Marked Themes As Context Frames In
Research Article Abstracts

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Abstract

Research article abstract (RA abstract) is an important area of investigation. This importance comes from the role that it plays in the scientific community that is used to serve different writings and reading functions and purposes. It helps writers to squeeze significant information and findings of a whole research article into a compact unit and to manage information flow to be communicated in the scientific community (Martin, 2003; Ventola, 1994). This paper attempted to investigate the discourse functions (context frames) of marked themes used in Applied Linguistics and Economics research article abstracts. Sixty research article abstracts from the two disciplines published in journals of Applied Linguistics and Oxford Economic Papers in 2010 to 2011 issues were analyzed. The results revealed a significant difference in the use of validation context frame across the two disciplines. However, there were more similarities than differences regarding use of context frames in the abstracts from the two disciplines. This is discussed in the context of general and specific genre expectations as well as textual choices exercised to give text coherence. Findings of this study also supported the proposition that one micro level feature, in the form of marked theme, as thematic function, has the potential to signal the development of macro structure and rhetorical organization in abstract writing for scientific article writing.

Keywords: context frame; marked theme; research article abstracts; academic genre; rhetorical organisation

Introduction

Research article abstract (RA abstract) is an important area of investigation. This importance comes from the role that it plays in the scientific community that is used to serve different writings and reading functions and purposes. It helps writers to squeeze significant information and findings of a whole research article into a compact unit and to manage information flow to be communicated in the scientific community (Martin, 2003; Ventola, 1994). It also has the function of saving time by "informing the reader about the exact content of the article, indicating whether the full text merits their further attention" (Martin, 2003, p. 26). In addition, RA abstracts could play a primary role in convincing editors of a journal or organizers of a conference to publish or accept a research article.

Analyzing the RA abstract could give helpful insights regarding its underlying mechanisms and structures (Lores, 2004) as textual operatives.

A discourse community is seen as a social space with experts at the center and aspiring novices at the periphery (Swales, 1990). This community is said to exude six characteristics which are having: 1) common public goals, 2) mechanisms for intercommunication between members, 3) participatory mechanisms to give feedback and information, 4) developed and continuing to develop discoursal expectations, 5) inbuilt dynamic towards an increasingly shared and specialized terminology, and 6) a critical mass of members with a suitable degree of relevant discoursal and content expertise (Swales, 1988, p. 212). Each discourse community may use different mechanisms for intercommunication between its members which result in different genres (Swales, 1990), among which is academic research article abstract. Research article abstracts (RA abstract) as a form of communicative genre in the academic discourse community is social in essence (Miler, 1984). It helps maintain a relationship between the writer and the reader of the same discourse community. Miller (1994) demonstrated that genre emerges from the requirements of a recurrent rhetorical situation, and it asks for an adequate response from the reader, and the RA abstract is one such evocative genre. From this viewpoint, the generic character of the RA abstract is no longer defined in terms of specific lexis and syntax, but rather as a case of interaction between individuals, acting in a social, institutional context. Adding on to the argumentation, Lores (2004) stated that RA abstract is an academic genre which has its own functions, rhetorical structures, and linguistic realizations. It has primarily two functions, indicative and informative. These two functions can be captured in two basic rhetorical structures, IMRD (Introduction, Method, Result, Discussion) and CARS (Create a Research Space), which are realized by different linguistic features (p. 281). One of these linguistic features is the Hallidyan textual metafunction which manifests as theme in the clause (Gosden, 1992).

The notion of theme in research article and its sections have been studied by many researchers during the last few decades. For example, Whittaker (1995) investigated the thematic structure of research articles in two disciplines of Applied Linguistics and Economics. More recently, Jalilifar (2010) analyzed thematic structures used in ELT research articles published in local and international journals. Martinez (2003) compared the used theme types in the method and discussion sections of Biology research articles. In addition, Ghadessy (1999) and Ebrahimi and Khedri (2011) studied the academic research article abstracts in terms of thematic choice, focusing on disciplinary differences, while Gosden (1992) studied marked and unmarked themes and their manifestation in different rhetorical sections (IMRD) of research articles.

Unmarked/Marked Themes and Context Frames

Halliday (1985, 1994, 2004) defines theme as the element in a particular structural configuration taken as whole. It organizes the clause as a message and provides the configuration of theme and rheme. Based on this definition, a clause is made of two parts, theme followed by rheme. Davis (1988) puts forward a two-part analysis of theme,

namely, obligatory topic realized by the grammatical subject (GS) (example 1) and optional context frames (CF) (example 2), realized by any element preceding the GS. A marked theme is best explained in comparison with an unmarked theme. Example 1 is illustrative of an unmarked theme while example 2 evidenced a marked theme with a contextual frame. In essence, the theme shows a point of departure for the topic to be developed in the text.

1. *We* compared our findings with previous studies using similar instruments in different settings. (Applied 1)
2. *Since the mid-20th century*, graduate schools in the USA have witnessed a growing participation of international students, many of whom do not speak English as their first language. (Applied 17)

It is obvious that an unmarked theme shows a grammatical subject that forms the point of departure while the marked theme employs a technique that front other information. The marked theme uses three main context frames for this purpose: Conjunctive/Modal adjunct and Conjunctions, Prepositional and Adverbial Phrases and Subordinate Clauses and Nonfinite Clause (Gosden, 1992, p. 211). These context frames are illustrated as follows:

TYPES OF CONTEXT FRAMES (CF)	EXAMPLES
CF type 1: Conjunctive/Modal adjunct and Conjunctions	Conjunctive adjuncts: however, moreover, therefore Modal adjuncts: surprisingly Conjunctions: but, and, so
CF type 2: Prepositional and Adverbial Phrases	Prepositional Phrase: in this paper, after ten months Adverbial phrase: after completing the research, since mid-20th century
CF type 3: Subordinate Clauses and Nonfinite Clauses	*While* the relatively strong emphasis was on Ex ante, *when* joint ventures are possible

These three types of grammatical realization (context frames) serves nine major discourse functions. The functions and the examples are presented below:

DISCOURSE FUNCTIONS OF CONTEXT FRAMES	EXAMPLES
1a. Location in time – Real world entity (RWE)	*CF1. Yet, Still,* *CF2. After concluding, After completing the research,* *CF3.During the phase of failure, Starting from the puzzling observation,*
1b. Location in time – Discourse entity (DE)	*CF1. First, Finally, Then* *CF2. In consequence, On the immediate post test,*

2a. Location in space - Real world entity (RWE)	*CF1. Here, There,* *CF2. Among the items reported as difficult, in Italy,* *CF3. Where uptake occurred,*
2b. Location in space – Discourse entity (DE)	*CF1. Here,* *CF2. In the present study, In this study,*
3a. Addition – Appositive	*CF1. For example, For instance, In other words,*
3b. Addition – Emphatic	*CF1. Further, Furthermore, And,* *CF2. In addition to,* *CF3. What is more,*
4. Contrast/Concession	*CF1. However, Although, In contrast, Though,* *CF2. Despite that,* *CF3. While the relatively strong emphasis was on Ex ante,*
5a. Cause – Reason/ Result	*CF1. Therefore, Hence,* *CF2.With the improvement of the outer grower scheme,* *CF3. Depending on the measure of certainty used*
5b. Cause – Purpose	*CF1. To this end,* *CF2. For L1 lexicalization,* *CF3.* In order to obtain HL cells,
6. Means	*CF1.* In this way, *CF2.By further studies, With this construction,* *CF3.Using both Instrumental Variables and GMM techniques*
7a. Condition – Real	*CF1.* In doing so, *CF2.Giving their centrality evaluative nature,* *CF3. When joint ventures are possible,*
7b. Condition – Hypothetical	*CF1.* In principle, Perhaps, *CF2. Under the assumption that,* *CF3. If this is justified,*
8a. Validation – External	*CF1. In particular* *CF2. Following Rouke et al. (1999)* *CF3. As is well known, As noted earlier,*
8b. Validation – Internal	*CF1. Significantly, Clearly, Certainly, Evidently,* *CF2. Based on 10 month observation,* *CF3. Drawing from interviews of 15 Latin American women in the USA,*
9. Viewpoint	*CF1. Quite surprisingly, More specifically,* *CF2. In the view of these findings,*

Each of the discourse functions is distinct. As mentioned, many of the contexts are adverbials which show location of time, space, concession, cause and effect. In addition, there are also conjunctive adverbs that begin a sentence, modifying the entire sense of the sentential meaning such as those shown as 7, 8, and 9 (condition, validation and viewpoint). Thus it is seen that there is a range of semantic meanings associated with the different discourse functions. Translated into context frames foregrounded as marked themes, it can be said that writers have choices to show how sentences can begin to link ideas together, giving text coherence that signifies to the reader directions manipulated by the writer.

Objective of the Study

Even though many researchers had examined thematic structure in research article and its sections, little work, to the researchers' knowledge, has been focused on the RA abstracts regarding the discourse functions of marked themes. Therefore, this study was put forward to address the issue of context frames in RA abstracts among two disciplines of Applied Linguistics and Economics, to find out how context frames are applied in RA abstract in these disciplines with reference to marked themes. The research questions are:

1. What is the distribution of marked and unmarked themes in the selected Applied Lingustics and Economics RA abstracts?
2. How are the discourse functions in the marked themes realized in the RA abstracts?
3. Is there a significant difference in the use of the different types of discourse functions as context frames in the expression of marked themes?

Method

The study undertook a contrastive text analysis in which texts that are similar in some aspects and different in others are compared and contrasted (Eggins, 1994, p.310). Sixty RA abstracts from two disciplines of Applied Linguistics and Economics were selected for comparison. The RA abstracts were taken from two journals: *Applied Linguistics* and *Oxford Economic Papers* published by Oxford University Press. All the RA abstracts were published in the 2010 to 2011 volumes as regular articles and they implied the IMRD structure. The rationale behind these journal selections was to have a corpus which is representative of abstracts produced by successful writers or what Mauranen (1996) called "good text" that has met the criterion of having been edited and published, and in this case, in reputable journals that would have subject the articles to rigorous reviewing and editing .

Analysis of Data

The frameworks used for analysis rests on the types of context frames (CF) and discourse functions associated with the context frames (Gosden, 1992). The details are found in figures 1 and 2. The three broad categories of context frames used help in gathering information in the comparison for the distribution of marked and unmarked themes. The second framework of discourse functions provide details on the manifestations of the

context frames and is used to answer the second research question. These details have overlaps in the types of context frames as discourse functions are not classified according to the linguistic parameters used for the description of the context frames. As such, the data gives concentration to discourse functions as a point of interest.

This study adopted the t-unit as the basic unit of analysis. A t-unit is defined by Fries (1994) as a clause complex which contains one main independent clause together with all the hypotactic clauses which are dependent on it. The rationale behind this selection was that analyzing theme at the level of t-unit rather than at the individual clause makes it easier to focus on patterns of thematic development in large amounts of text, and can also be justified on the grounds that the thematic structure of a dependent clause is often constrained by the independent clause. (Fries & Francis, 1992, as cited in North, 2005).

The procedure of analysis follows a few steps. First, the RA abstracts were extracted and collected from 2010 and 2011 volumes of the two journals. Second, the data were analyzed based on Davies' (1988) and Gosden's (1992) categories and sub-categories of context frames. Initial analysis is verified by two raters who are pursuing their PhD in English language studies. Once concordance was established, the researchers proceeded with the rest of the analyses (see Appendix for sample analyses). Third, the frequency and percentage of marked theme types and sub types of the data were calculated. Finally, in order to check the significance of the differences between disciplines, Chi-square was run on the data.

Findings

Results of the study are presented according to the research questions. The presentation of findings begin with research question one.

1. What is the distribution of marked and unmarked themes in the selected Applied Lingustics and Economics RA abstracts?

In analyzing the gathered data in terms of marked theme (Context Frame) and unmarked theme (Grammatical Subject), it was found that in both disciplines writers relied more on unmarked theme. This was compatible with what was earlier reported by Gosden (1992), Lores (2004), and Borsinger (2003). The finding indicates the greater tendency toward theme/ subject compliance that may result in structural simplicity and fluency. Marked themes, while less frequently used, however, indicated over 30% of textual thematic markings. This is a sizeable portion and warrants investigation in its own right.

The figures presented in Table 1 shows a slight disciplinary difference regarding the use of marked theme across the two in-focus disciplines. While 31% of total themes were dedicated to marked theme in Applied Linguistics RA abstracts, writers in Economics use this theme in 37% of their t-units. This is in line with earlier results reported by Martinez (2003) and Whittaker (1995). It may indicate that Economic RA abstracts are more argumentative (Martinez, 2003) and elaborative in nature (Jalilifar, 2010). The result may also suggest that the discourse of Economics RA abstracts is more rhetorically multi-functional in nature, and writers attempt to create more overt cohesion by applying more

context frames in their abstracts (Gosden, 1992). The lower percentage of context frames in Applied Linguistics RA abstracts illustrates the matter-of-fact statements of these abstracts (Gosden, 1992, p.215) using, in comparison, more unmarked themes. Table 1 displays the frequency and percentage of marked (CF) and unmarked (GS) themes used in the RA abstracts of two disciplines of Applied Linguistics and Economics.

Table 1: Frequency and percentage of marked and unmarked themes

	Marked Theme (%)	Unmarked Theme (%)	Total
Applied Linguistics	55 (31)	121 (69)	176 (100%)
Economics	63 (37)	109 (63)	172 (100%)

2. How are the discourse functions in the marked themes realized in the RA abtracts?

In answering this question, the findings of the study are discussed according to the use of the associated discourse functions found in the marked themes or context frames.

Location in Time
Concerning location in time, there is a slight difference in applying this discourse function in the two disciplines of Applied Linguistics (12%) and Economics (14%), as displayed in table 2. Overall, this result may suggest that writers in both disciplines show tendency in organizing the text from the time perspective. Data analysis illustrated inter-disciplinary differences in terms of the subcategories of the broad context frame. In Applied Linguistic RA abstracts, 9% and 3% of all the discourse functions were allocated to real-world and discourse entity respectively. This was the reverse in Economics RA abstracts where writers showed a mark tendency toward framing discourse entity (11%) compared to real world entity (3%).

Table 2: Frequency and percentage of *Location in time*

	Applied Linguistics (%)	Economics (%)
Location in time- Real world entity	5 (9)	2 (3)
Location in time- Discourse entity	2 (3)	7 (11)
Total	**7 (12)**	**9 (14)**

This finding may suggest that in Applied Linguistics, the writers favoured the creation of a chronological relationship between their studies and what have been done earlier, in order to show that their study is a continuation of earlier works (see examples 3 & 4). The writers mostly use this manner of thematic development in the first two sentences of their abstracts.

3. *Since the mid 20th century,* graduate schools in the USA have witnessed a growing participation of international students, many of whom do not speak English as their first language (Applied 17)
4. *Yet despite their pervasiveness,* very few studies attempt to look at their use in the pedagogical setting. (Applied 27)

Writers in Economics RA abstracts applied this manner of expressing the context frame to build a chronological relationship between the actions that occurred in the study. However, they mostly relied on words like *first, then,* and *finally*, to present the sequence of the actions. This may result in a pattern that shows a very straight forward manner of development that could even be considered as terse (examples 5 & 6) in describing the procedural relationships that are chronologically linked.

5. *First,* a model to explain how changes in regulatory framework (e.g., audit effectiveness) and trans boundary spillovers affect both actual and reported emissions is developed. *Then* the theoretical predictions using data for 39 European countries from 1999 to 2003 are tested and inferences about true emission levels are made. (Economic 14)
6. *First* we estimate standard fiscal rules. *Then* we explore how fiscal policy responds to new information, especially on the business cycle. (Economics 22)

Location in Space
This discourse function illustrates the writers' tendency towards showing the spatial location of the existing scientific knowledge within the external real-world in terms of matter, process and procedures. The result indicated similarity in application of this expression of the context frame. In both disciplines, the focus was on discourse entity. This may suggest that writers in both disciplines prefer to focus on their study and take reader attention to the current study (example 7) and to the context of the study (see example 8).

7. In this study, we present an idiodynamic methodology for studying rapid change in WTC. (applied 12)
8. *In Italy* they have a positive long term effect on value added and employment. (Economics 29)

Addition
As shown in table 4, writers in both disciplines treated this discourse function somewhat similarly. Both disciplines used only emphatic additions, and this means that they do not provide examples or elaborations on different points made. This might be discussed from various aspects, such as, a) abstract by definition is a squeezed form of information of a longer discourse to help the reader to discuss whether the full text article is related to what he seeks or does not (Martin, 2003) b) well-structured abstract is one which states all the four components of introduction, method, result, and conclusion which are fundamental and obligatory (Jalilifar, 2009), c) the research abstract is mostly limited in length due to the submission requirements of each journal.

One point which deserves to be mentioned regarding emphatic addition, at least in this study, is it is used mostly in the result section of the RA abstracts for three functions, adding information about the result (Example 9), supporting the argued ideas of the study (Example 10) and increasing the cohesion by linking sentences in the abstract (Example 11).

9. In a dynamic stochastic union model, we show that firing costs have a small and ambiguous impact on the level of employment if the union precommits to future wages. *Further,* in comparison with the commitment equilibrium and for very

general union preferences, the no commitment equilibrium exhibits higher wages and a lower employment level.(Economic 21)

10. We argue that language competence as cultural capital does not have the same value across different disciplines and may not always be critical to NNES students' academic success. *Furthermore,* despite their keen awareness of their differences from their native-speaking counterparts, the NNES doctoral students in this study had other forms of cultural capital with which they claimed legitimacy and recognition in their disciplinary communities. (Applied 17)

11. The results indicate that the introduction of the euro has remarkably weakened the role of firm size in the decision to export to the Eurozone. *What is more,* the change in the proportion of exports to the Eurozone is negatively related to firm size. (Economic 9)

Table 4: Frequency and percentage of *Addition* context frame

	Applied Linguistics (%)	Economics (%)
Addition – Appositive	-	-
Addition – Emphatic	10 (18)	10 (15)
Total	**10 (18)**	**10 (15)**

Contrast

Disciplinary difference was reported regarding manifestation of contrast in the context frame. The frequency of this discourse function was 13 (23%) and 20 (31%) in Applied Linguistics and Economics respectively.

Table 5: Frequency and percentage of *Contrast*

	Applied Linguistics (%)	Economics (%)
Contrast	13 (23)	20 (31)

This manifestation of context frame is shown by using words like *however* which besides indicating contrast, helps in the contextualization of textuality of the abstract (Lores, 2004). An interesting point regarding the application of this expression was that it is used in all the four sections of the rhetorical structure (IMRD) of the abstracts as shown in examples 12 - 15. The examples were taken from Introduction, Method, Result, and Discussion sections respectively. The Contrast function was used to indicate a gap within existing research (example 12), to contrast the method in use with methods found in previous studies (example 13), to contrast the results gained in the same study (example 14) and to contrast the gained result with previously reported ones (example 15). This could show the importance of contrast in abstract writing and its significant role in convincing the reader to read the article by abstracting and contrasting the information presented in any of the four sections (IMRD) of the research article abstract.

12. *While language aptitude has been investigated actively within second language research,* there is a current dearth of research on the effects of aptitude in cases of attrition. (Applied 25)

13. *While previous research on patients' preferences for diagnostic terminology has*

relied on questionnaires, we assess patients' own preferences and their responses to a doctor's use of different labels through the qualitative and quantitative analysis of doctor–patient interactions in a realistic clinical setting.(Applied 29)

14. Our findings point to a facilitative role of pictorial illustrations on short- and long-term retention of both form and meaning of idioms**.** *In contrast,* etymological notes do not have any positive effect. (Applied 10)

15. *Contrary to previous studies,* the results of the present study point toward a strong preference for subject wh-questions to object wh-questions. (Applied 30)

Cause

This discourse function helps the writer to justify the research actions and hypothesis. This is often done through introducing the solution part of the recurrent rhetorical pattern as indicated in the use of contrast and concession in the context frame. Concerning this function, table 6 shows that it was handled in the same manner by the writers in the two disciplines, each with two occurrences. This finding was not in the same line with the outcome of earlier studies done by Martinez (2003) and Gosden (1992).

The point worth mentioning was the use of cause to show reason used only by Economists (examples 16 &17), and the use of cause to show purpose by Applied Linguists (examples 18 &19). Taking a close look at the examples, we could see that Applied Linguists used the cause function for two purposes: a) creating a semantic relationship and b) using phrases like *to this end* and *for L1 lexicalization* that are seen as realisations of the textual theme through the use of conjunctive adjuncts (Halliday, 2004). The data analyses indicated that the cause function in the context frame was used only in the result section (examples 16 & 17) in the Economics RA abstracts for justification, while this was not the situation in Applied Linguistic RA abstracts, where it is used in method (example 18) and in result section (example 19).

16. *With the improvement of the out grower scheme*, farmers devoted larger shares of land to cash crops, and farm output significantly increased. (Economic 1)

17. *Depending on the measure of uncertainty used*, investment may be stimulated or curtailed by the effects of uncertainty on its own or through its interactions on cash flow. (Economic 2)

18. *To this end,* the author examined positive evaluative lexis in 95 RPT letters written for 11 faculty members from 8 US universities. (Applied 4)

19. *For L1 lexicalization,* non-lexicalized words caused great difficulty. (Applied 18)

Table 6: Frequency and percentage of *Cause* context frame

	Applied Linguistics (%)	**Economics (%)**
Cause – Reason/Result	-	2 (3)
Cause – Purpose	2 (3)	-
Total	**2 (3)**	**2 (3)**

Means

The data analysis (table 7) revealed inter-disciplinary difference concerning this discourse function. Even though only a small percentage is dedicated to this realization

(2% in Applied Linguistics and 6% in Economics) the frequency of this function in Economics was four times more than that manifested in Applied Linguistics. This discourse expression introduces the processes and techniques used for scientific investigation in a study (Gosden, 1992). It seems that writers of Economics RA abstracts provide readers with more information on the processes and techniques used in the study (examples 20 & 21), and they show the degree of validity and importance of the results. The other reason behind the use of this function as a context frame was to give relevant emphasis and take the reader's attention not just to the process and techniques but also to the large sample used in the study, as in example 22.

20. *By distinguishing between discretionary and non-discretionary fiscal policy,* this paper analyses the stability of fiscal rules for EMU countries before and after the Maastricht Treaty. (Economics 25)

21. *Through the analysis of a number of well-known international brand names*, we provide ample evidence supporting the claim that a finite set of cognitive operations, such as those of domain reduction and expansion, mitigation, and strengthening, among others, can account for the drawing of inferences on the basis of the cue provided by the brand name. (Applied 3)

22. *Using a panel of almost 300,000 Australian companies,* we estimate a piecewise-constant exponential hazard rate model to examine the relationship between innovation and company survival. (Economics 30)

Table 7: Frequency and Percentage of *Means*

	Applied Linguistics (%)	Economics (%)
Means	1 (2)	4 (6)

Condition
The result emerging from the analysis (presented in table 8) reported a difference between the two disciplines in case of expressing the hypothetical condition, while the difference in case of the other subcategory of condition as a context frame was not as noticeable. The result was in the same line with Gosden's (1992) findings. Both abstracts had real condition manifested five times but in the Economics RA abstracts, the discourse function is situated right at the beginning to highlight the situation in which the study is conducted (Examples 23 & 24). The use of an hypothetical condition expression may be justified by what Myers says: " The writer must stay within a consensus to have anything to say to members of his or her discipline, but must also have a new claim to make to justify publication" (1989, p.5) (example 25 & 26).

23. *In an incomplete-contract setting,* we analyze the contracting out of public service provision, comparing the performance of for-profit (FP) and not-for-profit (NP) firms. (Economics 20)

24. *In a dynamic stochastic union model,* we show that firing costs have a small and ambiguous impact on the level of employment if the union precommits to future wages. (Economics 21)

25. *If this is justified,* it follows that learner failure to use formulaic sequences should present some barrier to communication. (Applied 11)

26. *If there is no international discipline on ownership restrictions,* the ownership

restriction level chosen by the Southern government tends to be overacted and will deteriorate the world welfare. (Economics 7)

Table 8: Frequency and percentage of *Condition*

	Applied Linguistics (%)	Economics (%)
Condition – Real	5 (9)	5 (7)
Condition – Hypothetical	1 (2)	4 (6)
Total	**6 (11)**	**9 (13)**

Validation
Table 9 shows a marked difference between the two sets of analyzed data concerning the validation function in context frame. Applied linguists allocated 20% (11% to external and 9% to internal) of the expression to validate their study, while economists allocated only 5% (2% and 3% to external and internal validation respectively). The data analysis yield interesting points regarding the use of external and internal validation in both sets of data. External validation (example 27 & 28) was used just in the introduction and method sections by the writers to link their study to previous studies in the case of the important concept definition and methods of analysis and categorization. In terms of internal validation, they used this realization to draw the reader's attention to the link between the hypotheses and the finding (example 29). The result is shown in table 9.

27. *Drawing on the concepts of communities of practice (Lave and Wenger 1991; Lave 1996; Wenger 1998) and capital (Bourdieu 1977, 1991),* the study analyzes how linguistic competence plays out in NNES students' participation in three different disciplines. (Applied 17)
28. *Following Rourke et al. (1999),* the indicators of social behavior were categorized into the following types: (i) affectivity, (ii) cohesiveness, and (iii) interactivity. (Applied 2)
29. *As expected,* we find that the degree of uncertainty embodied in different innovation proxies does shape the pattern of company survival. (Economics 30)

Table 9: Frequency and percentage of *Validation* context frame

	Applied Linguistics (%)	Economics (%)
Validation – External	6 (11)	1 (2)
Validation – Internal	5 (9)	2 (3)
Total	**11 (20)**	**3 (5)**

Viewpoint
As for the last type of discourse function found in context frame in the list provided, the two disciplines showed similarity of use (table 10), whereby it was used for expressing overt viewpoints giving the writers a high discourse profile, similar to a switch to the participant role of *we* as grammatical subject (example 30) (Gosden, 1992).

30. In view of these findings, we suggest that language aptitude has a compensatory function in language attrition, helping the attriter to retain a high level of L1 proficiency despite reduced L1 contact.(Applied 25)

Table10: Frequency and Percentage of *Viewpoint* context frame

	Applied Linguistics (%)	**Economics (%)**
Means	2 (3)	3 (4)

Chi-Square Analysis

3. Is there a significant difference in the use of the different types of discourse functions as context frames in the expression of marked themes?

In answering research question three, the result of chi-square analysis indicated that the difference between two disciplines was statistically significant only in the case of validation marker. More similarities than differences regarding the use of discourse functions in context frames were surmised with reference to general and specific genre expectations in the next section. Table 11 displays the result of Chi-square analysis.

Table 11: Chi square analysis in the use of context frames

	Applied Linguistics	**Economics**	**Chi-square Value**	**df**	**Sig.**
1. Location in time	12%	14%	0.154	1	0.6949
2. Location in space	5%	3%	0.500	1	0.4795
3. Addition	18%	15%	0.273	1	0.6015
4. Contrast/ Concession	23%	31%	1.185	1	0.2763
5. Cause	3%	3%	0.000	1	1.0000
6. Means	2%	6%	2.000	1	0.1573
7. Condition	11%	13%	0.167	1	0.6831
8. Validation	20%	5%	9.000	1	0.0027
9. Viewpoint	3%	4%	0.143	1	0.7055

The critical value of X^2 with 1 degree of freedom was 3.84 for the 0.05 level of significance

Conclusion

The study investigates how writers from two different disciplines; Applied Linguistics and Economics, negotiate the marked theme (context frames) in the RA abstract genre and whether the possible differences in discourse functions are statistically significant for the claim that in the same genre, writing is shaped by disciplinary characteristics.

Findings showed more similarities than differences in applying the marked theme in both disciplines. The similarities are not merely a reflection of implying the same rhetorical structure (IMRD) but they also revealed somewhat similar features to realize those sections linguistically. They implied a noticeable slant for marked theme as a linguistic element to mark those sections and guide the reader in moving from one section to another. Marked themes obviously help in illustrating the text organization, therefore both sets of writers used these themes considerably to link different sections of the RA abstract logically. The use of context frames and the appropriate discourse markers can be said will significantly increase the textual cohesion and coherence of the RA abstracts.

Without them, the writing would be arid and lacking in signages for the reader to follow the flow of the discourse. It therefore would make sense for all writers to be well versed in this aspect of writing resources and on a pedagogical level, it could be recommended that "it seems possible to teach students theme quite explicitly and coherence can be improved as a result" (Francis, 1990, p.38). In a sense, context frames is a devise that could contribute to good arguments and counter arguments in academic writing.

Even though the result indicated only small differences regarding the frequency and percentage of the use of some context frames, and the analyzed corpus was small for generalization, the gained results is not supportive of claims made by Lovejoy (1991) and North (2005). They postulated that within the same genre, writers from different disciplines write differently. More similarities reported by the result might be in support of Halliday and Hasan's claim. They believe that texts which belong to the same genre represent a similar contextual configuration, that is, they show common characteristics in terms of field, mode, and tenor of discourse. Similarity in contextual configuration engenders similarity in textual choices which reflected in the thematic choices. Thus, as far as RA abstract patterns in the same family of genre, this similarity in context frame use is not surprising.

This study has implications for writers and researchers especially in disciplines where abstract writing has its own significance. By increasing their awareness towards the importance of these linguistic features, they could improve coherence and cohesion of RA abstracts. It also points to the possibility that these linguistic features could take the attention of journal editors or conference organizers and convince them to accept and publish the research article.

Analysing the RA abstract from a macro and micro point of view sets academic writing in a perspective that impresses the importance of a particular genre. As it serves as the first contact of a research article, writers are likely to spent time in composing this preamble so that it does justice to the full article. It should attract the reader and at the same time give information in a way that reveals the salience of the work, brought out primarily through a dexterous manipulation of language resources. Marked themes and the associated array of discoursal functions certainly provide RA abstract writers with important means to achieve an end.

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APPENDIX

Sample of data analyses – the parts marked in bold in the text of the abstracts are examples of context frames

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Innovation and the determinants of company survival
By: Hielke Buddelmeyer, Paul H. Jensen and Elizabeth Webster
Oxford Economic Papers, 62 (2010), pp.261-285
Abstract

Although many companies compete through the development of new technologies and products, *(Contrast Context Frame)* it is well known that innovation is inherently risky and therefore may increase the *ex ante* likelihood of both exceptional company performance and bankruptcy. **However** *(Contrast Context Frame),* existing empirical studies consistently find a positive relationship between innovative activity and company survival. We argue that this conclusion may be a result of a simple selection effect caused by the degree of uncertainty embodied in the innovation proxies used. **Using a panel of almost 300,000 Australian companies**, *(Means Context Frame)* we estimate a piecewise-constant exponential hazard rate model to examine the relationship between innovation and company survival. **As expected**, *(Validation-Internal Context Frame)* we find that the degree of uncertainty embodied in different innovation proxies does shape the pattern of company survival.

NNES doctoral students in English-Speaking academe: The nexus between language and discipline

By: Yu-Jung Chang, and Yasuko Kanno

Applied Linguistics, 31 (5) (2010), pp. 671-692

Abstract

Since the mid-20th century(*Location in Time- Real World Entity Context Frame*)**,** graduate schools in the USA have witnessed a growing participation of international students, many of whom do not speak English as their first language. Previous research has often portrayed non-native-English-speaking (NNES) students in US doctoral programs as disadvantaged because of the presumed primacy of English in their academic pursuits. This study examines NNES doctoral students' participation in US academia, and in doing so, challenges this assumption. **Drawing on the concepts of communities of practice (Lave and Wenger 1991; Lave 1996; Wenger 1998) and capital (Bourdieu 1977, 1991)** (*Validation- External Context Frame*), the study analyzes how linguistic competence plays out in NNES students' participation in three different disciplines. We argue that language competence as cultural capital does not have the same value across different disciplines and may not always be critical to NNES students'academic success. **Furthermore** (*Addition- Emphatic Context Frame*), despite their keen awareness of their differences from their native-speaking counterparts, the NNES doctoral students in this study had other forms of cultural capital with which they claimed legitimacy and recognition in their disciplinary communities

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