Metadiscourse use in English Language and Sociology master's theses literature review chapters

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Biodata

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Abstract

Review genres are very crucial in the academy. Consequently, in recent times they have engendered the attentions of Applied Linguists, discourse analysts, literacy specialists, and most importantly scholars in EAP. In line with this, the present study explored variations in metadiscourse use across the literature review subgenre in English Language, and Sociology master's theses. The data set consisted of twenty literature review chapters of master's theses, 10 from each of the two disciplines. The metadiscursive items were manually identified and coded, drawing on the modified version of Hyland's model of metadiscourse. Except transitions, the study revealed significant variations in all the other interactive and interactional subcategories across the two disciplines. The findings show that subgenre factor and disciplinarity influence metadiscoursal choices in master's thesis. Pedagogic and theoretical implications of these findings are undoubted.

Keywords: disciplines, literature review, master's thesis, review genre, metadiscourse

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1. Introduction

Generally, variations in metadiscourse use in the thesis genre across disciplines are studied from either macroscopic analysis –the study of a whole thesis – (e.g. Burneikaite, 2008, 2009a, b & c; Hyland, 2004; Lin, 2005; Yu, 2016), or microscopic analysis –the study of a rhetorical section of thesis – (e.g. Kawase, 2015; Rezaei, Estaji & Ghale, 2015; Zahra, Roya & Shahla (2015)**.** The macroscopic approach has been employed in several studies (e.g. Duruk, 2017; Haufiku & Kangira, 2018; Marandi, 2002; Zahra, Roya & Shahla, 2015). In this case, researchers are interested in discovering disciplinary-specificities, and variations in metadiscourse use (e.g. Hyland & Tse, 2004; Hyland, 2004; Burneikaitè, 2008, 2009a, b & c; Musa, 2014a & b).

In their study, Rezaei et al. (2015) found interesting some similarities and disparities across chapters in the use of interactional subcategories. They realized that engagement markers and self-mentions respectively recorded the highest and lowest frequencies across Introduction and Literature review (LR) chapters in applied linguistics master's theses. Notwithstanding, they found that there was a marked statistical difference in all the subcategories across the two chapters. More so, Zahra, Roya & Shahla (2015) explored variation in metadiscourse in conclusion chapters across English Translation, Teaching, and Literature master theses. They realized variation in the scale of preference in both interactive and interactional subcategories. For transitions and boosters occurred as the most frequent interactive and interactional subcategories across the three disciplines. Aside from these, they were differences in the positions of the other subcategories. Most importantly, they found significantly marked differences in the subcategories across the three differences. The studies point to chapter-specific and discipline-specific use of metadiscourse devices.

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Studies on metadiscourse use in the literature review chapter in thesis (e.g. Chen, 2011; Loan & Pramoolsook, 2016; Olmos-Lopez, 2015; Rezaei, et al., 2015) are limited. The only study that comes close to this study is Chen (2011) who investigated the use of endophoric markers, attitude markers, and self-mentions in the LR chapters across social sciences/humanities and sciences PhD theses. He found that the aforementioned metadiscourse subcategories were generally more frequent in the sciences than in the social sciences/humanities. Chen's (2011) study and the present study converge and diverge in some regards. Both studies focus on literature review chapter, but they differ given that while Chen (2011) focused on PhD thesis, the present one focuses on master's thesis. Hyland (2004) has established that PhD and master's theses vary with respect to their metadiscoursal choices.

Thus, the present study seeks to explore metadiscourse use in the LR chapters in English Language and Sociology master's theses from an English-medium university. The paper assumes that as a student-produced text, the master's thesis 'can vary greatly in form, tone, epistemology and purpose across disciplines' (Thompson, 2012: 119.). It is thus expected that the varied epistemologies, conventions, and norms in English Language and Sociology which are humanities and Social sciences disciplines (see Hyland, 2009) will reflect on the LR Chapters in the master's theses from the two disciplines. Based on Becher's (1989) taxonomy of disciplines, both English Language and Sociology are soft sciences. However, English Language is considered softer than Sociology, given that it is considered a humanity discipline while Sociology is considered a Social Science (Hyland, 2009). More so, Biglan's (1973) model reveal English Language and Sociology as soft-pure-non-life, and soft-pure-life disciplines respectively Indeed, this study is very crucial given that the Literature Review chapter has not received the required attentions in metadiscourse studies. Can and Yuvayapan (2018), in their study indicated that they excluded the literature

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review chapters from their corpus because they claim the LRs 'mainly consist of citations from other studies in the literature…' (p. 131). They ignore the fact that the citations (i.e. evidentials) themselves are metadiscursive, and most importantly metadiscourse is pervasive in thesis (Hyland, 1998a, 2004; Olmos-Lopez, 2015).

The main questions underpinning this study are: 1) What variation exists between English Language Literature Review (ELLR) and Sociology Literature Review (SLR) in terms of the use of interactive metadiscourse? and 2) What variation exists between ELLR and SLR in terms of the use of interactional metadiscourse?

The rest of the paper is organized as follows. I provide a brief review on empirical studies metadiscourse use in Literature Review Chapters in theses (and RAs, given the paucity of such studies on master's theses literature review). This is followed by issues related to the various methods employed in the study, and then results are discussed. I finally conclude with summary of the key findings, implications of the findings and recommendations for further studies.

2. Interpersonal Model of Metadiscourse

Since its first usage by Zellig Harris, an American linguist, in the 1960s (Adel, 2006; Hyland, 2005a, Hyland & Jiang, 2018), metadiscourse has witnessed an exponential growth theoretically and empirically. Its fuzzy nature has resulted into disagreement among theorists, culminating into a plethora of theorizations (e.g. Abdi, Rizi & Tavakoli, 2009; Adel, 2005, 2006; Aguilar, 2008; Beauvais, 1989; Burneikaitè, 2008; Crismore, Markkanen & Steffensen, 1993; Hyland, 2004, 2005a; Hyland & Tse, 2004; Kumpf, 2000; Vande Kopple, 1985). These theories have helped make metadiscourse 'more theoretically robust, empirically usable and pedagogically useful' (Hyland, 2005a: 6). Interestingly, the empirical growth of metadiscourse was highlighted by the

Metadiscourse Across Genre (MAG) Conference organized in 2017 at Cyprus, where over hundred papers on metadiscourse and its allied constructs were presented.

For the purposes of this study, the modified version of Hyland's (2005a) model of metadiscourse is deemed the most appropriate analytical framework, given that Hyland's model is known for its application in academic context –of course its use outside academic context is undisputed (see Hyland, 1998b). Consequently, Zarei and Mansoori (2011: 45) described it as 'a model of metadiscourse in academic text'. Hyland (2005a) classifies metadiscourse into interactive and interactional subcategories, as shown in Table 2.

Table 2
The modified version of Hyland's model of metadiscourse

Category	Function	Examples
Interactive resources	Help to guide reader through the text	
Transitions	Express semantic relation between main clauses.	In addition/but/thus/and
Frame makers	Refer to discourse acts, sequences, or text stages	Finally/to conclude/my purpose is to
Endophoric makers	Refer to information in other parts of the text	Noted above/see Fig./in Section 2
Evidentials	Refer to source of information from other texts	According to X/(Y, 1990)/Z says
Code glosses	Help readers grasp meanings of ideational material	Namely/e.g./such as/in other words
Interactional resources	Involve the reader in the argument	
Hedges	Withhold writer's full commitment to proposition	Might/perhaps/possible/about
Boosters	Emphasize force or writer's certainty in proposition	In fact/definitely/it is clear that
Attitude markers	Express writer's attitude towards proposition	Unfortunately/I agree/surprisingly
Engagement markers	Explicitly refer to or build relationship with reader	Consider/note that/you can see that
Self-mentions	Explicit reference to author(s)	I/we/my/our
Continuants	Create a space for reader intrusion into text	And so on, etc., among others, …

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Hyland's (2005a) model follows the integrative stance (see Mauranen, 1993), and it recognizes that 'the use of discourse to manage social relationships is inseparable from its role in managing the organization of texts' (Hyland & Jiang, 2018: 19). The interactive metadiscourse generally concerns itself with the organization of the text, while the interactional ones focus on writer-reader interaction. In the original model, each macro-category had five micro-categories. Akoto (2012) introduced a new category, *continuants* to the interactional macro-category. Generally, these resources create an epistemic vacuum, which invariably 'invites' readers to collaborate with the writer in knowledge production.

3. Method

3.1. *Data Source*

The datasets for the present study comprise the literature review chapters of twenty master's theses (10 each from English Language and Sociology) from an English-medium university in Ghana. Accordingly, the data can be described as an interlanguage corpus (see Adel, 2006; Burneikaite, 2008) as they were produced by nonnative users of the English Language. The soft copies of some of the selected theses were obtained from the writers. But those where the softcopy could not be obtained, the literature review chapters were photocopied and retyped. In processing the corpus, I excised all visuals (e.g. tables, and graphics/figures), chapter, and (sub)section titles. The entire corpus totalled approximately 200, 000 words, with 100, 500 and 99, 500 from English Language.

Table 1
Basic quantitative details from ELLRC and SLRC

Disciplines	Words	Pages	RF of MD	NF of MD	MD Density
ELLRC	100, 500	402	13, 261	132	13.20
SLRC	99, 500	398	12, 670	127	12.00

Table I shows that the datasets have different sizes, where corpus from ELLR is larger than SLR. This indicates that English Language theses LR are more voluminous than Sociology ones. Unsurprisingly, as shown in Table 1, English Language leads in raw frequency and MD density. What however is not justified by the above factors (i.e. number of pages and words) is the difference in the NF, given that the NFs were normalized at a common base of 10, 000 words.

Procedure for analysis

The study undertakes a frequency analysis of metadiscourse items in the LR Chapters in English Language and Sociology master's theses to ascertain the degree of variability. I profiled the frequency list (i.e. the number of times each metadiscourse subcategory occurred). This helped reveal the absence or presence of a particular metadiscourse subcategory (see Rayson, 2003). Based on the frequency list, I determined the *frequency-ordered list*, where the most frequent metadiscourse subcategories were ranked or highlighted for the *rank analysis* as shown in Tables 3 and 5.

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In recent times, scholars have developed softwares to analyze functional phenomena such as metadiscourse, but the context-dependent nature of metadiscourse (Adel, 2006) gives manual analysis an added advantage. Quite recently Professor Stephen Bax, and Abbas, Shwhzad & Ghalib (2017) respectively developed *Text Inspector* (https://textinspector.com/help/?page_id=676), and MetaPak softwares specifically used in analyzing metadiscourse devices in text. Manual analysis, rather than computer-assisted or what Aguilar (2008) described *automatized* analysis was adopted in this paper. Although the latter saves time (Rayson, 2003, Adel, 2006), 'it presents us with so much information that we need a filtering mechanism to pick out significant items before the analysis can proceed' (Rayson, 2003: 4). This

weakness inherent in the software analysis justifies the use of the manual analysis, which appears timeless.

The raw frequencies of the identified metadiscourse items were computed. However, given that the datasets from the two disciplines were differently sized, the raw frequencies were normalized at 1, 000 words to ensure fairness. To ascertain whether the observed differences in the frequencies were significant or not, I employed the log-likelihood calculator (freely available at http://ucrel.lancs.ac.uk/llwizard.html) to compute the level of statistical significance. For an observed difference to be considered statistically significant, it must be above the statistical cut-off point of 95th percentile; 5% level; $p < 0.05$; critical value = 3.84.

In addition to the quantitative analysis, qualitative evidences are provided from the texts to demonstrate the occurrence of the various metadiscourse items. Extracts or excerpts from English Language and Sociology are respectively coded as ELLRC (English Language Literature Review Chapter) and SLRC (Sociology Literature Review Chapter). These excerpts are systematically numbered such as ELLRC 1, 2, or SLRC 1, 2 for easy reference. The metadiscursive resources in the excerpts are **bolded** and *italicized* for textual visibility.

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4. Discussion of Results

This section examines the findings in relations to the two main research questions underpinning this study. It comprises two subsections, which respectively discuss variations in interactive and interactional metadiscourse use across ELLRC and SLRC.

4.1. ***Variation in the use of interactive metadiscourse across ELLR and SLR***

Table 3 presents tentative *tolerability scale* of interactive subcategories for ELLRC and SLRC. We observe that ranks of transitions (1st), frame markers (4th) and endophorics (5th) are common to the two disciplines. The difference between the two lies between code glosses and evidentials, such that while code glosses appeared second highest interactive subcategory in ELLRC, it ranked 3rd in SLRC. More so, while evidentials recorded the 2nd highest frequency in SLRC, it ranked 3rd in ELLRC.

Table 3
Statistical information on interactive devices in ELLR and SLR

Category	English			Sociology		
	RF	NF	Rank	RF	NF	Rank
Transitions	1927	19.2	1st	1838	18.5	1st
Code Glosses	1695	16.9	2nd	1161	11.7	3rd
Evidentials	1648	16.4	3rd	1316	13.2	2nd
Frame Markers	591	5.9	4th	351	3.5	4th
Endophorics	567	5.6	5th	279	2.8	5th
Total	6428	64.0		4945	49.7	

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The position of transitions is congruent with Rezaei, Roya & Shahla (2015) where transitions ranked first in the conclusion chapters across three disciplines (i.e. English Translation, Teaching and Literature).

4.1.1. *Transitions*

Transitions encompass rhetorical resources that are employed 'to make pragmatic connections between stages in discourse development' (Khedri, Heng & Ebrahini, 2013: 322). Accordingly, they establish additive, causative, consequential and contrastive links between/among ideational information in text, as exemplified in corpus evidences ELLRC 0001 and SLRC 0001. It is realized in this study that transitions markers are central in the review genre in the master's thesis across the two disciplines. It thus affirms the ubiquitous nature of these text-connecting resources (e.g.

Burneikaite, 2009c; Hyland, 2005a & b; Mestre-Mestre, 2017). In fact, Hyland and Tse (2004) contend that transitions typify academic genre particularly review genres where argumentation is central.

The review of literature is to help shape the focus of the study *and also* help us to know the amount of work that has been done in the area of refusals. ELLRC   0001

Therefore the two perspectives complement each other **and** one or the other could be used to explain a given situation **and** will not mean that the one, which is not chosen, is rejected. SLRC 0001

It is shown in Tables 3 and 4 that transitions are significantly more pervasive in ELLRC than in SLRC. Hyland (2004) asserts that the more discursive disciplines are more inclined to the use of transitions, as such disciplines 'rely more on the careful crafting of coherent and persuasive discourse' (p. 147). Although both English Language and Sociology are soft disciplines (Becher, 1989; Biglan, 1973), on a cline, English Language is softer than Sociology, as social science, which merges the characteristics of humanities and natural sciences (Hyland, 2009).

4.1.2. *Code glosses*

Code glosses serve as text-internal dictionaries that make the meaning(s) of proportional ideas obvious to readers. They are evidences of shared disciplinary vocabulary 'which provide[s] extra information to pave the way for readers to be acquainted with the writers' preferred meanings' (Khedri et al., 2013: 324). The analysis shows that there is higher use of code glosses in ELLRC (16.9) than in SLRC (11.7), per 10, 000 words. The disparity in the degree of glossing largely reflects English Language and Sociology's comparative inclination to the constructivist/interpretivist and positivist approaches to communication respectively (Hyland, 2009). Aguilar (2008) maintains that through code glosses, writers present a disciplinary informed

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ethos as *interpreter persona,* who seeks to make information in the text accessible to the readers. As a humanities disciplines (Teuber, 2005), English Language require significant use of code glosses in order to persuasively communicate with the audience. It is however important to note that the significant difference in code glosses use in the Literature Review chapters has a number of implication.

The Outer Circle and the Expanding Circle varieties are together labeled 'non-native Englishes' *(NNEs).*   ELLRC   0002

Specific aspects of culture, **such as** technology are constantly changing   SLRC 0002

One, it suggests that English master's theses probably perceive their readers as people less familiar with the disciplinary-specific terms and as such need to be 'taught'. It thus suggests that the English writers may conceptualize a readership of their thesis to encompass both expert and novice readers. Finally, it points to arguably relatively high section of 'terminological inexactitude' (Capraro, Barroso, Nite, Rice, Lincoln, Young & Young, 2018: 3) given English Language discipline's fuzzy, borrowed/loaned and ambiguous terms. This claim can be further (in)validated by scholars in disciplinary lexicography (e.g. Baumann & Graves, 2010; Hyland & Tse, 2011).

Table 4
Log-likelihood values on interactive subcategories across ELLR and SLR

Metadiscourse Subcategories	Log-likelihood Value	Significance Status
Interactive metadiscourse	179.38	Significant
Transitions	1.31	Not Significant
Code Glosses	95.17	Significant
Evidentials	34.02	Significant
Endophorics	97.17	Significant
Frame Markers	59.45	Significant

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4.1.3. *Evidentials*

Literature reviews are described as an evidentially-dense subgenre of the thesis genre (e.g. Can & Yuvayapan, 2018; Salek, 2014). While the genre factor accounts for evidential use in the LR chapters, we notice from Table 3 that disciplinarity also plays a crucial role. It is shown that, per 10, 000 running words, evidentials were significantly more frequent in ELLRC (16.4) than SLRC (13.2).

Gumperz (1972) explains Communicative Competence as man's 'ability to select, from the totality of grammatically correct expressions available to him, forms which appropriately reflect the social norms governing behavior in specific encounters' **(p. 205)**. ELLRC   0003

Furthermore the programmes addresses (sic) redistribution of wealth from the rich to the poor, give financial support to single parent families, the unemployed and offer subsidy for health and educational services ***(Lindsey & Beach, 2000).***   SLRC 0003

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The LL value of 34.02 (see Table 4) indicates that the observed difference is statistically significant. Thus, the values and norms of the two disciplines positively influence the use of evidentials in the LR chapters. This finding implies that English Language master's students demonstrate greater awareness of the existing literature in their fields of study and make reference to them than do their Sociology counterparts. The 'increasing scientism in the social sciences' (Hyland & Jiang, 2018) may account for Sociology students' limited use of evidentials. Like the hard scientists, they are likely to refer more to their own activities such interview and administration of questionnaires, undertaken towards the writing of the work. These may include

4.1.4. *Endophoric markers*

Endophorics are employed to make intra-textual references in an ongoing discourse (see Hyland, 2004, 2005a & b). The figures presented in Table 3 reveal that endophoric markers were more

frequent in ELLRC than in SLRC (i.e. 5.6 vs 2.8 per 1000 words). This finding challenges Mestre-Mestre's (2017) claim of the complementary relationship between endophorics and evidentials. He posits that limited use of evidentials is normally compensated for by the use of endophoric markers. Unfortunately, in this study, we notice a positive correlation between endophorics and evidentials as they both appeared more frequent in ELLRC. Furthermore, the overuse of endophorics in ELLRC challenges Hyland and Jiang's (2018) assertion that the more quantitative disciplines use more endophorics than the more qualitative ones.

The review of literature is to help shape the focus of **the study** and also help us to know the amount of work that has been done in the area of refusals.   ELLRC   0004

Shiman's study guided **the present study** in two ways….   SLRC   0004

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They maintained that 'the more quantitative disciplines make the most use of this feature, often pointing to tables, figures or other ways of numerical data outside of the linear verbal exposition' (p. 24). Arguably, Sociology is more quantitative than English Language (see Hyland, 2009). Granted that this claim is an established fact, we can then say that the current finding indicates a shift and change in the values, norms and conventions of disciplines, a reality affirmed by Hyland and Jiang (2018) in their diachronic study that investigated metadiscourse use over a 50-year period. With the growth of computational, corpus, quantitative and statistical linguistics, tables, diagrams, figure (and visuals in general) are becoming common in English Language master's theses.

4.1.5. *Frame markers*

Frame markers imply that a text is metaphorically similar to an architectural edifice (see Hyland, 2004, 2005a & b). Writers, therefore, employ frame markers to 1) refer to text structure 2) label text stages 3) announce discourse goals and 4) indicate topic shifts. The rhetorical role of these devices is very crucial as they act as signposts to guide readers through the text. They are found to be more frequent in ELLRC than in SLRC, see Table 3.

Chapter Five will focus on data analysis, whilst **Chapter Six provides the findings, taking into consideration the research questions**. (ELLRC 0005)

The purpose of the review is to help create the grounding for the study of women's perceptions of their roles in households in Yendi, Ghana. (SLRC 0005)

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Table 3 shows that the difference between the two disciplines with respect to the use of frame markers is significant statistically. It is, therefore, obvious that the values and the beliefs of the two disciplines informed the master's students' choice of these devices. Hyland and Jiang (2018) argued that frame markers are increasingly becoming prevalent in the hard disciplines than in the soft ones. Sociology, a social science discipline, on a cline is closer to *hardness* than English Language (see Hyland, 2009). Per the observation of Hyland and Jiang, one expects Sociology master's thesis to contain greater use of frame markers. Unfortunately ELLRC contains more frame markers, suggesting that the students from this discipline more often announce their goals, and engage in topic shifts than their colleagues in Sociology. This finding may be justified by the highly interpretive and discursive nature of English Language as a humanity discipline (Hyland, 2009).

4.2. ***Variation in the use of interactional metadiscourse across ELLRC and SLRC***

On rank analysis, Table 5 points to interesting similarities across ELLRC and SLRC. The two disciplines have a common scale of preference for the interactional devices, as hedges rank first, followed by boosters and attitude markers. Engagement markers, continuants and self mentions placed 4th, 5th and 6th respectively. The similarities between the two disciplines are attributed to the genre factor –the factor that corpora both comprise literature reviews, which of course share a common rhetorical function, and textual positioning.

This finding differs largely from Rezaei et al (2015) whose study on interactional devices in the literature review chapter in linguistics master's theses yielded: engagement markers, hedges, boosters, attitude markers and self mentions. Except self mentions which recorded the least frequencies in both studies, the ranks of the remaining subcategories vary. The reasons for the difference between the two studies are the variations in the norms, values, conventions and epistemological stances in the disciplines involved. Again, it can be attributed to variation in the 'culturally constructed norms of academic genres' (Can & Yuvayapan, 2018: 129) or geopolitics, given Rezaei et al.'s corpus was produced by Iranians, while the present one is by Ghanaians. The literature affirms cross-cultural variations in metadiscourse use in thesis writing (Abdi, 2009; Blagojevic, 2004; Heng & Tan, 2010; Can & Yuvayapan, 2018)

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4.2.1. *Hedges*

We observe from Table 4 that Sociology master's students used more hedges in their LR than do their English Language counterparts. The observed difference in the use of hedges are supported to be statistically significant with a LL value of 63.93, as shown in Table 5. It is established that

information in a piece of text is either a fact/proposition or a claim (see Abdollahzadeh, 2011; Musa 2014a & b).

Working with conversational data reduces and ***sometimes*** prevents a situation in which the analyst has to make up his contextual or situational details to support his argument. (ELLRC 0006)

It was ***estimated*** that ***about*** 40 - 65 percent of urban population increase in Ghana between 1960 - 1970 was due to net migration.   (SLRC 0006)

Table 5
Statistical information on interactional devices

Category	ELLRC			SLRC		
	RF	*NF*	*Rank*	*RF*	*NF*	*Rank*
Hedges	2652	26.4	1st	2976	29.9	1st
Boosters	1830	18.2	2nd	2655	26.7	2nd
Attitude Markers	1825	18.1	3rd	1956	19.7	3rd
Engagement Markers	384	3.8	4th	71	0.7	4th
Continuants	102	1.0	5th	56	0.6	5th
Self Mentions	40	0.4	6th	11	0.1	6th
Total	6833	68.0		7725	77.6	

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Therefore, the difference in hedges use across ELLRC and SLRC chapters suggests that the degree of propositionality in ELLRC is higher than SLRC, which invariably has a higher degree of evaluativity (since the claims are meant to be evaluated) (see Abdollahzadeh, 2011). This implies that Sociology master's students write with greater awareness of their readers and thus cautious in their claims to show their deference to their readers.

4.2.2. *Boosters*

Boosters are generally considered hedging-neutralizing resources. It is thus anticipated that more use of hedges may attract more use of boosters. This enables writer to present a balanced ethos,

not as a least confident or an overly authoritative writer. It is thus not surprising that boosters are found to be more frequent in SLRC (26.7) than the ELLRC (18.2) per 1000 words.

Certainly, deviations in the grammar, pronunciation, meaning and vocabulary exist, confirming Freeborn's (1998) observation that the new Englishes have their own characteristics of vocabulary grammar and pronunciation. (ELLRC 0007)

Slusser, et al., (2004) *argued* that most mothers in their study spent an hour or less, distributed in two separate periods, pumping their milk while at work. (SLRC 0007)

Sociology master's students write with a higher degree of certainty than their English Language counterparts in their LRs. This results can be attributed to relatively scientism in social sciences (Hyland & Jiang, 2018), and their comparative preference for the quantitative paradigm of research (Can & Yuvayapan, 2018). It is asserted that the more soft knowledge disciplines limit their use of boosters given that the high degree of subjectivity which may not be supported by data (Hyland & Tse, 2004). Thus, the greater presence of boosters in SLRC is largely justified.

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Table 6
Log-likelihood statistical significance values on interactional subcategories

Metadiscourse Subcategories	Log-likelihood Value	Significance Status
Interactional metadiscourse	63.93	Significant
Hedges	22.04	Significant
Boosters	160.99	Significant
Attitude Markers	5.94	Significant
Engagement Markers	233.57	Significant
Continuants	13.13	Significant
Self Mentions	17.23	Significant

4.2.3. *Attitude Markers*

Records on attitude markers reveal that SLRC contains significantly more (19.7 vs 18.1) of them than ELLRC. The finding indicates that the values of the two disciplines influence the appraisal

of propositional information (Hyland, 2004) in the LR Chapters in the master's theses. It is asserted that the higher the degree of evaluativity through the use of hedges, the lower the degree of propositionally (see Abdollahzadeh, 2011). In this paper, we noticed that hedges were more frequent in the SLRC than in the ELLRC. Thus, ELLC seems to contain more propositions than the Sociology thesis. The finding indicates that appraisal is 'implicitly *invoked'* in ELLRC but 'openly *inscribed'* (Hyland & Jiang, 2018: 25) in SLRC. Given that attitude markers show a writers appraisal of proposition, one expected that attitude markers would be more frequency in ELLR than in SLRC.

It is no wonder non-native speakers have outstripped native speakers.   (ELLR 0008)

Despite the criticisms**,** the theory has been ***extremely influential***.   (SLR   0008)

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Disciplinary typologists (e.g. Biglan, 1973; Becher, 1989; Hyland, 2009) note that Sociology, a social science discipline, is positioned between humanities (softer disciplines) and natural sciences (harder disciplines). Hence, Sociology dovetails the values of softness and hardness to present 'new' ethos, which is hybrid. Consequently, one expected that English Language will communicate attitude and appraisal more than Sociology in their LR. This finding suggests that Sociology is evolving (see Hyland & Jiang, 2018), and therefore becoming softer than even the humanity discipline (i.e. English Language).

4.2.4. *Engagement Markers*

Engagement markers allow writers to explicitly involve their readers in the evolving text or discourse (e.g. Adel, 2006). The presence of engagement markers in a text reveals the degree of

interactivity between a writer and readers in a text. The records in Table 5 suggest that ELLRC is significantly more reader-engaging than SLRC, as the occurrences of engagements markers normed to 10, 000 words in the two subgenres are 3.8 and 0.7 respectively.

Let us consider the difference between the following sentences. **(**ELLRC   0009)

On a regional basis, the primary school enrolment statistics from 1994/95 to 1996/97 show that Ashanti, Central, Greater Accra, and Volta regions had the highest pupil enrolment of 86.75%, 91.96%, 81.24%, and 88.51% respectively…***(see Table 2.3)***. (SLRC   0009)

As a discursive soft field, the English Language requires a lot of engagement markers to 'enable readers to explicitly step into the text to focus readers on a particular aspect of the data or argument and guide their interpretations' (Hyland & Jiang, 2018: 27). Sociology apprentice scholars write to fit into the objectivist or the positivist approach to writing where much attention is given to the ideational content rather than the discourse participants. They thus portray limited reader-sensitivity, or consciousness.

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4.2.5. *Continuants*

Akoto (2012) argued that continuants, which are classified as part of vagueness markers (e.g. Lin, 2012, 2013) are rhetorically employed to create an epistemic vacuum for readers to fill. These resources recognize readers' potentials as epistemic contributors in the ongoing discourse. The presence of continuants justifies the disciplinary discourse community as democratic one where 'every member has the right to contribute to the discourse…' (Teubert, 2005: 8). Their use implies that readers are considered as members of the disciplinary community familiar with the knowledge repertoire. The analysis revealed that continuants were common to the two chapters, as shown in the corpus evidences ELLRC 0010 and SLRC 0010.

That is, his *turn* ends when he employs certain phonetic features as fast, or slow tempo simultaneously with a drawled syllable-time rhythm together with a semantic, pragmatic ***and other features*** (Obeng, 1983).   **(**ELLRC   0010)

Partly as a result of industrial development, they became heavily dependent on imports of foreign technology, although this form of dependency covered many other spheres of activity – agriculture, communications, education medicine ***and so on.***   **(**SLRC 0010)

As indicated in Table 5, continuants are more common in ELLRC than in SLRC. Evidence from Table 6 indicates that the observed difference is statistically significant, with an LL value of 13.13. The finding shows that disciplinarity plays a critical role in the choice of continuants in the writing of LR. Given that English Language master's students draw heavily on evidentials, they expect their readers, who invariably are experts (i.e. supervisors, examiners, assessors) to demonstrate their disciplinary knowledge by filling the epistemic space left for them. Sociology master's students on the other hand largely provide substantial information to their readers thereby reducing the degree of writer-reader transaction of knowledge. The limited use of continuants in Sociology thesis could also imply that the students are not aware of the primary readers of the master's (who are disciplinary experts, see Eley & Murray, 2009; Murray, 2009, 2011).

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4.2.6. *Self Mentions*

The normed frequencies, as shown in Table 4, for self mentions are 0.4 and 0.1 per 1000 words for ELLRC and SLRC respectively. Unsurprisingly, it is shown in Table 6 that the observed difference is statistically significant as the LL value (17.23) is above the statistical threshold of 3.84.

In Chapter Four, *we* shall deal with the Methodology under which the research design, setting, the population and sampling, method of data collection and limitations are considered. (ELLRC 00011)

I capture this multi-linear approach in a diagrammatical form as illustrated Central to this framework is the study of family level factors and children's education interrelationship. (SLRC 00011)

This suggests that English Language master's students 'create a much stronger authorial presence' (Samraj, 2008: 55) in their LR chapters than their Sociology counterparts do. The fact that English Language is a humanity discipline, and Sociology a social sciences, and respectively align themselves to the interpretivist and positivist justify this finding (see Hyland, 2009; Starfield & Ravelli, 2006).

Conclusion

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The Literature Review (LR) constitutes part of the academic review genre (Hyland & Diani, 2009). It also is a trans-disciplinary subgenre in the master's thesis. Is it the same in terms of metadiscourse choice across disciplines? The present study sought to answer this question by exploring metadiscourse use in LR Chapters across two disciplines (i.e. English Language and Sociology). Specifically, the paper sought to discover the 'degree of interdisciplinary diversity and a degree of intradisciplinary [*intra-genre*] homogeneity' (Hyland, 2000: 10) (Additions mine).

To answer realize the aim of the study, two subcorpora were built from the LR chapters of ten English Language and ten Sociology master's theses. Given the unequaled sizes of the two subcorpora, I normalized them to 10, 000 words in order to provide a common base for the comparison. I drew on the modified version (Akoto, 2012) of Hyland's interpersonal model of metadiscourse and manually coded all the metadiscursive resources. Frequency profiling of the

metadiscoursal items was undertaken, and the log-likelihood statistical tool was employed to ascertain whether the observed differences were statistically significant.

The study generally found that there were variations in the same chapter across the two disciplines, with respect to metadiscourse use. On both interactive and interactional resources, variations occurred at two levels: ranking and frequency. Findings on interactive resources showed that …The findings, in general, affirm Vazquez and Giner's (2009: page) assertion 'academic writing is created by paying special attention to the specific constraints or conventions of different disciplines. These constraints condition the resources used by academic writers in their different disciplines'. Thus, it affirms the assertion that metadiscourse use is not only, genre-specific (e.g. Bal-Gezegin, 2016) or culture/language-specific (e.g. Ozdemir & Longo, 2014) or discipline-specific (e.g. Hyland, 2004, 2005b) but also chapter (genre-part)-specific.

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The findings have implications for the teaching and learning of the LRs in master's thesis. The study has reviewed that there are degrees of specificities, and generalities regarding metadiscourse use in LRs. Teacher of postgraduate pedagogy, and students alike will therefore benefits from the findings like these. More so, theoretically the study has confirmed the modifications Hyland's theory. It attests that continuant indeed constitute crucial part of the language of literature review, in particular and master's thesis in general. Finally, the findings have implications for further studies, as expressed in the ensuing recommendations.

It is recommended that further studies explore metadiscourse use in LR chapters across humanities, social sciences and natural sciences disciplines to ascertain variation across the disciplinary cline, postulated by Hyland (2009). Again, another study can compare literature review Chapters in master's and PhD theses, and more so RAs to ascertain the levels of variation.

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