The 8th International Language for Specific Purposes (LSP) Seminar - Aligning Theoretical Knowledge with Professional Practice

Revisiting Genre Analysis: Applying Vijay Bhatia's Approach

Manvender Kaur Sarjit Singh\textsuperscript{a}, Sarimah Shamsudin\textsuperscript{b*}, Yasmin Hanafi Zaid\textsuperscript{c}

\textsuperscript{a}Faculty of Education, Universiti Teknologi Malaysia, 81310, Johor, Malaysia
\textsuperscript{b}Language Academy, Universiti Teknologi Malaysia, Jalan Semarak, 54100, Kuala Lumpur, Malaysia
\textsuperscript{c}Language Academy, Universiti Teknologi Malaysia, 81310, Johor, Malaysia

Abstract

This paper presents an application of Vijay Bhatia's genre analysis. A move analysis and a multidimensional analysis was conducted using a compiled representative corpus; COREWIC. As a descriptive analysis, it explored the written communicative events produced by engineers in the Malaysian petroleum industry. Among the findings is the proposition of basic move-schemes used while writing the work procedures used in the corpus. The analysis conducted is highly reflective of Bhatia’s \cite{Bhatia2} model for genre analysis consisting of seven steps needed to conduct a “comprehensive investigation of any genre”. Therefore, this paper presents and discusses the application of the seven steps in Bhatia's \cite{Bhatia2} model on the genre analysis of work procedures prepared in a professional setting of petroleum industry. Bhatia’s combinational perspectives of grammatical, socio-cognitive and cultural explanation provide a fundamental ground for the analysis of the written communicative events produced in a professional setting such as the petroleum industry.

Keywords: genre analysis; written communicative events; professional discourse; corpus analysis

1. Introduction

Since the eighties, language teachers generally, and applied linguists, particularly those who are concerned with the teaching of English for Specific Purposes (ESP), have shown great interest in the analysis of the written and spoken genre. According to Holmes \cite{Holmes1} this interest is motivated by pedagogical concerns especially by the need to develop suitable models for ESP teachings. The concern has been, as stressed by Holmes \cite{Holmes1} on the need
to enhance the ability of non-native speakers to understand and produce academic and scientific texts. However, as suggested by Bhatia [2], earlier studies of academic and scientific discourse had failed to produce relevant and comprehensive accounts of such texts. Earlier studies had not been sufficiently comprehensive to highlight the contents of the scientific and academic texts. Moreover as argued by Bhatia [3], a more integrated approach to genre analysis is required in order to produce evidence of knowledge being applied in the professional settings.

Genre theories mainly cover three specific eras of genre perspectives namely; the new rhetoric, the systemic functional linguistics (SFL) and the ESP. However, in the present analysis, these perspectives are considered rather complementary than contradictory, in terms of analytical applications. Martin [4] suggested that a genre is a class of communicative events, revealing some shared set of communicative purposes, which are recognized by members of the specific professional or academic community in which the genre occurs. The definition provided by Swales [5] has particularly influenced subsequent ESP related studies conducted using genre as a tool for analysis. Later on, Bhatia [6] deposited yet another definition of genre:

Genre essentially refers to language use in a conventionalized communicative setting in order to give expression to a specific set of communicative goals of a disciplinary or social institution, which give rise to stable structural forms by imposing constraints on the use of lexi-co-grammatical as well as discoursal resources. [Bhatia, 2004:23].

Genre analysis or discourse investigations have rocketed in recent years. According to Connor [7], recently, genre analysis has received increasing attention in terms of contrastive rhetoric research, with works focusing on textual or structural analysis. In contrastive analyses, a genre analysis focuses mainly on generic structures and rhetorical function, such as ‘moves’, ‘stages’, ‘schematic’ or ‘generic’ structures.

According to Bazerman [8], Devitt [9], and Miller [10], new rhetoric genre researchers engage in the idea that a genre is created from repeated social actions occurring regularly in recurring situations which generate the typical structure of the forms and content of the genre.

Describing and accessing the structural patterns in a genre is a reflective analysis, reflecting how a language is being used by language users, whether it is meant for academic use, to produce a scientific discourse or for workplace written communication.

The compilation and creation of a genre-specific corpus accommodates such an analysis. McEnery and Wilson [11] provided a useful link between corpus and grammatical analyses, stating that grammatical (or syntactic) studies have, along with lexical studies, been the most frequent types of research which used corpora as their research instrument. Elaborating further, they stated that a corpora is an important tool for syntactic research due to its’ representative quantification of the grammar of a whole language variety and also the role of corpora as empirical data, quantifiable and representative in nature for the testing of hypothesis derived from grammatical theory.

However, in Malaysia, there is a lack of availability of genre-specific corpus especially from a professional setting such as the petroleum industry. To fill this gap, the present study developed a representative corpus to be used in the analysis conducted.

2. The COREWIC Corpus

The corpus was compiled using work procedures produced by engineers from three main key player companies in the local petroleum industry in Malaysia. The work procedures are written as guidelines for various different work practices of the company and are a crucial measurement for the Quality, Health, Safety and Environment (hereafter QHSE) compliance. The work procedures are prepared by safety engineers and are reviewed by the QHSE Senior Manager before being approved by the General Manager of the department. The procedures are written to be referred to by the employees of the companies, as a basis for safe execution of their daily tasks, according to specified QHSE requirements. The work procedures outline the objectives, the scope,
the responsibilities and the step-by-step instructions to be complied by the employees at various work stations in the yards of the companies. The work procedures also define the related references and definitions according to the responsible QHSE accreditation bodies such as the National Institute of Occupational Safety and Health (NIOSH) and the Department of Occupational Safety and Health (DOSH).

The primary use of the written work procedures is to highlight the safety measures related to critical works in the companies and to ensure that the critical works are conducted in a safe and healthy manner and are performed by competent employees. In a particular department, there could be as many as ten different work stations on the yards, each assigned with different tasks, requiring different specific tasks execution. These tasks are all bound together with identical safety measures which are implemented through the work procedures. For instance, the In House Scaffolding Training is a work procedure prepared for the safe execution of the in-house scaffolding activities. The Electrical Safety Procedures outlines the necessary safety measures required during the execution of various activities involving work with electrical appliances. The Safety Coordination Meeting on Board Vessel outlines the QHSE precautions for vessel undergoing repairs.

The genre-specific corpus was used as a tool for the move analysis and the multidimensional analysis. Written texts have previously been used to create a corpus (Luzon, [12]; Henry and Roseberry, [13]; Thompson, [14]). For example, Luzon [12] used 55 multi-authored final writing assignments prepared by engineering students to create a learner corpus for her study of the use of pronoun we in the reports written by EFL engineering students. Earlier, Henry and Roseberry [13] used 40 job application letters written by native English speakers to conduct a corpus analysis of the moves and the strategies used in the genre of job application letter. Thompson [14] created a corpus using 20 PhD theses and initiated a tagging system to differentiate between two types of citations used; the integral and non-integral.

The corpus for this study consists of 90 work procedures collected from three companies; 30 from each company. These texts were compiled to form a genre-specific corpus known as CORpus of Engineering Written Industrial Communication or COREWIC for short. The corpus was then coded using the following representative codes; WP for work procedures, A, B and C for the individual companies, number 1 to 30 for each document from each of the company.

Diagram 1 shows the structure and the number of words in the COREWIC Corpus. An important point to be made before going further is that in this study, only written texts was used and compiled into a corpus due to the assumption that authentic writing represents language use more closely than speech. The written genre of work procedures was chosen due to the following considerations; (i) convenience for data collection, (ii) representativeness of the topic and (iii) appropriateness for the corpus compilation.

![Fig.1. The genre-specific COREWIC corpus](image-url)
3. Applying Bhatia's Approach to Genre Analysis

Bhatia [2] suggested that in order to analyze unfamiliar genres, it is necessary to consider some or all of the seven steps as indicated below, depending on the purpose of the analysis, the aspect of the genre and the background knowledge the researcher has on the nature of the genre to be analyzed. Bhatia’s [2] seven steps of genre analysis are; (1) Placing the Given Genre-Text in a Situational Context, (2) Surveying Existing Literature, (3) Refining the Situational / Contextual Analysis, (4) Selecting Corpus, (5) Studying the Institutional Context, (6) Levels of Linguistic Analysis and (7) Specialist Information in Genre Analysis.

Each of the seven steps is elaborated further with example of applications into the present study.

3.1. Placing the Given Genre-Text in a Situational Context

The first step, according to Bhatia [2], is to place the genre-text within the situational context. This can be accomplished by relying on prior experience, the internal clues in the text and the encyclopedic knowledge that one has acquired. In the present study, the writer's background and previous knowledge of the specialist discipline of petroleum engineering aspects provided the situational context for genre-text gathered and analyzed. The genre belongs to the professional community of engineers and general workers consisting of welders, riggers, and technicians.

The situational context of the genre within a specific discourse community allows the user to understand the communicative conventions associated with the genre. This will accommodate the understanding of why the genre is conventionally written the way it is and why it is used in the specific area of activity to which the genre belongs. Bhatia [2] further dictated that this kind of knowledge is greater in those people who professionally belong to the community which habitually makes use of the specific genre. However, for those who do not possess the knowledge, it is often acquired by surveying existing literature.

3.2. Surveying Existing Literature

Recently, various studies using specific genre-texts have been conducted in many professional settings thus creating the availability of literature. According to Bhatia [2], this will include literature on other linguistic analyses of the genre in question, or similar genres, tools, methods, theories of linguistic/discourse/genre analysis which might be relevant to the situation to be analyzed. It also includes discussions of the social structure, interactions, history, beliefs and goals of the professional or academic communities which use the genre in question.

For the purpose of this study, the literature reviewed included studies by Bhatia [2, 15, 16] conducted on sales promotion letters, job application letters and legislative provisions, Henry & Roseberry [13] who analyzed job application letters, Flowerdew and Dudley-Evans [17] who analyzed editorial letters sent to international journal contributors and Upton [18], who reported findings of research conducted at the Indiana Center for Intercultural Communication (ICIC) at Indiana University on non-profit philanthropic discourse.

However, research or studies conducted on similar genre of work procedures in similar context and similar professional setting as the petroleum industry has been scarce and was unavailable at the moment when this study was conducted. Relying on the literature available, the present study was aimed at analyzing the genre-text of work procedures prepared by engineers in the petroleum industry in Malaysia. The existing literature and the lack of literature in related research context supported the genre analysis conducted in this study, further necessitating the analysis of written genre of work procedures.
3.3. Refining the Situational/Contextual Analysis

According to Bhatia [2], the next step would be refining the analysis further by defining the speaker/writer of the text and the audience – their relationship and their goals. For the purpose of this analysis, the writers of the texts were defined as QHSE engineers. These engineers were employed by the companies to work in the QHSE departments. Their main tasks were to encourage safe working practice in the companies. The QHSE engineers are involved directly in the preparation of the work procedures.

The occupational placement of the community which consists of the QHSE engineers is within the engineering aspects of the companies. The discourse takes place as the working procedures of the companies where workers are to read and follow the instructions as presented in the texts of the work procedures.

Consequently, the relationship of the text to reality is in the form of properly guided instructions of works to be conducted in the selected companies. The works in the companies are not allowed to proceed without the allocations of these guidelines and instructions.

3.4. Selecting Corpus

Bhatia [2] suggested that in order to decide on the exact type of corpus to be compiled and used, one has to identify the genre that is being used, define it and characterize it thoroughly in order to distinguish it from other similar genres. The genre used should be defined according to the communicative purpose of it, within the situational context which is accommodated by the genre and some of the distinctive textual characteristics of the genre-text.

Further elaborating on the selection of corpus, Bhatia [2] stated that it is necessary to clearly state the criteria of selection made when deciding on the appropriateness of a text in a specific genre. Generally, the genre used in the present analysis belongs to the written communicative events occurring in the workplace of English language users.

Specifically, the genre belongs to the written communication produced within the engineering discourse used in the petroleum industry. The texts used are selected from the various written communicative events being produced and used in the settings, including emails, memorandums, business letters, accident reports and survey reports.

As an exploratory investigation, the texts are selected based on the specific purpose of the study which is to analyze the linguistic structure of the written communicative event of work procedures prepared by engineers in the petroleum industry. The selection of the texts was also influenced by the following considerations; convenient collection of data to be used in the analysis, representativeness of the data to the topic of the study and appropriateness for corpus compilation to be used in the study.

3.5. Studying the Institutional Context

The next attempt as suggested by Bhatia [2] should be to study the institutional context in which the genre is being used. This includes studying the rules and conventions such as linguistic, social, cultural, academic and professional governing the use of language in the settings.

In this section, Bhatia [2] also highlighted the influence of the organizational context on the overall construction of the genre. For this study, it was noticed that the particular organizations that were being investigated have placed certain controls over the genre construction mainly the structural layout of the genre.

The controls placed are pre-requisites as the authors of the genre are guided by a general layout of the texts and are directed to follow the specific structural outline without making serious changes to the construction. The organizations have placed their own defining purposes to have the genre written as it is. The control indicates linguistic and academic conventions of the genre. Professional conventions of the genre are accommodated into
its 'power of speech' where the genre 'speaks' on behalf of the authors. The authors' superiority in the organizations is reflected within the written genre thus indicating direct professional influence of the genre.

3.6. Levels of Linguistic Analysis

Next, as suggested by Bhatia [2], is deciding the level(s) of analysis to be conducted. This depends highly on the purpose of the study being conducted.

Three levels of linguistic realization may be carried out. The first one is to look at the lexico-grammatical features of the texts in the genre. Corpus-based and quantitative in nature, this analysis focuses on specific features of language that are predominantly used in the texts. As described by Bhatia [2], this approach of genre analysis within the level of lexico-grammatical analysis was conducted by Barber [19] and Gustafsson [20].

According to Bhatia [2], although this level of analysis may have been useful to confirm or disapprove some intuitive statements of certain lexico-grammatical features of genres, it contributes little to the aspects of textualized understanding of these genres. It also limits our understanding of the purpose of these particular genres.

The second level of linguistic analysis of a genre, as suggested by Bhatia [2] is the text-patterning or also stated by Widdowson [21] as textualization. Within the aspects of this analysis is the conventional language use by the members of the particular speech community. Swales [22] used this level of analysis on data gathered from chemistry textbooks, where he studied the function of past-participles in the pre- and post- modifying NP positions. According to Swales, this type of analysis is an important convention in science and is often used by the author to prevent unwanted enquiries related to details of experiments explained in the textbooks. This level of analysis takes linguistic description a step further in the direction of explaining "why do members of the secondary cultures write the way they do?" This explanation is also provided in the present analysis of work procedures prepared by engineers in the petroleum industry in Malaysia.

In the present study, this kind of analysis was conducted and placed within the aspects of a multidimensional analysis of the text-genre collected from the settings. The multidimensional analysis consisted of part-of-speech tagging, frequency analysis followed by an analysis of the distributional patterns of selected linguistic elements.

Another purpose of the present analysis was to investigate and interpret the structural conventions of the genre. According to Bhatia [2] this kind of genre analysis falls within the third level of linguistic analysis of a genre.

The third level of linguistic analysis of a genre which is the structural interpretation of the text-genre highlights the cognitive aspects of language organization. Bhatia [2] placed it under the psycholinguistic orientation as it reveals the cognitive structuring of the texts. The writer tends to concentrate on tactical aspects of genre construction highlighting individual strategic choices made to execute his or her intention [Bhatia, ibid.]. The selected strategies used by the writer reflect the writer's purpose of writing the genre, identifying what goes on in his or her mind while writing the specific text.

Generally, according to Bhatia [2], the strategies do not change the "...essential communicative purpose of the genre". However, the strategies used identify and highlight the social-cultural context in which the genre is prepared. The originality of the strategies used is reader focused. "Who is the reader?" and "What is the message to be communicated?" are the two main questions in the writer's mind when generating the strategies.

In the present study, the structural interpretation of the text-genre revealed that the writers of the work procedures have similar concerns of their readers. The writers displayed remarkable resemblances of strategies used, which were analyzed according to the moves used following Swales' [23] move analysis. Following Swales, a similar application of move analysis was conducted by Bhatia in 1982 using a legislative genre [15], [16]. The present study supported the claim made by Bhatia [2] that cognitive structuring in a genre is the property of the genre and not that of the individual reader.

Generally, a genre analysis may include but not limited to two common approaches; a move analysis and a multi-dimensional analysis. According to Kanoksilapatham [24], units of texts in a genre can have specific
internal purposes or also known as the rhetorical moves as suggested by Swales [25]. For the purpose of this study, a move analysis refers to the identification of a number of "moves" as various communicative functions are used in the text while a multi-dimensional analysis refers to the sentence level syntactical analysis (hereafter SLSA) comprising of the recognition of part-of-speech (hereafter POS) in the texts and the structural patterns of the POS used.

The two approaches are complimentary of each other in terms of analyzing and understanding the texts in the genre. There is no evidence of the existence of generally recognized guidelines or rules for move identification. Therefore, the present study relied on the linguistic structures of sentences, comprehension of the text, and understanding of the expectations and goals of the discourse community in the research in order to classify the moves. As a basic guideline, this study used the core components of the work procedures to organize and identify the moves used in the texts.

In order to tag the moves according to specific rhetorical moves, a pre-designed coding scheme was developed and used as operational criteria to provide control for possible variations of coding and to make move identification possible for reliability assessment. The coding schemes used for the move analysis were generated by identifying the corresponding core components and the general structure of the sentences in the core components. It was necessary to rely upon the general structure of the sentences to assign the moves identified as some sentences in the core components reflect a separate move from the one assigned to the component. For example the following text taken from WPA9, is reflecting the use of two moves together in one component which is the Procedure:

<move 8c> Means to disseminate information depend on the nature of the information itself and the target audience. <move 5> Refer to Internal and External Communication Matrices for means of communication to employees and other interested parties respectively.

(Text: WPA9)

For the purpose of this research, the coding schemes were designed individually for WPA, WPB and WPC to allow an in-depth analysis for each group of documents. Some of the coding schemes used for the moves had been further expanded into sub-moves in order to allow appropriate clarification of the communicative function of the main move. The core components with the corresponding moves and sub-moves identified in WPA, WPB and WPC are tabulated in Table 3 accordingly.

Altogether there are 9 main moves identified; move 1 to move 9 for WPA, move 1 to move 8 for WPB and move 1 to move 8 for WPC with sub-moves for move 8 (WPA), move 7 (WPB) and move 7 (WPC).

In order to validate a quantified analysis, the multidimensional analysis should be supported with a statistical analysis of the POS. On the other hand, validation of the move analysis may be supported by selecting and training a human coder. In this study, the variation in coding was determined using the Cohen’s Kappa calculation in the SPSS software.

3.7. Specialist Information in Genre Analysis

In order to add validity of the findings in genre analysis, Bhatia [2] suggested the use of specialist information provided by a practicing member of the disciplinary culture where the genre is being used. According to Bhatia, the information provided by specialist informants tends to bring validity to the insights gained and adds psychological reality to the analysis. Selinker [26] and some of his colleagues used a specialist genetics professor to assist them in understanding a journal article in genetics.

Huckin and Olsen [27] used the same author of the genetics article which Selinker [26] used in his study, and provided some clarification on the crucial issues related to the use of specialist informants in discourse interpretation. Among others, they listed that LSP researchers who use informants should have some familiarity with important conventions and ways of arguing in the field being studied.
<table>
<thead>
<tr>
<th>CORE COMPONENT</th>
<th>MOVE</th>
<th>SUB-MOVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WPA</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOPIC</td>
<td>move 1: Indicating specific topic</td>
<td></td>
</tr>
<tr>
<td>TABLE OF CONTENT</td>
<td>move 2: Outlining the structure</td>
<td></td>
</tr>
<tr>
<td>OBJECTIVE/PURPOSE</td>
<td>move 3: Indicating the specific objective[s] / purpose[s]</td>
<td></td>
</tr>
<tr>
<td>SCOPE</td>
<td>move 4: Stating the specific scope</td>
<td></td>
</tr>
<tr>
<td>REFERENCES</td>
<td>move 5: Indicating reference[s] / examples</td>
<td></td>
</tr>
<tr>
<td>DEFINITIONS</td>
<td>move 6: Clarifying definitions of term[s]</td>
<td></td>
</tr>
<tr>
<td>PROCESS FLOW</td>
<td>move 7: Showing the flow of the process involved and person[s] responsible</td>
<td></td>
</tr>
<tr>
<td>PROCEDURE</td>
<td>move 8: Describing the procedure[s] involved</td>
<td>8a: Listing the procedure[s] 8b: Explaining specific procedure[s] 8c: Clarifying the procedure[s] 8d: Inserting responsibility</td>
</tr>
</tbody>
</table>

| **APPENDICES / RECORDS** | move 9: Providing cross-reference | |

| **WPB** | | |
| TOPIC | move 1: Indicating specific topic | |
| TABLE OF CONTENT | move 2: Outlining the structure | |
| PURPOSE/OBJECTIVE | move 3: Stating the specific purpose | |
| SCOPE | move 4: Stating the specific scope | |
| REFERENCES | move 5: Indicating reference[s] / examples | |
| DEFINITIONS | move 6: Clarifying definitions of term[s] | |
| PROCEDURE | move 7: Describing the procedure[s] involved | 7a: Listing the procedure[s] 7b: Explaining specific procedure[s] 7c: Clarifying the procedure[s] 7d: Inserting responsibility |

| **APPENDICES / RECORD** | move 8: Providing supporting documents | |

| **WPC** | | |
| TOPIC | move 1: Indicating specific topic | |
| TABLE OF CONTENT | move 2: Outlining the structure | |
| PURPOSE / INTRODUCTION / OBJECTIVE | move 3: Indicating the specific objective[s] / purpose[s] | |
| SCOPE | move 4: Stating the specific scope | |
| REFERENCES | move 5: Indicating reference[s] / examples | |
| DEFINITIONS | move 6: Clarifying definitions of term[s] | |
| PROCEDURE | move 7: Describing the procedure[s] involved | 7a: Listing the procedure[s] 7b: Explaining specific procedure[s] 7c: Clarifying the procedure[s] 7d: Inserting responsibility |

| **APPENDICES / RECORDS** | move 8: Providing cross-reference | |
In order to gain the much sought after information, meetings with specialist informants is necessary. In the present study, specialist information was gained through interviews with selected informants from the industry being studied. The information gained helped validate the findings from the move analysis and the multidimensional analysis.

4. Conclusion

Bhatia's [2] approach to genre analysis was used in the present analysis of workplace written documents. The application of the seven steps as proposed was used as guiding principles to conduct the micro and macro level corpus-based textual analyses. The proposed method of multidimensional analysis and move analysis conducted in the present study is most useful in a qualitative analysis of a text corpus. However, it is undeniable that similar method of analysis may also be applied to a quantitative analysis.

The findings of the macro and micro level analyses are useful to provide insights in creating a framework to teach specific courses under the ESP domain. In addition, the findings highlighted could be used as guiding principles to develop a suitable syllabus for the engineering ESP courses especially in the petro-chemical engineering courses offered in the higher learning institutions.

References


