associated with repetition typical of online processing, as noted earlier, which may account for their higher frequency level.

Table 4 Most frequent two-, three-, and four-word bundles in the CANBEC corpus (lexical bundles also appearing on PBmtg frequency lists shown in bold)

Two-Word Bundles	f/ 100,000	Three-Word Bundles	f/ 100,000	Four-Word Bundles	f/ 100,000
you know	383	**I don't know**	63	**at the end of**	20
I think	293	**a lot of**	52	**the end of the**	19
of the	236	at the moment	52	have a look at	11
I mean	217	we need to	47	**end of the day**	11
in the	206	I don't think	38	a bit of a	9
on the	204	the end of	37	**I don't know if**	8
at the	157	I mean I	27	at the same time	7
to be	155	a bit of	24	I don't know what	7
I don't	152	and I think	24	to be able to	6
to do	149	be able to	24	two and a half	6
if you	143	in terms of	24	a lot of the	6
and then	136	one of the	24	we need to do	6
have to	124	to do it	24	**thank you very much**	6
we've got	121	**at the end**	23	I don't know whether	5
to the	120	I think it's	23	the other thing is	5
for the	118	**we have to**	23	if we can get	5
need to	114	**end of the**	23	in terms of the	5
we can	114	I think we	20	**I don't know how**	5
it was	104	**you know the**	20	to make sure that	5
and the	103	have a look	19	if you look at	5

Moving to the longer bundles, it can be seen that the frequencies tend to be consistently higher in PBmtg than in ENL business meetings; *I don't know* occurs at the top of each three-word bundle list but the frequency level is 1.5 times greater in PBmtg (93 f/100,000 as compared to 63), and *we have to* occurs at a rate three times higher in PBmtg than in CANBEC (66 vs. 23 f/100,000), where *we need to* is preferred. *We need to* occurs at a much lower frequency level (13 f/100,000) in the PBmtg corpus. This suggests a preference for different phrasing; *have to* rather than *need to* in ELF meetings, although in both meeting corpora there is a preference for *we*

rather than the *you* that is prevalent in general ELF. Other three-word bundles occurring frequently in the CANBEC meetings but with much lower rates in PBmtg are *at the moment* (52 vs. 30 f/100,000), *I don't think* (38 vs. 19 f/100,000), *in terms of* (24 vs. 9 f/100,000), *be able to* (24 vs. 5 f/100,000), and *a bit of* (24 f/100,000 in CANBEC, with only two occurrences in PBmtg). Regarding *in terms of*, it is worth noting that this was also found to be a negatively key bundle in PBmtg when referenced against VOICE; so, this phrase had clearly not been adopted in this genre compared to ELF in general.

Among the four-word bundles, the same general trend continues, with comparatively few of the same phrases occurring but higher frequency levels in those that do. The fact that Handford (2010) does not include repetitions and hesitations in his lexical bundle list distorts the comparison of the four-word bundles somewhat, as these represent a third of the PBmtg bundles. There are only six overlaps in the two lists, and three of these are bundles based on *at the end of the day*, which occur on the PBmtg list at higher frequencies than the CANBEC list. This suggests that *at the end of the day*, a phrase frequently cited on 'most annoying business jargon' lists, continues to be widely used in general and has been enthusiastically adopted by these ELF users. Two other three-word bundles that appear on both lists are *I don't know if* and *I don't know how*, with frequencies of 8 and 5 f/100,000 respectively in CANBEC, and 8 and 9 f/100,000 in PBmtg. This indicates that it is a frequent framing device for offering opinions both in ENL and ELF meetings, and, as noted earlier, in ELF in general. Several of the other phrases occurring in CANBEC meeting data but not in PBmtg are idiomatic in nature, such as *have a look at*, *at the same time*, *the other thing is*, which may account for their lower frequencies in the PBmtg corpus.

It is difficult to draw direct comparisons between the ENL and ELF meeting bundles found because of the limitations in the data. However, some general observations can be made. There appear to be similarities in the language used, particularly in terms of some of the framing devices used, such as *I think*, *you know*, and *I don't know*. In personal stance expressions, the subject tends to be *I* or *we*, rather than *you.* However, differences are also apparent. There seems to be a direct contrast in the use of *need to* and *have to*; the former preferred in CANBEC and the latter in PBmtg. The impersonal phrasing found in PBmtg is not evident here and the hedging devices noted in PBmtg like *more or less* and *something like that* do not occur at high frequency rates in CANBEC. Conversely, some of the less transparent expressions that are frequent in

CANBEC (e.g., *have a look (at)*, *at the same time*, *in terms of (the)*) occur with much lower frequencies in PBmtg.

Summary and Implications

The results of the analysis show, first, the degree to which lexical bundles occur in this set of ELF business meetings. Some common bundles occur with similar frequencies to single words, the same kinds of patterns as have been found in native speaker speech (Handford, 2010). ELF speakers in these business meetings clearly rely on core bundles in the same way as native speakers do; in fact, these results suggest that there may be a higher reliance on core bundles, as Carey (2013) found, as frequencies of the most common bundles are higher than frequencies in ENL business meeting language use, although this is likely to be due to the more limited range of language employed. This limited range refers to both the lexis and structures used by the speakers but, also, the number of speakers; the smaller corpus size is also a contributing factor to the limited language range, as noted below.

Frequent bundles in these ELF business meetings overlap to a large extent with the bundles used in ELF speech in general, as represented in the VOICE corpus. This supports the position that there are stable core features in terms of lexical bundles in spoken ELF (cf. Mauranen, 2009; Carey, 2013); there are clear patterns of use. However, whether there are any meaningful differences between ELF in general and ELF business language is less clear. Certain features that distinguish ENL business language from other genres are reflected in the comparison of PBmtg bundles and VOICE bundles, such as the preference for *we* over *you* (O'Keeffe et al., 2007). However, another feature found in the CANBEC studies – the predominance of *need to* in business over *have to* in other contexts – is not in evidence in PBmtg. PBmtg bundles also follow the pattern found in ENL, i.e., that many frequent bundles tend to be common across different genres.

One feature that becomes apparent from this study is the extent to which lexically empty bundles are used in these ELF business meetings. These include fillers like *for the for the*, characteristic of online processing but, more significantly, repeated minimal response tokens like *mhm* and *yeah*. These are largely associated with providing feedback to the speaker, which VOICE shows has important function in ELF and, evidently, most of all in these ELF business meetings. In terms of the other frequent lexical bundles, it is apparent that, in PBmtg, certain

frames tend to be used for hedging (e.g., *I think that* and *I don't know*) and neutral phrases, such as *this is* are heavily used. Interpersonal references are common, e.g., *you can see*, *you know*. Vague expressions, such as *more or less* and *and so on*, are commonly used, as is the common cliché *at the end of the day*. The high usage of vague expressions echoes findings in ELF academic contexts (Metsä-Ketalä, 2012:263), where *and so on* and *or something like that* are widely used, again indicating that there may be considerable overlap across different genres of spoken ELF.

The findings here attempt to identify core lexical patterns occurring in a particular selection of BELF meetings in a specific context. Any implications must be tempered with the limitations arising from this. The picture that emerges here is that certain features of spoken ENL business language have been adopted but forms are simplified and functions are clear. Idiomatic language and opaque hedges tend to be avoided but simple hedges and interpersonal references are key features. One potential implication this may have regards the teaching of spoken business English for ELF contexts, suggesting that an emphasis on promoting interpersonality and hedging opinions will be useful. It also questions the value of learning business idioms and business-related jargon, if English is to be used in an ELF setting. However, it would be premature to draw conclusions from this; further studies would need to be carried out in different ELF business contexts to make any generalizations, and it would be particularly interesting to look at such contexts beyond Europe. It may well be the case that in BELF in Asia, for example, certain idiomatic phrases are frequently used, influenced by local varieties of English.

This leads to the final point, which is a call for further corpora of BELF spoken language to be built in a variety of geographical and professional environments. The main projects in ELF, such as VOICE and ELFA, have been based in European institutions and, although speakers of non-European languages are included, the context is firmly European. As technology brings different parts of the world ever closer, it is incongruous to overlook ELF from a worldwide perspective. Different enterprises, too, are likely to generate different language samples. The broader the assortment of interactions that can be examined, the closer it is likely to bring us to understanding how ELF works, and identifying any features that are truly core.

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Prosody Drives Syntax:
Prosody in the Focus and Topic Constructions of Akan

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Abstract
This paper discusses the focus and topic constructions of Akan in connection with the phonology-syntax interface. It observes the categorial structure of the two constructions and particularly looks into an antecedent-anaphor (anaphoric) relationship that arises in the constructions. From the perspective of the understanding that phonology, through prosody, could influence syntax, it is contended that syntax crucially draws on phonology for structural well-formedness in this anaphoric relationship. It is further suggested and shown that analysis in the prosodic structure (Selkirk, 1981; Nespor and Vogel, 1986; Hayes, 1989; etc.) enables clear, convenient and comprehensive explanation of this anaphoric relation. Additionally, within optimality theory (Prince and Smolensky, 1993; Grimshaw, 1997), where the heart of grammar lies in the interaction of constraints in evolving a desired candidate, existing (i.e., RES and IDENT) and motivated constraints (RIP and Ant$^\omega$≠RPro) are employed to evolve and/or optimize grammatical focus and topic constructions. With optimality theory, it is also particularly made evident that prosodic information may be significant to syntax and, where this is the case, prosody must contribute to a constraint set if an optimal candidate is to be evolved.

Introduction

This paper observes the phonology-syntax connection in the extra-sentential clauses of focus and topic constructions of Akan, a Kwa language widely spoken in Ghana. It particularly attempts to argue that prosody drives proper realization of an antecedent-anaphor (anaphoric) relationship in these constructions of Akan. With prosody in the picture, it is important to note that the interface analysis of the anaphoric relationship is primarily explained within the frameworks of Prosodic

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Phonology (Selkirk, 2011, 1981; Nespor and Vogel, 1986; Hayes, 1989; etc.). Furthermore, in the spirit of formalization and clarity, the relationship is subjected to optimality theoretic analyses (e.g., Müller, 2012; Prince and Smolensky, 1993; Grimshaw, 1997) to evince and underscore the significance of prosody.

Prosodic phonology posits an intermediate structure within phonology called prosodic structure (henceforth, p-structure), to whose creation syntactic structure is considered to have contributed, and within which phrasal rules or occurrences are explained to be motivated. Consequently, the p-structure (through which phonology interacts with syntax) renders the syntactic categories as hardly or remotely visible to phrasal occurrences. In other words, instead of syntactic categories directly providing domains for the motivation and/or triggering of phrasal rules or occurrences, with other linguistic resources, they are rather employed as inputs to the generation of rule domains constituting the p-structure (e.g., Selkirk, 2011; Hayes, 1989; Truckenbrodt, 1999; and Frascarelli, 2000). With the p-structure, the Indirect Reference Hypothesis (e.g., Féry, 2011; Inkelas, 1989; Selkirk, 1996; and Truckenbrodt 1999) that particularly explains the remoteness of the categorial structure (c-structure) of syntax is enforced. Following this position, the suggestion that phrasal phenomena are best analyzed in the p-structure is advanced in this paper; i.e., that prosody drives the proper realization of the anaphoric relationship in the focus and topic constructions of Akan. It must be noted that linguists differ on the number of levels that constitute the prosodic component. In this study, we adopt Nespor and Vogel's (1986:11) general proposal of the following seven prosodic units/levels/categories: Phonological utterance (U), Intonational phrase (I), Phonological phrase (ϕ), Clitic group (C), Phonological word (ω), Foot (Σ), and Syllable (σ).

The paper observes that the emerged anaphoric relationship in the focus and topic constructions of Akan is prosodic domain-sensitive and, for that matter, subsequent to phonological order. It is important to note that, against the background that the phonology-syntax connection has often been observed with phonological phenomena as have been attested in several languages including Akan (see Nespor and Vogel, 1986; Zec and Inkelas, 1990; Marfo, 2009, for example), the present case of prosody in syntax in Akan is significant. It contributes to the position that the relationship between phonology and syntax is bi-directional (e.g., Zec and Inkelas, 1990); i.e., it is not only syntax-to-phonology directed but, also, phonology-to-syntax directed, as will be made evident in the following sections.

The rest of the paper is organized as follows: In the next section, a brief description of the focus and topic constructions in Akan is given. The paper discusses the anaphoric relationship in the focus and topic constructions of Akan and further looks into a connection with the phonology-syntax interface analysis in the next section. In the penultimate section, how the observed anaphoric relationship is constrained in terms of optimality theory is presented and discussed. The final section is devoted to the conclusion of the discussion.

Focus and Topic Constructions of Akan

Focus and topic constructions of Akan, as in other languages (see, e.g., Frascarelli (2000) for Italian and Kiss (2007) for Hungarian), involve constituent placement at (or extraction to) the left periphery of an extra-sentential clause. That is to say, a constituent can neither be focused nor topicalized at a canonical clause position in Akan. Rather, such a constituent needs to sit at the specifier position of a projected functional phrase (henceforth, Spec-fP); [$_{fP}$ focus/topic [$_{IP}$ …]]. The extracted constituent is discussed as the one which the rest of the sentence is about (Frascarelli, 2000; Kiss, 2007; Marfo, 2009). Furthermore, in the focus or topic constructions of Akan, the focused or topicalized constituent is replaced or resumed with a co-referential pronoun (henceforth, resumptive pronoun (RPro)) at its base position in the contained canonical clause as will be exemplified in the following sub-sections.

Focus Construction

Besides a constituent extraction to Spec-fP of Focus Phrase (specifically, Spec-FP), the focus construction in Akan is also characterized by insertion of a clitic morpheme, *na*, immediately after Spec-FP. This morpheme is noted as the 'focus marker' (FM) (Saah, 1988; Marfo, 2009). Observe these manifestations in (1). We also observe in (2) that FM assumes the head position of the projected functional phrase, FP. Let us note in passing that Akan is a two-tone language; high tone (H) and low tone (L). H is indicated with an acute (e.g., *dá* 'day') and L is indicated with a grave (e.g., *dà* 'never'). In this paper, however, tones are not marked since they are not significant to the analysis.

> (1)   a.   Kofi$_i$ na ɔ$_i$-boa-Ø   Ama
>   Kofi FM 3SG-help-HAB Ama
>   'It is Kofi who helps Ama'

      b.   Ama$_i$ na Kofi boa-Ø   no$_i$
             Ama FM Kofi help-HAB 3SG
             'It is Ama that Kofi helps'

    *c.   Kofi boa-Ø   Ama na
             Kofi   help-HAB Ama FM
             'It is Kofi who helps Ama'

(2)   [$_{FP}$ Kofi$_i$ na [$_{IP}$ ɔ̀- [$_{VP}$ boa [$_{NP}$ Ama]]]]

The ill-formed construction in (1c) demonstrates that FM cannot be introduced in the canonical clause; i.e., when a constituent to focus on remains in-situ. The c-structure of (1a) in (2) also gives a clear picture of the positions of the constituent in focus and the FM in particular. As noted earlier and will be again revisited in section 4, it could also be observed in (1a) and (1b) that the constituent in focus is replaced with a co-referential RPro at its base position in the FP-contained canonical.

Topic Construction

As exemplified in (3a) and (3b), we observe that the constituent in topic is also placed at Spec-TOPP. As indicated in (3) and (4), Spec- TOPP is also co-indexed with an RPro in the canonical clause contained in the TOPP. Also significant in (3) is the fact that, as in Italian (Frascarelli, 2000:3), there is always an intonational partition, indicated by comma here, between the topicalized constituent and the contained canonical clause. This means, unlike in the case of the focus phrase, the topic phrase in Akan is not segmentally headed but prosodically; i.e., with intonational break.

    (3)   a.   Kofi$_i$, papa re-srɛ   no$_i$
                Kofi, father PROG-beg 3SG
                '(about) Kofi, father is begging him'

          b.   Papa$_i$, ɔ̀-re-srɛ   Kofi
                father, 3SG-PROG-beg Kofi
                '(about) Father, he is begging Kofi'

    (4)   [$_{TOPP}$ Kofi$_i$, [$_{IP}$ papa [$_{VP}$ resrɛ no$_i$]]]

Prosody in Syntax

We have observed that, in the focus or topic constructions of Akan, the extracted constituent (to the left periphery of the functional clause) is replaced with an RPro at its base position in the contained canonical clause. Although it will not be taken up any further in this paper, note that unlike in the subject, the RPro occurrence is very much restricted in the object and other post-verbal environments (Saah, 1988; Marfo, 2004, 2009)

As we witnessed in (2) and (4), this occurrence creates an anaphoric relationship, a syntactic phenomenon, which is indicated by the co-indexing. In this section, we explain further that this anaphoric relationship demonstrates an interface between phonology and syntax, and that the interface is crucial to grammar. Specifically, we contend that this anaphoric relationship is prosody-controlled in structure; that the selection of an anaphor is dependent on the prosodic status of its antecedent. This, thus, reiterates the argument that phonology could play a role in syntax just as syntax has a place in phonology (e.g., Selkirk, 2011; Zec and Inkelas, 1990).

NP in the Antecedent-Anaphor Relationship

Towards understanding that the anaphoric relationship in the focus and topic constructions of Akan is prosody-controlled in structure, a distinction is made between two kinds of antecedents in connection with p-structure; i.e., nouns (specifically, full NPs) and pronouns. From the point of view of the constitution of phonological or prosodic word domain (ω-domain), nouns and pronouns are respectively descrived as 'prosodically independent' and 'prosodically dependent' (or 'prosodically insufficient') for Akan, following Marfo (2004). Among other details, Marfo (2004) explains that this distinction is also based on the traditional notion of 'contentiveness' (Cann, 1999) – i.e., the lexical-functional distinction among syntactic categories. In this regard, in agreement with Zec and Inkelas (1990), Chen (1987), Selkirk (1996), etc., it is suggested here that a pronoun, unlike a noun (or 'full NP'), is inadequate to independently constitute ω-domain. It is further suggested that the pronoun must be contained with another unit in order to belong to a ω-domain; i.e., co-containment into ω-domain. The domain of ω in Akan, then, should conform to the following in (5).

(5)   Phonological word (ω):
       Each lexical terminal node/word (of the c-structure) is a prosodic word.

The postulation in (5) explains that there cannot always be a one-to-one correspondence between a syntactic word and a prosodic one. Thus, while, in syntax (s-phrasing), each terminal node constitutes a syntactic word (indicated by 'S' in the examples in (6) below), in phonology, (p-phrasing), a constituent becomes a ω on the satisfaction of the requirement(s) in place; in the case of Akan, (5). Accordingly, while *ɔ(no)* 's/he' and *me* 'I', for instance, are syntactic words like *papa* 'father' and *Kofi* 'personal name (PN)', they need to be mapped into a or a higher prosodic unit with another constituent(s), as could be observed in (6). In other words, as the postulation in (5) predicts, pronouns fall short of a ω and have to be co-contained in one, hence their description as prosodically dependent and this is indicated as ω-bar ($\bar{\omega}$).

(6) a. $[_{\text{TOPP}}$ $[\text{Papa}_i]_S$ $[\text{ɔ}_i]_S$ $[\text{resrɛ}]_S$ $[\text{Kofi}]_S]$ *s-phrasing*
         $[_{\text{TOPP}}$ $[\text{Papa}_i]_\omega$ $[\text{ɔ}_i]_{\bar{\omega}}$ $[\text{resrɛ}]_\omega$ $[\text{Kofi}]_\omega]$ *p-phrasing*
         (About) father, he is begging Kofi.

     b. $[_{\text{TOPP}}$ $[\text{me}_i]_S$ $[\text{me}_i]_S$ $[\text{resrɛ}]_S$ $[\text{Kofi}]_S]$ *s-phrasing*
         $[_{\text{TOPP}}$ $[\text{me}_i]_{\bar{\omega}}$ $[\text{me}_i]_{\bar{\omega}}$ $[\text{resrɛ}]_\omega$ $[\text{Kofi}]_\omega]$ *p-phrasing*
         (About) me, I am begging Kofi.

As noted earlier, the postulation of the ω-domain is significant here because the ω status of an antecedent determines the phonological form of its anaphor in Akan. Specifically, a constituent in focus or in topic and in the singular employs the 'third person singular' (3SG) pronoun, *ɔno*, in the base position of canonical clause if this constituent is a ω. As could be observed in (7) below, *ɔno* is respectively represented as /ɔ-/ and *no* in the subject and the object positions. If the focus or topic ω is inanimate, however, the pronoun *ɛno* is used, represented as /ɛ-/ in the subject. In order to distinguish c-structure from p-structure in necessary examples, henceforth, p-structure units will be contained as '(…)$_\omega$'.

(7) a. Focus construction: *Noun*
         Subject: $[_{\text{FP}}$ $(\text{Kofi}_i)_\omega$ na $[_{\text{IP}}$ ɔ$_i$ $[_{\text{VP}}$ re-ware   Esi]]]
                   Kofi   FM   3SG- PROG-marry Esi
                   'It is Kofi who is marrying Esi'

         Object: $[_{\text{FP}}$ $(\text{Esi}_i)_\omega$ na $[_{\text{IP}}$ Kofi $[_{\text{VP}}$ re-ware $[_{\text{NP}}$ no$_i$]]]]
                   Esi   FM   Kofi   PROG-marry 3SG
                   'It is Esi who Kofi is marrying'

b. Topic construction: *Noun*
Subject: [$_{\text{TOPP}}$ (Kofi$_i$)$_\omega$, [$_{\text{IP}}$ ɔ́- [$_{\text{VP}}$ re-ware   Esi]]]
          Kofi   3SG- PROG-marry Esi
'(about) Kofi, he is marrying Esi'

Object: [$_{\text{TOPP}}$ (Esi$_i$)$_\omega$, [$_{\text{IP}}$ Kofi [$_{\text{VP}}$ re-ware [$_{\text{NP}}$ no$_i$]]]]
          Esi   Kofi   PROG-marry 3SG
'(about) Esi, Kofi is marrying her'

From the data in (7), it could be observed that a noun or ω (the antecedent) in focus or in topic corresponds to a different phonological form (not the same noun) – i.e., the 'third person' (3SG) pronoun – in the canonical clause position (as the anaphor). We describe this case of antecedent-anaphor relationship as *constituent-base disparity*, which is realized in both the focus and the topic constructions in (7).

As has been noted earlier, pronouns, on the other hand, fall short of a ω, and have been described as prosodically dependent ($\bar\omega$) for that matter. We observe that, if the constituent in focus or in topic is a pronoun, unlike in the case of nouns, the same pronoun (i.e., the same phonological form) is maintained in the canonical base position. Accordingly, as could be witnessed in both constructions in (8) below, the antecedent and the anaphor are identical. We describe this case of 'antecedent-anaphor' correspondence as *constituent-base sameness*.

(8) a. Focus construction: *Pronoun*
Subject: [$_{\text{FP}}$ (wo$_i$)$_{\bar\omega}$ na [$_{\text{IP}}$ wo$_i$- [$_{\text{VP}}$ re-ware Kofi]]]
            2SG   FM   2SG-   PROG-marry Kofi
'It is you who is marrying Kofi'

Object: [$_{\text{FP}}$ (me$_i$)$_{\bar\omega}$ na [$_{\text{IP}}$ Kofi [$_{\text{VP}}$ re-ware me$_i$]]]
            1SG   FM   Kofi   PROG-marry 1SG
'It is me who/that Kofi is marrying'

b. Topic construction: *Pronoun*
Subject: [$_{\text{TOPP}}$ (wo$_i$)$_{\bar\omega}$, [$_{\text{IP}}$ wo$_i$- [$_{\text{VP}}$ re-ware   Kofi]]]
            2SG   2SG-   PROG-marry Kofi
'(about) You, you are marrying Kofi'

Object: [$_{\text{TOPP}}$ (me$_i$)$_{\bar\omega}$, [$_{\text{IP}}$ Kofi [$_{\text{VP}}$ re-ware [$_{\text{NP}}$ me$_i$]]]]
            1SG   Kofi   PROG-marry 1SG
'(about) Me, Kofi is marrying me'

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Pronoun in Conjunction

The distinction between constituent-base disparity and constituent-base sameness at this point underscores the understanding that it is only a syntactic word that is also a ω (or above) that is co-indexed with a different phonological unit in the canonical base position in Akan. Indeed, at this stage of analysis, it is possible to analyze the anaphoric phenomenon and the associated dichotomous distinction established directly in the syntax as against our thesis of indirect reference to syntax. However, there is one case with a distinction that analysis in terms of direct reference to syntax may fail to account for and consistently integrate into the entire analysis. This is where the constituent in focus or in topic is a pronoun and does not occur in isolation but, rather, with another constituent (i.e., either a noun or another pronoun) as a conjunction. In this case, as illustrated in (9) below, the conjoined units are co-indexed with a different or neutral pronoun in the base position, realizing constituent-base disparity just as a noun will.

(9)   a.   Pronominal subject-in-conjunction in focus: *Pro+Pro*

Subject: [$_{FP}$ ((me)$_{\bar{\omega}}$ ne (wo)$_{\bar{\omega}}$)$_{\omega i}$ na [$_{IP}$ yɛ́- [$_{VP}$ re-srɛ   Esi]]]

    1SG   and 2SG   FM   1PL-   PROG-beg   Esi

'It is you and me who are begging Esi'

b.   Pronominal object-in-conjunction in topic: *Pro+Noun*

Object: [$_{TOPP}$ ((Adu)$_{\omega}$ ne (wo)$_{\bar{\omega}}$)$_{\omega i}$, [$_{IP}$ Kofi [$_{VP}$ re-srɛ   mo$_i$]]]

    Adu   and 2SG   Kofi   PROG-beg   2PL

(about) Adu and you, Kofi is begging you.

The prosodic account to this pronoun-in-conjunction case has to do with employment of a subcategorization framework. That is to say, although a pronoun cannot constitute a ω by itself because it is forbidden by ω-domain postulation in (5), its appearance in the syntax motivates a creation of a ω-subcategorization frame. With this frame, schematized in (10), which is inspired by and, indeed, similar in interpretation to Zec and Inkelas' (1990:369) constituent subcategorization frame for Serbo-Croatian clitics, a pronoun ascends to the status of a ω with a noun or another pronoun as illustrated in (9).

(10)   [[Pro]$_{\bar{\omega}}$ ...]$_{\omega}$ or   [... [Pro]$_{\bar{\omega}}$]$_{\omega}$

Following the attainment of the ω status through subcategorization, we observe a constituent-base disparity (9); i.e., a different pronoun in a canonical clause position in the syntactic occurrence of anaphoric relationship. Also, observe in (9) that the emerged anaphoric pronouns identify with one of the conjuncts (as antecedent) in person, just as we realized with individual nouns and 'third person' in (7). What is most important, however, is that the whole conjunction also agrees with the anaphor in number (i.e., plural). The data in (9) is alternatively shown in (11) below and these emphasize that, on attainment of the ω status, a realization of constituent-base sameness is ill-formed and utterly ungrammatical.

*(11)   a. $[_{FP} (\textit{me} \text{ ne } \textit{wo})_{\omega i} \text{ na } [_{IP} (\textit{me} \text{ ne } \textit{wo-})_i [_{VP} \text{ re-srɛ} \quad \text{Kofi}]]]$
            1SG and 2SG   FM   1SG and 2SG-   PROG-beg   Kofi
        'It is you and me who are begging Kofi'

       b. $[_{TOPP} (\textit{Adu ne wo})_{\omega i} [_{IP} \text{Kofi re-srɛ} [_{NP} (\textit{Adu ne wo})_i]]]$
            Adu and 2SG   Kofi PROG-beg   Adu and 2SG
        '(about) Adu and you, Kofi is begging you'

Following the observations made, the motivation for our prosodic analysis of the anaphoric relationship in the topic and focus constructions is clear; the three cases of (full) nouns, pronouns-in-isolation and pronouns-in-conjunction (at Spec-fP) are consistently and holistically explained. Specifically, a ω at Spec-fP employs a different pronoun in its base position in the canonical clause, but a constituent that falls short of ω maintains identical phonological form in the relationship. In the syntax, we would have been forced to explain each case differently, since each terminal node of the categorial structure constitutes a syntactic word. It is also important to emphasize that this affirms the thesis that phonology (through its p-structure) could play a role in syntax; in this case, in the syntactic occurrence of anaphoric relationship in Akan.

Constraining the Anaphoric Relationship

In this section, we attempt to formalize the three cases of the anaphoric relationship in the focus and topic constructions of Akan from the perspective of optimality theory (e.g., Müller, 2012; Prince and Smolensky, 1993; Grimshaw, 1997; Bresnan, 2000) where the heart of grammar is defined by constraint interactions. That is, in optimality theory, constraints are inspired individually and employed to control independent phenomena in language. In terms of c-

structure representation of the two constructions, it has been made evidently clear that a constituent must be extracted to sit at Spec-fP, thereby forbidding in-situ focus or topic. Since this is hardly at the core of the present discussions, we only briefly point out that this realization is enforced by the 'operator in specifier of functional projection' constraint (OP-SPEC), motivated by the presence of syntactic operator at Spec-fP (Grimshaw, 1997; Bresnan, 2000; Marfo and Bodomo, 2004; etc.). Considering the core argument that prosody drives the syntactic phenomenon of anaphoric relationship in the focus and topic constructions of Akan, the set of individual constraints to use here are particularly either syntactically motivated or prosodically inspired. These constraints then essentially conspire to evolve an optimal candidate (i.e., focus/topic construction) among a selected number of candidates. That is to say, constraints are violable and may be overridden by higher-ranking constraints.

In the anaphoric relationship, we have observed that RPro must reflect Spec-fP in terms of person and number. Before constraining this information of grammatical importance, however, it is equally important to observe that it initially motivates a syntactic constraint, which ensures the realization of the anaphoric relationship and particularly demands the maintenance of the canonical word order. We note this constraint as 'resumptive pronoun in base position' (RIP), stated in (12a). A relevant constraint that immediately competes for dominance with RIP here is RES ('Resumptive constraint'), one of the constraints with which Legendre, Smolensky and Wilson (1998) and Pesetsky (1998) have extensively accounted for resumptive pronoun (RPro) strategies. Also stated in (12b), RES forbids resumption of pronouns at canonical base positions.

(12)   a.   RIP: Extracted functions must be phonetically represented with a
                    pronoun (not by a trace) in the canonical clause position

       b.   RES: Resumptive pronouns are prohibited.

As given in Tableau (I) below for both cases of focus and topic construction, after which only focus construction (FP) will be used since the two constructions share more or less the same c-structure as we have observed and the input indicates, RIP would have to dominate RES (i.e., constraint ranking RIP >> RES) if we could optimize the desired candidate. This candidate needs to exhibit RPro in canonical base position, as could be observed between candidates (a), (b) and (c). Be reminded that data in the tableaux is glossed in the data in (7) and (8).

I	[fF focus/topic [IP …]]		RIP	RES
☞ a.	[FP Kofi*i* na [IP ɔ*i*-reware Esi]] [TOPP Kofi*i*, [IP ɔ*i*-reware Esi]]			*
b.	[FP Kofi*i* na [IP _*i*-reware Esi]] [TOPP Kofi*i*, [IP _*i*-reware Esi]]		*!	
c.	[FP Kofi*i* na [IP Kofi*i* reware Esi]] [TOPP Kofi*i*, na [IP Kofi*i* reware Esi]]		*!	*

We observe that candidate (b) is eliminated for violation of the dominant constraint; it failed to resume the extracted subject argument at Spec-IP. Candidate (c) is also out contested on the same issues. It could, however, be explained that it did better than candidate (b) since (c) attempted to instantiate Spec-IP, but in terms of constituent-base sameness instead of constituent-base disparity. Although candidate (a) then violates RES, it emerges as the optimal one for respecting the dominant RIP. Candidate (c) could also be said to violate RES, but insignificantly, since it has already been taken out for fatally violating RIP.

It is important to note that, among an exhaustive and elaborate candidate set – i.e., between (a) and similar candidates –, the present constraint set cannot be sufficient in evolving the desired candidate (a). As Tableau (I) explains and Tableau (II) below further explores, indeed, the dominant RIP is only violated in cases where there is no resumption in base position of an extracted constituent (as in the case of candidate (b)) or where the noun (at ω status) is copied in base position (as in the case of candidate (c)). As has been earlier observed, it is only where the extracted constituent is below the status of ω that this same constituent is copied into a canonical base position (see data in (8)).

II		Matrix focused ω	RIP	RES
☞	a.	[FP (Kofi*i*$_\omega$ na [IP ɔ*i*-reware Esi]]		*
	b.	[FP (Kofi*i*$_\omega$ na [IP _*i* -reware Esi]]	*!	
	c.	[FP (Kofi*i*$_\omega$ na [IP Kofi*i* reware Esi]]	*!	
☺	d.	[FP (Kofi*i*$_\omega$ na [IP wo*i* -reware Esi]]		*

| ☺ | e. | $[_{FP}$ (Me ne wo)$_{\omega i}$ na $[_{IP}$ (me ne wo)$_i$ resrɛ Esi]] | | * |

In Tableau (II), the performance of the others – i.e., candidates (d) and (e) – is equal to that of (a), since all of them violate RES. In other words, the current constraint set allows undesirable candidates; i.e., where the RPro does not share common person and/or number specification with Spec-fP (as in the case of candidate (d)) and where a pronoun is conjoined with another (as in the case of candidate (e)). Including the desired candidate (a), therefore, these candidates remain in contention as indicated by the smiling face (☺). Let us note that *wo* in candidates (d) and (e) is second person singular (2sg) pronoun, he/she; thus, it is different from 3sg pronominal specification of Spec-fP constituent, *Kofi*.

Grammatically, candidate (d) is ill-formed because RPro (at Spec-IP) should share a common person and number specification with Spec-fP; 3SG, as in the case of desirable candidate (a). 3SG (she/he) replaces a personal name, here, *Kofi*. In Tableau III, which is revamped in terms of constraint set, (d) is suitably thrown out of contention. This state of affairs is explained by the introduction of an correspondence constraint (e.g., Benua, 1995, 1997; Steriade, 1996; etc.); namely, 'feature identity between antecedent and its anaphor'; IDENT-AA$_{[per. \& num.]}$. With this constraint, faithfulness is required between an antecedent and its anaphor (hence, antecedent-anaphor (AA) faithfulness), rather than McCarthy and Prince's (1995, 1999) suggestion of faithfulness between an input and an output (input-output (IO) faithfulness). IDENT-AA$_{[per. \& num.]}$ is inspired by base-reduplicant (BR) faithfulness (Benua, 1997), which, as a kind of input-output faithfulness, works much the same as input-output faithfulness. In connection with voicing as a feature, Potts and Pullum (2002:373), for instance, explain IDENT-IO as 'if a node u is an input node and [αvoiced], then every output correspondent of u is [αvoiced]'. In the same direction, as stated in (13), IDENT-AA requires an anaphor (i.e., RPro at a canonical position) to share common person and number specifications with its antecedent (at Spec-fP). Having fatally violated this constraint, candidate (d) is appropriately disqualified.

(13)   IDENT-AA$_{[per. \& num.]}$:   If a node u is an antecedent node and [αperson & αnumber], then an anaphor correspondent of u is [αperson & αnumber].

III

Matrix-focused ω	RIP	RES	IDENT-AA
☞ a. [FP (Kofi$_{i\omega}$ na [IP ɔ$_i$-reware Esi]]		*	
b. [FP (Kofi$_{i\omega}$ na [IP __$_i$-reware Esi]]	*!		
c. [FP (Kofi$_{i\omega}$ na [IP Kofi$_i$ reware Esi]]	*!		
d. [FP (Kofi$_{i\omega}$ na [IP wo$_i$-reware Esi]]		*	*!
☺ e. [FP (Me ne wo)$_{\omega i}$ na [IP (me ne wo)$_i$ resrɛ Esi]]		*	

At this point, candidate (e) still remains in contest (hence, the smiling face indicator). However, as was critically analyzed earlier, from the perspective of p-structure, particularly considering the ω status of the antecedent and how this status informs the realization of its anaphor, we know that (e) is not a desired candidate or cannot emerge as the optimal one. It has been noted that, indeed, this prosodic information is essential to the realization of the anaphoric relationship. For that matter, it is at the heart of the argument that prosody drives a well-formed anaphoric relationship. In this direction, if candidates (a) and (e) are to be optimized and eliminated, respectively, a prosodic constraint that feeds this prosodic information in the constraint set is crucial.

Looking back at the present constraint set and its connection with candidates (a) and (e), it could be observed that none of them encodes the ω status of the antecedent as very significant information. It has consistently been explained that this information underscores the distinction between 'constituent-base disparity' and 'constituent-base sameness'. A constraint that expresses this distinction then would serve to set apart candidates (a) and (e). That is to say, we need a prosody-inspired constraint that could enforce 'constituent-base disparity' between an antecedent that is a ω (ω-antecedent) and its anaphor, and 'constituent-base sameness' between an antecedent that is below a ω ($\bar{\omega}$-antecedent (i.e., pronoun in isolation)) and its anaphor. Respectively, these are where Spec-fP and RPro are phonologically different and where Spec-fP and RPro are phonologically identical. The motivated constraint here is Ant$^{\omega}$≠RPro, which requires a ω-antecedent to be higher than its anaphor in terms of order in the prosodic hierarchy. Stated in (14) below, Ant$^{\omega}$≠RPro as a prosody-inspired markedness constraint enforces its requirement on the c-structure of individual candidates. Hence, with this constraint, prosody

clearly constrains syntax. As a reminder, the prosodic hierarchy suggests that the prosodic categories are orderly structured and in phonological representation they are strictly organized according to that hierarchy.

(14)   Ant$^{\omega}$≠RPro: Antecedent (Ant.) must not have the same phonological form as its anaphor (RPro) where Ant is a phonological word (ω) or higher.

IV	Matrix focused ω	RIP	RES	IDENT-AA	Ant$^{\omega}$≠RPro
☞ a.	[FP (Kofi$_{i\omega}$ na [IP ɔ$_i$-reware Esi]]		*		
b.	[FP (Kofi$_{i\omega}$ na [IP __$_i$ -reware Esi]]	*!			
c.	[FP (Kofi$_{i\omega}$ na [IP Kofi$_i$ reware Esi]]	*!			*
d.	[FP (Kofi$_{i\omega}$ na [IP wo$_i$ -reware Esi]]		*	*!	
e.	[FP (Me ne wo)$_{\omega i}$ na [IP (me ne wo)$_i$ resrɛ Esi]]		*		*!

With the inclusion of Ant$^{\omega}$≠RPro to the constraint set, irrespective of its ranking in the present candidate set, candidate (e) and the likes are well dealt with and eliminated. As Tableau IV explains, the antecedent of candidate (e) at Spec-fP assumes ω status following the subcategorization frame given in (10); specifically, the pronoun is in conjunction. Thus, it is eliminated because, with ω-antecedent, it must have exhibited 'constituent-base disparity' as in (9a), given below in (15a) for ease of reference. In other words, 'constituent-base sameness' is ill-formed where the antecedent is a ω, and it is well-formed where the antecedent is below ω (i.e., ō), as shown in (15b). It can also be observed that candidate (c) also violates Ant$^{\omega}$≠RPro for exhibiting 'constituent-base sameness' although it has already been eliminated for violating the dominant RIP.

(15)   a.   [FP ((me)$_{\bar{\omega}}$ ne (wo)$_{\bar{\omega}}$)$_{\omega i}$ na [IP yɛ$_i$- [VP re-srɛ   Esi]]]
                     1SG   and 2SG   FM   1PL-   PROG-beg   Esi
             'It is you and me who are begging Esi'

         b.   [FP (me)$_{\bar{\omega}i}$ na [IP me$_i$- re-srɛ   Esi]]
                     1SG   FM   1PL- PROG-beg Esi
             'It is me who is begging Esi'

Conclusion

We have observed the structure of the focus and topic constructions of Akan as extra-sentential clauses and particularly looked into the realization of antecedent-anaphor (anaphoric) relationship in them. Considering constituent representations in an antecedent and its anaphor, three possible instances have been observed and explained in connection to anaphors they co-occur with – i.e., (full) NP, pronoun-in-isolation and pronoun-in-conjunction. Through prosodic analysis, we have particularly strived to argue that the prosodic structure (p-structure) provides a common platform for clear, convenient and holistic accounting of the three antecedent instances and how they contribute to the manifestations of the anaphoric relationship. This has been captured with the dichotomous distinction of 'constituent-base disparity' and/vs. 'constituent-base sameness'. All these underscore the suggestion that, through p-structure, phonology influences or could influence syntax. In this paper, it has been demonstrated that prosody contributes to the proper realization of the syntactic phenomena of anaphoric relationships.

Furthermore, through optimality theory, where the heart of grammar lies in the interaction of constraints in evolving a desired candidate, we have endeavored to formalize and constrain the three manifestations of the anaphoric relationship. It has been observed that the dominant RIP constraint demands a resumptive pronoun at a base position in the two extra-sentential clauses, whiles IDENT-AA sees to it that this pronoun agree in number and person with its antecedent. What is even more important in working within optimality theory is the fact that it enables us to underscore the fact that prosody constrains syntax through constraint motivation. Accordingly, it is the introduction of a prosody-inspired constraint (i.e. Ant$^{\omega}$≠RPro) in the constraint set, which simultaneously enforces 'constituent-base disparity' against 'constituent-base sameness' for structural well-formedness. This ultimately defines and/or evolves a grammatical candidate.

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Comparison of Metadiscourse Markers in Arabic and English Research Articles in the Introduction and Conclusion Sections

Hmoud Alotaibi[1]

Abstract
Little is known about metadiscourse in Arabic and English research articles written by Arabic-speaking writers. Therefore, this paper uses Ädel's (2006) framework to investigate metadiscourse markers in the introduction and conclusion sections of research articles written in Arabic and in English by native speakers of Arabic. The findings indicated that the text-oriented metadiscourse was more preferable across corpora and particularly was more prominent in introductions compared to conclusions. The findings also revealed cross-linguistic variations, as English texts used a higher number of metadiscourse markers than their Arabic counterparts. The study closes with several recommendations for future studies and addresses pedagogical implications.

Introduction

Metadiscourse is known as language about language. It can be conceptualized as a framework or a model of analysis which determines particular rhetorical devices or strategies used by writers. Ädel (2006) explained metadiscourse as 'text about the evolving text, or the writer's explicit commentary on her own ongoing discourse, displaying an awareness of the current text or its language *per se*, and of the current writer and reader *qua* writer and reader' (p.183). Within the genre of the research article, writers are encouraged to adhere to certain research norms. These conventions, however, are flexible and dynamic which allow variations to exist between languages, cultures, and discourse communities. Investigating the use of metadiscourse becomes,

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then, an interesting aspect of research, as it reveals some subtle variations and offers implications for novice writers to benefit from experienced writers' techniques.

Using Hyland's (2005) popular metadiscourse taxonomy, several studies have compared and contrasted the use of metadiscourse in research articles across languages. For instance, Zarei and Mansoori (2007) contrasted English to Persian texts in two disciplines: computer engineering and applied linguistics. They found that both language groups used interactive resources more than interactional ones. Also, they found that Persian texts used the interactive type more than their English counterparts, while the opposite occurred with the case of the interactional type. Although the previous study has not detected any disciplinary variations, Farrokhi and Ashrafi (2009) attributed the variations in their study to the academic discipline, as they found medical papers written by Persian writers used more metadiscourse instances as opposed to those written by English native speakers, while the opposite occurred in the applied linguistics papers. Other than Persian, the Arabic language was contrasted with English in Sultan (2011). He focused on discussion sections in linguistics papers written by native speakers of Arabic and English and found that Arabic texts employed metadiscourse instances (both interactive and interactional types) more than their English counterparts did. Regarding the interactive metadiscourse, transitions and code glosses were the two most preferable sub-types in Arabic while frame and endophoric markers in conjunction with evidentials were prominent sub-types used in English texts.

Perez-Llantada (2010) also carried out a cross-linguistic study, yet using Ädel's (2006) framework. She contrasted Spanish texts to English ones focusing on the introduction and the discussion sections of biomedical papers written by three language groups: Spanish scholars writing in Spanish, Spanish scholars writing in English, and North-American scholars writing in English. For the introductions, she found that text-oriented metadiscourse was more common than the participant-oriented metadiscourse. Both metadiscourse types, however, were distributed similarly in the conclusions, again in the three language groups. Regarding the cross-linguistic comparisons, the Spanish subgroup used fewer metadiscourse units compared to the other two subgroups. While the English texts written by Spanish speakers and those written by English speakers included similar number of metadiscourse units, the Spanish subgroup used more instances. The distribution of metadiscourse markers between the introductory and concluding parts in Perez-Llantada (2010) was partially supported in Kuhi, Yavari, and Azar (2012).

Specifically, the researchers focused on linguistics papers and found that the interactive type was used more than the interactional one in the introduction sections. In discussion/conclusion sections, however, the researchers found that the interactional markers were employed more.

It can be summarized from the above review that the distribution of metadiscourse markers was commonly used in other languages more than in English. In Perez-Llantada's (2010) study, however, this finding was reversed and, more importantly, it was found that texts written in English by Spanish speakers used more metadiscourse elements compared to Spanish texts and English texts written by English speakers. Therefore, it is important to investigate the use of metadiscourse in research articles written in other languages and to make comparisons with texts written in English by non-English speakers. Since Sultan's (2011) study compared Arabic texts to English texts written by English speakers, the nature of English texts written by Arab writers remains unknown. The present study fills this gap by drawing a cross-linguistic comparison between research articles written in Arabic and in English by Arab scholars.

Concerning the distribution of metadiscourse markers in the sections of research articles, especially between the introductory and concluding parts, results in previous research showed that introductions employed text/interactive metadiscourse elements more than they used participant/interactional markers (Kuhi et al., 2012; Perez-Llantada, 2010). The picture is not clear in terms of the distribution between the participant/interactional in the discussion/conclusion sections. Since the only study on Arabic texts (i.e., Sultan, 2011) examined only one section, the present study draws a comparison between the introduction and conclusion sections. Indeed, Ädel (2006) stressed that introductions and conclusions are 'good candidates for specialized forms of discourse that focus on the text, the writer or the reader' (p.125).

The Corpus and Method of Analysis

The study compared 20 introduction and 20 conclusion sections written in English by Arab scholars to the same number of texts written in Arabic also by Arab scholars. The texts were drawn from one journal, the *Arab Journal for the Humanities*. Restricting selection to one journal was to avoid possible variations between journals (Perlans-Escudero and Swales, 2011). This journal is quite popular across the Arab world and publishes peer-reviewed papers pertinent to the humanities. The study focused on linguistics papers in order to avoid the possibility of

disciplinary variations. It is important to note that it is rare for Arabic journals to have publications in one specific field, as, mostly, they publish in a range of fields such as the humanities or sciences. The texts were written within a span of 13 years (2000-2013). This long period is due to the unavailability of linguistics papers that included straightforward and separated sections, as many were excluded due to merging discussions with conclusions. The size of the corpus in terms of number of words is displayed in Table 1.

The study used Ädel's (2006) non-integrative approach of metadiscourse as a model of analysis. Specifically, the paper identified the metadiscourse functions listed by Ädel in the text-oriented and participant-oriented categories. Extracted from her argumentative texts, Ädel considered these functions as instances of personal metadiscourse. In this paper, however, the metadiscourse functions were counted whether they were personal or impersonal. This choice is motivated by the hypothesis of the scarce employment of personal metadiscourse in research papers, which the analysis later confirmed. Ädel's taxonomy of text-oriented and participant-oriented types, along with her definitions, are listed in Table 2, which also includes an example extracted from the corpus of the present study for each function (the 'I' in the table refers to the examples taken from the introductions and the 'C' refers to those taken from the conclusions).

The study consisted of a two-way comparison: first, a cross-linguistic comparison was drawn between the introductions and, secondly, a comparison was made between the conclusions. The analysis focused on the frequency of text-oriented type and the participant-oriented functions and, also, on the strategies employed for each function. Unlike in Pérez-Llantada (2010), the analysis of metadiscourse functions in this study has not been conducted in the light of the rhetorical moves associated with the examined sections. Concerning the introductions, the rhetorical moves proposed in Swales' (1990, 2004) CARS model were found to be insignificant in Arabic introductions (Al-Qahtani, 2006; Alotaibi and Pickering, 2013). A cursory look at the employment of these moves in the Arabic subgroup in this study supports these findings. The same can be said about the conclusions as the Arabic texts selected for this study employed different strategies, such as providing summarized points and writing arguments in full paragraphs. The low frequency of the rhetorical moves in the Arabic subgroup in conjunction with the imbalanced construction of the conclusions would definitely undermine the validity of comparison between the subgroups, as argued in Moreno (2008), if the comparison were carried out based on the rhetorical choices in conclusions. Therefore, similar to the decision

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I took for introductions, the analysis on conclusions was not carried out in the light of the rhetorical moves found in conclusions.

Table 1 Number of words in the corpus

	Introductions		Conclusions	
	English	Arabic	English	Arabic
Number of Words	13573	10708	8013	7122
	24281		15135	

Table 2 Ädel's (2006) discourse functions of metadiscourse with examples from the study corpus

	Discourse Function	Example from the Corpus
CODE	**Defining** explicitly comments on how to interpret terminology.	(We) refer; call; define (I)
	Saying involves general *verba dicendi* such as *say*, *speak*, *talk* or *write*, in which the fact that something is being communicated is foregrounded.	We would like to say (I)
TEXT-ORIENTED	**Introducing the topic** gives explicit proclamations of what the text is going to be about, which facilitates the processing of the subsequent text for the reader.	The current study will demonstrate the … (I). I will suggest some guidelines... (C)
	Focusing refers to a topic that has already been introduced in the text: announces that the topic is in focus again, or it narrows down.	Based on this important distinction, we have opted for Hickey's rather than House's dichotomy. (I). First… Second… (I&C)
	Concluding is used to conclude a topic.	In conclusion, … (I&C)
	Exemplifying explicitly introduces an example.	For example, … (I&C)
	Reminding points backwards in the discourse to something that has been said before.	As mentioned above (I&C) The study showed… (C)
	Adding overtly states that a piece of information or an argument is being added to existing one(s).	In addition; furthermore (I&C)
	Arguing stresses the discourse act being performed in addition to expressing an opinion or viewpoint. Verbs used are performatives.	I claim in this study that (I) The study supports the claim (C)
	Contextualizing contains traces of the production of the text or comments on (the conditions of) the situation of writing.	Through my reading this encyclopedia and my studying of its morphological features, I have noted a number of points that I would like to introduce in this (I)

PARTICIPANT-ORIENTED	**Anticipating the reader's reaction** pays special attention to predicting the reader's reaction to what is said, e.g., by explicitly attributing statements to the reader as possible objections or counterarguments conceived by him.	To validate what we say, we mention some studies on morphology that have not tackled this matter. (I)
	Clarifying marks a desire to clarify matters for the reader; motivated by a wish to avoid misinterpretation. Negative statements are common.	That is; In other words… (I&C)
	Aligning perspectives takes it for granted that the reader takes the writer's perspective. The reader's agreement is presupposed.	It is well known that…; It is clear that (I&C)
	Appealing to the reader attempts to influence the reader by emotional appeal. The writer persona conveys her attitude with the aim of correcting or entreating the reader.	It is interesting to note the capability (I) The hope is that this study will contribute some insights (C)

* 'I' refers to examples found in introductions; 'C', examples in conclusions.
** Examples are selected randomly from the four subgroups (The Arabic ones are translated).

Results

The identification of the introduction and conclusion sections in both language groups was a straightforward process, albeit some articles used varied labels for the texts. English texts were more homogenous compared to the Arabic ones. Concerning the introductions, all English texts were labeled as such, except two that were entitled *theoretical framework* and *background of the study*. It was found that each of these sections served exactly the function of an introduction because, firstly, they did not use the introduction title for any other section and, secondly, these sections included the rhetorical moves proposed in Swales (1990; 2004) for introductions. With exception to three articles that did not use a title for the introduction, Arabic introductions used different labels: مقدمة (*introduction* was used 8 times), مدخل (*entry* was used four times), تمهيد (*preface* was used three times), and, finally, توطئة (*forward* was used twice). Similar to the case in English, these different labels indicated the introduction because they occupied the introduction location and included the traditional rhetorical devices found in introductions, albeit some deviations were found as indicated in the method section. Regarding the conclusions, one English article did not use a title while the rest used the *conclusion* label. Concerning the Arabic subgroup, while the majority used the *conclusion* title, two articles had no titles and one used صفوة القول which can be translated as *in a nutshell*.

As shown in Table 3 and Figure 1, the analysis prevailed that text-oriented metadiscourse was more preferable to the participant-oriented type in the introduction and conclusion sections in both language groups. The analysis also showed an evident cross-linguistic variation, as both types of metadiscourse were employed more in the English papers compared to their Arabic

counterparts. The Chi-square test was run to measure the differences and detected that the differences were statistically significant between the two language groups in both sections.

Table 3 The frequency of text- and participant-oriented metadiscourse

	Introductions		Conclusions	
	English	Arabic	English	Arabic
Text-Oriented	111	70	88	57
Participant-Oriented	16	14	15	5
Total	127	84	103	62
Chi-Square Test	Value=8.00 p=0.018		Value=11.09 p=0.004	
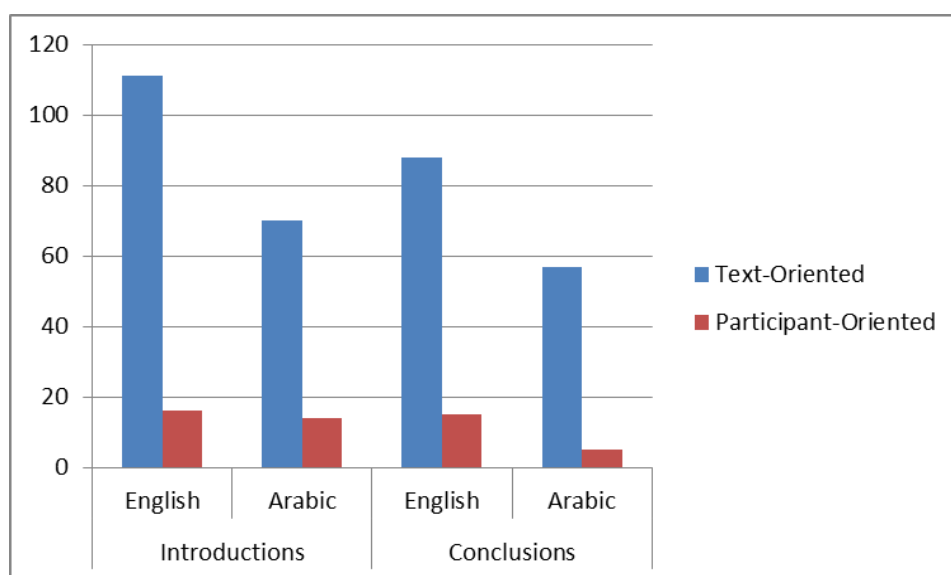
Figure 1 The frequency of metadiscourse types

The count process of the metadiscourse tokens in both language groups revealed interesting variations. As shown in Table 4, the text-oriented metadiscourse functions were more employed in the introductions compared to the conclusions in both language groups. English texts used more metadiscourse textual tokens, particularly in the introduction sections, as shown in Table 4. The Chi-square test detected that these differences were not statistically significant in the introductions subgroup but they were significant in the conclusions subgroup.

Table 4 Frequency of text-oriented metadiscourse

Text-Based Functions	Introductions		Conclusions	
	English	Arabic	English	Arabic
Defining	6	1	0	0
Saying	0	2	0	0
Introducing	23	13	1	0
Focusing	31	25	10	7
Concluding	0	2	11	7
Exemplifying	20	10	5	7
Reminding	3	1	31	21
Adding	19	9	15	7
Arguing	7	1	15	8
Contextualizing	2	6	0	0
Total	111	70	88	57
Chi-Square Test	Value=0.000 p=1.000		Value=21.00 p=0.397	

Compared to the results found with the text-oriented metadiscourse, the gap was shorter between the two language groups for the participant-oriented metadiscourse. As displayed in Table 5, the only subgroup that used a fewer number of tokens was the Arabic group in the conclusion sections. The Chi-square was run to test these differences and the results showed that they were not statistically significant in all subgroups.

Table 5 Frequency of participant-oriented metadiscourse

Participant-Based Functions	Introductions		Conclusions	
	English	Arabic	English	Arabic
Anticipating	1	1	0	0
Clarifying	10	7	6	2
Aligning	2	0	2	1
Appealing	3	6	7	2
Total	16	14	15	5
Chi-Square	Value=0.000 p=1.000		Value=0.000 p=1.000	

Metadiscourse in Introductions

Regarding the text-oriented metadiscourse, the functions of *introducing the topic* and *focusing* were found to be crucial in both sets of texts, as shown in Figure 2. The typical strategy of *introducing the topic* in English was either to announce what the study was about, as in (1), or to explicitly state the objective of the study, as in (2). This direct strategy was not found in Arabic texts as they introduced the topic with a complex methodology, illustrated in (3) and (4).

(1) The current study will demonstrate the importance of cross linguistic studies by… (E)

(2) The main objective of this paper is to initiate a cross-linguistic typology of… (E)

وهذه الدراسة تحاول الإحاطة بما يمكن أن يقدم تصوراً للخطابة في ظل بيت المقدس..

(3) *This study tries to comprehend what can be perceived from oratory within the environment of Jerusalem.* (A)

وقد رأينا أن نرصد الظواهر اللغوية الكنعانية والآرامية المتبقية في أسماء الأمكنة والبقاع التي وصلت إلينا في بلاد الشام من خلال درسها حسب سوابقها ولواحقها اللغوية

(4) *We have decided to trace the Aram and Kana linguistic phenomena that are remaining in the place names in Sham that reached us through studying their prefixes and suffixes.* (A)
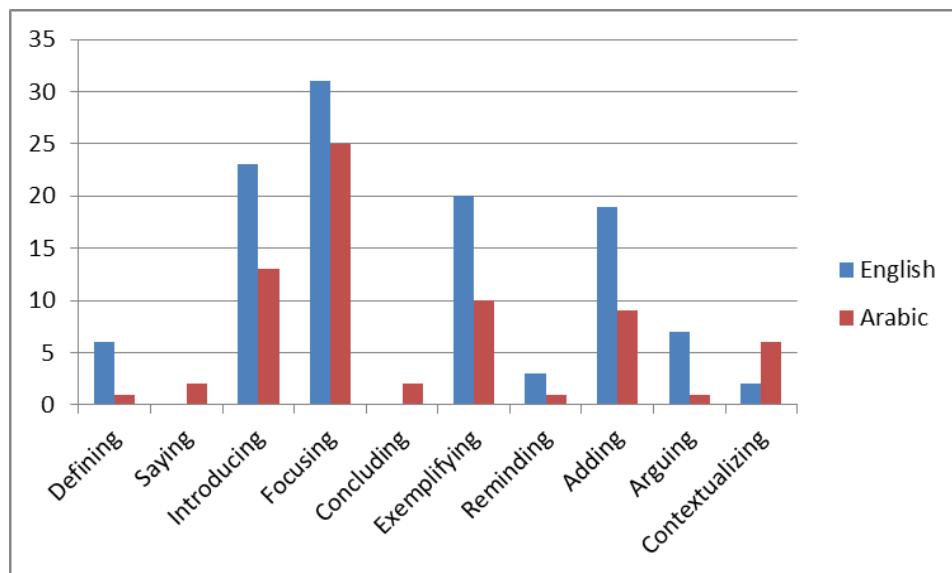
Figure 2 The frequency of text-oriented metadiscourse in introductions

Similar to the *introducing the topic* unit, English texts adopted several strategies for the *focusing* function. They mostly narrowed down the main objective of the study, i.e., by breaking the general aim of the study into a more focused one. For example, the first sentence in (5) constituted the *introducing the topic* function while the second sentence fulfilled the *focusing* function. Also, the *focusing* category was used to highlight the structure of the paper, as in (6), or to indicate a specific method used in the study, as in (7).

(5) The objective of this study is to figure out the inherent challenges found in… The article is meant to recognize challenges and identify the changes… (125)

(6) The paper is organized as follows. In section 2, I explore the affiliation of… (113)

(7) Based on this important distinction, we have opted for Hickey's rather than House's dichotomy. (86)

In Arabic, however, the *focusing* function adopted only one function: narrowing the main objective. This strategy appeared occasionally as serially numbered statements and sometimes as a short statement following the statement of the main objective.

The *exemplifying* and *adding* functions held the second position in the introductions after the *introducing the topic* and *focusing* units and, likewise, they were more preferable in English texts. The *adding* unit was more varied in English with transitions such as *in addition*, *also*, *furthermore*, and *besides*, while the most employed connector in Arabic was the conjunction *and*, followed by *also*. Similar to the variations found in the *adding* function, the *exemplifying* function was utilized in English with more varied linguistic segments, such as *for example* and *for instance*, while introducing an example in Arabic was mostly restricted to using the phrase على سبيل المثال (*for example*). Yet, the Arabic texts also used the strategy of naming as a way of introducing an example, as in (8).

عبروا عن حزنهم وآلامهم وكآبتهم في صور شتى؛ منها البكاء والعويل، ومنها الصراخ والجزع، ومنها التذمر والشكوى

(8) *They expressed their grief and their pain in various forms; some include weeping and wailing, and some include screaming and despairing, and some include grumbling and complaining.* (A)

The *arguing*, *reminding* and *defining* functions received less attention in both language groups, although they appeared higher in frequency in English texts, as the case was with the functions mentioned above. The *arguing* function in English took multiple forms, in terms of the use of the first pronoun, tense, and phrasing, as illustrated in (9), (10), and (11), respectively.

(9)   I claim in this study that… (E)

(10)   This study will prove that True Comitative exists but on a long spectrum of other comitatives. (E)

(11)   However, I assume that it is plausible to extend the argument presented in this work to accommodate similar syntactic errors made by Arab university students elsewhere… (E)

The single case in Arabic, as in (12), appeared as the first sentence after a long literature review. It did not include a straightforward presentation of argument but, instead, it illustrated the author's discomfort with the 'framework' used in the previous literature. In this sentence, the writer argued that his presented framework was the most appropriate one compared to the one used by the authors he cited.

ولكننا نعمد إلى إطار ثان نرسمه ونصادر عليه منهجيا ليكون عونا لنا على جلب مفهوم القطيعة إلى دائرة الوعي اللغوي في صياغته الحديثة تخصيصا

(12)   *But we choose and delineate a different and familiar framework to help us in bringing the notion of the epistemological break to the circle of linguistic awareness in its new format.* (A)

The variation in the *reminding* function was limited, since it included phrases such as *above mentioned* in both language groups, although the Arabic case appeared as a parenthetical clause. Concerning the function of *defining disciplinary terms and concepts*, the gap was higher with six cases in English and only one in Arabic. In English, this function tended to provide definitions by using introductory verb phrases such as *refer*, *call*, and *define*. One case, however, spelled out the definition without such introductions. The only definitive statement in Arabic introductions followed the dictionary style by first showing that there were several meanings of the word 'eulogy' and, then, it provided a list of dictionary definitions.

The *contextualizing*, *concluding*, and *saying* functions were the only ones that appeared more in Arabic texts. In fact, the *concluding* and *saying* functions appeared twice in Arabic

introductions but never in English ones. Concerning the *contextualizing* function, the two English cases were employed before the study being introduced. The first case, as in (13), functioned in linking the study to what it might be relevant to, while the second case, in (14), placed the aim of the study within a context of a well-known perspective.

(13) A relevant kind of linguistic change to the present study is the gradual movement away from the habitual use of an ethnic language (Farsi) to the use of the majority language (KA) (Gal, 1978; Li Wei, 1994)…(E)

(14) This article rests on the notion that creates [creating] an innovation in the field of English language teaching (ELT) is not enough to bring about a change at all levels of pedagogy, academic achievement and learning outcomes of English language learners… (E)

The cases of the *contextualizing* function in Arabic papers followed different strategies. The first one was to give a rationale of the study, as in (15), and was used right before the announcement of the study. The second strategy, as in (16), was to select what was relevant from the previous literature and was usually adopted after a long discussion of previous studies. The third strategy was to tackle the process of publication, as in (17).

ويأتي هذا البحث محاولة للتأكيد على أن العقل العربي بمكوناته الثقافية التقليدية قد استمر حتى العصر المملوكي...

(15) *This study tries to emphasize that the Arabic mind with its traditional cultural components have continued until the Mamluki era.* (A)

سيطول بنا الحديث، إذا حاولنا تتبع تجليات هذين المنزعين على مستوى الحقول المعرفية المختلفة. لكن، حسبنا أن نشير هنا إلى ماله علاقة مباشرة بموضوعنا. نشير إلى جانبين...

(16) *It will take long if we tried to trace the manifestations of these attitudes at the level of different cognitive fields. But, it is adequate to mention what has a direct relationship with our topic. We indicate two sides:…* (A)

ومن خلال تتبعي لهذه الموسوعة، ودراستي في مسائلها الصرفية وقفت على جملة من الأمور سأطرحها في هذا البحث..

(17) *Through my reading this encyclopedia and my studying of its morphological features, I have noted a number of points that I would like to introduce in this study.* (A)

The *saying*, and *concluding* functions were low in frequency and, also, were signaled with pertinent linguistic phrases. Phrases such as *we would like to say* were used for the *saying* function and *we conclude/finally* for the *concluding* function.

Concerning the participant-oriented metadiscourse in introductions, it appeared significantly low in frequency compared to the textual-oriented type. As shown in Figure 3, the *clarifying* function was the most used one in both corpora and was signaled in both language groups with similar expressions; the most favored signal in both languages was *that is*.
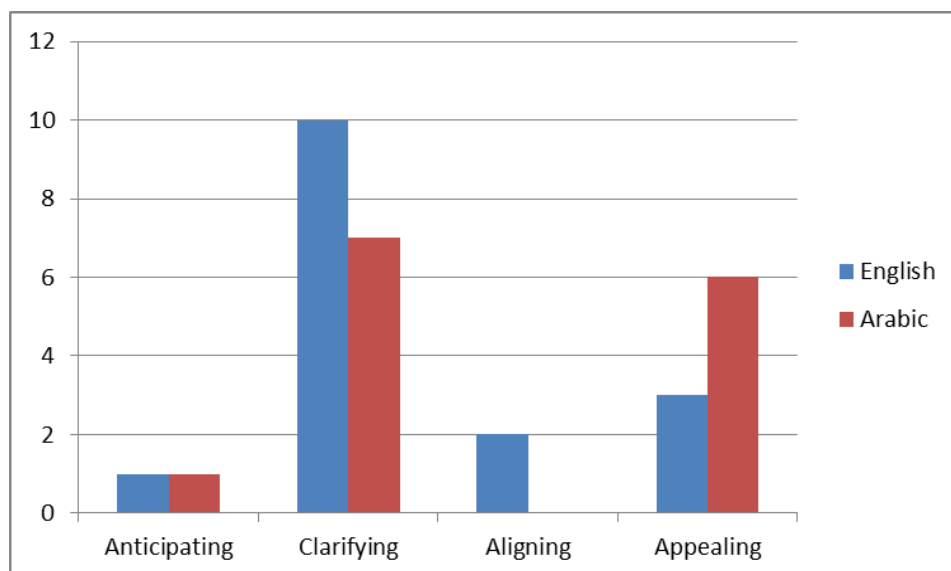
Figure 3 The frequency of participant-oriented metadiscourse in introductions

The Arabic case of the *anticipating readers' reactions* function, as in (18), provided a validation of the study as a way of encountering the reader's disagreement. The English case in (19) involved the argument function yet it was mediated by the use of the modal verb *can* which reflected the author's anticipation of the reader's disagreement.

ولإثبات صحة ما نقول نذكر بعضا من المؤلفات النحوية التي لم تتعرض لهذه المسألة ...

(18)   *To validate what we say, we mention some studies on morphology that have not tackled this matter...*
        (A)

(19)   It can be claimed that there are three levels of structures… (E)

Unlike the previous function, the *aligning with the reader's perspective* function presupposed the readers' agreement. In (20), for instance, the authors used the phrase *it is well known* to signal some shared background knowledge with their readers.

(20) It is well known that computer-aided systems of translations cannot aspire to gain authenticity… (E)

Despite that the function of *appealing* was used twice as much in the Arabic corpus compared to the English subgroup, it mostly followed the strategy of stimulating the readers in order to validate the argument, as in (21). The three examples in English used phrases such as *it is/should be noted* to invite the readers to share with them similar lines of thought. In fact, one writer used the adjective *interesting* to further capture the readers' attention, as in (22).

قارن بين هذه الكتب وبين موسوعة نحوية كالتذييل والتكميل تجد صدق كلامنا ..

(21) *Compare between these books and any encyclopedia on morphology such as indexing and you will find the accuracy of our take.* (A)

(22) It is interesting to note the capability of MT… (E)

Metadiscourse in Conclusions

Concerning the textual-oriented metadiscourse, the *reminding* function received an exclusive attention in both language groups, especially in English texts, as shown in Figure 4. It was used mostly to remind readers of the findings or the aim of the study. English texts used the simple past and the present prefect tense, while the Arabic papers used only the simple past tense, since the present perfect is not available in the language. It is interesting to note that all Arabic cases used impersonal metadiscourse expressions, through passive constructions, such as *the study showed*. While half of English conclusions applied this strategy, the other half used the personal metadiscourse expressions, mostly through the first person pronoun *I*.
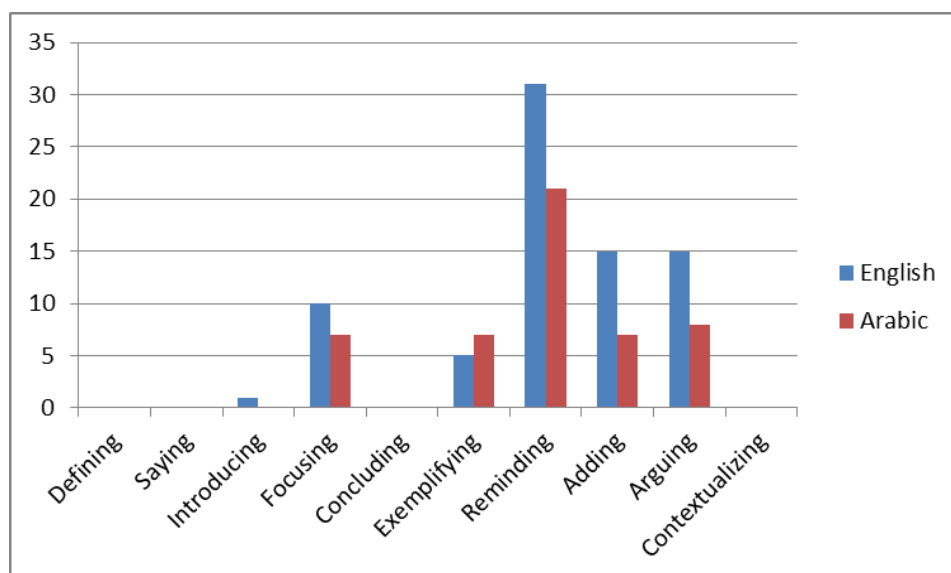
Figure 4 The frequency of text-oriented metadiscourse in conclusions

The *adding* and *arguing* functions held the second position in the conclusions. They were used almost twice as much in the English texts as in the Arabic texts. The *adding* function was used in English with different types of connectors, such as *also*, *in addition*, and *moreover*. In Arabic, the most favored type was the conjunction *and*. The *arguing* function was used similarly in both languages and, similar to the strategy found in the *reminding* function, the writers stressed the importance of argument with phrases such as *our findings confirm* and *the study supports the claim*. It can be noticed that the tense here was present, unlike the past and present perfect used for the *reminding* function.

The occurrences of the functions of *focusing* and *concluding* held the third position in both language groups and, again, appeared higher in frequency in English texts. The *focusing* function had two forms in English and one in Arabic. The two forms in English were the use of ordinal numbers such as *first* and *second* to narrow down what had been introduced, and the second form was through discussing a particular part of the study such as the implications. The Arabic papers used only the former form. The *concluding* function was used more in English but was similarly signaled in both sets of texts with common concluding keywords, i.e., *to conclude, in conclusion* and *finally*.

The *exemplifying* function was the only textual-based unit that was employed more in Arabic conclusions compared to their English counterparts. This function was quite similar in

both sets of texts in terms of the number of usages and strategies, such as *for example*, *such as*, and *as*.

The author of the only conclusion found in English that used the introducing the topic function, as in (23), used the future tense to introduce the argument.

(23) I will suggest some guidelines which might, if accepted, help us to understand the common types of... (E)

As shown in Figure 5, all the functions of the participant-oriented metadiscourse were higher in frequency in English conclusions and were also more varied in usage. The *clarifying* function was signaled mostly in English papers with phrases such as *in other words* and *that is*, while the Arabic writers opted for using phrases such as *I mean*.
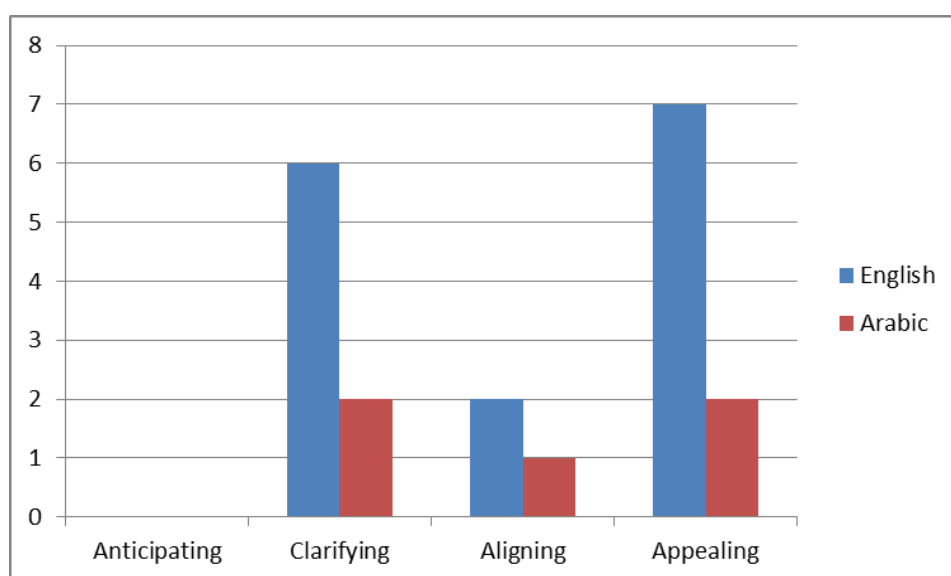
Figure 5 The frequency of participant-oriented metadiscourse in conclusions

For the *aligning with readers' perspective* function, writers assumed their readers' agreement about the clarity and validity of the results. The writers in (24) and (25), for instance, anticipated that their readers shared with them the same point of view. The writer in Arabic used the pronoun *us*, while the author in English chose the impersonal expression *it is clear that*.

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ويشعرنا هذا الأمر أن هذا الكتاب العظيم يفتح أبوابا عدة لأهل البحث والعلم لكي يبحثوا...

(24) *This matter makes us feel that this great book open doors for researchers and people of knowledge to research…* (A)

(25) It is clear that the… had the highest mean… (E)

The *appealing to readers* function occurred mostly in English and adopted several strategies. In (26), for example, the writer of the English conclusion expressed his hope that his study would be beneficial to interested readers. Likewise, the writer of the Arabic conclusion in (27) addressed the reader to convince him or her of the validity of the study methodology. The writers in English often used personal metadiscourse expressions, such as the inclusive *we* pronoun, as in (28).

(26) The hope is that this study will contribute some insights which can be helpful to those interested in… (E)

وقد يلاحظ القارئ أننا أدخلنا غير مرة شعر الغزل...، ونحسب أن ذلك لا يخل لا بالمنهج ولا بالهدف، اعتقادا منا بأن ...

(27) *The reader might notice that we used love poetry more than once…, we anticipate that this does not affect the methodology nor the aim of the study, as we believe that…* (A)

(28) We believe that these points should be taken into account in any… (E)

Discussion

The diverging patterns detected in this study between the two languages groups and those between the introductions and conclusions indicate that metadiscourse is an important indicator of the writers' perception of selecting the discourse functions that support the rhetorical organization of the research article. Overall, writers' preference to use the textual-oriented metadiscourse to the participant-oriented type suggests the Arab authors' focus is on the structure of the paper more than their concern with the interaction with their readers, whether when writing in their native language or in English. Despite this agreement, the influence of the language remains salient, as English texts in this study employed the metadiscourse expressions more than their Arabic counterparts did, whether through the textual or participant markers.

As for the textual-oriented type, the introductions included metadiscourse expressions more than the conclusions, which might be attributed to the space given to each, as the introductions were longer in terms of the number of words. Despite this divergence, the distribution of the textual functions between the two sections seems to be plausible. For example, most of the functions that appeared in the introductions, such as *defining* and *introducing*, are mostly perceived to be used to fulfil the rhetorical development of the introduction, i.e., that include *establishing a territory*, *establishing a niche*, and *occupying the niche* (as shown in Swales, 1990). Likewise, the focus on using the *reminding* function in the conclusions appears to be compatible with the way academics close their papers. Yet, the scarce use of *introducing* in Arabic introductions shows that the perception of using this function differs between languages. In fact, the low employment of *introducing* in Arabic can be contrasted to the high frequency of *contextualizing*. In other words, writers of Arabic introductions may deliberately restrain from introducing the study as they find it adequate to contextualize their study. Interestingly, most contextualizing cases occurred at the position of occupying the niche, the last segment of the introduction, which supports this interpretation. This finding may explicate the low occurrence of the rhetorical device *occupying the niche* in Arabic introductions found in several studies (e.g., Al-Qahtani, 2006; Alotaibi and Pickering, 2013).

The two groups of scholars used the *arguing* function more in the conclusions, which correlates with the finding in Pérez-Llantada (2010) who found arguing statements occurred mostly in the discussions compared to introductions. These findings altogether suggest that it is common to delay the argument in the research article, which can be contrasted to placing the argument at the beginning of argumentative essays that follow the linear pattern.

Concerning the occurrences of the participant-oriented metadiscourse, they were significantly low in frequency compared to the textual functions. Specifically, English texts distributed them equally between the two sections, yet they were hardly seen in Arabic conclusions. The *clarifying* and *appealing* functions were given more attention. Perhaps the *clarifying* function was overused due to its resemblance to the textual-oriented metadiscourse, i.e., it fulfils the textual organization of the text more than serving interaction with the reader. As for the *appealing* function, it appeared with the same number in introductions and in conclusions but writers of English texts used it more in their conclusions while those of Arabic papers used it more in their introductions. Several cases of *appealing* in Arabic introductions used this function

to appeal to readers to accept the rationale of the study. Perhaps similar to the finding regarding the introducing-contextualizing relationship, writers of Arabic introductions may opt for *appealing* instead of *arguing* in their introductions, while the opposite was adopted in the conclusions. This may explain why several researchers found general avoidance of argumentation in Arabic introductions (Al-Qahtani, 2006; Alotaibi and Pickering, 2013).

In addition to the low frequency of metadiscourse expressions in Arabic texts, the results showed that, unlike in English, the discourse functions in Arabic were employed with very limited forms and strategies. These findings altogether suggest the insignificant role of metadiscourse in Arabic academic texts. The propositional content of Arabic academic texts may deliberately be kept free from the writer's interference in order to be perceived as an academic text. In other words, the tendency to minimize the use of the writer persona is what causes the insignificance of metadiscourse.

Conclusion

The findings of the study have shown some different perceptions of metadiscourse employment that Arabic speakers have when they are writing in English and when they are writing in their native language. The results also yielded that metadiscourse is a helping tool in explaining some rhetorical strategies often found in Arabic research articles. Yet, before drawing any conclusions, the limitations of this study need to be addressed in order to be accounted for in future research. First, the investigation was limited to one discipline. Several researchers (e.g., Ozturk, 2007; Samraj, 2005) have argued that rhetorical organizations of the research article may vary based on the discipline. Hence, future researchers should examine other disciplines to see whether there are any disciplinary variations pertinent to metadiscourse usage. Secondly, the study focused only on two sections; namely, the introduction and the conclusion. Yet, since each part-genre is basically constructed to fulfil certain purposes (Swales, 1990), the investigation should extend to include all sections. Thirdly, the types of the research articles selected for this study lacked uniformity, as some articles were purely theoretical and some were experimental. According to Pho (2008), these types affect the rhetorical development of the research article and hence their influence on metadiscourse usage is expected. Finally, the construction of the sections was hybrid in terms of length and writing styles. Some conclusions, for instance, summarized the results in serially numbered points while some provided arguments written in full paragraphs.

These disparate constructions may have influenced the validity of the comparison drawn in this study; so, it is incumbent upon future researchers to select only equivalent sections. More importantly, the small size of corpus constructed for this study may prevent the study from being truly representative of metadiscourse used in Arabic texts and in English texts written by Arab scholars. Therefore, it is central for future studies to expand the size of the corpus.

Pedagogically speaking, the study can be beneficial for EFL researchers and learners, particularly those whose L1 is Arabic. The fact that some Arabic speakers, while writing in English, tend to employ more metadiscourse expressions and use different strategies, as found in this study, indicates the prominence of metadiscourse in English papers. Therefore, EFL researchers and learners should be cognizant of this rhetorical tool and its applications.

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The Use of Linguistics in Indicating the Influence of Political Power in Shaping Politicians' Behaviour: The Case of Demetrios D. Bousdras[1]

Ourania Katsara[2]

Abstract
This study investigates the language used in Demetrios D. Bousdras's political speeches to Thessalian farmers during the period 1909-1917 by identifying language choices through the applications of appraisal theory and conceptual metaphor theory (Lakoff and Johnson, 1980, 2003; Martin and White, 2005). Critical discourse analysis is also used to interpret and explain the sociopolitical context hidden in the discourse (Fairclough, 1989). Extracts from five political speeches selected from Bousdras's book (1951) were analysed. The language patterns drawn from the speeches' corpus have shown that Bousdras used language to communicate vision to the farmers. Implications of the findings indicate that intervening political structures, such as political regimes, parties and state structures can shape individual behaviour (Sotiropoulos and Bourikos, 2002).

Introduction

There is a plethora of studies relating to the use of metaphor and appraisal theory in relation to analysing politicians' ideologies and aspirations. Chartetis-Black (2011) argued that a pure metaphor is a word or phrase that changes its use from a common or basic sense to another sense contrary to the common use. His analysis of political speeches of four British (Winston Churchill, Enoch Powell, Margaret Thatcher, and Tony Blair) and five American politicians (Martin Luther King, Ronald Reagan, Bill Clinton, George Bush and Barack Obama) showed that metaphor is essential to their persuasiveness. He argued that metaphor is a way of presenting

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shared experience and familiarity and helps politicians to present innovative ideas and political issues. In addition, Helander (2014) investigated alignments in speeches by Sir Winston Churchill and Tony Blair. His analysis showed that both speakers aligned themselves with their audiences, pointing out that the linguistic appraisal devices were used to legitimise the speakers' opinions and intentions.

There is little research on the rhetoric of Greek politics in the 20th century. One of the few studies on analysing Greek politics in 1909 refers to Mazower's (1992) article where he discussed the rise of Venizelos and makes a comparison of him with the generation of politicians which preceded him, and with his leading contemporary Gounaris. The author argued that Venizelos used his rhetorical skills and the press and became the agent of national regeneration. He concluded that the interpretation of his rise highlighted the personality-centred quality of Greek politics of the time. Bousdras was a politician who eventually supported Venizelos's party and became one of his senators (1932-1935). However, the literature on the political rhetoric of Venizelos's senate of the period is meagre. Sotiropoulos and Bourikos (2002) argue that one of the limits and problems of past approaches to Greek political elites is that existing studies in the literature tend to focus on profiles of individuals rather than on structures. Available studies tend to neglect the intervening political structures which shape individual behaviour. Demetrios Bousdras was the one who fought for the big idea of farming by taking over with the aim to vindicate Antypas's and other fighters' endeavours who lost their lives in support of the big idea. On the 22 of May 1909, he founded and chaired the Lowland Farming Association in Karditsa; in 1910, he created his own political agrarian party being elected as an MP for 24 years. Bousdras's fights had positive outcomes: a) the release of enslaved peasants; b) the rehabilitation of landless cultivators; c) the formation of the agrarian bank with the law 4332/1929 under Venizelos's government; and d) the commencement of hydraulic works. It is important to analyse his speeches and show how political regimes of the period shaped his political behaviour by supporting Venizelos's party.

This article will analyse the rhetoric Bousdras used in his speeches. The collection of the corpus is made from Bousdras's book (1951). The specific texts were selected because the purpose of the article is to show how language was used to communicate vision in relation to the influence of political power. Bousdras's efforts to convince Thessalian farmers will show how his political approach changed over time; thus, highlighting the strength of political power. This

article will make a modest contribution to the literature by covering the gap in studies on the influence of political power in the Greek political elite context (Sotiropoulos and Bourikos, 2002). Specifically, the analysis will identify discursive strategies in order to show the strength of political power. These strategies were discovered through the principles of appraisal theory and conceptual metaphor theory (Lakoff and Johnson, 1980, 2003; Martin and White, 2005). The interpretation of the strength of this political power will be explained via the use of critical discourse analysis (Fairclough, 1989, 1992).

Theoretical Background

Discourse is a term with different definitions integrating various meanings which covers a large area from linguistics, through sociology, philosophy and other disciplines (Titscher, Meyer and Vetter, 2000:42). Fairclough (1989:24) states that the term refers to 'the whole process of interaction of which a text is just a part'. Fairclough claims that discourses could be used by speakers to express their ideological content in texts as does the linguistic form of the text. Along similar lines, Dellinger (1995) argues that texts are organised syntactic forms whose 'content-structure' reflects the ideological organisation of a particular area of social life. Schaffer (1996) argues that political discourse is a sub-category of discourse and can be based on two criteria: functional and thematic. According to Schaffer (1996), political discourse results from politics and it is historically and culturally determined. It fulfils different functions in relation to different political activities. It is also thematic because topics are related to various forms of politics, such as political activities, political ideas and political relations.

Successful politicians are the ones who have achieved success by using rhetoric skilfully and aiming at persuading their audience of the validity of their views. Wareing (2004) argues that the proper selection of words might influence strongly the attitudes of an audience because it could affect people's perception of the others and of themselves. Kouzes and Posner (2006:18) suggested that leaders need to know who they are talking to and speak to them in language they will find engaging. They also stated that leaders should talk about a future destination in ways that others find appealing.

In addition, Van Djik (2006:733) argues that political situations do not simply cause politicians to speak in certain ways but, instead, 'there is a need for cognitive collaboration between situations and talk or text, that is context'. Such contexts might help to define how

people experience and interpret the for-them relevant aspects of the political situation. Thus, acting as a Prime Minister, MP, party leader or demonstrator will be perceived by speakers and/or recipients as a relevant context category in political discourse.

Theories such as conceptual metaphor theory and appraisal theory are valuable in making political discourse clear and convincing. Lakoff and Johnson (2003) argued that conceptual metaphor has two domains: the 'source domain', which is the conceptual domain which contains the metaphorical expressions that are tangible or 'mapped from', and the 'target domain', which is the conceptual metaphor that needs to be understood due to its 'abstractness' or 'mapped into'. A 'map' of related thoughts, knowledge, experience and/or behaviour from the source domain are being used to give an idea of what the target domain means and a metaphor is a tool used to connect these 'thoughts'. Therefore, abstract concepts which do not fully make sense can be compared to concepts that are clearer in our experience or thought (Lakoff and Johnson, 1980:115).

Metaphors have an impact on cognitive perception and, since politics are closely connected with ideology, metaphors influence to a great extent people's political conviction (Lesz, 2011:21). Burkholder and Henry (2009:110) argue that metaphor in political discourse functions as a persuasive tool. Penninck (2014) also argues that metaphor can invigorate a message and arouse an emotional response. These emotions can have an influence on how a leader is perceived. Mio, Riggio and Resse (2005:288) indicated that the higher the metaphor use in political speeches, the more they seem to inspire individuals. The researchers argued that the emotions aroused by speeches connect with the topic or rhetor while simultaneously what measures need to be taken are communicated. Their survey on American presidents' charisma indicated that those presidents that used twice as many metaphors in their inaugural speech were perceived as more charismatic.

Daulay (2011) argues that appraisal theory is a linguistic theory about emotions, ethics and aesthetics. It concerns language resources that help to determine how speakers express themselves in relation to their audience. Martin and White (2005) argue that there are five categories of appraisal theory: attitude, appreciation, judgement, engagement, and graduation. This theory makes explicit negotiation elements, classifies them and shows the process of their function in actual situations.

A leader needs to be able to communicate his or her stance on what is good or bad in order to develop mutual purposes and shared values (Bennis, 2003; Collins and Porras, 1991). Communicating the leader's vision means eliciting agreement with those stances from followers (Yukl, 2002). Appraisal theory is useful in explaining how to elicit this desired response, which is how to construct relations of alignment and rapport between the speaker and the actual or potential respondents (Martin and White, 2005:2). Followers are being active participants in committing to the leader's vision by making the vision a reality (Rost, 1993).

The combination of the use of both appraisal theory and conceptual metaphor theory can make a linguistic analysis more clear because, as Avila Soto (2012) argues, despite the strong descriptive power of appraisal theory, this description does not sufficiently explain the use of metaphorical constructions employed in the expression of evaluative meanings. Avila Soto (2012) argued that it is necessary to establish a preliminary empirically based descriptive link between conceptual metaphor theory and appraisal theory, since evaluative meanings expressed in the configuration of political discourse include both literal meaning forms and a substantial number of metaphorical expressions.

Methodology

These principles of appraisal theory and conceptual metaphor theory were used in order to analyse extracts from political speeches and show Bousdras's linguistic charisma in trying to encourage farmers to fight for their land. The interpretation of the linguistic features identified in the extracts is grounded in Fairclough's assumptions in Critical Discourse Analysis (CDA), which is a research paradigm that linguistically addresses the prevailing social problems by opposing dominant ideological positions (Wodak and Meyer, 2005). Fairclough's notions of CDA transform into an analytical method used in this article including:

> the linguistic description of the language text, interpretation of the relationship between the discursive processes and the text, and explanation of the relationship between the discursive processes and the social processes (1989:97)

Sample

Bousdras's book contains a variety of speeches delivered to Thessalian farmers, members of the Lowland association, members of parliament, conference attendees, etc. This article analyses only the speeches delivered to Thessalian farmers.

Data Collection

The selected extracts comprise a large portion of the entire original speeches offered in Bousdras's book. The specific sentences from the speeches were selected because of their rich linguistic nature. Every effort has been made by the author to accurately translate the extracts into English. Bousdras used Katharevousa and not modern Greek, and various names mentioned in his speeches when translated into English remained in the accusative for the sake of translation accuracy.

Data Analysis and Results

The extracts from the speeches to be analysed are put in numerical order starting from Text 1, while the linguistic analysis follows. The linguistic elements which are analysed are in bold. Sometimes, discussion of the same linguistic features present in various texts is offered. The repetition of the analysis of these features was considered important in order to clarify Bousdras's political approach and elucidate political power-influence.

Speech 1 (16th September 1909, Karditsa)

Texts 1-5 are extracts selected from the speech delivered in the main square of Karditsa where the first rally for the agrarian matter took place.

Text 1

> **...**in the House of parliament, a while ago, among others, the **prominent** politician Alexandros Zaimis said that the state must reduce its military expenditures because it absorbs half of the budget. **But the opinion is false**. Firstly, nations do not thrive by economising but only by large and inexhaustible resources... (Bousdras, 1951:2-4)

Bousdras is assessing human behaviour in relation to the sub-category of judgement 'social esteem' which has to do with 'normality' to show how unusual someone is (Martin and White, 2005:52): 'the **prominent** politician, Alexandros Zaimis'. In addition, he uses the engagement category, since he is using linguistic resources by which he 'adopts stance towards the value positions being referenced by the text and with respect to those they address' (Martin and White, 2005:92). Specifically, Bousdras is using 'dialogic contraction' and the subcategory of 'disclamation' which refers to resources concerning ways in 'which the textual voice positions itself at odds with, or rejecting some contrary positions' (Martin and White, 2005:97). This resource is realised through lexico-grammatical items such as concessions: '**But,** this opinion is wrong'. Bousdras invokes critical assessment of the situation. This assessment is further developed in the following extract where Bousdras is trying to strengthen the value of the army.

Text 2

> ...as it is known the strength is given only by the army and the fleet, … Greek people will gladly pay the high costs for the military forces, first, because the queen town is not conquered yet, the joy and hope of the Greeks, and, **therefore, the king who is turned into marble has not come back to life** and, secondly, because the army secures the existence of the states and creates their grandeur… (Bousdras, 1951:3)

In this extract, Bousdras is using the well-known Greek prophecy about the fall of Constantinople where the legend refers to an angel who rescues Constantine XI the emperor as the Ottomans enter the city. The angel turns Constantine into marble and places him under the earth in a cave near the Golden Gate. The legend dictates that the marble king waits to be brought to life and reconquer the city for the Christians (Nicolle, Haldon and Turnbull, 2007:191). This legend is used by Bousdras in order to show his endeavour to pave the way to the introduction of an argument in favour of establishing a movement in order to take action.

.... **We need to draw our attention elsewhere and find the road to progress.** Land is the only source from which everything derives, the source to which everything is returned and the source whose existence is eternal... Farmers and merchants were the ones who created Athens' glory. However, the fame belongs first and foremost to agriculture… The tsifliks, therefore, need to be eradicated via compulsory expropriation because of public necessity. **For this reason, there is a need to create an agrarian movement like the army movement.** (Bousdras, 1951:4)

Bousdras is using a conceptual metaphor of a journey to call on the Thessalian farmers to participate in the journey of fighting to eradicate the tsifliks. In a journey, there will be a traveler who marches towards a destination through certain routes on which there will be obstacles (Lakoff and Turner, 1989). Along similar lines, a country and its people will encounter difficulties on their way to be successful.

In this extract, we can see that the Thessalian farmers are travelers. In 1909, farmers had experienced hardships and were deprived of land. This was a major problem of that time and Bousdras is encouraging farmers not to give up by inviting them to join the journey to freedom by making a collective effort to get through. This example further indicates the function of simplification in political discourses. Thompson (1996:186) argued that abstracted and complicated politics could be made easy to understand by making the topic familiar to people. He argues that the journey is a familiar topic for people and the above extract show that farmers could march towards the journey of freedom, which will help them 'find the road to progress' by becoming members of the 'agrarian movement'.

Text 4

... Agriculture by which people are supplied with the appropriate commodities gives birth to industry, as known. **As a mother and a daughter, (it) nourishes trade. Those sectors produce riches which form the string of the nervous system of the countries**… (Bousdras, 1951:4)

In this extract, Bousdras is making use of the human metaphor. Lakoff and Johnson (1980) argue that personification is a special type of metaphor where the object is specified as being a person in order to describe a variety of experiences with non-human entities in relation to human motivation, characteristics, and activities. Thus, in political speeches, the nation as a person is used in order to describe some phenomena.

Specifically, Bousdras is using a human metaphor to show that nation is dependent on agriculture and presents agriculture as human. He is then using aspects of the person mapped onto agriculture, which helps people understand specific concepts of agriculture. In particular, growth is mapped onto development and it is used to make clear to the farmers that a state is developing and growing, thanks to agriculture. In the same way, a human who grows up becomes mature, being able to tell others how to be mature, referring to the idea of kinship. This means that a nation which becomes fully developed can tell other undeveloped countries how to develop in an appropriate way. In Bousdras's example, agriculture helps a country to grow and, based on agriculture, industry and trade flourish.

In addition, this example shows how strength is mapped onto economic condition and power. This implies that the health of a country is its economic condition. The sentence 'Those sectors produce riches which form the string of the nervous system of the countries' shows that industry and trade are very important for the economy of a country. Bousdras is using this metaphor because he wants to highlight the importance of agriculture on a country's economy. This also enhances the farmers' pride about their profession, making them eager to participate in actions that protect it.

Text 5

(With the existence) of tsifliks, no improvement is possible, since farmers, due to unbearable pressure, deadly hate land owners and this is because, according to the **dear departed** Professor of Political Economy, **Ioannin Soutso**, cultivating big tracts of land in Greece will be a utopia in the long term. In addition, according to the **renowned Adam Smith**, the great owner rarely makes his name as a great source of improvement. The tsifliks therefore, need to be eradicated via compulsory expropriation because of

public necessity. **For this reason, there is a need to create an agrarian movement like the army movement. The movement is everything...** (Bousdras, 1951:4)

Speech 2 (20th January 1910, Karditsa)

Texts 6-7 are extracts selected from the speech delivered in the main square of Karditsa, where a huge rally took place. Thousands of farmers and pupils of the primary school Pitsari Artesianou at the head of the priest of the village, Anastasio Katsouda, were gathered.

Text 6

> … A house and land constitutes fatherland. It is, therefore, a national need to acquire a country. **Money is available but even if there isn't, it can be found because it has a scent for personal interest and it jumps at the one who asks for it**. The government will listen to this national invitation. **But you need to be united because union brings strength**... if there are any differences among ourselves, we need to put them aside… **and we need to be willing to work with perseverance...** (Bousdras,1951:14).

In this extract, Bousdras is trying to exemplify the difficulties that need to be encountered during a journey because of impediments to movement. The journey metaphor explains that there will be 'barriers to overcome' and 'burdens to bear' (Lakoff and Johnson, 1999:188). Individuals have to be strong enough and make efforts to overcome these barriers in order to arrive at their destination, which refers to 'fatherland'. The personification metaphor is also used here, since Bousdras is using this conceptual metaphor in order to place emphasis on the need to be patient and united in order to reach the destination and to underline the value of effort to achieve the goal. The source domain (barriers) is mapped onto the target domain (difficulties).

Text 7

> ....we need to maintain law because, otherwise, it will be difficult to receive capital and **we don't want a second front with the criminal law**. Do you agree with all these? ... **Do not forget that you are Rigas Fereos's descendants. He was the one who swore to**

liberate our country and ... **sang the everlasting**: '**it's better to live for 1 hour as a free man than live for 40 years as a slave in prison**' ... we owe to continue his work and swear by his name not to give up our fight till the end. **We haven't got a country. We want a country. Long live our country!** (Bousdras, 1951:14-15)

In this extract, Bousdras is using social sanction resources that are policed by the rules and regulations mainly coming from the state where members are expected to comply otherwise penalties will be given to those who do not comply (Martin and White, 2005). In this way, he is trying to persuade his audience that, in order to receive capital needed for compulsory expropriation, citizens need to be lawful: 'We don't want a second front with the criminal law', shows that he used social sanction resources in relation to 'propriety' and how ethical someone is (Martin and White, 2005:52).

Bousdras is expressing positive judgement and 'social esteem' relative to the 'capacity' of his fellow descendant by the sentence: 'Do not forget that you are Rigas Fereos's descendants. He was the one who swore to liberate our country'. This creates a context with his audience upon which they agree (all of them are descendants of Rigas Fereos). Bousdras aligns himself with the audience through his positive attitude towards Greek people's braveness, known in history. He is using, thus, 'endorse' by repeating what was 'demonstrated and proven' in Greek history. This judgement of 'social esteem' is foregrounded through the mode of reminding the song invented by Fereos who sang the everlasting: 'it's better to live for 1 hour as a free man than live for 40 years as a slave in prison...'.

Social goals set by government are often the destinations of a journey. The source domain (destinations) is mapped onto the target domain (social goals). Among the final destinations, freedom and liberty are included (Lakoff and Turner, 1989). This is shown in the above text. Bousdras is using this conceptual metaphor to influence Thessalian farmers that their goals are worthwhile, instilling confidence in them. In addition, Bousdras is using the 'attitude' category where he is evaluating people's character. In particular, he is using the sub-category of 'affect' which is 'concerned with emotions with positive and negative emotional responses and dispositions' (White, 2004b:4). According to White (*ibid.*), these emotions can be expressed directly (explicit or inscribed) and, in this extract, Bousdras is using affectual values as being construed as qualities (Martin and White, 2005): 'the immortal'. Moreover, Bousdras is using his

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positive feeling to use 'affect' as targeting to some specific stimulus (i.e., to work like Fereos).
Here, Bousdras is using affectual values which refer to the relational process dimension (Martin and White, 2005:47).

Speech 3 (24th November 1910, Karditsa)

Texts 8-11 are extracts selected from the speech delivered in Karditsa, where a rally took place.

Text 8

>...**our land is sick**. It suffers from a social and economic disease. A few days ago, the political doctor, the Prime Minister Venizelos paid a visit. He examined the patient but his diagnosis was wrong because he considered that the reason for the existence of the quarrels was the lack of settlement of the relationships between tenant farmers and land owners announcing that the settlement is the medicine. **But the lack of settlement is not the reason but the external occasion**... God help us if this wrongful diagnosis prevails because the disease will last longer and the microbe will corrode the agricultural organism. The real cause of the quarrels is the tsifliks' estate development. This is violence and plundering. And this hatred against the 'rapists' which is passed on from generation to generation **displays current land owners as living monuments of usurpers.** (Bousdras, 1951:77-78)

This extract shows how Bousdras's argument is made clear with the combination of the principles of both appraisal theory and conceptual metaphor theory. Bousdras is using the personification metaphor (Lakoff and Johnson, 1980) when he is referring to the land as being sick. He is then referring to the Prime Minister Venizelos as being its political doctor. These interesting metaphors are further elaborated when Bousdras is using the descriptive appraisal theory categories to offer his evaluation and indicate that tenant farming is not the right medicine.

Specifically, Bousdras is using 'dialogic contraction' and the subcategory of 'disclamation' (Martin and White, 2005) when he says 'But the lack of settlement is not the reason but the external occasion'. He is negatively evaluating the impact of tenant farming on

Thessalian farmers' lives. 'Judgment' is related to 'propriety', since land owners are judged as people who stick to nothing.

Text 9

> **Politics in the broad sense is business**, a speculative act and the mind of **wise** people is changeable. In this prefecture, there are two parties: the agrarian and the Venizelian. The Agrarian party supports the expropriation and the Venizelian supports the settlement of the relationship between tenant farmers and land owners. **You should vote for the Agrarian party because it represents the general and, simultaneously, your individual interests**. In this case, the expropriation unites and coincides the general with the individual ideal. If expropriation is attained, all slave farmers and each of them separately **will become free and owners of land.** Just as I say, everyone today is not fighting for others but for himself. Secondly, you will clearly show that the resolution of the agrarian matter is an urgent need. **Feudal tyranny will be gone and the victory of the rural idea will be great…** In the past, you used to vote for Trikoupin or Deligiannin? What was the gain of it? **If you now vote for Venizelos, what will you gain?**... (Bousdras, 1951:79)

In this extract, Bousdras is using the war metaphor. Xu (2010) argues that the conceptual metaphor 'politics is war' explains why a presidential election campaign is a war. It is argued that, during this campaign, all candidates will try by all means to fight for a presidential position. In addition, war metaphors are used by politicians to underline that, in order to achieve social goals that are worthwhile, personal sacrifice and physical struggle are necessary. Furthermore, politicians will try to imply that short-term hardships are necessary in order to obtain long-term goals. This implies that the politicians use war metaphors to evaluate social goals. Of course, there will be enemies in war and social evils could be an inhibiting factor in progress.

The sentence: 'politics in the broad sense is business... and the mind of wise people is changeable' shows that Bousdras is using the metaphor 'politics is business', which is related to 'war is politics' pursued by other means (Lakoff, 1993). These metaphors imply that 'the political gains' of conflict (election campaign) must be balanced 'against costs'. Bousdras's

judgement implies that voting for the agrarian party and not for Venizelos's party will turn out to be positive for them because 'gains are believed to outweigh costs'. Bousdras is trying to persuade farmers that, even though Venizelos's party supports reaching a settlement regarding the relationship between tenant farmers and land owners, which means immediate relief of hardship, the agrarian party supports that such a settlement will not solve the problem but 'the disease will last longer'. Therefore, Bousdras is trying to persuade them that voting for the agrarian party will be good for farmers' lives in the long run.

In addition, in the above extract Bousdras is using the conceptual metaphor 'social evils are war' (Lakoff, 1991). The source domain (enemies) is mapped onto the target domain (social evils). The example shows that the social evil is 'feudal tyranny', which can make a society become unsteady, affecting people's lives and limiting people's joy of peace and freedom. With this metaphor, Bousdras is pointing out the specific enemy, making, thus, more clear what needs to be done by the farmers. He is showing that there is a way to fight this social enemy and evil.

With this metaphor, it is shown that Bousdras's aim is to employ the function of persuasion. Mio and Katz (1996:127) point out that metaphor in politics is used to convince or persuade the public for action or to characterize political opponents. Moreover, Bousdras is negatively evaluating the land owners' actions. This is evident in the use of the words 'feudal tyranny', making them, thus, reprehensible people. Therefore, Bousdras is using 'social sanction' to emphasise the immorality of the situation and persuade farmers to take action and vote for a party that will liberate them, since, as shown, past parties have not done anything to solve the problem.

Text 10

> ... **Shame on you if you lose your courage**. You with your fights, from the lowest dregs of the Thessalian population, rise in a conspicuous position, in the highest top. You are virtuous. The whole of Greece is honourably talking about you. **Your intelligence and honour is judged today**… (Bousdras, 1951:79)

In this extract, Bousdras is using 'appreciation', which refers to 'evaluations which are concerned with positive and negative assessment of objects, artefacts, processes and states of

affairs rather than human behaviour' (Martin and White, 2005:56). Bousdras is using the subcategory of 'reaction', where the focus is on the impact or quality of products and processes of the listener. Martin and White (2005:57) state that 'reaction is related to affection (emotive)… and oriented to interpersonal significance'. Bousdras is trying to encourage the farmers to vote for the agrarian party and prove, by this action, that they are intelligent and honourable.

Text 11

> … **As you well know, freedom is not given to people but it is conquered by struggles and maintained by bravery. Blood is the price of freedom**. **Even Paradise opens its gates after much sadness caused on earth**. The grief is the price and that's why we buy our place in this as in the cemetery. But don't you think that the sword is the key of paradise? Without any sweat there is no virtue. (Bousdras, 1951:79)

In this extract, Bousdras is employing the metaphor 'difficulties are impediments to movement' (Lakoff and Johnson, 1999:188) to indicate the difficulties of the journey: 'blood is the price of freedom' and to explain to the farmers the process of reaching their destination; that is, their freedom. The source domain (destinations) is mapped onto the target domain (social goals). The extract illustrates that Bousdras is using an effective way to encourage farmers to work hard to achieve their goal by highlighting the fact that people will leave arduousness behind them when they know that a very bright future is waiting for them.

Speech 4 (16ᵗʰ October 1911)
Text 12 is an extract selected from the speech delivered to the liberated farmers encouraging them to lead a new life.

Text 12

> Every dog has his day and now the weeds and wild herbs are eradicated… you need to bridle your passions… **[S]econd, you need to implant into your mind the idea of love** because the taste of love is sweet, prolonging life, while hatred has a bitter taste,

corrupting life... [T]hird, learn the farming trade because the ones who master this trade will become rich **and wealth is the father of happiness**… [F]ourth, implant into your mind the willpower to work because willpower is stronger than fate. Labour is life... **Labour is the biggest virtue. It is God's blessing, leading to happiness. No day without work and like Appelis, the known painter used to say 'no day without a stroke of the brush'**. Fifth, **feed land because land is the mother of life**... for its food, it returns multiple interests, it produces products in abundance. Sixth, remember that time is money and you shouldn't waste your time. **'Be chary of your time'**, our ancestors used to say. Seventh, save up money… you always need to remember that you are mortal and simultaneously you need to take care of having goods in order to become immortal... [E]ighth, pay your instalments to the state because, in this way, you will assist your colleagues... think about your feelings if others walked out on you. Your deeds should be based on what you would like others to do for you: **'don't do to others what we don't want them to do to us'**. Above all, you should be grateful because gratitude brings profit... (Bousdras, 1951:227-228)

In the following sentences:

- 'second, you need to implant into your mind the idea of love',
- 'third, learn the farming trade because the ones who master this trade will become rich and wealth is the father of happiness',
- 'Labour is the biggest virtue', and
- 'It is God's blessing, leading to happiness',

Bousdras employs the 'happiness' variable, which covers emotions concerned with 'affairs of the heart'; that is, sadness, anger, happiness and love (Martin and White, 2005:49). Moreover, in the sentence 'No day without work and like Appelis, the known painter used to say, "no day without a stroke of the brush"', Bousdras is using 'endorse' (Martin and White, 2005) to persuade farmers to work hard like the painter, Appelis.

In addition, Bousdras is using the metaphor 'time is money' (Lakoff and Johnson, 2003:7-8). This conceptual metaphor is reflected through the target domain 'time' and the source

domain 'money'. Lakoff and Johnson (2003) argue that the metaphor 'time is money' leads to the sub-categorisation of concepts such as 'time is a limited resource' and 'time is a valuable commodity' (e.g., we receive hourly wages). In the sentence 'be chary of your time', Bousdras is using the sub-category 'time is a valuable commodity' because he tries to persuade the farmers to work hard and not lose time because, as he explained earlier in his speech, 'land is the mother of life'. Bousdras is also using 'endorse' when he mentions that this proverb, 'be chary of your time', was used by ancient Greeks. The sentence 'don't do to others what we don't want them to do to us' shows that Bousdras is using 'judgement of social sanction' by referring to the Old Testament.

Speech 5 (during the first ten days of July 1917, as cited by Bousdras, 1951:271)
Text 13 is an extract from the speech delivered in the crowded squares of Karditsa and Trikala.

Text 13

> On behalf of Eleftherios Venizelos, I bring you his greetings. But I also bring you freedom... **The enslaved earth breathes the fresh air of freedom**. **It was foreign and now it became yours**. The earth is the safest means of preservation of life and its life force intertwines with the instinct of self-preservation. Your endeavours for the acquisition of land and the longing for freedom recovery have not proved vain. **Now, you became full citizens and, I hope, the future will be overloaded by roses**. **After Calvary, the resurrection came.** (Bousdras, 1951:271-272)

The following sentences, 'The enslaved earth breathes the fresh air of freedom' and 'it was foreign and now it became yours', show that Bousdras is evaluating the farmers' current state. He is using 'value', a sub-category of appreciation where he wants to emphasize how real freedom is now. This is also enforced by the use of the proverb 'after Calvary, the resurrection came'. The sentence 'Now, you became full citizens and, I hope, the future will be overloaded by roses' show that Bousdras is using 'affect' and the dimension 'irrealis' where his feelings involve (intention, rather than reaction) with respect to a stimulus that is not yet actualised

(Martin and White, 2005:48). Martin and White (2005) argue that 'irrealis' affect involves fear or desire. In this sentence, the verb 'hope' indicates that the 'irrealis' resource involves desire.

Discussion of the Results and Conclusion

The analysis of Bousdras's speeches have shown that he is using language as an instrument to interact in a variety of situations being recognized as political environment (Chilton, 1998). Chilton (1998:688) argued that language is 'the universal capacity of humans in all societies to communicate', while 'politics is the art of governance'. Bousdras, in his speeches, used linguistic devices in order to persuade farmers to take specified political actions.

It was found that there is a role of power in social relations (Wodak, 2001). Bousdras's language choices can be interpreted by the use of CDA, since, through CDA, the same discourse can be used to construct unequal power relations (Dijk, 1996) but it can also be used to challenge power, to subvert it to alter the distribution of power in the short and the long term (Wodak, 2001:11).

> **Politics in the broad sense is business**… **You should vote for the Agrarian party because it represents the general and, simultaneously, your individual interests**… **If you now vote for Venizelos, what will you gain?...** (Bousdras, 1951:79)

> On behalf of Elefterios Venizelos, I bring you his greetings. But I also bring you freedom. **The enslaved earth breathes the fresh air of freedom** (Bousdras, 1951:271).

The analysis indicated that Bousdras communicated vision to the Thessalian farmers. It is shown that Bousdras is using specific features of leadership that must be present in an effective vision (Martin, 2011). Specifically, he is issuing a challenge, suggesting that leaders should incorporate a statement in their visions presenting a challenge or a worthwhile long-range target towards which people can direct their energies (Nanus, 1990:17). Bousdras was encouraging farmers to fight for their land, highlighting the concept of vision as a road map to a future destination (Toffler, Toffler and Gibson, 1988): '**We need to draw our attention elsewhere and find the road to progress**' (Bousdras, 1951: 4).

Bousdras is also indicating the notion of urgency in order to communicate vision as a road map. This urgency was discussed by Kotter (1995) in his article in the mid-1990s on why many transformation efforts fail: 'Secondly, you will clearly show that **the resolution of the agrarian matter is an urgent need**' (Bousdras, 1951:79).

Another feature of vision that Bousdras is using is the value of depicting shared values. Bousdras, in his speeches, was trying to guide farmers by communicating a vision that focuses on motivating principles and values (Collins and Porras, 1991) using the tenet embraced by Kolzow (1999) on the role of vision in the context of strategic planning. Specifically, Kolzow (1999) argued that vision should contain a future that includes shared values that are valuable and important for individuals (Kolzow, 1999). Bousdras tried to appeal to the farmers' emotions by reflecting their hopes and dreams and helping them to see how they can contribute (Blanchard and Stoner, 2004:28). In his speeches, he showed that he knew their desires indicating that he was an effective leader in the sense that he depicted shared hopes by speaking in terms of 'we' and not 'I' (Kouzes and Posner, 2006):

But you need to be united because union brings strength… if there are any differences among ourselves, **we need** to put them aside… **and we need** to be willing to work with perseverance… **we need** to maintain law because, otherwise, it will be difficult to receive capital and **we don't** want a second front with the criminal law. (Bousdras, 1951:14)

In addition, Bousdras tried to promote bonding, a critical element in vision (Martin, 2011), in his effort to highlight the importance of these shared hopes:

… But if you do not fulfil your duties and you become indifferent towards your interests, we clearly state that **we will remain and will continue to fight for the liberation movement because freedom is the greatest wealth of people; it is air, the oxygen of life**. And, with God's blessing, **we will go through it**. (Bousdras, 1951:80)

References to the past, present and future in vision are also recommended in the leadership literature. Peters (1987:404) suggested that an effective vision prepares for the future but, also, honors the past, noting enduring themes which can make people feel more confident to

deal with a new brave world. Bousdras is mentioning Rigas Fereos in his speeches to draw on this past glorious moment in Greek history and empower farmers' efforts:

Do not forget that you are Rigas Fereos's descendants. He was the one who swore to liberate our country… and **sang the everlasting**: '**it's better to live for 1 hour as a free man than live for 40 years as a slave in prison**'... **we owe to continue his work** and swear by his name not to give up our fight till the end. (Bousdras, 1951:14-15)

Another feature of vision discussed in the literature refers to the use of imagery. Collins and Porras (1991:46-47) suggested that the notion of vision as image requires 'a vibrant, engaging, and specific description of what it will be like when the mission is achieved'. The following extract shows how Bousdras is trying to describe specifically how serfdom will be struck. Reference to Alexander's sword and the Gordian knot helps farmers envision the historical moment related to the legend of Phrygian Gordium associated with Alexander the Great (Lane, 1973:149-151). It is used as a metaphor for an intractable problem and 'to cut the Gordian knot' means to solve a problem by bold action and by violating conventional rules, defining the problem and its accepted range of remedies (Hamilton, 2014): '…expropriation is the medicine. It will strike a lethal blow against serfdom, it will cut the bonds, **as the sword of Alexander will cut the Gordian knot**' *(*Bousdras, 1951:78).

The means to implement the vision are also discussed in the leadership literature. Allen (2006:5) noted that, when leaders execute a vision, they first frame the vision by defining what done means and then they make the vision operational by deciding what doing looks like. Bousdras, in this extract, is trying to convince the farmers that the vision of expropriation which will fight serfdom will be operational only if farmers decide to negotiate with Venizelos and support him if he adopts liberation: 'Only Venizelos has the medicine and we will buy it if he sells it, **I mean we will support him if he adopts the liberation**. **For this today we have to think about the price**' (Bousdras, 1951:78).

This analysis of Bousdras's speeches could help in identifying forms of linguistic manipulation used in the 20th century in Greece. According to Gazi (2009), Georgios N. Hatzidakis (1848-1941) was the first Professor of Linguistics at the University of Athens. According to his view, 'the task of linguistics is to explore and present the process of the

evolution of each language with the help of all the historical evidence that is accessible' (Hatzidakis, 1898:8). Gazi (2009) argued that, at the end of the nineteenth century, there is a shift within Hatzidakis's scholarship. This shift refers to trials to control language according to the priorities of political agendas formed by the bourgeoisie.

The linguistic analysis of Bousdras's speeches indicates that the specific political context in Thessaly in the 20th century had an impact on the use of leadership from a communications standpoint, noting that 'leadership is human (symbolic) communication which modifies the attitudes and behaviours of others in order to meet group goals and needs' (Hackman and Johnson, 2004:428). Bousdras's goal was to encourage farmers to fight for their land, reflecting Hackman's and Johnson's (2004:431) three clusters of communication skills, that are: linking (which includes monitoring the environment and creating a trusting climate by fostering team building), envisioning (which relates to creating new visions), and regulating (which means influencing others by developing power). Bousdras tried to promote his agrarian party in order to solve the farmers' problem but, eventually, he used verbal communication tools in order to manage change and gain compliance and negotiation by supporting Venizelos's politics. The main implication is that the linguistic analysis illuminated ways in which the dominant forces in a society construct versions of reality that favour their interests (Fairclough, 1992).

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The Development of Morphological Generators and Related Issues:
The Case of Modern Greek

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Abstract
The morphological generator constitutes the core of a Natural Language Generation software system, which is the module that creates the words in applications of Computational Linguistics. The designing of the generator depends on the morphotactics of the specific language being processed and the relevant morphophonological phenomena that are encountered. This dependency is exemplified using Modern Greek as the processed language, being one of concatenative morphology with rich inflectional, derivational and compounding systems. The same methodology can be readily applicable to linguistic engineering products for other languages of concatenative, agglutinative or polysynthetic morphology. Such a feature can be useful especially in multilingual software applications, like a machine translation system, by making better use of computing resources.

Introduction

The computing process of creating natural language texts for specific communication objectives is called Natural Language Generation (NLG), being a part of computational linguistics (McDonald, 1992). An NLG system converts a digital representation of natural language into natural language text. This process is the opposite of Natural Language Analysis (NLA), which is the display of texts in a representation suitable for processing by a computer (Papathanasopoulou, 2015:27). Simple examples of NLG systems are those that generate form letters. Usually, they do not include grammar rules but they can create a letter

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to a customer. The most sophisticated systems operate dynamically, creating text in order to respond to a communicational goal. As in other areas of natural language processing, this can be done either using models of language (grammars) or using statistical models derived from the analysis of human written texts. Examples of such applications are the following:

- Editorial assistance systems that mimic a scenario writing with cut-and-paste, where a writer formulates the text from various search results, thus making the process more effective and efficient (see Galitsky, 2013; Galitsky et al., 2012; Sauper and Barzilay, 2009).

- Systems that produce text summary of data from databases or from data sets (data-to-text). These systems, usually performing data analysis and production of text, are the most successful applications from a commercial viewpoint. The relevant topics include text forecast from weather data (see Sripada et al., 2014; Belz, 2008; Reiter et al., 2005; Goldberg et al., 1994), summaries of financial and business data, such as the analysis of large amounts of data (e.g., retail sales: Anand and Kahn, 1992) and summaries of medical data from electronic health records (see Portet et al., 2009; Harris, 2008; Law et al., 2005).

- Automatic speech synthesis or synthesis from text. This is the computerized conversion of digital text to voice (text-to-speech). Voice is a key supporting tool for substitution of written or visual information for special groups of people such as the visually impaired (blind, partially sighted), elderly, people with dyslexia, people who find it difficult to handle printed media, people who do not know enough of a language (e.g., immigrants) as well as in any other case where the acoustic information is more functional than the visual one.

- Machine translation, namely the automated translation of text from one language to another via a computer. It is one of the first and most difficult applications of computational linguistics which derives knowledge from many of its sub-sectors. Different techniques are used for achieving the translation, presenting an intense academic and commercial field of interest (Papathanasopoulou, 2015:30).

The morphological generator is the computational unit that handles the formation of words at the core of NLG systems, especially dealing with the morphotactics and the

morphophonological phenomena of the processed language. The morphological generator is of particular importance to languages of rich morphology, such as Modern Greek.

Morphological Generators for Modern Greek

The autonomous existence of a morphological generator is meaningful only in the context of software for experimental usage. Thus, the ability to compose words exists in natural language processing applications that perform NLG and NLA. For Modern Greek, some systems with such a generating ability are the following:

- Processor ATHINA (Galiotou, 1991; Ralli and Galiotou, 1991, 1987), implemented in Turbo-Prolog programming language, which consists of a machine readable dictionary (MRD) and rules, functioning as a finite-state automaton (FSA). Tested on 10,000 words, it provides their grammatical recognition. ATHINA is based on the theoretical model of Generative Lexical Morphology, demonstrating its applicability to Modern Greek.

- Two-level morphology processors (Markopoulos, 1998; Sgarbas et al., 1995), consisting of a ready software engine. The programmer expresses the rules of morphophonological alterations in the accompanying declarative language of the system and the engine executes the generation accordingly. The morphemes are provided by the user of the system.

- The Greek system of NLG based on the corresponding IDAS software model for English (Karamanis, 2000), which is restricted to nominal morphology for a Classification-Based NLG system. This system is essentially a knowledge representation one, based on an Ontology Base, where knowledge is organised in classes and roles.

- The IMPS (Papakitsos, 2000), including a distinct morphological generator unit (Alexi, 1997), implemented in Turbo-Pascal programming language, which consists of morpheme-based lexicon and it is based algorithmically on the models of functional decomposition (Papakitsos, 2014:36-37; Sproat, 1992; Allen et al., 1987) and lazy word-parsing (Papakitsos, 2014:41-42; Dura, 1994). It has been tested on texts of 1,880,000 words (the Greek part of ECI-corpus) and the analysis accuracy exceeded 98% in a representative sample of words. The tagger of IMPS has been also implemented in Visual C programming language (Daflou, 2013).

- The embodied sub-system of morphological generation of the Greek Wordnet (see Grigoriadou et al., 2004, 2001; Kornilakis et al., 2004, 2003; Galiotou et al., 2001), which is based on IMPS and is restricted to inflectional morphology.

The above software systems follow a variety of programming methodologies, including imperative or declarative programming (Pressman, 1987) and database or knowledge-based orientation. The present study was conducted as a part of the IMPS project, with the purpose of defining preferable algorithms that could deal with the morphophonological phenomena of Modern Greek in a most efficient manner computationally; namely, with less complexity. In order to easily achieve computationally measurable results and compatibility to the rest of IMPS, the methodology of designing the software architecture of the presented NLG system followed the imperative programming supported by a database orientation. This kind of orientation included a database for the morphemes of Modern Greek, arranged in the five encountered classes of them; namely, free-ones, prefixes, roots, suffixes, and postfixes.

The Software Architecture

The software architecture of a morphological generator depends on the morphological typology and the morphotactics of the underlying language. Modern Greek is a language of concatenative morphology, where the inflected words may generally have the following structure:

$$[\text{stem}]_m - [\text{postfix}] : (m = 1 \text{ to } 4),$$

while a stem has the structure:

$$[\text{prefix}]_n - [\text{root}] - [\text{suffix}]_n : (n = 0 \text{ to } 4).$$

Thus, the processing requires an architecture where the linguistic processes of inflection ([postfix]), derivation ([prefix]$_n$ & [suffix]$_n$) and compounding ([stem]$_m$) will be treated by a different software unit because of the different phenomena that occur during each activity. The relevant software architecture of the presented herein system was initially based on the theoretical framework of Generative Lexical Morphology, as being adapted to Modern Greek by Ralli (1994, 1992, 1988, 1985, 1983), for providing adequate descriptions of the

encountered linguistic phenomena. In the absence of a syntactic software module, the implementation followed the Strong Lexicalist Hypothesis (Lapointe, 1981, 1979).

Inflection ('postfixation') is computationally treated in a trivial manner. The computational focus of attention is given to data structures. Namely, lists of roots/stems and lists of postfixes are realized (Gregoriadou et al., 2002:5; Papakitsos et al., 2002:482-483). Each list of postfixes corresponds to a particular inflectional paradigm of nouns, adjectives or verbs. Each root/stem (of nouns, adjectives or verbs) in a relevant list is accompanied by a pointer to the related inflectional paradigm. So, by choosing a root/stem along with the help of the attached pointer, all the inflectional types of a lexeme are formed. The procedure of *postfixation* is the last one to be executed, according to the theory of Generative Lexical Morphology as it is adapted to Modern Greek (e.g., see Ralli, 2011:22).

In the case of derivation, the procedures of affixation are examined here, while other cases of derivation, such as the ablaut in Modern Greek (see Ralli, 2011:140-146), are better treated through data structures than algorithmically. Affixation is divided into two distinct cases: suffixation and prefixation. The first case can be computationally treated either through data structures or algorithmically via properties. In the first way, the root/stem is connected through pointers, once again, with a list of allowable suffixes (Papakitsos et al., 2002:480). In the second way, suffixation is implemented algorithmically through managing the categorial property. The algorithmic way does not prevent the overproduction of ungrammatical types (Papakitsos et al., 2002:481). For example, the root of the lexeme *ποτ-ό* (= drink _{NOUN}) will produce seven derivative verbs with the attachment of the equivalent verbal suffixes of Modern Greek (Papakitsos, 2000:89):

ποτ-ίζ-ω, *ποτ-άζ-ω, *ποτ-ιάζ-ω, *ποτ-εύ-ω, *ποτ-ών-ω, *ποτ-αίν-ω, *ποτ-άρ-ω,

having only the first-one as a lemmatized word (= to water). This is an issue of ongoing research: which of the two ways is the optimum one, in terms of the computational resources used. Respectively, prefixation can be managed through data structures, as well, for the same reasons as in suffixation.

Compounding can be partially treated in a manner similar to inflection, through either data structures or algorithmically. Word constructs or compounds having a noun or a verb as their first stem can be treated mainly through pointers that link the two (or more) stems together. Compounds with their first stem being an adjective or an adverb can be treated through the categorial property of the stem (noun, adjective, verb or adverb). In the second

case, the proof-check is implemented algorithmically by the evaluation of the compatibility between the categories of stems. Generally, the algorithmic way may cope with neologisms but it causes overproduction of ungrammatical words.

The crucial subunit of the morphological generator and the necessary one in most of the previous cases is that of morphophonological changes management. Here, there are two possibilities of implementation. The first one is by encoding the phonetic features of the graphemes (Alexi, 1997:11-14). Then, it continues by encoding the transformations through the rules of a theoretical model, such as the one of generative phonology as adapted to Modern Greek (see Filippaki-Warburton, 1992:58-63 and 88-90). A score can be computed algorithmically from comparing and searching for a new form that is compatible with the resulting set of phonetic features. The second possibility is implemented by directly encoding the transformation of adjacent graphemes (Markopoulos, 2006:132-140), regardless of their phonetic features (Alexi, 1997:24), e.g.:

$$\nu + \gamma > \gamma\gamma : \varepsilon\nu + \gamma\rho\acute{\alpha}\varphi\text{-}\omega > \varepsilon\gamma\gamma\rho\acute{\alpha}\varphi\text{-}\omega \ (= \text{to enroll }_{\text{ACTIVE}})$$

Here, the computing dilemma of how to implement linguistic phenomena appears once again: to realize the cause of transformation (first method) or the result of it (second method). For a linguist, the first method of implementation is more interesting, having bundles of phonetic features. For the linguistic engineer, the second method of implementation is preferable because it avoids the increased computational complexity, which is measured by several classical methods that are called software quality metrics (Papakitsos, 2013:46-47; Pressman, 1987:452-458). Increased computational complexity leads to undesirable errors that can be extremely difficult to discover before correcting.

Discussion

The computational treatment of Modern Greek morphology in the developed NLG system revealed two areas of study, regarding the morphophonological transformations and the morphotactics of the language. In the former area, the encountered phenomena are of a local nature. Only adjacent morphemes are affected, mainly altering the last phoneme (character) of the preceding morpheme. In this case, implementing the result of the transformation is computationally more efficient, thus preferable for commercial applications, as discussed in the last paragraph of the previous section. In the latter area, regarding morphotactics, the main goal of the system is how to reduce the overproduction of ungrammatical types that are

encountered in the derivation process that was also mentioned in the previous section. The two modes of implementation consisted of treatment through data structures or algorithmically via properties. The first mode leads to a more complex database, where the combinations of adjacent morphemes are explicitly encoded via links. In this way, the related algorithms are more efficient and there is no overproduction of ungrammatical types. The second mode of implementation via properties leads to a database of a simpler structure but algorithmically is more complex. In addition, the overproduction of ungrammatical types is not prevented, although it may support neologisms, unlike the first mode, if this feature is required by the system. Thus, in terms of software maintenance, the first mode is preferable.

Some issues for future studies in the area of this NLG system, and in general as well, would be the following. Firstly, the incorporation of semantic features in the database for dealing with the production of grammatical types of words, just like the Wordnet model or the Gellish one (Van Renssen, 2005). Secondly, the study of the contribution of other theoretical models of Morphology, besides Generative Lexical Morphology, like Construction Morphology (Booij, 2012), in the designing of the algorithms and the database's structure.

Conclusions

In this paper, the general features of NLG systems, as well as some popular applications of such systems, were introduced. It has been argued that the core of an NLG system is the morphological generator, of which the designing depends on the type of natural language that is processed. As an example of implementation, a morphological generator for Modern Greek has been presented that was created within an integrated morphological processing system (IMPS). The Modern Greek language, having a concatenative morphology and given its morphotactics, needs a separate computational treatment of each of the three morphological processes: inflection, derivation and compounding. For each case, some examples of encoding respective language phenomena were presented along with some computational consequences on the results of the morphological generator. A crucial criterion of research for selecting the mode of implementation is how to achieve an increased production of grammatical results combined with a reduced computational complexity.

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