L1 Literacy Practices’ Impact on L2 Text Organization

El impacto de las prácticas de literacidad en L1 en la organización textual de L2

Abstract:

Situated within the Intercultural Rhetoric (IR) framework, this study uses text linguistic analysis of Arab students’ English academic papers to investigate the transfer of the Arabic language instruction practices into English Second Language (ESL) written texts. The analysis involves a comparison of surface linguistic features (i.e., syntactic relations and cohesive devices) in a corpus of Arab and English-speaking students’ papers. Furthermore, the Arabic and English-speaking students completed surveys about the skills emphasized in their L1 classrooms. It is believed that the features of writing instruction in Arabic, which are influenced by diglossia, are transferred into ESL written texts. The results show that the Arabic-speaking and English-speaking students’ texts exhibit differences at the rhetorical level. The characteristics of the ESL texts are similar to Arabic native texts which suggest a transfer of L1 learned writing methods into L2 texts. The findings from the linguistic analysis and the data obtained from the surveys are discussed with reference to Arabic teaching methodology, diglossia, and learning experience transfer from Arabic into English.

Keywords: L1 instruction, Intercultural Rhetoric, Contrastive Rhetoric, cultures of learning, diglossia.

Resumen: Desde el marco de la retórica intercultural (RI), este estudio utiliza el análisis de la lingüística textual en textos académicos en inglés de estudiantes árabes, para investigar la transferencia de las prácticas de instrucción en lengua árabe en textos escritos en inglés como segunda lengua. El análisis incluye una comparación de las características lingüísticas superficiales (por ejemplo, relaciones sintácticas y dispositivos de cohesión) en un corpus de textos de estudiantes de lengua inglesa y árabe. Además, se aplicaron encuestas a los estudiantes de árabe y de inglés sobre las habilidades que se enfatizan en sus clases en L1. Se cree que las características de la instrucción para la escritura en árabe, las cuales están influenciadas por la diglosia, se transfieren a los textos escritos en inglés como segunda lengua. Los resultados demuestran que los textos de los estudiantes de árabe e inglés muestran diferencias en el nivel retórico. Las características de los textos escritos en inglés como segunda lengua son similares a los textos en la lengua nativa árabe lo que sugiere la existencia de una transferencia de los métodos de escritura aprendidos en L1 hacia los textos en L2. Se discuten los descubrimientos obtenidos a partir del análisis lingüístico y de los datos de las encuestas con referencia a la metodología de enseñanza árabe, diglosia, y la transferencia de la experiencia de aprendizaje del árabe al inglés.

Palabras clave: instrucción en L1, Retórica Intercultural, Retórica Contrastiva, culturas de aprendizaje, diglosia.
For several decades, many ESL writing teachers and researchers have been enthusiastic about the insights offered by the Contrastive Rhetoric Hypothesis (CR) (Kaplan, 1966). However, many others have contended that the conclusions outlined by CR do not support the new discipline’s major proposition that ESL writers transfer their first language (L1) cultural thought patterns into their ESL essays and that the observed differences in L2 writers’ texts are likely manifestations of developmental errors that may be universal (cf. Mohan & Lo, 1985). As a result of the ensuing critiques and evaluations of CR’s methods, Contrastive Rhetoric was transformed into Intercultural Rhetoric (IR) (Connor, 2004) which advocates a comprehensive approach that extends beyond the examination of ESL written texts as a finished product. Within the IR interdisciplinary lens, the present study attempts to explain the Arabic rhetorical organization transfer into ESL texts by discussing Arabic diglossia and Arabic as a L1 instruction.

**Background to the Study**

**From Contrastive Rhetoric to Intercultural Rhetoric**

Kaplan’s (1966) observations about differences in organizational patterns of ESL students’ compositions brought about a new field of research in ESL writing. Intrigued by these differences in student texts, he initially hypothesized that these rhetorical differences reflected a transfer of L1 cultural thought patterns into ESL compositions and coined the term Contrastive Rhetoric (CR) to account for the contrast between English rhetorical patterns and the ones in ESL texts. Subsequently, many researchers contributed to the emerging field and, as a result,
a substantial body of research contrasting English rhetorical style with ESL texts formed the vast literature of the new area of inquiry (cf. Kaplan, 1966, 1972, 1976; Hirose, 2003; Alvarez, 2005; Zhou, 2015; Bolgun & Mangla, 2017). Then, in the 1990s, CR went through a period of reflections and revisions. These critiques questioned the hypothesis’ assumptions about cultural dichotomy and thought patterns, negative transfer, and the view of ESL texts as finished products without consideration of L1 learning contexts, genre, audience, and process (cf. Hinds, 1983; Zamel, 1997; Matsuda, 1997; Kubota, 1999). Kaplan himself acknowledged the limitations of CR’s early assumptions (1987). Consequently, Intercultural Rhetoric (IR) arose as an interdisciplinary framework that studies ESL writing as a process that takes place in various contexts and situations when Connor (2004: 291) introduced it as “a set of new methods... that is context-sensitive and, in many instances, goes beyond mere text analysis.” Citing approaches espoused by Critical Discourse Analysis proponents, she proposes that writing research needs to be honed “as a socially constructed activity and process” (Connor, 2008: 306). Connor (2011) called for the integration of different disciplines and theories in CR studies. This paradigm shift focused the attention of ESL writing teachers and researchers on examining L1 cultures and contexts rather than viewing ESL papers as a finished product. One of the areas that gained the attention of researchers working within the IR context is the process through which ESL students acquired their L1 writing skills. Therefore, an interest in understanding L1 learning processes, contexts, and audiences led some researchers to move away from the narrow perspective that dominated earlier CR research. Although the call to investigate L1 acquisition contexts and methods gained traction (cf. Liebman, 1992; Uysal, 2008), Hinds (1983) questioned Kaplan’s (1966) assumptions earlier and proposed that researchers may need to examine L1 writing instruction contexts for clarifications. He recommended that “[i]n order to ‘discover’... the foreign language rhetorical patterns, it is necessary to examine compositions in the foreign language; compositions written for an audience which reads that language” (Hinds, 1983: 186).
Arabic Rhetoric Transfer into L2 Texts

Of particular interest to the present study is the research investigating rhetorical differences between English textual organization and Arab students’ ESL essays and culture of learning (cf. Kaplan, 1966, 1972, 1976; Sheikholeslami & Makhlouf, 2000; Sayidina, 2010; Bacha, & Bahous, 2013). These studies report consistent findings, such as the presence of repetition, run-on sentences, parallel structures, and a preference for lexical cohesion in the Arabic speaking students’ ESL texts. While and other early CR researchers considered these rhetorical transfers to be culturally influenced thought patterns, the current study, working within an IR framework, suggests that these differences are learned as a direct result of the Arabic teaching methods that are informed, in turn, by the nuanced cultural and sociolinguistic phenomenon known as diglossia in Arabic (Ferguson, 1959; Maamouri, 1998; Myhil, 1998; Saiegh-Haddad & Spolsky, 2014; Shockley & Nurchelis, 2016). From an IR perspective, this study does not regard these rhetorical patterns in written Arabic communication “deficient” but different from English written communication due to the Arabs’ heritage and cultural identity. Therefore, it is believed that there are no “oral” or “literate” cultures; there are communicative style preferences. However, when Arabic rhetorical style is transferred into L2 texts, it becomes consequential for Arab students’ academic achievement.

Arabic Diglossia

Ferguson, (1959), in his canonical work, defines diglossia as a sociolinguistic phenomenon that occurs “where two varieties of a language exist side by side throughout the community, with each having a definite role to play” (Ferguson, 1959: 325), and classifies Arabic as a classical example of a diglossic language. In this sense, Ferguson contends that diglossia is a situation in which one variety of the language (H) has a high prestige, and the other variety (L) has a low prestige. The High variety in Arabic, the Classical or Modern Standard Arabic, is used in ceremonial functions, orations, political speeches, and high literature, but it is not used in daily communication. On the other hand, the Low variety
is used in daily, mundane functions; hence, it is the variety that is spoken at home and acquired naturally as a “mother tongue”. It is apparent that L1, the Low variety, which is the students’ native language, is not used in class, but the High variety is. Zaharna (2009) notes that “[w]hile people throughout the Arab world learn to read and write Modern Standard Arabic, it is not normally spoken...”, (Zaharna, 2009:181). Saiegh-Haddad and Spolsky (2014) explain that the Arab World has “a strong religious-political ideology of the Standard language [as] being sacred and unifying”, (Saiegh-Haddad & Spolsky, 2014: 230). Within this diglossic context, instruction in Arabic adheres to a grammar-based method of teaching that is characterized by repetition of structures and vocabulary, and reliance on “model” essays from the High variety with emphasis on accuracy at all levels of education from elementary school to university (Maamouri, 1998). It must be emphasized here that while spoken Arabic in daily communication does not imply a uniform dialect, owing to the existence of regional vernaculars (cf. Zaharna, 2009), formal schooling and written communication are consistent throughout the Arab world due to political and religious agenda to keep the Classical language alive.

Consequently, all Arabic speaking students’ native essays display a rhetorical style that is rhythmic due to the High variety’s acquisition by memorization of parallel structures and the copying of texts characterized by high lexical cohesion and memory aiding devices, such as rhyme and rhythm (cf. Mohamed & Omer 1999; Sayidina, 2010; Bacha, & Bahous, 2013). Arabic instructors’ insistence on accuracy in this diglossic situation compels them to use classical model essays, which are essentially composed orally for recitation, to teach writing of the High variety. The organizational patterns of the ESL texts analyzed are consistent with what is defined as “oral” (Ong, 1983, 1992; Havelock, 1983), and they are also consistent with the Quranic style, which is essentially an “oral” text that was written down to prevent its loss. However, it is imperative to acknowledge the valid criticism directed at the wider “literacy thesis” notions (cf. Halverson, 1992) in regard to the “oral vs literate” dichotomy, the assumptions attached to orality as the epitome
of “uncivilized barbarianism”, and literacy’s implications of power and subjugation. Nonetheless, while the current study does not regard “orality” as synonymous with “illiteracy”, it employs “oral” as a descriptor that denotes characteristics of Arab students’ written English texts. These features potentially resemble spoken English to some of their native English-speaking instructors, whose idea of literacy may be imbued with what Collins and Blot (2003) call the “literacy bias [that] is part of our academic common sense….” (Collins & Blot, 2003:17).

Arabic diglossia is particularly problematic for today’s Arab, because the Classical or Modern Standard variety taught in school is akin to a foreign language that has no native speakers. Arabic literacy experts lament the dilemma of Arabic as a L1 education, and as Saiegh-Haddad and Spolsky (2014) concluded, “[t]he sociolinguistic phenomenon defined originally by Ferguson [...] as diglossia is complex and has far-reaching educational consequences” (Saiegh-Haddad & Spolsky, 2014: 226). Some researchers attribute the presence of diglossia itself to religious concerns. Shockley and Nurcholis (2016) explain the conventional association between religion and diglossia in classical languages by arguing that “[n]ot least among the motivators for linguistic conservatism is religion. [T]wo of the four languages in Ferguson’s landmark paper on diglossia were the languages chosen for two of the world’s most important religious texts-Greek, that of the New Testament; and Arabic, that of the Qur’an” (Shockley & Nurcholis, 2016: 70). Therefore, there appears to be a general consensus among researchers that religion has a major influence on Arabic instruction in Arab schools and colleges. Jandt (1998) contends that “[i]n striking contrast to the development and growth of writing to serve the needs of commerce and government, in the case of the Arabs the stimulus came directly from the creation of Islam, the religion based on the teachings of the prophet Mohammed” (p.128). He asserts that “[t]he Koran is the ultimate standard for Arabic style and grammar... Classical Arabic [H], the language of the Koran, is the accepted standard for the written language” (Jandt, 1998: 133-134).
However, it is important to underscore the paradoxical situation of the Quran as an oral text that is meant to be recited orally; nonetheless, it is the epitome of the Arabic writing style. Therefore, while the spoken variety is not written, the written variety is modelled on an “oral” text. Asuncion-Lande (1983) traces the tradition of teaching Arabic as a first language to the care given to preserving Arabic as the language of the holy book in Islam and an essential factor that unites all Arabs, asserting that “[a]s the sacred book of the Islamic faith, the Koran was the bond of unity over the entire Arab world” (Asuncion-Lande, 1983: 255). The author explains this religious, linguistic, and political function that Arabic instruction plays by illustrating how medieval Arab scholars “laid the foundations for grammatical description and teaching of Arabic from then on” (Asuncion-Lande, 1983: 255). Furthermore, Van De Wege (2013) acknowledges the Quranic influence on Arabic rhetoric, and states that “Middle Eastern rhetoric is still largely uninfluenced by Averroes and more influenced by Islamic thought and Qur’anic language”, (Van De Wege, 2013: 28).

This study aims to answer the following research questions:

RQ1: To what extent is Arabic classroom instruction manifested in Arab students’ ESL essays’ rhetorical organization?

RQ2: How do Arab students’ English texts differ from native English-speaking students’ texts?

| Methodology |

Data gathering

A corpus was created from 60 English papers. Thirty of them were written by ten freshmen Arab students studying at US universities and thirty of them were written by ten freshman English-speaking American students. The average age of the Arab students was 19.2 years old, and the average age of the English-speaking American students was 18.4 years old. The Arab students, who all came from publicly-funded schools in their home countries, in the Middle East and North Africa (MENA) region, were in their first semester and were admitted to their programs with an average TOEFL (iBT) score of 71. The American
students were enrolled in a university undergraduate writing program. Each Arabic-speaker contributed three papers and each participating English-speaker contributed three papers.

The papers were classified according to genre (pair 1: critical analysis (a critique of an Op-Ed piece), pair 2: argumentation (an argument essay), pair 3: research essay on a topic chosen randomly. A simple random sampling of genre-type was adopted during the design phase of the study. The scores were obtained by employing multiple raters who analyzed the essays. Five raters independently provided assessment for each story (each genre). Interrater reliability was assessed by examining the inter-class correlation coefficient (ICC). ICC values above 0.8 indicate almost perfect reliability. The inter-rater reliability was found to be ICC = 0.997 with 95% confidence interval between 0.993 and 0.999. This suggests the raters have an almost perfect agreement when assessing the stories. The papers were analyzed at the textual sentential level for transition words and cohesive devices. In addition, the students responded to a survey about the activities emphasized in their first language classes in their home countries.

Table 1

<table>
<thead>
<tr>
<th>Type of Essay</th>
<th>Number of Essays</th>
<th>Word Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>English papers by Arab students (E AR)</td>
<td>30</td>
<td>60,610</td>
</tr>
<tr>
<td>English papers by American students (E AM)</td>
<td>30</td>
<td>65,532</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>126,142</td>
</tr>
</tbody>
</table>

Model of analysis

Cohesion: Lexical and Grammatical Cohesion

Replicating Sayidina (2010) analytical model, the two cohesion categories identified for the linguistic analysis model are lexical and grammatical cohesion according to Halliday and Hasan (1976). In addition, cohesive devices common in Arabic, such as repetition at the clausal and sentential levels are incorporated to account for other cohesive devices, like same noun or synonym repetitions (cf. Gleason, 1965; Gutwinski, 1976; Enkvist, 1973; James,
Lexical cohesion (LC) is identified as:

(i) repetition of the same noun a synonym, a clause or sentence.

Grammatical cohesion (GC) is classified as:

(i) Reference: the use of pronominal reference (personal, demonstrative, and indefinite pronouns),

(ii) Substitution: the use of a word, such as one, ones, or do in place of another word or sentence.

(iii) Ellipsis: the use of substitution by zero: a head noun, main verb, or a whole clause that is mentioned previously is elided.

Transition Words and Phrases

The papers were also analyzed to understand how the speakers of the two languages use transition words and phrases (cf. Bander, 1980). These markers are classified as:

(i) Additive transitions: and, or, also.

(ii) Causative transitions: since, as, owing (to the fact), because (of the fact), consequently, hence, so, therefore.

(iii) Adversative transitions: while, in contrast, whereas, however, nevertheless.

(iv) Temporal transitions: then, next, previously, before, after.

|Analysis and Results|

Survey Results and Participants’ Written Comments

First, the survey results of the skills emphasized in the Arabic and English classrooms are summarized below in Tables 2 and 3 respectively.

Table 2

<table>
<thead>
<tr>
<th>Arabic-speaking students’ report of skills emphasized in Arabic language</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skill</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>Reading literary tests</td>
</tr>
<tr>
<td>Using model essays chosen by teacher</td>
</tr>
<tr>
<td>Doing grammatical analyses</td>
</tr>
<tr>
<td>Dictation</td>
</tr>
<tr>
<td>Writing research</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Table 3  
*English-speaking students’ report of skills emphasized in English language*

<table>
<thead>
<tr>
<th>Skill</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading literary texts</td>
<td>60.3</td>
</tr>
<tr>
<td>Brain-storming in groups</td>
<td>74.6</td>
</tr>
<tr>
<td>Writing book reviews</td>
<td>54.7</td>
</tr>
<tr>
<td>Peer reviews</td>
<td>81.5</td>
</tr>
<tr>
<td>Watching documentaries</td>
<td>40.6</td>
</tr>
<tr>
<td>Doing field research</td>
<td>78.9</td>
</tr>
</tbody>
</table>

The participants also provided written comments which are quoted directly below. The survey results show that the Arabic and English-speaking students read literary texts, but this is the only shared criteria. However, reading religious texts, dictation, grammatical analysis, and model essays for writing do not appear in the English-speakers’ responses. While the Arabic-speakers seemed to emphasize activities that entail conformity and focus on accuracy, the English-speaking students report an inclination towards critical thinking, invention, and individual thinking. The writing activities reported by the Arabic-speakers include writing research, but also dictation, and writing essays modelled on texts chosen by their teachers which imply limited opportunities for critical thinking and individual input. On the other hand, the English-speakers emphasized writing as a process of prewriting, post writing continuum. Only two students wrote comments; one mentioned enjoying discussing Mitch Albom’s *Tuesdays with Morrie*, another wrote:

> I wish we had public speaking classes.

The Arab students, on the other hand, made more comprehensive observations. Some of these comments include:

> [I]n my Arabic language we were never emphasized [sic] on the thesis statement or critical thinking. I belive [sic] this is the biggest difference.

Another participant remarked:
We used to memories [sic] essays given by teachers. Here in this university, we develop the habit of writing different kinds of essay by own[sic].

A final thought offered by a respondent sums it up as:

In Arabic, writing is copy and paste for us.

The Arab students’ written comments, together with the responses represented in Table 2 above, correlated to Sheikholeslami and Makhlof’s (2000) observations regarding use of the model essay, which is drawn from classical texts that were composed orally centuries earlier. They also correspond to Bacha and Bahous’s (2013) findings that Lebanese schools “emphasize memorization, teacher centeredness, and lecture methods” (as cited in Esseili, 2019: 89).

Cohesion

Second, cohesion assessment scores were examined using descriptive statistics and histograms. Histograms and Shapiro-Wilk tests were used to explore the distribution of data. Histograms show approximately bell-shaped normal distribution. Shapiro-Wilk tests results in p-values > 0.05 indicating the data is normal for all cohesion measurements. Including genre and language factors into the same model allows us to explore the difference between English and Arabic speaking students, while controlling for genre effect. Table 4 contains descriptive statistics for grammatical and lexical cohesion scores. Results are presented as mean and standard deviation values for each genre separately for Arabic and English-speaking students.

A statistically significant difference in grammatical cohesion scores was found between English and Arabic speaking students. Large effect size indicates that 96% of variability in grammatical cohesion scores can be explained by the language of the student. No statistically significant effect of genre or interaction (combination of genre and language) was found.

Mixed ANOVA was used as inferential statistical analysis to compare Arabic and English-speaking students in regards to their scores on two cohesion assessment outcomes (Grammatical, Lexical). A separate
ANOVA model was used for each outcome, two models in total. The results of these analyses are presented in Table 5.

Table 4

Descriptive statistics for grammatical and lexical cohesion

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Genre</th>
<th>Arabic speaking students, n = 10</th>
<th>English speaking students, n = 10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Grammatical</td>
<td>Argumentation</td>
<td>10.50</td>
<td>2.42</td>
</tr>
<tr>
<td>cohesion</td>
<td>Critique</td>
<td>9.10</td>
<td>2.69</td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td>10.70</td>
<td>4.57</td>
</tr>
<tr>
<td>Lexical cohesion</td>
<td>Argumentation</td>
<td>27.80</td>
<td>4.83</td>
</tr>
<tr>
<td></td>
<td>Critique</td>
<td>31.30</td>
<td>9.31</td>
</tr>
<tr>
<td></td>
<td>Research</td>
<td>36.80</td>
<td>8.74</td>
</tr>
</tbody>
</table>

Table 5

Mixed ANOVA results for cohesion

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Main effect of language</th>
<th>Main effect of genre</th>
<th>Language x Genre interaction effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical</td>
<td>$F(1,18) = 388.71, p &lt; .001$, $n^2 = .96$</td>
<td>$F(2,36) = .35, p = .71$, $n^2 = .02$</td>
<td>$F(2,36) = 1.13, p = .34$, $n^2 = .06$</td>
</tr>
<tr>
<td>cohesion</td>
<td>$F(2,36) = 2.93, p = .07$, $n^2 = .14$</td>
<td></td>
<td>$F(2,36) = 3.65, p = .04$, $n^2 = .17$</td>
</tr>
<tr>
<td>Lexical cohesion</td>
<td>$F(1,18) = 250.13, p &lt; .001$, $n^2 = .93$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A significant difference in grammatical cohesion scores was found between English and Arabic speaking students. Arabic speaking students showed smaller grammatical cohesion scores ($M = 10.10$) compared to English speaking students ($M = 45.93$). Large effect size indicates that 96% of variability in grammatical cohesion scores can be explained
by the language of the student. No statistically significant effect of genre or interaction (combination of genre and language) was found.

Arabic speaking students demonstrated significantly higher levels of lexical cohesion compared to English speaking students ($M = 31.97$ vs $M = 7.23$). In addition, the lexical cohesion language gap is larger for the research genre compared to the argumentation genre. Effect sizes suggest that 93% of variability in lexical cohesion scores can be explained by the language of the student, and 17% attributed to combined effect of language and genre. Lexical cohesion scores were not statistically different between genres.

We observed a significant main effect of language for both grammatical and lexical cohesions, and significant interaction effect for lexical cohesion. This indicates a significant difference in outcome scores between English and Arabic speaking students. There was no significant difference in outcomes measures between genres.

*Figure 1. Grammatical cohesion scores by genre and language*
For instance, the English-speaking students’ papers show a markedly less tendency to employ repetition as a lexical cohesion device. The most noticeable devices used are grammatical, as can be observed in this English-speaking student’s excerpt:

The author’s assumption that a university education is essential for success is a bit antiquated. For instance, Levin (n.d.) has reported that one can reduce student debt and get gainful employment by attending a two-year college that offers hands-on skills needed in the work place. But his claim regarding the pay gap...

The cohesive devices used in the example above are grammatical (substitution and reference). By contrast, the Arabic-speaking students’ ESL texts show more frequency than the English-speaking students’ papers of repetition of same noun, synonym, phrase, or phrase compound (see examples from the ESL corpus.)

As known, **online shopping** became widely spread nowadays. **online shopping** is very different
from traditional shopping in many ways. And online shopping is defined as being a method of purchasing...

In society, individuals count on others to feel a sense of belonging, and without belonging and companionship people feel lonely and lost without belonging and companionship. For people who constantly feel stress and worry [sic] a pet is a great way for belonging and companionship.

This lexical cohesion device has also been reported by Sheikholeslami and Makhlouf (2000) who stated that “[l]exical cohesion is largely limited to repetition of vocabulary,” (Sheikholeslami & Makhlouf, 2000: 131.) Gleason (as cited in Gutwinski, 1976) defines these repetitions as “enation”. Accordingly, “[t]wo sentences may be said to be enate if they have identical structure, that is, if the elements (say, words) at equivalent places in the sentences are the same classes, and if constructions in which they occur are the same” (Gutwinski, 1976: 199). He observes that “enatation” as a cohesive device could be partial or complete. This type of repetition is also referred to by Quirk et al. (1972) and James (1983) as “formal parallelism” while Kaplan (1966) calls it “structural parallelism” in his discussion of Arab students’ essays. Furthermore, Enkvist (1973) identifies this device as “iconic linkage” which he describes as “those situations in which two or more sentences cohere because they are at some level of abstraction, isomorphic or more popularly, ‘pictures of each other’” (Enkvist, 1973: 123).

Transition Words and Phrases

Third, assessment scores were examined using descriptive statistics and histograms. Means and standard deviations are reported separately for English and Arabic speaking students. Table 6 summarizes additive, temporal, causative, and adversative scores with further break-down by language and genre. Additionally, mean and standard deviation values are reported. Histograms and Shapiro-Wilk tests were used to explore the distribution of data. Histograms show approximately bell-shaped normal distribution. Shapiro-Wilk tests results in p-values > 0.05 indicated a normal distribution for the majority of measurements.
Inferential statistical analysis was performed to compare Arabic and English-speaking students in regards to their scores on four quantitative assessment outcomes (Additive, Temporal, Causative, Adversative). Mixed ANOVA was performed with genre being within-subjects factor and language being between-subjects. The results of these analyses are presented in Table 7. This table shows a significant difference in each outcome between English and Arabic speaking students. No statistically significant effect of genre or interaction (combination of genre and language) was found for any of the four outcomes:
A significant difference in additive scores was found between English and Arabic speaking students. Arabic speaking students showed higher additive scores ($M = 11.60$) compared to English speaking students ($M = 4.93$). Large effect size indicates that 87% of variability in additive scores can be explained by the language of the student. No statistically significant effect of genre or interaction (combination of genre and language) was found.

A significant difference in temporal scores was found between English

**Table 7**

Mixed ANOVA results for additive, temporal, causative and adversative scores

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Main effect of language</th>
<th>Main effect of genre</th>
<th>Language x Genre interaction effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additive</td>
<td>$F(1,18) = 120.32$</td>
<td>$F(1.30,23.37) = 1.46^*$</td>
<td>$F(1.30,23.37) = .55^*$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .001$</td>
<td>$p = .25$</td>
<td>$p = .51$</td>
</tr>
<tr>
<td></td>
<td>$n^2 = .87$</td>
<td>$n^2 = .07$</td>
<td>$n^2 = .03$</td>
</tr>
<tr>
<td>Temporal</td>
<td>$F(1,18) = 7.59$</td>
<td>$F(2,36) = 2.45$</td>
<td>$F(2,36) = 2.01$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .013$</td>
<td>$p = .10$</td>
<td>$p = .15$</td>
</tr>
<tr>
<td></td>
<td>$n^2 = .30$</td>
<td>$n^2 = .12$</td>
<td>$n^2 = .10$</td>
</tr>
<tr>
<td>Causative</td>
<td>$F(1,18) = 89.11$</td>
<td>$F(2,36) = .72$</td>
<td>$F(2,36) = 1.35$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .001$</td>
<td>$p = .49$</td>
<td>$p = .27$</td>
</tr>
<tr>
<td></td>
<td>$n^2 = .83$</td>
<td>$n^2 = .04$</td>
<td>$n^2 = .07$</td>
</tr>
<tr>
<td>Adversative</td>
<td>$F(1,18) = 156.72$</td>
<td>$F(2,36) = 1.09$</td>
<td>$F(2,36) = 2.46,$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .001$</td>
<td>$p = .35$</td>
<td>$p = .10$</td>
</tr>
<tr>
<td></td>
<td>$n^2 = .90$</td>
<td>$n^2 = .06$</td>
<td>$n^2 = .12$</td>
</tr>
</tbody>
</table>

Note: * the assumption of sphericity was violated, therefore F values for genre and interaction are reported using Greenhouse-Geisser correction method.
and Arabic speaking students. Arabic speaking students showed smaller temporal scores ($M = 6.37$) compared to English speaking students ($M = 7.27$). Large effect size indicates that 30% of variability in temporal scores can be explained by the language of the student. No statistically significant effect of genre or interaction (combination of genre and language) was found.

A significant difference in causative scores was found between English and Arabic speaking students. Arabic speaking students showed smaller causative scores ($M = 5.30$) compared to English speaking students ($M = 13.20$). Large effect size indicates that 83% of variability in causative scores can be explained by the language of the student. No statistically significant effect of genre or interaction (combination of genre and language) was found.

Figure 3. Additive scores by genre and language
Figure 4. Temporal scores by genre and language

Figure 5. Causative scores by genre and language
A significant difference in adversative scores was found between English and Arabic speaking students. Arabic speaking students showed smaller adversative scores ($M = 5.47$) compared to English speaking students ($M = 14.03$). Large effect size indicates that 90% of variability in adversative scores can be explained by the language of the student. No statistically significant effect of genre or interaction (combination of genre and language) was found.

![Figure 6. Adversative scores by genre and language](image)

We observed a statistically significant main effect of language, but no significant effect of genre or interaction term. This indicates a significant difference in outcome scores between English and Arabic speaking students. This difference is similar across all three genres. There is also no significant difference in outcomes measures between genres.

|Discussion|

The results indicate that the Arab students perceive clear differences in the literacy practices they were
used to in Arabic and the demands of their English curriculum in American universities. By linking the students’ responses to the syntactic analysis findings of transition words and phrases and cohesive devices, it is plausible to claim that the teaching methods and activities undertaken in the two school cultures yield different rhetorical styles, and that the Arabic-speaking students transfer their learned rhetorical style into English academic texts. These results also reveal oral features in Arab students’ ESL papers that correlate with observations made by contrastive rhetoric researchers. They assert that the rhetorical strategies used by Arabic speakers in their written English are inconsistent with the literacy skills expected at English-speaking higher educational institutions, which are frequently attended by Arabic speakers for tertiary and higher education. While Ong’s (1982) ideological premise cannot be accepted; nonetheless, his description of orality corresponds to the findings reported in this study indicating that the rhetorical features of the “model essay” and other orally produced texts used in the Arabic classroom are transferred into L2 texts. For instance, the results reported in this study evidently show Arab students’ preference for lexical cohesion, especially same noun repetition instead of grammatical cohesion and the tendency to use more additive transitions than causative or adversative (see Table 6 above). In addition, the Arab students’ survey results (see Table 2 above) clearly indicate an instructional methodology that favors memorization and modeling rather than approaching writing as a process of discovery, addressing genre, context, and audience awareness, as can be observed in Table 3. Furthermore, the comments provided by some participants in the survey are also revealing.

The survey results and the text analyses suggest that L1 institutional instruction plays a significant role in shaping Arab students’ concept of writing which they transfer to their L2 academic texts. It is argued that the diglossic situation prompts Arabic instructors to use orally composed model essays to teach the writing of the High variety. According to Sheikholeslami and Makhlouf
(2000), these model essays “could be a source of negative impact on the English writing of Arabic-speaking students....” (Sheikholeslami & Makhlouf, 2000:130). Therefore, they offer their students no path towards independent thinking and discovery. Because of diglossia, Arab students do not have a formally written native language which is a result of the low status of their native variety (L). Due to this, it is not acknowledged as a language, but rather treated as a corrupted variation of the high (H) variety. Because of this, learning the prestigious variety is reported to be difficult for Arabic speakers. Myhill (1998) observes that the Arabic teaching methodology in Arab schools in Israel is “uninspiring” and that, due to the diglossic context of Arabic, “Arabic-speaking children who are learning to read in primary school are thus confronted with a task which is quite different from the one encountered by their peers who speak and learn to read, for example, Hebrew or English” (Myhill, 1998: 202). These observations may help shed light on the profound impact of Arabic as L1 teaching methodology on L2 writing acquisition.

The rhetorical style that seems to reproduce written texts in the prestigious dialect's form is valuable for its memory aiding function. It is important to note that this style relies on lexical cohesion and additive transition to build texture. To support learners’ memory, Havelock (1983) argues that language should be couched in a highly stylized form, and it must be “rhythmic, to allow the cadence of the words to assist the task of memorization...” (Havelock, 1983: 13). The features illustrated in the Arab students’ ESL texts extend far beyond the lexicon to repetition of whole clauses. Sentences cohere, accordingly, by rhyme, rhythm, alliteration, and symmetry which are poetic devices similar to those in the Quran. The following excerpt from the ESL papers exemplifies enation and iconicity:

Social insecurity is an outcome of many day-to-day interactions. Day-to-day social interactions that left them hurt. Or a thought that left them hurt. Social interactions and thoughts constantly causing them to believe that people are constantly gossiping about them. Even if they are not gossiping about them.
Iconicity, formal parallelism, structural parallelism, and enation are not limited to nouns and phrases, but can also be seen in whole clauses and sentences as the following excerpt illustrates:

James [changed author’s name] supports his opinions by using his personal opinions to express his point of view that all majors are equal, and James believes his opinions are true. But all majors cannot be equal. For example, all majors cannot be equal just as all jobs are not being equal, some majors cannot find jobs.

Kaplan (1972) observes that such “parallelism can also be achieved by creating lists of identical grammatical constructions linked by punctuation or, as in Shakespeare’s dramatic verse, by prosodic devices like rhyme and meter” (Kaplan, 1972: 35-36). He concludes that the parallelism in the Arabic-speaking students’ essays he examined reflects the students’ preference of a Quranic style adding that “[s]tylistically, [the Arab student’s] language recommends parallelism in preference to subordination. He will choose to imitate the Koran in preference to his English teacher for obvious reasons” (Kaplan, 1972: 37). Kaplan affirms that “[t]he revelation of the Koran stands as the supreme literary achievement of Arabic, and its influence on the development of Arabic writing has been immeasurable” (Kaplan, 1972: 35). He compares the influence of the King James version of the bible on English to that of the Quran on Arabic by averring that the effect of the Judeo-Greco literary style on English did not extend past the 17th century, while “the literary influences of the Koran in Arabic extend into the present day” (Kaplan, 1972: 35). Beside these historical divergences, writing in English is viewed as a process that follows pre-writing, writing, and post-writing activities. Thus, it is clear that the two sets of texts in the corpus have developed through profoundly different conceptual underpinnings of literacy and writing instruction in the two school systems.

**Conclusion and Pedagogical Implications**

This study compared the rhetorical organization of academic papers written by Arabic and English-
speaking undergraduate students to investigate the effects of Arabic as a First Language instruction on Arab students’ ESL academic writing. Afterwards, the Arabic speaking students also commented on their L1 learning experiences and the skills emphasized in their classrooms. The study revealed that the English-speaking students’ texts showed clear tendencies for grammatical cohesion and adversative and causative transition words. By contrast, the Arab students’ essays are marked by a preference for lexical cohesion (especially same noun repetition), and additive transitions (mainly and, or, also) to signal shift and build texture. Ironically, repetition makes an expository text suitable for oral recitation rather than reading. The cohesive devices and transition words and phrases preferred by Arabic speaking students represent the model of style in their L1 which Jandt (1998) attribute to Quranic style contending that “Arabic emphasizes creative artistry through repetition, metaphor, and simile in part because of the poetic influence of the Koran” (Jandt, 1998: 134). Therefore, noting the high emphases placed on using religious and classical texts as models, it seems safe to assert that instruction of Arabic as a First Language contributes to the presence of oral features in Arab students’ ESL papers. Interestingly, the features analyzed in this study show uncanny similarities to Arabic native texts, which are marked by high instances of same noun, phrasal, and structural repetition. For instance, Mohamed and Omer (1999) conducted analyses of the cohesive devices used in a corpus of Arabic texts and reported that the “Arabic texts showed that… structures tend to be either identical or very similar syntactically and/or phonologically… sometimes [even] in the number of words they contain” (Mohamed & Omer, 1999: 302). The findings reported in this study suggest that the two sets of academic papers were produced through different processes. This implies that Arabic L1 writing instructions have taught these students their rhetorical organization. The survey results and students’ comments also lend credence to the claim made here pertaining to cultural and institutional role on Arabic rhetorical patterns observed in Arab ESL students’ papers.
Owing to the insights gained through Intercultural Rhetoric, it is possible for researchers to look beyond the finished ESL texts for answers in order to help their students. This study attempted to explain the impact of L1 policies, planning, and instructional methods on shaping an ESL student’s essay. While L1 classroom instruction is not the sole factor in the way ESL students write, it is an important component in forming students’ notions about literacy. ESL instructors can tap into transferable skills from L1. For instance, the results of this study imply that explicit instruction in English academic writing that requires Arab students to identify rhetorical differences between Arabic and English texts would be beneficial. Arabic speakers who learn writing in a diglossic context are adept in analyzing unfamiliar texts and would be able to decipher nuanced differences between their ESL texts and academic English texts. Their L1 learning experience can be “positively” transferred to their new learning contexts. Their training in text models can be utilized in ESL writing by assigning authentic texts from their major courses to be analyzed for rhetorical and genre-specific features. Therefore, active and critical/ analytical reading of different genres could be of value to the students. Creating databases of texts that are available for classroom practice as well as an online corpus for self-study can provide students and instructors with valuable resources. If utilized, this approach could be a positive transfer of L1 learning experience into L2.
| References |


