

## **The Use of Linking Adverbials in Malaysian Students' Argumentative Essays**



**Ummul K. Ahmad<sup>1</sup> & Low Poh Wey<sup>2</sup>**

<sup>1</sup>Language Academy, Universiti Teknologi Malaysia, 81310 Johor Bahru, MALAYSIA

<sup>2</sup>Department of English, Southern University College, Jalan Selatan Utama, Off Jalan Skudai, 81300 Skudai, Johor Bahru, Malaysia

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**ABSTRACT:** Many English as a Second Language (ESL) learners' essays are deemed incoherent as they failed to signpost and facilitate readers' understanding of their line of arguments—a task that can chiefly be accomplished through the use of appropriate and efficient use of linking devices. This study investigates the use of linking adverbials (LAs) as connective devices in argumentative essays written by pre-university students from Malaysian matriculation colleges. The learner corpus of this study comprises 95241 words from 209 argumentative essays written by students from three matriculation colleges in southern states of Malaysia. About 2465 occurrences of LAs were extracted and then coded according to Liu's (2008) four-way categorization framework. Similar corpus of 110737 words was also extracted from BAWE corpus as reference. Malaysian learner writers overly relied on a small set of LAs and their essays largely offered one sided argumentation. Students tend to overuse ADDITIVE adverbials (e.g. furthermore) and SEQUENTIAL (e.g. next), mainly to enlist key points and rarely used the more semantically complex ADVERSATIVES (e.g. however). The corpus also revealed that certain LAs were used inappropriately. The findings offer insights for language teachers specifically writing instructors on helping students to prepare for more sophisticated writing tasks that require complex propositions and how to integrate teaching specific linguistics features such as Linking Adverbials.

**KEYWORDS-** linking adverbials; learner corpus; argumentative essay; second language writers

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### **I. INTRODUCTION**

For many second language learners, writing is often considered the most challenging skill to master among the four language skills. Learner writers are often expected to transfer their ideas into writing following specific genre expectations while observing grammatical conventions. Of all the different types of essays introduced to students in various English for Academic Purpose (EAP) and English for Specific Purpose (ESP) writing courses, the argumentative essays genre is deemed the most challenging and least favored by students (Dueraman, 2007; Cheng and Chen, 2009; Ferretti, Andrews-Weckerly and Lewis, 2007; Neff-van Aertselaer and Dafouz-Milne, 2008). The main reason is it requires students to assert their stance coherently and persuade the readers using logical arguments, all at the same time. Writing a persuasive argumentative essays is challenging even for expert writers (Galbraith and Rijlaarsadam, 1999) as it demands the combination of content and critical thinking from the writer's perspective; and these requirements are obviously difficult for unskilled writers who are struggling with intrinsic difficulty of self-expression. Argumentative essay genre is a crucial genre to learn for tertiary level students. A study looking at the difficulties faced by learner writers at this level has reported that students continue to face difficulties with using multi-layered syntactic structures and appropriate features in writing argumentative essays (Nemeth and Kormos, 2001). Argumentative essays of Malaysian ESL students' too have been criticised as having bad organization and lacking in cohesion (Botley, 2014), even though the genre has been introduced at secondary school level. Results from numerous studies based on learner corpus (for examples Crewe, 1990; Chen, 2006; Liu, 2008; Shea, 2009; Heino, 2010; Ishikawa, 2011; Lei, 2012) have shown that ESL learners in general have difficulties connecting their ideas logically while using the appropriate linking devices in their writing.

Linking Adverbials (hereafter referred as LAs) are considered as one of the key cohesive elements that build logical links between different units of a text while signposting the argumentation path to readers. They are essentially the most common way to build coherence in texts (Chen, 2006) and they provide cohesion not only in writing but also in speech (Liu, 2008). Despite being introduced to these devices early on, students still struggle with their appropriate use. Studies by Liu (2008) and Chen (2006) have pointed out that ESL learners have a tendency to use particular LAs inappropriately across registers such as using the

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informal and colloquial LAs in their academic writing. Students, for example, use 'therefore' when they are expected to use however when linking their sentences to strengthen their arguments and this inadvertently weakens their writing. The appropriate use of linking adverbials not only can signal relationship between ideas and transitional expression but they also can differentiate the writers' stance from counterarguments, particularly in complex genres such as argumentative essay. Therefore, student writers need to learn the logical way of building arguments by employing the appropriate linking devices.

Numerous studies have, as a matter of fact, found that students' confusion with the use of linking adverbial have led to ESL students to underuse, overuse and misuse these conjunctions (Crewe, 1990; Milton and Tsang, 1993; Chen, 2006; Heino, 2010) In a corpus-based study of adverbial connectors, Shea (2009) disclosed that certain connectors, such as appositional (e.g., in fact) and additive (moreover) were overused while contrastive (however) and argument developing (therefore) connectors were underused. Chen (2006) meanwhile found that many Swedish writers thought that it was appropriate to use less formal linking adverbials in academic writing.

Milton and Tsang (1993) and Hinkel (2004) agree that liberal use of LAs does not guarantee the overall quality of writing. Through their corpus-based study of LAs in EFL students' learners, Milton and Tsang (1993) reported that the top ten overused LAs were lastly, besides, moreover, secondly, firstly, consequently, furthermore, regarding, therefore and namely. They claimed that excessive use of these LAs had even caused confusion to readers. Crewe (1990) postulated that students use LAs as 'surface-level fillers' without considering how they build coherence in the text. Meanwhile, Liu and Braine (2005) adopted the formative work of Halliday and Hassan (1976) and studied the use of cohesive linkers in argumentative essays written by Chinese undergraduate students. They found that there was a substantial relationship between the quantities of cohesive elements with the quality of students' argumentative essays. The use of linking adverbials, however, could not make the essays cohesive if the linkers are misused or overused. In other words, only the appropriate use of linking adverbials could make the writing cohesive or organised. Moreover, findings of Yang and Sun (2012) have corroborated this, emphasizing that the correct use of linking adverbials is often positively associated with ESL learners' writing quality regardless of their proficiency levels.

Linking ideas coherently is also important in academic speech. In her study, Zareva (2011) found native and non-native students in the United States used the same kind of linking adverbials according to semantic types, occurrence, forms and position in their academic presentations. She also showed that students overused result adverbials but underused adversative adverbials. Not only the type of adverbials, students also preferred using single-word adverbials as compared to phrasal adverbials and they commonly placed the LAs in sentence initial positions. Heino (2010) also found that his Swedish learners overused some linking adverbials and underused others following specific categories.

As students advance their studies to higher levels, writing tasks become more sophisticated and most likely, the tasks would involve evidence of complex structures that require critical thinking and cohesive organisations. This study aims to examine Malaysian pre-university students' use of linking adverbials in argumentative essays through a small collection of learner corpus. It examines which types of linking devices that are most preferred by Malaysian learner writers and which poses the most challenges. Using a reference sub-corpus extracted from British Academic Written English (BAWE) corpus, the study then compares the findings to see how our learner writers use linking adverbials differently from native learner writers. The use of standard corpus can verify and provide comparative results, particularly when analyzing specific linguistic features in text (Biber et al., 2002). Earlier studies such as Liu and Braine (2005) and Zareva (2011) have also analysed cohesive features of students' writing and speaking skills in comparison to native corpora. Findings from our comparison are believed to inform teachers of students' writing difficulties, specifically with organizing ideas with coherence and cohesion through the use of appropriate linking devices.

## II. CLASSIFICATIONS FOR LINKING ADVERBIALS

Researchers have used numerous nomenclatures to refer to linking devices. Linking adverbials have been called 'conjunction' (Halliday and Hasan, 1976) 'logical connectives' (Crewe, 1990), 'logical connectors' or 'conjunctive adverbials' (Celce-Murcia and Larsen-Freeman, 1999), 'adverbial connectors' (Shea, 2009; Heino, 2010;), 'adverbial conjuncts' (Zhang, 2007; Xu and Liu, 2012), 'connector' (Narita et al., 2004; Rørvik and Egan, 2013), and 'linking adverbials' (Biber, et al., 2002; Liu, 2008; Peacock, 2010; Ishikawa, 2011). All studies, however, commonly refer to its function as connectors of ideas. This study has chosen the term 'linking adverbials' following Liu (2008) as the term 'linking' is clearer to readers compared to the term 'conjunctive', and the word 'adverbials' contains more than two words which is more all-encompassing than 'connector' and thus can include linking phrases such as on one hand or in contrast.

To study the classifications of linking adverbials, we referred to four commonly used sources: The Grammar Book (Celce-Murcia and Larsen-Freeman, 1999), Longman Student Grammar of Spoken and Written English (Biber et al., 2002), Cambridge Grammar of English (Carter and McCarthy, 2006) and the study of Liu (2008). Numerous studies have referred to Celce-Murcia and Larsen-Freeman's (1999) four way classification (see Chen, 2006; Crewe, 1990; Park, 2013) while Biber's and Carter's learner corpus-based lists have been referred by Conrad (1999) and Ishikawa (2009) and Anderson (2014) as they provide reliable corpus-based learner samples. Clearly, different scholars have classified linking adverbial differently. However, despite the various terms used,

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these four sources all agreed that linking adverbials contain a correlative role. Table 1 below summarised our review of the overall semantic categories of linking adverbials together with subcategories and items listed according to these four studies.

**Table 1. Summary Of Semantic Categories Of Linking Adverbials Across Studies.**

<b>Celce-Murcia &amp; Larsen-Freeman (1999)</b>	<b>Biber et al. (2002)</b>	<b>Carter &amp; McCarthy (2006)</b>	<b>Liu (2008)</b>	<b>Examples</b>
<b>ADDITIVE</b> Emphatic Appositional Comparative	<b>ENUMERATION &amp; ADDITION</b>	<b>ADDITIVE</b>	<b>ADDITIVE</b> Emphatic Appositional Comparative	<i>in addition</i> <i>furthermore</i> <i>likewise</i>
	<b>APPOSITION</b>	<b>META-TEXTUAL</b>		<i>for example</i>
<b>ADVERSATIVE</b> Proper adversative Contrastive Correction Dismissal	<b>CONTRAST/ CONCESSION</b>	<b>CONTRASTIVE</b>	<b>ADVERSATIVE</b> Proper adversative Contrastive Correction Dismissal	<i>alternatively,</i> <i>instead,</i> <i>on the other hand</i>
		<b>CONCESSIVE</b>		<i>however</i>
<b>CAUSAL</b> General causal Causal conditional	<b>RESULT/ INFERENCE</b>	<b>RESULTATIVE</b>	<b>CAUSAL</b> General causal Causal conditional	<i>therefore, thus, so</i>
<b>SEQUENTIAL</b>	<b>TRANSITION</b>	<b>TIME</b>	<b>SEQUENTIAL</b> Enumerative Simultaneous Summative Transitional	<i>then, first,</i> <i>meanwhile</i>
		<b>LISTING</b>		<i>first of all</i>
	<b>SUMMATION</b>	<b>SUMMATIVE</b>		<i>in conclusion, to sum up</i>
		<b>INFERENCE</b>		<i>in that case</i>

After reviewing the references above, we decided to adopt Liu's (2008) framework that was modified from Celce-Murcia and Larsen-Freeman's (1999) four-way classification. We believe that Liu's (2008) four-way classification system is more comprehensive as it has included all elements from earlier studies and this provides a better differentiation of each sub-category.

### III. METHOD

This study is a discourse-based analysis on students' essays using a learner corpus consisting of writing samples of students from three Matriculation colleges in southern states of Malaysia. We initially collected 347 writing samples but used only 209 (60 percent) samples for the study, written only by students who had received at least a B grade in their Sijil Pelajaran Malaysia (SPM) English paper. Students come from various native language background such as Malay, Mandarin, Tamil and other indigenous languages. All participants wrote an argumentative essay based on three given prompts that are similar to the ones used in Malaysian University English Test (MUET), using at least 350 words within 50 minutes. The students were familiar with the genre since Matriculation colleges prepare students for taking MUET, as part of the requirement for advancing their studies to university level.

#### A. Description of Corpus

Students' hand-written essays were digitised and converted to text (.txt) files. A discourse-based analysis of sentences containing linking adverbials were identified and classified following Liu's (2008) framework: ADDITIVE, ADVERSATIVE, CAUSAL and SEQUENTIAL. Using Liu's compilation list and the features of Key Word in Context (KWIC) in AntConc Build3.4.4 (Anthony, 2014), we identified and extracted all occurrences of Linking Adverbials in students' essays and later put them according to the discourse categories.

Table 2 below summarises the corpus used in this study. The corpus contains a total of 95241 words.

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**Table 2. Summary Of Current Learner Corpus**

Colleges	J	M	N	Total
Selected essay	58	75	76	209
Word count	25280	35347	34614	95241
Sentence count	1496	2058	1999	5553
Token count	26590	37587	36514	100691
Type count	2600	2885	2919	8404

To see the lexical diversity of the current corpus, we calculated the type-token ratio (TTR) (see Figure 1). Type token ratio measures the variation of lexis used and the result showed that the corpus has a low TTR of 5.20%, which indicate that students have limited variations in their vocabulary and that they repeatedly used the same words in their writing.

Type	Number of separate		4919		
Token Ratio (TTR)	= words (types)	×	=	=	5.20%
	Number of words (tokens)	%	100		95241

**Figure 1.** Type-token ratio for the current corpus

### B. Corpus Analysis

Students' hand-written essays were digitised and converted to text (.txt) files. A discourse-based analysis of sentences containing linking adverbials were identified and classified following Liu's (2008) framework: ADDITIVE, ADVERSATIVE, CAUSAL and SEQUENTIAL. Using Liu's compilation list and the features of Key Word in Context (KWIC) in AntConc Build3.4.4 [30] (Anthony, 2014), we identified and extracted all occurrences of Linking Adverbials in students' essays and later put them according to the discourse categories.

### C. Comparative Corpus

A comparative learner corpora is needed in order to see how different Malaysian matriculation students' use LAs in their argumentative essays. A sub-corpus of essays which has similar characteristics with the current learner corpus was extracted from the hosts of genre family of British Academic Written English (BAWE) corpus. The BAWE sub-corpus contains 63 argumentative essays written by first-year, native English-speaking students from the Social Sciences, totalling 110737 words. While we acknowledge the inherent differences between the BAWE sub-corpus from our learner corpus such as topics, writing experiences and students' levels of study, the native-speaker reference corpus is needed to assess the efficacy of Linking Adverbials used in our second language learner writer corpus.

## IV. DISCUSSION AND CONCLUSION

Liu's (2008) study has listed a total of 110 linking adverbials; however, we identified only 64 of them (58 percent) in our current corpus. Table 3 shows the top ten most frequently used linking adverbials in students' essays while Table 4 shows the overall comparison of LAs across categories.

**Table 3. Top Ten Most Frequently Used Linking Adverbials In Malaysian Matriculation Students' Essays (Normalised To 10000 Words)**

Rank	Linking adverbials	Function of use	Category	Raw frequency	f/10,000
1.	<i>For example</i>	Listing examples	ADDITIVE	191	20.05
2.	<i>So</i>	Telling the consequence of an action	CAUSAL	188	19.74
3.	<i>Therefore</i>	Telling the consequence of an action	CAUSAL	97	10.18
4.	<i>Hence</i>	Telling the consequence of an action	CAUSAL	83	8.71
5.	<i>In conclusion</i>	Making a conclusion	SEQUENTIAL	81	8.50
6.	<i>Thus</i>	Telling the consequence of an action	CAUSAL	77	8.08
7.	<i>Besides</i>	Adding similar ideas	ADDITIVE	72	7.56
8.	<i>Because of it/this/ that</i>	Telling the consequence of an action	CAUSAL	57	5.98
9.	<i>Furthermore</i>	Adding similar ideas	ADDITIVE	56	5.88
10.	<i>Next</i>	Making ideas relative to one another	SEQUENTIAL	56	5.88

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**Table 4. Overall Comparison Of Linking Adverbials Across Categories (Normalised To 10000 Words)**

Categories	Sub-categories	Current corpus		BAWE	
		Raw Frequency	f/10,000	f/10,000	LL value
ADDITIVE	Emphatic	751	78.85	23.48	+328.60
	Appositional	326	34.23	15.98	+70.12
	Comparison	0	0.00	1.90	+26.07
	<b>Total</b>	<b>1077</b>	<b>113.08</b>	<b>41.36</b>	<b>+358.89</b>
ADVERSATIVE	Proper adversative	158	16.59	33.23	-57.55
	Contrastive	27	2.83	8.40	-29.13
	Correction	30	3.15	11.11	-47.51
	Dismissal	15	1.57	9.21	-60.13
	<b>Total</b>	<b>230</b>	<b>24.15</b>	<b>61.95</b>	<b>-173.91</b>
CAUSAL	General causal	560	58.80	33.86	+70.04
	Causal conditional	51	5.35	5.33	+0.00
	<b>Total</b>	<b>611</b>	<b>64.15</b>	<b>39.19</b>	<b>+62.74</b>
SEQUENTIAL	Enumerative	331	34.75	13.18	+104.26
	Simultaneous	4	0.42	0.81	-1.29
	Summative	211	22.15	1.99	+207.13
	Transitional	1	0.10	0.00	+1.54
	<b>Total</b>	<b>547</b>	<b>57.43</b>	<b>15.98</b>	<b>+258.21</b>
Total of	Linking adverbials	2465	258.82	158.48	+251.01

Our study used a reference corpora and frequency profiling such as log-likelihood test (c.f. Rayson and Garside, 2000) to compare key items. Table 4 shows that a total of 2465 occurrences of LAs were identified from the Malaysian learner corpus, with log likelihood value of +251.01, indicating that there were overwhelmingly more occurrences of linking adverbials in the Malaysian corpus. Considering the TTR value of 5.20%, and that we identified only 58% of Liu's extensive list, it is clear to see that the clusters of LAs identified in our corpus were small and the LAs employed by the students concentrated to specific kinds. As can be seen from Table 3, the appositional adverbial ADDITIVE for example is the most frequently used LA, occurring 191 times in the corpus or 20.05 per 10000 words. This is followed by the less formal linkers so (188 tokens/19.74 per 10000 words) under the category CAUSAL which was used more often compared comparatively to the more formal linkers therefore (97 tokens, or 10.18 per 10000 words), hence (83 tokens) and thus (77 tokens), under the same category. Notice, however, there were no linkers under the category of ADVERSATIVES that made it to the top ten most frequent word list. Table 4 shows that even though Malaysian learner writers used all LAs from all four major categories, the frequency distributions of LAs of ADDITIVE far outweighed other categories, despite no occurrences were found for the 'comparison' sub-category. Linkers from ADVERSATIVE category were the least found in the current Malaysian corpus. In contrast, ADVERSATIVE linkers are the most frequently used linkers in the BAWE corpus.

As shown in Table 4, Malaysian learner writers used more linking adverbials (f=258.82 per 10000 words) as compared to those found in BAWE (f=157.74 per 10000) corpus. This higher frequency of LAs in our learner corpus resonates with Field & Oi's (1992) and Lei's (2012) studies as they too found that ESL students frequently used LAs when compared to native speaker writers of English and professional writers in their argumentative essays. The overuse of linking adverbials in three out of four categories are shown by the higher log likelihood (LL) values. Compared to the BAWE corpus, Malaysian learner writers in our study overly employed ADDITIVES, CAUSALS and SEQUENTIAL linkers but underused linkers from the category of ADVERSATIVES. Earlier studies also (see Crewe, 1990; Milton and Tsang, 1993; Chen, 2006; Heino, 2010 and Lei, 2012;) have recorded that non-native speakers most frequently use ADDITIVE LAs and least frequently use ADVERSATIVE LAs.

### A. Overused and Underused Linking Adverbials

Numerous research studies have found that language learners rely on a smaller set of LAs in their writing compared to native speakers and professional writers (see Chen, 2006; Zhang, 2007; Ishikawa, 2011; Lei, 2012; Xu and Liu, 2012). The results presented in Table 5 correspond with Table 4, where it shows linking adverbials that are overused by Malaysian learner writers in comparison with the BAWE corpus.



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Table 5. Overused Linking Adverbials

Rank	Linking adverbials	Categories	Current	BAWE	
			f/10,000	f/10,000	LL ratio
1	<i>So</i>	CAUSAL	19.74	1.72	+186.66
2	<i>besides</i>	ADDITIVE	7.56	0.27	+89.61
3	<i>Next</i>	SEQUENTIAL	5.88	0.00	+86.39
4	<i>In conclusion</i>	SEQUENTIAL	8.50	1.35	+60.37
5	<i>For example</i>	ADDITIVE	20.05	7.86	+57.12
6	<i>First and foremost</i>	SEQUENTIAL	3.78	0.18	+42.35
7	<i>Hence</i>	CAUSAL	8.71	2.62	+35.93
8	<i>Moreover</i>	ADDITIVE	5.25	0.63	+43.36
9	<i>Last/lastly</i>	SEQUENTIAL	3.04	0.45	+22.55
10	<i>As we know</i>	ADDITIVE	1.89	0.00	+27.77

The results above show that Malaysian learner writers overused linkers from the ADDITIVE adverbials category more than other categories when compared to the BAWE corpus. When compared to the BAWE corpus, the biggest difference is found in the use of informal CAUSAL so (LL +186.66). Malaysian learner writers preferred to use less formal general CAUSAL so to explain the consequence of an action in their argumentative essays, as typified by Example 1.

Example 1:

For the conclusion, we should decrease the time of using the social media to avoid this thing to happen. So, our life can become better and healthier. (J 001)

Also notice the use of informal expression “this thing” used by the writers and the comparative value of CAUSAL ‘so’ as shown in Table 5. Colloquial expressions and the use of informal linking adverbials such as so shown here were also reported in Korean learner corpus (Ha, 2014). Similarly, Ha pointed that Korean EFL learners have a tendency to overuse ADDITIVE connectors such as besides (LL +89.61) to reformulate or add a point, rather than to persuade the readers by giving a strong argument for or against a certain theme. Examples 2 illustrates similar use from our corpus while Example 3 shows similar phenomenon using SEQUENTIAL connector:

Example 2

For example, Albert Einstein does not have PHD in any specific course, but he proves what he can do in science and people use his formula and theory in the practical. Besides, his work is certificated by the world and everyone appreciate him. (M 9)

Example 3

This happen because we, ourselves, do not have the initiative to revise what we have been taught of. Next, talking about human side, none of us are perfect. We tend to make friends with everyone whom we thought are nice. (J 010)

In example 3 above, the writer used SEQUENTIAL next (LL +86.39), to add a new idea to his earlier points on how one needs to the help of others to succeed in life. Enumerative devices were used by students mainly to show the order of ideas as they appear in their essays. Three other SEQUENTIAL linkers namely, in conclusion (+60.37), first and foremost (+42.35), and last/lastly (+22.55) were also favoured by Malaysian learner writers. Lei (2012) has commented that students' overuse of certain linking adverbials may perhaps be attempts to ‘cover up’ their poor writing. Students' overuse of ADDITIVE and SEQUENTIAL as we have seen in the corpus, did not add variation in the content nor did they add complexity in the argument structure as the linkers chosen merely enlisted similar points from the same perspectives. Studies by Park (2013) [36] also revealed that Korean university students used sequential adverbials 6 to 1 when compared to native speaker writers. Summative adverbials such as in conclusion occurred ten times more frequently in Park's study. In our study too, students use enumerative and summative adverbials more than any other types (see Table 4).

According to Cooper and Patton (2009), a good argumentative essay also requires the writers to persuade the readers through acknowledging the opposite point of view besides giving the basic structure of argumentative essays such as introduction, thesis, premises and conclusion. Rebuttal is therefore vital in an argumentative essay. Our corpus, however, showed that this element is frequently missing. Table 6 below shows the least frequently used linking adverbials in our corpus in comparison with the BAWE corpus and LAs from ADVERSATIVE category that function to show oppositions were significantly avoided.

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**Table 6. Underused Linking Adverbials**

Rank	Corpus	Categories	Current	BAWE	
			f/10,000	f/10,000	LL value
1	<i>However</i>	ADVERSATIVE	5.56	20.59	- 92.64
2	<i>Rather</i>	ADVERSATIVE	0.31	6.77	- 72.29
3	<i>Still</i>	ADVERSATIVE	1.26	7.77	- 52.39
4	<i>Then</i>	SEQUENTIAL	1.57	6.14	- 29.11
5	<i>Yet</i>	ADVERSATIVE	0.84	4.61	- 28.81
6	<i>As Well</i>	ADDITIVE	1.05	4.33	- 21.68
7	<i>Similarly</i>	ADDITIVE	0.00	1.13	-19.86
8	<i>That Is</i>	ADDITIVE	0.73	2.98	- 14.66
9	<i>Otherwise</i>	CAUSAL	0.00	1.21	-12.41
10	<i>Then</i>	CAUSAL	2.31	2.89	- 0.66

As can be seen from the table, Malaysian learner writers seldom used four ADVERSATIVE adverbials such as *however* (-92.64), *rather* (-72.29), *still* (-52.39) and *yet* (-28.81) comparatively. The underuse of adverbials from this category could be that most essays did not offer any counterarguments or change the direction of the argument logically. Numerous studies have also indicated this is typically lacking in ESL argumentative essays (Halliday and Hassan, 1976; Granger and Tyson, 1996; Hamed, 2014).

The findings clearly suggest that our students have limited experiences in writing up persuasive essays and lack the practices in expressing more complex thoughts. They may also be unfamiliar with the many varieties of linking adverbials and their discursual functions. Similar to other inexperienced ESL writers reported before, our learner writers relied on familiar types of LAs merely to structurally organise their essays, rather than using them to strategically build strong content development of their ideas (c.f. Field and Oi, 1992; Lei, 2012).

### B. Additional Linking Adverbials Used by Malaysian Learner Writers

The present study also found different uses of linking adverbials by Malaysian learner writers in their argumentative essays. These additional linking adverbials carry the function of linkers, even though they are used differently from Liu's (2008) framework. Table 7 shows how these linkers were used by the students.

**Table 7. New Items of Linking Adverbials Found In The Present Study**

ADDITIVE	ADVERSATIVE	CAUSAL	SEQUENTIAL
<b>Emphatic</b>	<b>Proper Adversative</b>	<b>General causal</b>	<b>Enumerative</b>
<i>And</i> (f=1.47)	<i>Although</i> (f=0.52)	<i>Ergo</i> (f=0.21)	<i>At Last</i> (f=0.31)
<i>Plus</i> (f=0.84)	<i>But</i> (f=8.40)	<i>From Here/That/This</i>	<i>In Future</i> (f=0.21)
<i>On top of that</i> (f=0.42)		(f=1.89)	<i>At first</i> (f=0.42)
<i>Apart from that</i> (f=1.78)		<i>That is why</i> (f=1.05)	<i>Last but not least</i> (f=3.46)
<i>Other than that</i> (f=4.62)		<i>With that</i> (f=0.21)	<i>At /in /by the end</i> (f=0.42)
<i>Not only that</i> (f=0.31)		<b>Causal conditional</b>	<i>After That</i> (f=1.05)
<i>As we know</i> (f=1.89)		<i>By doing so/this/these</i> (f=1.36)	<b>Summative</b>
<i>Actually</i> (f=4.72)		<i>In this situation/context</i> (f=0.52)	<i>As a/ for the conclusion</i> (f=3.88)
<i>In fact</i> (f=0.42)			<i>Conclusion/the conclusion/the conclusion is</i> (f=1.15)
<i>On the other hand</i> (f=0.42) <i>Surely</i> (2.62) <i>Certainly</i> (0.52) <i>Absolutely</i> (0.73)			<i>In a/the nutshell</i> (f=4.72)
<b>Appositional</b>			
<i>This /that /it means</i> (f=0.73)			

As shown above, ADDITIVE category has many new items added into the group compared to other categories. Malaysian learner writers have the tendency to pad their essays with similar information by emphasizing their points (sub-category emphatic) and

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giving examples (sub-category appositional) in their argumentative essays as there were many new lexical items found in these sub-categories. Similar findings were reported by Granger and Tyson (1996)—they too found that French EFL learners overused appositional adverbials to give examples (e.g. for instance and namely). When compared to BAWE corpus, the Malaysian learner corpus also showed that the students used appositional adverbials to emphasize the content of the preceding sentence rather than to contrast ideas. The use of actually exemplifies this as shown in Example 4.

Example 4:

It can give an affect to our examination result because we will only pay our phone at a whole day. Actually, like a small kids, they also play a phone and computer that have a lot of games. (M 040)

In our learner corpus, actually ( $f = 4.72$ ) was often misused as an ADDITIVE linker, that equates meaning as 'sebenarnya' (besides) in Malay. Perhaps due to the lack of exposure and experience, our learner writers may have relied on their native language background as they write their essays in English. Granger and Tyson (1996) have also explained that the use of specific LAs is transfer-related. This finding corroborates with other studies that recorded learner writers misusing ADVERSATIVE such as on the other hand to further add a point without implying any contrast (see Field and Oi, 1992). Linking phrase such as other than that functioning as ADDITIVE is shown in Examples 5.

Example 5:

Social media really hinder us from real life socializing. Other than that, social media can also cause rifts among the family members. All family nowadays must have at least one smartphones and what is the usage of smartphone if not connected with the social media? (M 061)

In the above example, the student used other than that to emphasize his earlier statement on how social media has disrupted social relations. The phrase is used as an ADDITIVE marker, perhaps translated literally from Malay "selain daripada itu." Liu (2008) does not include the phrase other than that in his list of linkers.

Our learner writers also preferred to use prepositional phrases or multi-word phrases commonly used as linking adverbials in the category of CAUSAL (e.g. by doing so/this/these) and SEQUENTIAL (e.g. in a/the nutshell). However, these phrases and their comparable usage were not found in the BAWE corpus. Examples of multi-word prepositional phrases are shown as below:

Example 6:

People need to come out from their comfy home to interact with people at outside. By doing these also, people can learn to become more considerate and grateful with the people around them. Major problems could be solve when there is communication from face to face. (J 008)

Example 7:

He already lose the ability to communicate with others. This is how tragic for him. In a nutshell, social media could hinder us from real life socializing. So, let us drop the media social behind us and go outside to take a look to this beautiful world. (J 013)

Although Liu's (2008) study did not include in a nutshell in his LA list, in a nutshell was found in Zareva's (2011) studies comparing L1 and L2 spoken presentations. Zareva found the phrase was only used by L2 speakers in their spoken presentations. The phrase in a nutshell functions similarly to in conclusion; our learner writers mostly used in a nutshell to summarise and restate their stance in their concluding paragraph, as shown in Example 7.

Our learner writers also showed high propensity of using amplifying adverbs expressing a high degree of certainty such as certainly, absolutely and surely, indicating that they tend to write as they speak (c.f. Chen, 2006; Gilquin et al., 2007). Students' unawareness on register differences may have led to the overly spoken-like tone in their academic essays. In addition, their familiarity with colloquial adverbials in daily conversations may have also caused the students to use other informal semantic equivalent linking adverbials (Narita, et al., 2004; Gilquin and Paquot, 2007).

The results of this study describe cohesion and coherence elements typically found in inexperienced second language learner writers. While we aimed specifically to examine linking adverbials used when connecting ideas, we also noticed learner writers' general difficulties with other lexico-grammatical features, pragmatic appropriacy, and over-reliant on restricted set of linguistic features. Data shown by our corpus could offer insights and descriptions to English teachers of second language student's problems in expressing their thoughts and developing their arguments logically, and how best to help students make better use of linking devices to connect ideas inter- and intra-sentences in writing. As students proceed beyond the matriculation college to degree programs at university levels, they will be required to produce more sophisticated, longer pieces of writing irrespective of their discipline, such as critical summary of readings, personal reflections, article reviews, and project papers. Pre-university students who aim to enrol in degree programs should therefore be equipped with good writing skills.

Our study has shown that the linking adverbials chosen by student writers were of limited variety and the ones that they opted to use did not add to their essay's argument complexity. In other words, students have a small repertoire of linking devices and the structure of the essays are fairly simple and arguments are one-sided. Linkers from the categories of ADDITIVE and SEQUENTIAL were used as perfunctory organizing devices while more cognitively complex linkers such as ADVERSATIVE which show more layered, sophisticated argumentations that include rebuttals and counterarguments were the least used or seemed to be avoided. Crew's (1990) claims that ESL students use linking adverbials as 'surface-level fillers' to simply organise



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the essays may still hold. As counterargument is a required element in argumentative essays and their conspicuously low occurrences in our learner corpus further strengthen our belief that the genre is under-taught and students may not have adequate practice to explore the full spectrum of linking devices from all categories.

Clearly, organizing and writing argumentative essays in a second language are difficult for learner writers and the challenges are compounded when they are often asked to produce persuasive essays within a restricted time frame. Learner writers who contributed to our corpus wrote their essays within a time frame such as required in national examinations; they obviously did not have the opportunity to organise more complex thoughts and marshal evidences to support their arguments and offer counterarguments. Hence, the overuse and underuse of some categories of linking adverbials are perhaps justified. Adel (2008) has pointed out that time restriction may be a major factor that influences learner writers' overall weaknesses in argumentative essays such as reported in this study. Notwithstanding the innate difficulties of expressing complex thoughts in a second language, however, our learner writers have been prepped to write argumentatively for MUET and this prompts us to question that the underlying problem may not simply be confined to linguistic but of more general critical thinking skills. Familiarity with writing format and routinised practices over time may not be sufficient if students are not taught to think critically and provided enough language exposure to enable them to write persuasively.

Lastly, the findings of this study could also be used to reflect on how best to improve writing instructions in our English language classes. The comparison made with native corpus has shed light into students' writing inadequacies and the challenges faced by Malaysian matriculation students. A good piece of writing begins with good ideas that are well supported with evidence, and a persuasive argumentative essay is the one that has fully developed propositions and offers a balanced perspective. The essential steps of generating ideas for the assigned topic and critically thinking about them should always be emphasized before asking our students to even begin writing. Specific lexico-grammatical patterning and discourse appropriate features commonly associated with specific essay genre ought to be introduced and practiced within contextual writing tasks. Students could be exposed to wider reading materials with genre specific features for modelling purposes and be aware of register requirements as part of the preparation to write. All these can today be done easily with the use of learner corpora that are accessible to teachers and students alike. Teaching writing skills based on corpus evidence, however, currently remains an under-researched area in Malaysia.

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