

Coherence Relations and Niche Establishment in Applied Linguistics PhD Thesis Introductions

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Abstract

This study explores how PhD students of applied linguistics relate sentences to be coherent in the process of realizing a communicative move of the PhD thesis introduction genre called Move 2 or “establishing a niche” (Swales, 1990). The analyzed data includes 300 excerpts extracted from 300 thesis introductions, each consisting of sentences used by the thesis writer to establish their research niche. The “Create A Research Space” model (Swales, 1990) was used to identify sentences used to establish a niche, and rhetorical structure theory (Mann & Thompson, 1988) was used to analyze how these sentences are related to each other in this process. The study sought to identify the types of coherence relations utilized to realize Move 2 and the frequency with which they occur. The findings revealed that the use of coherence relations varied across the different rhetorical steps. In Step 1B (Indicating a gap), Elaboration was the most common, followed by Contrast and Concession. For Step 1C (Question-raising), Elaboration was again the most common, followed by the List relation. In Step 1D (Continuing a tradition), Contrast, Elaboration and Motivation were frequently used. These findings may have implications for teaching academic writing to PhD students and for the ways novice researchers use to situate their work within the existing literature.

Keywords: coherence relations, Move 2, niche establishment, PhD thesis introduction, rhetorical structure theory

1. Introduction

The introduction found at the beginning of the thesis is one of its essential parts, serving to sell the study and impress the readers. Therefore, developing a well-organized and clear introduction to promote one’s research is an important skill for novice writers when they step into the academic community of their discipline. However, writing introductions is known to be troublesome for almost all academic writers. Although many EFL students worldwide pursue degrees that require them to write a thesis in English, they often struggle to meet the standards of the style and quality of thesis writing (Paltridge, 1997).

One of the reasons novice researchers may find it challenging to write a thesis introduction is that it involves several rhetorical moves (Zainuddin & Shaari, 2021). One of the key rhetorical moves in research introductions appears to be associated with how writers establish their research niches as an initial effort to justify the position of the study being reported in order to persuade readers of the significance of their research (Swales, 1990). Based on the seminal work by Swales (1990), establishing research niches is one of the three moves proposed in his Create A Research Space (CARS) model, in which each move serves a communicative function. In the CARS model, an introduction is often made of the three following moves: establishing a research territory, establishing a niche, and occupying the niche. The purpose of Move 2 is to link Move 1 (establishing a territory) to Move 3 (expanding the territory). In other words, it connects what has already been reported in the literature to the current research.

However, a thesis introduction is more than a sequence of rhetorical moves; one of the key elements in the organization of any piece of writing is its coherence. Every written text can be fully comprehensible only if some level of go-togetherness is reflected through all of its constituent parts. Therefore, the skill to write coherently is vital at the postgraduate level because texts at this level are typically long and complex.

To understand how coherence is achieved in academic writing, researchers have employed various analytical frameworks, one of which is the rhetorical structure theory (RST). Developed by Mann and Thompson (1988),

RST is a descriptive theory of text organization that explains coherence by defining a set of rhetorical relations that hold between text spans. By identifying the relations that connect text spans and the intentions behind their use, RST provides a framework for analyzing how writers create coherent texts that achieve their communicative goals.

In the last three decades, a significant number of studies have examined the discourse of PhD theses produced by graduate students. Many of these studies focused on the introduction section to identify the organizational structure of the thesis introductory chapter at the move and step levels (e.g., Bunton, 2002; Cheung, 2012; Dong, 1998; Samraj, 2008; Soler-Monreal et al., 2011; Thompson, 2005). However, although considerable research has been devoted to the analysis of the rhetorical structure of thesis introductions in terms of Swales's (1990) CARS moves and steps and how these two organizational elements assist in achieving the overall purpose of the academic genre, only a few studies have focused solely on Move 2 of PhD theses introductions (e.g., Ankomah & Afful, 2019; Sun & Crosthwaite, 2022; Zainuddin & Shaari, 2017). These studies did explore the rhetorical structure of the niche establishment move, but they did not examine or explain how writers relate sentences to each other to be coherent in the process of achieving the communicative move. To the researcher's best knowledge, Kawase's (2021) study of niche establishments appears to be the only recent inquiry that has focused attention on coherence relations in this important move. However, his research was limited to the introductions of applied linguistics research articles. In other words, how writers of PhD theses relate sentences to be coherent in the process of establishing a niche for their studies in the introduction section has yet to be investigated. This study was carried out in an attempt to fill this gap. The research question is as follows: What coherence relations do academic writers use in each step of niche establishment in applied linguistics PhD thesis introductions?

The rest of this work is structured as follows: Section 2 presents a review of the relevant literature related to the main concepts of this study. Section 3 outlines the analytical framework. Section 4 presents the data analysis, findings, and a discussion of these findings. The study's conclusions and its implications are summarized in the final section.

2. Literature Review

2.1 Swales's (1990) CARS Model

In this research, a genre-based research framework from the field of English for Specific Purposes (ESP) was utilized to identify sentences used for niche establishment. A widespread working definition of genre in this field is derived from Swales's (1990) pioneering work, which includes two key elements: communicative purposes and discourse community. Based on Hyland's (2007) definition of genre analysis, a researcher conducting genre analysis seeks to determine the organization of a text's structure and how language choices establish its communicative function. According to Cheng (2011), ESP practitioners think that a text's communicative purposes are delivered sequentially, with a succession of moves and steps comprising the text's structure. Swales (1990), in his study of the introductions of research articles, identified a three-move structure that he later named the CARS model. Moves can be viewed as spatial matters in which ideas move from one preformatted section to another (Swales, 1990).

The CARS model includes two types of units: move and step. "A 'move' in genre analysis is a discursal or rhetorical unit that performs a coherent communicative function in a written or spoken discourse" (Swales, 2004, p. 228). A "step" is located under a move and is considered a sub-move with a communicative function for the execution of the relevant move. In other words, both move and step are functional units with flexible language realizations (Swales, 2004). Establishing a territory (Move 1 [M1]), establishing a niche (Move 2 [M2]), and occupying a niche (Move 3 [M3]) comprise the essence of the CARS (1990) model. The first move is to establish the context of a topic under study by relying on the research field and examining prior research. The second move is to give readers relevant information on the primary motivations or issues that prompted the development of a new study. It emphasizes that new research must be conducted irrespective of past findings in order to address unresolved challenges. The third move introduces the current study and suggests its subject matter. The several steps that fall under each move are as follows (Swales, 1990):

Move 1: Establishing a territory

- Step 1: Claiming centrality and/or
- Step 2: Making topic generalization and/or
- Step 3: Reviewing items of previous research

Move 2: Establishing a niche

- Step 1A: Counter-claiming or
- Step 1B: Indicating a gap or
- Step 1C: Question-raising or
- Step 1D: Continuing a tradition

Move 3: Occupying the niche

- Step 1A: Outlining purpose or
- Step 1B: Announcing present research
- Step 2: Announcing principal findings
- Step 3: Indicating RA structure

Numerous discourse analyses of published academic research have recently employed Swales's (1990) CARS model to analyze texts from various fields, disciplines, and languages. Moreover, several cross-disciplinary and cross-cultural studies have utilized the CARS model as an analytical framework for examining the move structure of theses and research articles. Using Swales's (1990) CARS move/step analysis, many genre studies have examined the organization of information in academic research writing (e.g., Bunton, 2002; Cheung, 2012; Dong, 1998; Samraj, 2008; Soler-Monreal et al., 2011; Thompson, 2005).

2.2 Coherence Relations

According to Taboada (2006), there are various ways to achieve coherence in discourse. She argues that the apparent coherence of a text is partially attributable to coherence relations or the connections between distinct components of the discourse. She further explains that these relations are known as coherence relations, discourse relations, or rhetorical relations. "They are paratactic or hypotactic relations that hold across two or more text spans" (Taboada, 2006, p. 568). Hovy (1990) described rhetorical relations as the fundamental structural constituents of a coherent text. When constructing a text (just as when constructing a sentence), speakers choose from a range of possibilities that connect different parts of the text (or sentence). The two connected parts of the text can then enter another relation as a unit, making the process recursive throughout the text (Taboada, 2006).

Coherence relations are one of the fundamental factors contributing to the establishment of coherence in discourse. According to Taboada (2006), when a hearer or reader recognizes coherence relations within a text, they can assign coherence to that text. However, it is unclear to what extent the reader is conscious of such relations and the impact on their comprehension. Unquestionable, however, is that readers or hearers process a text gradually; that is, they add new information to the text thread as it continues. When hearers or readers cannot comprehend why two discourse segments are placed next to one another or cannot determine their relation, they perceive the text to be incoherent.

2.3 Rhetorical Structure Theory

RST (Mann & Thompson, 1988) is "a theory of relational structure," which is the "structure expressing the organization of coherent contiguous text" (Mann et al., 1992, p. 41). It postulates that a coherent text can be characterized by means of a tree structure whose leaves are the "elementary discourse units" (EDUs) and whose internal nodes are labeled with a coherence relation (Stede et al., 2017). More specifically, according to RST, a text is coherent when it is possible to construct at least one hierarchical structure for the text as a whole (Ahmadi & Parhizgar, 2017). To construct a hierarchy, Ahmadi and Parhizgar (2017) explained that the text is broken into units, and each unit then becomes connected to another by adding a relation. An RST relation/coherence relation emerges when one part of a text plays a specific role relative to the other (Ahmadi & Parhizgar, 2017).

Mann and Thompson (1988) first proposed 24 relations, which may be said to hold between two EDUs or (recursively) between larger spans of text. The number of relationships was later increased to 32. They could be divided into two distinct categories: presentational relations that increase the reader's inclination (e.g., Motivation, Background, Justify, and Concession) and subject matter in which writers relate sentences to each other to increase the reader's understanding of the subject matter (e.g., Elaboration, Circumstance, Solutionhood, Cause, and Restatement). Table 1 shows the categorization of RST relations.

Table 1. Categorization of RST relations; taken from Mann and Thompson (1988)

Presentational Relations	Subject Matter Relations	Multinuclear Relations
Antithesis	Circumstance	Conjunction
Background	Condition	Contrast
Concession	Elaboration	Disjunction
Enablement	Evaluation	Joint
Evidence	Interpretation	List
Justify	Means	Multinuclear restatement
Motivation	Nonvolitional Cause	Sequence
Preparation	Nonvolitional result	
Restatement	Otherwise	
Summary	Purpose	
	Solutionhood	
	Unconditional	
	Unless	
	Volitional cause	
	Volitional result	

Coherence relations can also be classified into mononuclear and multinuclear relations. Presentational and subject matter relations are mononuclear relations consisting of one nucleus (N) and one satellite (S). Multinuclear relations, such as Joint and Sequence, connect a series of entities with the same status. RST’s nucleus–satellite notion concerns the writer’s purposes and the effect they intend to bring about, which is more in line with the function of rhetoric (Mann & Thompson, 1988). With most of the relations, the nucleus-satellite units are not of equal “weight” (Stede et al., 2017). Instead, the former is said to play the central role of the local constellation, whereas the latter has merely a supportive function. In RST analysis, a vertical line represents a nucleus and an arc represents a satellite (see Figure 1). Discourse analysis in RST involves the two following subtasks: discourse segmentation, which is the task of identifying the EDUs, and discourse parsing, which is the task of linking the discourse units into a labeled tree (Joty et al., 2013). Figure 1 shows the RST tree produced using the rstWeb online editing tool (Zeldes, 2016).

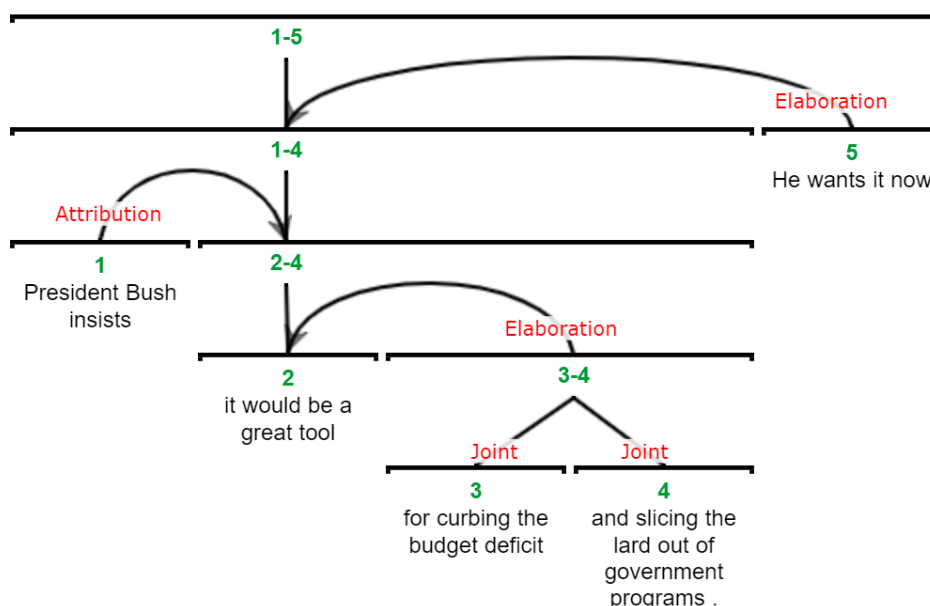


Figure 1. The RST tree produced using the rstWeb online editing tool (Zeldes, 2016)

According to Taboada (2006), the diagram is equivalent to a set of judgments the analyst has made, all of which can be explicitly identified using the relations and their definitions. She explains that every relation is defined in terms of the intentions that lead authors to use that particular relation. Thus, according to her, an RST diagram provides a view of some of the author’s purposes or intentions for including each part.

In RST analysis, relations are defined in terms of (a) constraints on the nucleus or satellite or both and (b) intended effect upon readers. Mann and Taboada's website (2005) on RST (<http://www.sfu.ca/rst/>) represents a useful reference point for RST relation definitions. It provides a table summarizing the relationships between the nucleus and the satellite in all RST relations. It also provides one or more examples and some commentary for each relation.

As an example to illustrate how RST relations are defined, O'Brien (1995, p. 446) used Mann and Thompson's (1988) relation set to demonstrate a relation between the following sentences: "She bought flowers for him. This was a bit odd."

According to O'Brien, these sentences can be identified as constituting the Evaluation relation under the following conditions defined in the taxonomy: "S relates N to the degree of writer's positive regard toward N," and the effect is "reader recognizes that S assesses N and recognizes the value it assigns" (Mann & Thompson, 1988). These sentences could thus be seen to constitute an Evaluation relation when readers recognize from the context that the first sentence constitutes a more important message and the second sentence assesses the fact noted in the first sentence (Kawase, 2021).

Additionally, RST assumes that "a text is understood to cohere in the ways that it does largely by virtue of its relational structure rather than by virtue of overt markers signaling relations among its parts" (Mann et al., 1992, p. 64). That is, relations are not necessarily signaled lexically, whether subject-matter or presentational (Kawase, 2019). This is because although relations can be "made accessible to the reader by conjunctions, often a variety of conjunctions, ... all of them can be conveyed in other ways, including being fully implicit" (Mann et al., 1992, p. 46). As a result, discourse markers such as conjunctions are viewed as signaling relations rather than creating or determining them (Kawase, 2021).

2.4 Research on PhD Thesis Introductions and Niche Establishment

In the last three decades, considerable research has been devoted to the analysis of the rhetorical structure of thesis introductions in terms of Swales's CARS moves and steps (1990, 2004) and how these two organizational elements assist in achieving the overall purpose of the academic genre. However, only a few studies have focused solely on Move 2 of thesis introductions. This section reviews previous research results specific to establishing a niche in the introductions of PhD theses, excluding results reported about other moves in each study.

The steps found in Move 2/establishing a niche of the CARS model proposed by Swales (1990) include counter-claiming, indicating a gap, question-raising, and continuing a tradition. Different findings were presented on the preference for the "Indicating a gap" step in establishing the niche of thesis introductions. For example, Salom et al. (2008) stated that "Indicating a gap" is the third most common strategy employed by Spanish PhD writers. All Ghanaian studies on establishing a niche indicate that Ghanaian writers choose "Indicating a gap" above other rhetorical strategies (Coker & Coker, 2012). In a different context, Parsa and Tahririan (2017) indicated that native speakers of Persian favor "Indicating a gap" as their second-best choice for establishing the niche of their introductions. However, other studies showed this strategy as the writers' top preference (Nimechisalem et al., 2016). In Wuttisrisiriporn's (2017) comparative research of Thai and American theses, students' second-preferred rhetorical strategy was "Indicating a gap."

Compared to other strategies for establishing a niche in research introductions, "Question-raising" seems to be uncommon. In Spain, postgraduate students rarely employ this strategy (Salom et al., 2008). Wuttisrisiriporn (2017) also reported that this strategy is infrequent or nonexistent not just in non-Anglophone contexts but also in Anglophone contexts.

Similarly, "Continuing a tradition" does not seem to be a preferred strategy for establishing a writer's niche. Spanish writers, for instance, use "Continuing a tradition" to establish a niche almost as frequently as the Question-raising strategy (Salom et al., 2008). Salom et al. (2008) also reported that Spanish writers did not use "Counter-claiming."

All of the above reviews were parts of studies that examined entire theses introductions to identify their organizational structure at the move and step levels. However, as mentioned earlier, only a few studies have focused solely on Move 2 of thesis introductions. For example, Ankomah and Afful (2019) investigated the rhetorical strategies employed by Ghanaian undergraduates and postgraduates of English language studies to establish a niche in their thesis introduction sections. They found that both groups employed "Indicating a gap" as their best choice to establish a niche, whereas postgraduates used "Counter-claiming" as the third most common strategy. Sun and Crosthwaite (2022) investigated the use of negation in Move 2 of PhD thesis introductions written by PhD candidates enrolled in an Australian university. Their results showed that disalignment is the most frequent subtype of negation, whereas "not" and "no" are commonly used as negation indicators.

It can be established that, so far, some studies have concentrated primarily on how writers establish a niche in the introductions of academic research. However, none of the previous studies described how writers relate sentences to each other to be coherent in the process of establishing a niche in the thesis introduction. As far as the researcher knows, Kawase's study of niche establishments in 2021 is the only recent study that seems to have paid attention to coherence relations in this important move. However, his research was limited to the introductions of applied linguistics research articles. He examined how research article writers relate sentences to establish a niche for their studies in the introduction section of their papers. He found that writers who established a niche by Indicating a gap in previous research tended to use a concessive or contrastive relation to relate the gap statements to the descriptions of previous studies. The writers who established a niche by indicating how their studies would extend previous research in the field tended to use a Background relation to claim a niche based on the specific studies. The writers who indicated a real-world problem for the niche establishment tended to use a Background relation to reveal a niche based on contextual information surrounding the problem.

3. Method

This study is primarily a qualitative examination of the rhetorical steps and coherence relations in the writings of PhD students. The study also offers some quantitative descriptions of the coherence relations used by doctoral-level writers in applied linguistics to achieve Move 2.

3.1 Data Selection

The analyzed data included 300 excerpts extracted from 300 thesis introductions, each consisting of sentences used by the thesis writer to establish their research niche. The theses were collected from different online databases of graduate theses and dissertations. Each excerpt was designated a code from T1 to T300. The excerpts used in the discussion section are T79, T185, T27, T7, T168, T54, T81, and T241. See the appendix for a list of the theses from which these excerpts were extracted.

The PhD theses were selected based on several criteria. They were written in English, completed by PhD candidates in English-speaking countries, and submitted for the degree of doctor of philosophy in applied linguistics. The full texts of the PhD theses were available for free access. In addition, only theses published between 2012 and 2022 were selected. In each thesis, there was a separate introduction. All selected theses were of the traditional type, consisting of an introduction, literature review, methods, results, discussion, and conclusion chapters.

3.2 Data Analysis

First, the researcher analyzed 10% of the selected introductions twice, with an interval of 1 month, to verify reliability. Next, the data analysis in this study was carried out in two phases. In phase 1, the rhetorical structure of the selected introductions was done manually. The CARS model (Swales, 1990) was used to identify sentences the writers of the selected PhD thesis introductions used to establish a niche for their research (i.e., Move 2). The sentences selected were cleared from all citations to simplify the analysis. Then, the types of steps used to realize the niche establishment move (Move 2) were identified. In phase 2, coherence relations were identified. The researcher used RST (Mann & Thompson, 1988) to examine how sentences are related to each other to be coherent. In this analysis, each sentence in the excerpt was considered as one EDU, and its relation to the following sentence was identified. In cases where Move 2 was realized by a single sentence, the sentence was divided into its main parts, each considered an EDU. Coherence relations were all identified manually, and the hierarchical structure trees were created using a software called RSTTool (O'Donnell, n.d.).

Lastly, the data was analyzed using descriptive statistics. The analysis identified the types and numbers of the rhetorical steps used in the selected introductions to achieve Move 2 and the types and numbers of the most used coherence relations for each step.

4. Results and Discussion

The data revealed that Step 1B (Indicating a gap) was the most frequently used step. It was used in 281 of the 300 excerpts. Steps 1C (Question-raising) and 1D (Continuing a tradition) were less frequent. They were used in 9 and 10 excerpts, respectively. Step 1A (Counter-claiming) was not used at all in the analyzed excerpts. This implies that the authors of the analyzed data probably prefer to establish their research niches by pointing out gaps in the literature instead of directly opposing previous findings or building upon prior studies.

Overall, Elaboration was the most common coherence relation used across all steps. This indicates that offering more information or explanations was one of the most essential strategies for establishing a niche. Nevertheless, the use of other coherence relations differed across the various rhetorical steps.

4.1 Step 1B (Indicating a gap)

Table 2. The most common RST relations for Step 1B (Indicating a gap)

RST Relation	Count
Elaboration	159
Contrast	93
Concession	49
Nonvolitional result	28
Background	27

Table 2 shows the analysis of Step 1B (Indicating a gap) where various coherence relations were identified. Elaboration was the most frequent. Contrast and Concession came in second and third place, respectively. This suggests that the authors of the analyzed data prefer to build on prior research by acknowledging prior research and comparing or contrasting their work with previous studies. Figures 2–4 demonstrate the relations Elaboration, Contrast and Concession, respectively.

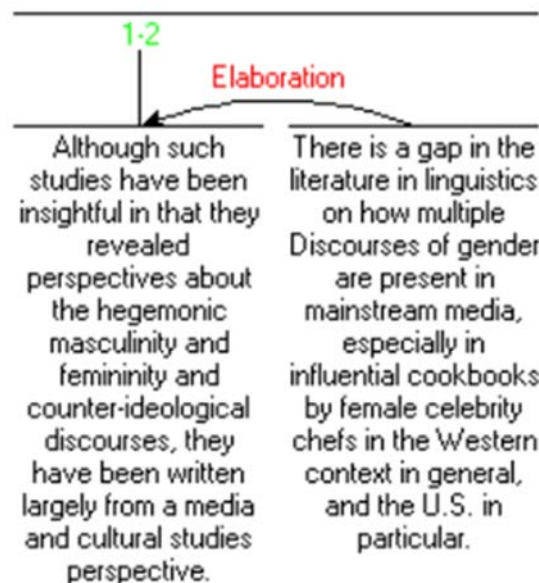


Figure 2. The Elaboration relation in Step 1B (Indicating a gap), T79

In the example in Figure 2, the second sentence (S) gives more details on the limitations of the previous research referred to in the first sentence (N), thus creating an Elaboration relation.

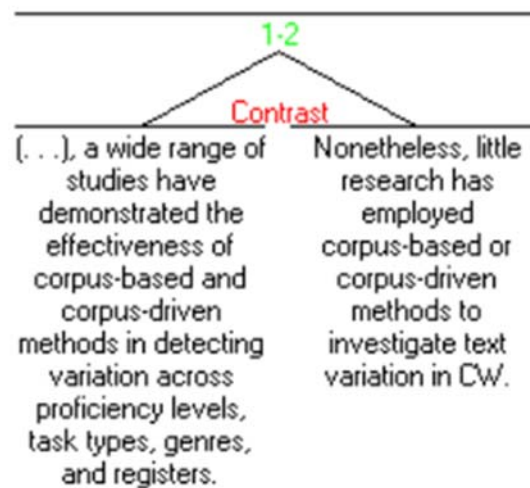


Figure 3. The Contrast relation in Step 1B (Indicating a gap), T185

The two sentences in Figure 3 present contrasting or opposing situations. In the first situation, these methods have been applied and have been found to be useful. In the other, there is a lack of research that has been conducted in this regard. Note that Contrast is a multinuclear relation, hence the two vertical lines in the tree, representing two nuclei.

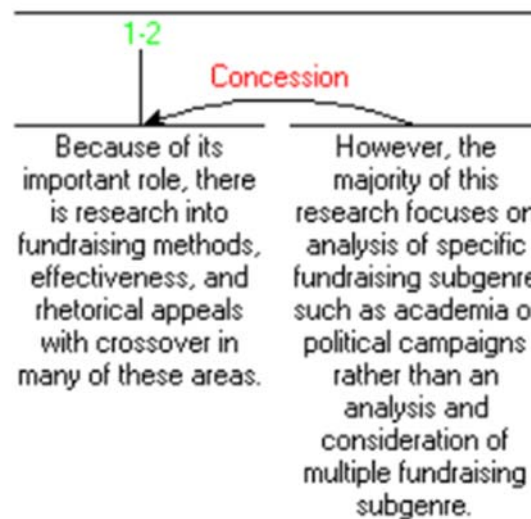


Figure 4. The Concession relation in Step 1B (Indicating a gap), T27

The second sentence (S) in Figure 4 points out a possible incompatibility with what has been mentioned in the first sentence (N). It explains that the majority of the studies cited in the first sentence (N) are concerned with the analysis of individual subgenres of fundraising instead of exploring multiple subgenres. However, despite the contrast, the satellite does not totally refute or oppose the nucleus.

The Background and Nonvolitional result relations were less frequent in Step 1B (Indicating a gap). They are illustrated in Figures 5 and 6, respectively.

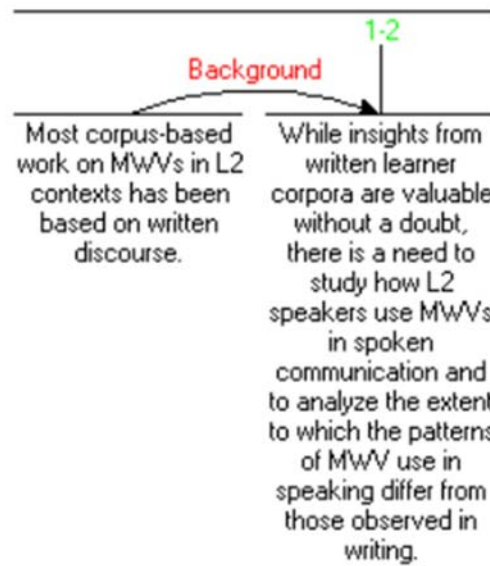


Figure 5. The Background relation in Step 1B (Indicating a gap), T7

In Figure 5, the first sentence (S) presents background information that most of the previous corpus-based studies on MWVs in L2 settings have been conducted on written data. This information helps the reader understand the need to extend the research to oral communication stated in the second sentence (N).

One observation in the excerpts in which Step 1B (Indicating a gap) was used was that the authors frequently used multiple relations within single excerpts (Figure 6). This reflects the authors’ tendency to present their arguments in a complex manner.

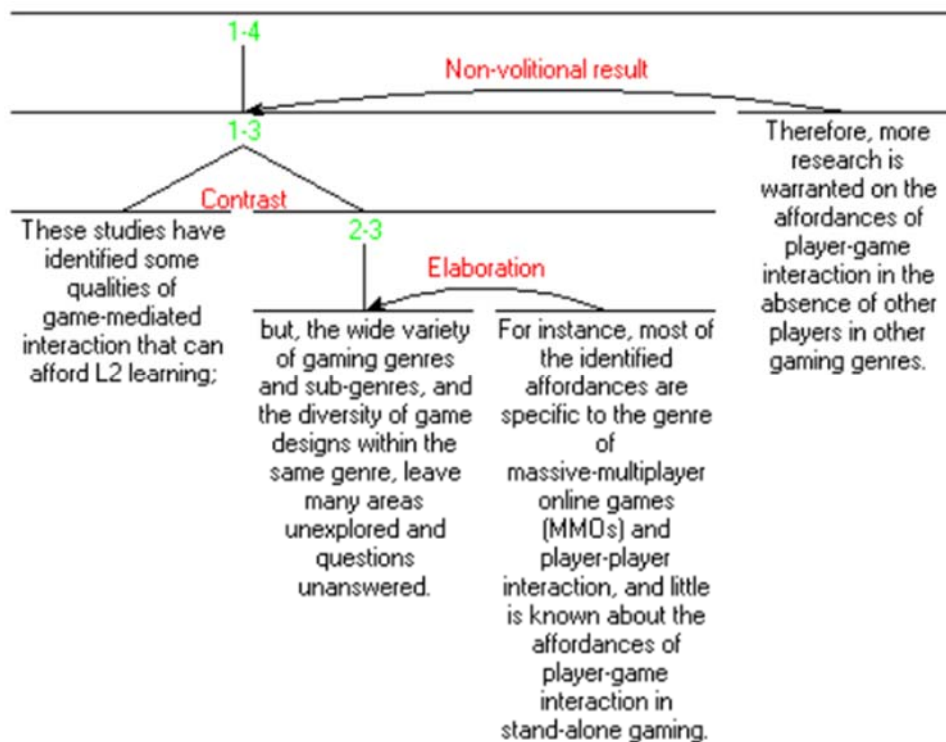


Figure 6. The use of multiple relations within a single excerpt in Step 1B (Indicating a gap), T168

4.2 Step 1C (Question-raising)

Table 3. The most common RST relations for Step 1C (Question-raising)

RST Relation	Count
Elaboration	8
List	3

As shown in Table 3, for Step 1C (Question-raising), Elaboration was again the most frequent relation. It was mainly used to introduce the questions being asked (Figure 7). List was used less frequently to connect several related questions (Figure 8). This way, authors can indirectly point out the lack of knowledge in the field and, at the same time, propose their research.

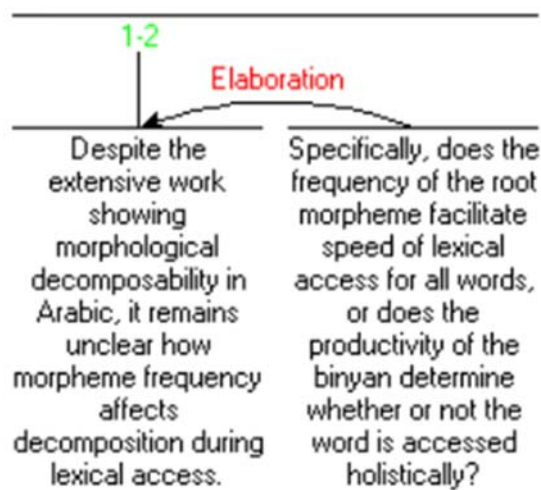


Figure 7. The Elaboration relation in Step 1C (Question-raising), T54

In Figure 7, the second sentence (S) gives further information by asking a question to clarify the situation of morpheme frequency and lexical access described in the first sentence (N).

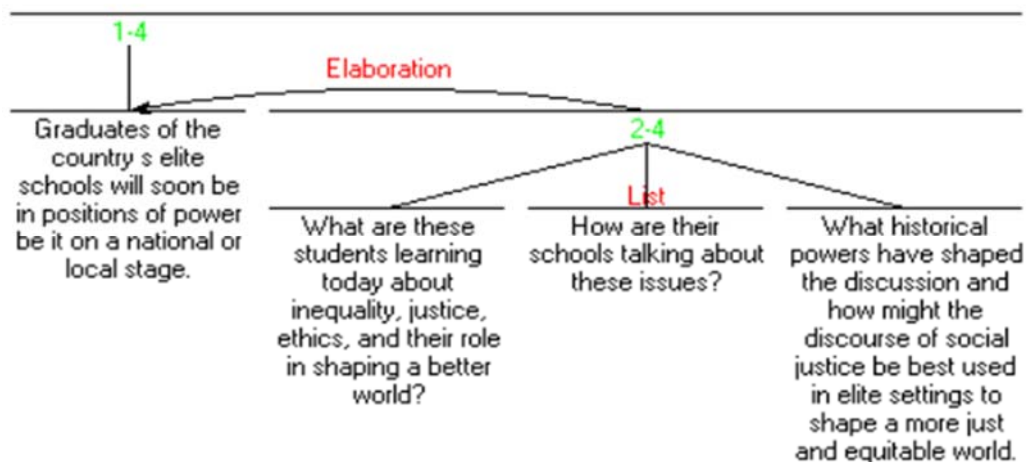


Figure 8. The List relation in Step 1C (Question-raising), T81

The first sentence in Figure 8 is the nucleus. The next three sentences form the satellite as one unit. Together, they make a List that elaborates on the nucleus by introducing a set of specific questions regarding what elite school students are being taught about social issues. List is a multinuclear relation; therefore, each question in the tree is a nucleus represented by a vertical line. Elaboration, on the other hand, is mononuclear, thus the arc.

4.3 Step 1D (Continuing a tradition)

Table 4. The most common RST relations for Step 1D (Continuing a tradition)

RST Relation	Count
Elaboration	5
Contrast	3
Motivation	3

Table 4 shows that in Step 1D (Continuing a tradition), Elaboration was the most prevalent relation. This suggests that the writers of the analyzed excerpts frequently provide additional details or examples to clarify or expand upon previously stated information. Contrast and Motivation relations were equally represented. Contrast was used to compare the present study with previous ones. Motivation was used to explain why it was necessary to go further or to continue previous research. The example in Figure 9 shows all three relations used in one excerpt.

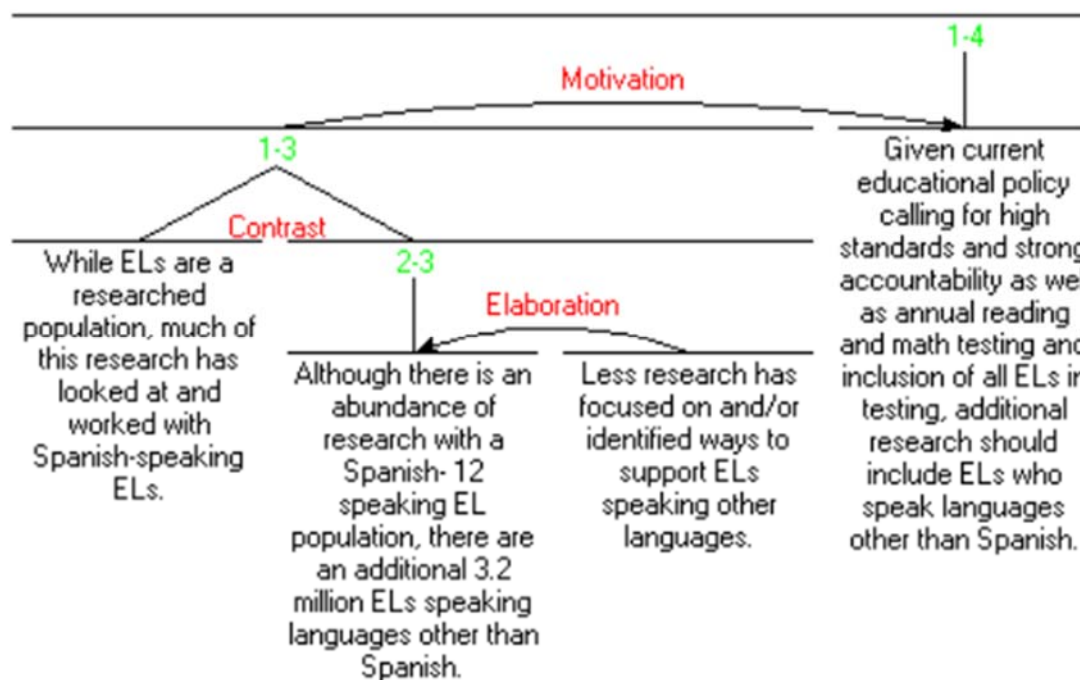


Figure 9. The Elaboration, Contrast and Motivation relations in Step 1D (Continuing a tradition), T241

In the example in Figure 9, there is a Contrast relation between the first two sentences, both nuclei. These sentences introduce two opposing sides of EL research. The first sentence emphasizes the focus on Spanish-speaking ELs. The second one mentions the fact that there are many non-Spanish-speaking ELs. The third sentence (S in the Elaboration relation) elaborates on the second (N in the Elaboration relation). It enhances the reader's comprehension by directly pointing out that there is limited research on non-Spanish-speaking ELs, which is only suggested but not stated in the second sentence. In the Motivation relation, the satellite (i.e., the information about the lack of research and current educational policies described in the first three sentences) provides information that is meant to increase the reader's desire to accept or agree with the concept proposed in the nucleus (i.e., the need for more research on non-Spanish-speaking ELs described in the nucleus [the final sentence]).

5. Discussion

The fact that Elaboration was by far the most frequent relation used by the authors of the analyzed excerpts across all steps highlights the significance of providing detailed explanations as a strategy to establish a research niche in applied linguistics academic writing. The authors of the analyzed data are most likely trained to provide complex explanations when they establish their research niches, indicating their awareness of the complexity of the topics in applied linguistics. In Step 1B, the high frequency of Contrast and Concession reveals that acknowledging prior studies while pointing out weaknesses or missing aspects is essential in establishing new studies' novelty and significance. In the case of Step 1C (Question-raising), the authors used List to introduce several related questions. This strategy enables them to show the depth of their research problem and showcase their awareness of the different aspects of the topic. By asking several related questions, the authors can demonstrate the complexity of their research. The use of Contrast, Elaboration, and Motivation in Step 1D emphasizes the importance of acknowledging the work of other scholars while highlighting one's unique contributions.

These findings have several implications for the teaching of academic writing in applied linguistics. First, it is necessary to emphasize the significance of detailed explanations and encourage students to present detailed elaborations when they establish their research niches. Second, students should be trained on how to effectively use Contrast and Concession to position their new research in the context of prior work. Finally, students should also be trained on how to combine different coherence relations as an advanced skill for niche establishment in applied linguistics academic writing.

By understanding how to effectively use coherence relations to establish research niches, educators in the field of applied linguistics can help students improve the strategies they use in their academic writing. This can help students describe the depth of their research, position their study within the current body of literature, and prove the originality and significance of their work. In the long term, this understanding and training can help future researchers produce high-quality academic papers in applied linguistics.

6. Conclusion

This study analyzed 300 excerpts extracted from 300 thesis introductions in applied linguistics, each consisting of sentences used by the thesis writer to establish their research niche. The CARS model (Swales, 1990) was used to identify sentences used for niche establishment, and RST (Mann & Thompson, 1988) was used to analyze how these sentences were related to each other in this process. Considering that this study focuses explicitly on PhD theses in applied linguistics, the generalizability of the findings to other disciplines may be limited. Future research could address this limitation by investigating the use of coherence relations in the process of niche establishment across different disciplines. In addition, the sample size of 300 theses may not reflect the various writing practices within applied linguistics. Future studies could analyze a larger sample of theses to gain a more extensive understanding of the various writing practices used in the discipline. Moreover, the manual rhetorical and coherence analysis conducted by a single researcher may result in possible variations in the interpretation of the results. Future researchers should involve multiple raters in the analysis process to increase the findings' reliability.

Despite the study's limitations, the findings of this qualitative study can be helpful in understanding the rhetorical steps and coherence relations used by PhD students of applied linguistics when they establish their research niche in their thesis introductions. The high frequency of Step 1B (Indicating a gap) and the use of Elaboration, Contrast, and Concession in this step highlight the importance for PhD students to critically engage with the existing literature and identify areas where research is lacking. In Step 1C (Question-raising), Elaboration and List were often used to give background information and to present a set of related questions in order to demonstrate the complex nature of the research problem. In Step 1D (Continuing a tradition), Contrast, Elaboration, and Motivation were used to contrast the current studies with previous works, to explain how the current research contributes to the existing literature, and to justify the need to extend it.

In conclusion, this study adds to the literature on rhetorical moves and coherence relations in academic writing and offers useful recommendations for future researchers and educators in applied linguistics. The study's implications can be helpful in designing writing instruction materials for PhD students in applied linguistics to help them successfully establish their research niches in their academic writing.

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Authors' contributions

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Competing interests

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Obtained.

Ethics approval

The Publication Ethics Committee of the Canadian Center of Science and Education.

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Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

References

- Ahmadi, A., & Parhizgar, S. (2017). Coherence errors in Iranian EFL learners' writing: A rhetorical structure theory approach. *Journal of Language Horizons*, 1(1), 9–37. <https://doi.org/10.22051/LGHOR.2017.8588.1011>
- Ankomah, C., & Afful, J. B. (2019). Establishing a niche in research: Rhetorical strategies in undergraduate and postgraduate writings in the department of English, University of Cape Coast. *Journal of Teaching English for Specific and Academic Purposes*, 7(3), 359. <https://doi.org/10.22190/JTESAP1903359A>
- Bunton, D. (2002). Generic moves in PhD thesis introductions. In J. Flowerdew (Ed.), *Academic discourse* (pp. 57–75). Routledge.
- Cheng, A. (2011). Language features as the pathways to genre: Students' attention to non-prototypical features and its implications. *Journal of Second Language Writing*, 20(1), 69–82. <https://doi.org/10.1016/j.jslw.2010.12.002>
- Cheung, Y. L. (2012). Understanding the writing of thesis introductions: An exploratory study. *Procedia – Social and Behavioral Sciences*, 46, 744–749. <https://doi.org/10.1016/j.sbspro.2012.05.191>
- Coker, W., & Coker, W. (2012). Stating the research problem: A genre-based study of English language MPhil theses in a Ghanaian university. *Language in India*, 12, 509–518.
- Dong, Y. R. (1998). Non-native graduate students' thesis/dissertation writing in science: Self-reports by students and their advisors from two U.S. institutions. *English for Specific Purposes*, 17(4), 369–390. [https://doi.org/10.1016/S0889-4906\(97\)00054-9](https://doi.org/10.1016/S0889-4906(97)00054-9)
- Hovy, E. H. (1990). Unresolved issues in paragraph planning. In R. Dale, C. Mellish & M. Zock (Eds.), *Current research in natural language generation* (pp. 17–45). Academic Press.
- Hyland, K. (2007). *Genre and second language writing*. The University of Michigan Press. <https://doi.org/10.1017/CBO9781139524742>
- Joty, S., Carenini, G., Ng, R., & Mehdad, Y. (2013). *Combining intra- and multi-sentential rhetorical parsing for document-level discourse analysis* (pp. 486–496). Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics. <https://aclanthology.org/P13-1048>
- Kawase, T. (2019). Coherence relations in research article discussions. *English Text Construction*, 12(2), 235–264. <https://doi.org/10.1075/etc.00028.kaw>
- Kawase, T. (2021). How do applied linguistics researchers structure coherence relations in the process of establishing a niche for their research? *Text & Talk*, 42(2), 233–254. <https://doi.org/10.1515/text-2019-0302>
- Mann, W., Matthiessen, C., & Thompson, S. (1992). Rhetorical structure theory and text analysis. In C. Mann &

- S. Thompson (Eds.), *Discourse description: Diverse linguistic analyses of a fund-raising text* (pp. 39–78). John Benjamins. <https://doi.org/10.1075/pbns.16.04man>
- Mann, W., & Taboada, M. (2005). *RST website*. Retrieved from <http://www.sfu.ca/rst/01intro/definitions.html>
- Mann, W., & Thompson, S. (1988). Rhetorical structure theory: Toward a functional theory of text organization. *Text – Interdisciplinary Journal for the Study of Discourse*, 8(3), 243–281. <https://doi.org/10.1515/text.1.1988.8.3.243>
- Nimechisalem, V., Tarvirdizadeh, Z., Paidary, S. S., & Hussin, N. I. B. (2016). Rhetorical moves in problem statement section of Iranian EFL postgraduate students' theses. *Advances in Language and Literary Studies*, 7(4), 173–180. <https://doi.org/10.7575/aiac.all.v.7n.4p.173>
- O'Brien, T. (1995). Rhetorical structure analysis and the case of the inaccurate, incoherent source-hopper. *Applied Linguistics*, 16(4), 442–482. <https://doi.org/10.1093/applin/16.4.442>
- O'Donnell, M. (2024). *RSTTool* (Version 3.0) [computer software]. WagSoft Linguistic Software. Retrieved from <http://www.wagsoft.com/RSTTool/>
- Paltridge, B. (1997). Thesis and dissertation writing: Preparing ESL students for research. *English for Specific Purposes*, 16(1), 61–70. [https://doi.org/10.1016/S0889-4906\(96\)00028-2](https://doi.org/10.1016/S0889-4906(96)00028-2)
- Parsa, S., & Tahririan, M. (2017). Move structures in “statement-of-the-problem” sections of MA theses: The case of native and nonnative speakers of English. *Iranian Journal of Applied Linguistics*, 20(2), 195–228.
- Salom, L., Monreal, C., & Olivares, M. (2008). *The move-step structure of the introductory sections of Spanish* (pp. 85–106). PhD theses. Revista Espanola De Linguistica Aplicada.
- Samraj, B. (2008). A discourse analysis of master's theses across disciplines with a focus on introductions. *Journal of English for Academic Purposes*, 7(1), 55–67. <https://doi.org/10.1016/j.jeap.2008.02.005>
- Soler-Monreal, C., Carbonell-Olivares, M., & Gil-Salom, L. (2011). A contrastive study of the rhetorical organization of English and Spanish PhD thesis introductions. *English for Specific Purposes*, 30(1), 4–17. <https://doi.org/10.1016/j.esp.2010.04.005>
- Stede, M., Taboada, M., & Das, D. (2017). *Annotation guidelines for rhetorical structure*. Retrieved from https://www.sfu.ca/~mtaboada/docs/research/RST_Annotation_Guidelines.pdf
- Sun, S., & Crosthwaite, P. (2022). “Establish a niche” via negation: A corpus-based study of negation within the Move 2 sections of PhD thesis introductions. *Open Linguistics*, 8(1), 189–208. <https://doi.org/10.1515/opli-2022-0190>
- Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- Taboada, M. (2006). Discourse markers as signals (or not) of rhetorical relations. *Journal of Pragmatics*, 38(4), 567–592. <https://doi.org/10.1016/j.pragma.2005.09.010>
- Thompson, P. (2005). Points of focus and position: Intertextual reference in PhD theses. *Journal of English for Academic Purposes*, 4(4), 307–323. <https://doi.org/10.1016/j.jeap.2005.07.006>
- Wuttisrisiriporn, N. (2017). Comparative rhetorical organization of ELT thesis introductions composed by Thai and American students. *English Language Teaching*, 10(12), 1. <https://doi.org/10.5539/elt.v10n12p1>
- Zainuddin, S. Z., & Shaari, A. H. (2017). Contextual layers in the establishment of research niche in doctoral thesis introductions by Malaysian writers. *GEMA Online Journal of Language Studies*, 17(2), 146–162. <https://doi.org/10.17576/gema-2017-1702-09>
- Zainuddin, S. Z., & Shaari, A. H. (2021). A Genre-inspired investigation of establishing the territory in thesis introductions by Malaysian ESL writers. *3L The Southeast Asian Journal of English Language Studies*, 27(2), 144–160. <https://doi.org/10.17576/3L-2021-2702-11>
- Zeldes, A. (2016). *rstWeb - A browser-based annotation interface for rhetorical structure theory and discourse relations* (pp. 1–5). Proceedings of the 2016 Conference of the North American Chapter of the Association for Computational Linguistics: Demonstrations. <https://doi.org/10.18653/v1/N16-3001>

Appendix A

A list of the theses from which the examples in this paper were extracted (in alphabetical order)

T27 Caudill, K. L. (2018). “Please make your tax-deductible donation today”: Discourse analysis of email and

direct mail fundraising letters (Order No. 10789526). ProQuest Dissertations & Theses Global. (2041177154). Retrieved from <https://www-proquest-com.sdl.idm.oclc.org/dissertations-theses/please-make-your-tax-deductible-donation-today/docview/2041177154/se-2>

T7 Cervantes, I. M. (2019). *Second language speakers' use of multi-word verbs in spoken communication: Evidence from the Trinity Lancaster Corpus* (Order No. 28849213). ProQuest Dissertations & Theses Global. (2606864618). Retrieved from <https://www-proquest-com.sdl.idm.oclc.org/dissertations-theses/second-language-speakers-use-multi-word-verbs/docview/2606864618/se-2>

T81 Herrmann, B. W. (2015). *Critical discourse analysis and the language of social justice in elite high schools* (Order No. 3745615). ProQuest Dissertations & Theses Global. (1756653348). Retrieved from <https://www-proquest-com.sdl.idm.oclc.org/dissertations-theses/critical-discourse-analysis-language-social/docview/1756653348/se-2>

T168 Ibrahim, K. H. S. (2016). *Interplay of languaging and gameplay: Player-game interactions as ecologies for languaging and situated L2 development* (Order No. 10119102). ProQuest Dissertations & Theses Global. (1805571120). Retrieved from <https://www-proquest-com.sdl.idm.oclc.org/dissertations-theses/interplay-languaging-gameplay-player-game/docview/1805571120/se-2>

T241 Matuszewski, J. L. (2017). *An examination of vocabulary acquisition by kindergarten English learners* (Order No. 10636857). ProQuest Dissertations & Theses Global. (2013295519). Retrieved from <https://www-proquest-com.sdl.idm.oclc.org/dissertations-theses/examination-vocabulary-acquisition-kindergarten/docview/2013295519/se-2>

T79 Matwick, K. (2016). *A critical discourse analysis of language and gender in cookbooks by female celebrity chefs* (Order No. 10299018). ProQuest Dissertations & Theses Global. (1847948651). Retrieved from <https://www-proquest-com.sdl.idm.oclc.org/dissertations-theses/critical-discourse-analysis-language-gender/docview/1847948651/se-2>

T54 Wray, S. C. (2016). *Decomposability and the effects of morpheme frequency in lexical access* (Order No. 10163849). ProQuest Dissertations & Theses Global. (1844985970). Retrieved from <https://www-proquest-com.sdl.idm.oclc.org/dissertations-theses/decomposability-effects-morpheme-frequency/docview/1844985970/se-2>

T185 Zhang, M. (2018). *Investigating native and target language use in collaborative L2 writing* (Order No. 10821958). ProQuest Dissertations & Theses Global. (2054001312). Retrieved from <https://www-proquest-com.sdl.idm.oclc.org/dissertations-theses/investigating-native-target-language-use/docview/2054001312/se-2>

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