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Metalinguistik dalam Pengajaran Bahasa

Analisis Retorika Teks Genre Akademik: Kerangka Teori dan Isu-Isu Metodologi

"Rhetorical Analysis of Texts in Academic Genre: Theoretical Framework and Methodology Issues"

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Abstrak

Studi tentang struktur retorika dan fitur linguistik teks dalam 'genre' tertentu, seperti artikel penelitian, tesis, disertasi dan makalah seminar telah diteliti secara intensif oleh pakar analisis wacana akhir-akhir ini. Manfaat dari temuan studi ini, antara lain, adalah untuk membantu proses belajar mengajar penulisan teks akademik atau ilmiah khususnya untuk mahasiswa. Esai ini membahas tentang kerangka teoritis dan metodologi mengenai analisis retorika teks dalam 'genre' akademik khususnya dalam konteks bahasa Inggris untuk tujuan-tujuan khusus. Makalah ini menyajikan beberapa kerangka kerja dan model struktur retorika dan fitur linguistik teks dalam 'genre' akademik untuk tujuan pengajaran menulis karya ilmiah. Makalah ini diharapkan dapat bermanfaat bagi dosen dan mahasiswa pascasarjana yang tertarik pada analisis wacana analitik, deskriptif atau komparatif (paralel atau sebanding) tentang teks akademik.

Kata kunci: genre; artikel penelitian; struktur retorika; isu-isu tentang metodologi.

Abstract

Studies on the rhetorical structure and linguistic features of a particular genre, such as research articles, theses, dissertations and seminar papers have been intensively scrutinized by genre specialists recently. The benefit of the findings of these studies, among other things, is to guide the teaching and learning processes of academic writing, especially for university students. This essay discusses the theoretical frameworks and methodological issues concerning the area of rhetorical analysis of texts in the academic genres in the context of English for specific purposes. It presents some frameworks and models of rhetorical structure and linguistic features of texts in a particular genre for pedagogical purposes. It is expected to be useful for university lecturers and postgraduate students who are interested in descriptive analytic or comparative (parallel or comparable) discourse analyses of academic texts.

Keywords: genre; research article; rhetorical structure; methodological issues.

1. Introduction

Literary texts are popular with the term 'genre'; for many years, literary texts such as novels, poems, or epics were used as examples of genres that learned by students in literature classrooms [1]. However, recently linguists also use the term genre to refer to types of spoken or written discourse classified by content, language, purpose and form. Learners, for example, analyze an example of a formal letter of complaint, looking at structure, set phrases, formality and purpose. Linguistic action is one of the generating factors of all communicative actions that emphasize contemporary functional genre theorists on the social and cultural aspects of genres [2]. Leckie-Tarry [2] offers two concepts of genre: 1) genre as an interaction between socio-cultural features and (2) genre as textual features. He also views that the socio-cultural features of a particular community in which a text is constructed and used can affect the textual forms. The texts forms are modified by the community members who control them. Further, Leckie-Tarry [2] differentiates the concept of register and genre which is related to the position or role of the communicative purpose of a particular text. The communicative purpose of a particular text in register is recognized on the basis of its linguistic features, whether it is an explicit or overt social communicative event in genre. In generic classification of texts, it becomes the main determining factor.

There are theoretical problems related to the notion of genre; this term has a wider context and can be used in some areas e.g. folklore studies, linguistic anthropology, the ethnography of communication, conversational analysis, rhetoric, literacy theory, the sociology of language, and applied linguistics [3]. According to Paltridge [3], there are many differences that can be used to approach the descriptions and definition of genre. It depends on several aspects, such as the goal of each approach to genre analysis, the differing theoretical positions and concerns underlying the various approaches. Then, these aspects of genre can be similar or different from one approach to another based on theoretical views: 1) the place of the structure of a text in the description and definition of genres, 2) the relationship between genre and context, 3) the relationship between genre and culture, and 4) the relationship between genre and cognition.

1.1. The English for Specific Purposes (ESP) Approach on Genre

Genre analysts such as Swales, Bathia, Johns and others have drawn English for Specific Purposes (ESP) as the final approach on genre where applied linguists working in this area. The studies were focused on patterns of rhetorical organization and genre-specific language features. The studies in genre analysis are different from the traditional register or sub-register analysis, especially in the importance of communicative purposes within a communicative setting [4]. Genres are ways to serve the goals of specific discourse communities [5]. They tend to establish relatively stable structural forms, and to some extent, even constraint the use of lexico-grammatical resources in expressing these forms.

Based on the previous discussion, there are two different views related to the theories on genres; these are in terms of the static and dynamic qualities of genre. The static quality of genre is important for practical reasons because unless genres are static, then how they can be taught [6]. In addition, Luke [7] suggests that this concept has been too simplistic by some functional linguists ignoring the realities of contestation and the fact that genres are themselves a site for struggle. This study is geared to allow for enhanced individual agency in mainstream institutions rather than for significant social change emphasized on direct transmission of text-types leading to uncritical reproduction of the discipline and an inequitable society. Moreover, a concern was expressed by Bathia [8] that the systemic functional scheme of genre places too much emphasis on the formal linguistic features of texts; these features fail to explain the communicative value conveyed in the text.

Avoiding to establish a working definition of genre and genre classification or taxonomy caused by the dynamic nature of genre is the effect of the dynamic quality of genre by the new rhetoricians. Freedman [9], for example, argues that the effectiveness of explicit teaching of genre features and knowledge are the questions that come across unless it is carried out in the context of or in close proximity to authentic tasks involving the relevant discourse. In other words, in an authentic environment, genre knowledge can only be acquired like a second language. According to Swales [4], to promote consciousness-raising by discussing texts and offering to the best of our abilities prototypical examples of relevant genres are the language teaching advocated and supported by people working in ESP. It means that a genre taxonomy is necessary if genre knowledge and skills are to be taught even in a very restricted environment and for a very specified purpose. This concept offers a solution where Freedman and Medway [10] concluded that genre is defined primarily by its common communicative purposes; these purposes and the role of genre within its environment give rise to specific textual features.

1.2. Studies on Linguistic Features of Research Articles

Several investigators have conducted studies on the topics classified as comparative studies on RAs; these studies focused on the linguistic features of the scientific texts in order to provide necessary empirical evidence to confirm or disprove some of the intuitive and impressionistic statements [11,12,13,14,15,16,17,18]. It tends to make about the high or low incidence of certain lexico-grammatical features of various genres [8]. Similarly, since different sections of RAs perform different rhetorical functions, they require different linguistic resources to realize those functions that are called as the need for the linguistic analysis of the RAs [4]. Then, Lexico-grammatical constructions are mostly found in Methods and Results sections of RAs than do the Introduction and Discussion sections, and this information is useful for pedagogical purposes.

Two aspects of scientific texts are the use of passive and active constructions. This aspect has been claimed to have an essential rhetorical function in scientific genres. The example of the frequency and rhetorical functions of active and passive constructions examined and compared by Liddicoat [11] was found in six Biology RAs and those found in four literary texts (novels) written in French by French speakers. In biology texts (scientific texts), the active construction is used more frequently than the passive one. In literary texts, on the other hand, the passive construction is used more frequently. Then, Liddicoat [11] suggests seven different rhetorical functions of passive and active constructions in these two different genres (literary and scientific). There are several functions of passive constructions: 1) to indicate that a standard procedure is followed, 2) to refer to author's individual future work, 3) to cite the peripheral previous work, 4) or to raise a particular topic, 5) while the actives are used to describe the procedure

undertaken, 6) to report and interpret the study results, 7) to review the essential previous studies, and 8) to refer to the author's own work in progress.

Another research was done by Ahmad [15] who examined the use of passive-active choices by the Malay authors in Malay RAs. Ahmad [15] studied the result and discussion sections of 62 RAs in a wide variety of fields of discipline in hard and natural sciences written in Malay. Based on his research, he found that the Malay authors use passive and active constructions for six different purposes, i.e. to justify differences in results or interpretation, explaining limitations, difficulties or perplexities, offering suggestions and recommendations for future work, and suggesting inconclusive results. On the other hand, the active constructions are used for highlighting major findings, comparing the present findings with those of previous research, and suggesting conclusive results. It can be concluded that Malay scientific writers generally prefer using passive constructions than the active forms in order to avoid the personal point of view.

Moreover, hedging, where its function in scientific texts has been found to be rhetorically essential is another important linguistic feature of texts. Hedges in scientific texts are communication strategies or rhetorical devices for projecting honesty, modesty and proper caution in self-reports, and for diplomatically creating research space [4]. Hedges are a significant communicative resource for academics because they both confirm the individual's professional personal and represent a critical element in the rhetorical means of gaining acceptance of claims [12]. It is an essential feature of genre where their use is motivated by the discourse community, standard of knowledge, and textual representations of a particular genre. In addition, hedges allow writers to anticipate possible opposition to claims by expressing statements with precision, caution and diplomatic difference with the views of colleagues. It is also suggested that hedges in scientific texts are the result of informational, rhetorical and personal choices that cannot be fully understood in isolation from social and institutional contexts.

Myers [19] argues the importance of hedging in scientific texts where the scientific writers are often required to decide the level of knowledge claims or denials that they wish to make in their scientific texts. For example, potentially face-threatening particularly for new or inexperienced authors. In this case, the authors normally use particular communication strategies in order to anticipate reader's response or criticism, e.g. use positive and negative politeness and hedging employing particular lexico-grammatical resources, such as modal verbs, passive constructions and pronouns.

Other studies about the use of hedging in ten RAs in each of four disciplines—Biology, Chemistry, Engineering and Medicine— written in French were done by Liddicoat [11]. He examined how French writers use modal verbs in their scientific texts. From this study, Liddicoat [11] suggests three ways in which writers may use modal verbs e.g. *pouvoir*, *devoir* and *falloir* to express knowledge claims in their scientific texts. He found that modal verb of *falloir* is the highest in terms of their level of certainty, while *pouvoir* is the lowest. Based on his research, the French scientists prefer to use lower-level certainty modal verbs *devoir* and *pouvoir* in making knowledge claims and the strongest available modal is never used for this purpose. This is the most interesting finding of Liddicoat's study.

Vassileva [14] investigated the use of hedging in RAs. She examined RAs of three different groups—Bulgarian RAs written by Bulgarian speakers, English RAs written by Bulgarian speakers and English RAs written by English speakers. She found some similarities among the RAs i.e. 1) use hedges irrespective of the languages which scatter throughout the entire texts and the common forms of hedges are modal verbs, and 2) semi-auxiliaries, adjectives and adverbial phrases. In contrast, some differences as found in her study between Bulgarian and English authors are: 1) the English authors prefer using modal verbs and semi-auxiliaries while the Bulgrarian authors are in favor of using adjective and adverbial phrases, 2) the English RAs is higher than those in Bulgarian RAs in the distribution of hedges in the three sections of the RAs (introduction, discussion and conclusion), 3) the frequency of hedges in introduction and discussion sections in the English RAs is higher than those in Bulgarian RAs, and 4) in the conclusion sections, the Bulgarian RAs have more hedges than the English RAs. In other words, there is a rhetorical native-language transfer in which the English RAs written by Bulgarian authors are more similar to those in Bulgarian than to the English.

Further, citing (directly or indirectly) the work of others in their scientific texts is another linguistic feature of a particular text which has attracted genre analysts' attention. It is focused on the use of lexical verbs than the ways authors use verbs in. There are two different ways of citation in scientific texts that have been classified by Swales [4]: 1) integral, and 2) non-integral. He also provides up to six different models in each of the classifications. Then, the use of reporting and non-reporting types of citation is more important distinction between facts. Swales [4] adds that an important rhetorical function is to create a research space for the authors. It is the choice between reporting and non-reporting forms of citation has.

Swales [4] also investigated the citation style of authors in sixteen biological and medical English RAs. He looked at the use of reporting and non-reporting types of citation in these articles. He found that the reporting/non-reporting ratio of 40-60 in the RAs. Similarly, Ahmad [15] found the ratio (46-54) in her Malay science RAs. Then, Jacoby [20] found a ratio of 75-25 of

reporting/non-reporting forms of citation in his literary criticism RAs. To conclude, some researchers found different ratio for RAs that are categorized into reporting/non-reporting forms in science and literary RAs. The differences are significant which the reporting type of citation is more common in the literary RAs than that in the sciences RAs. Bazerman [21] shows a decrease in the use of reporting types of citation in the discipline of hard sciences or scientific texts. According to Swales [4] the use of reporting types of citation will remain necessarily important because of its rhetorical function. Besides that, the use of the reporting forms of citation also allows authors to signal early in their texts that a particular claim is considered substantial and will be reused later in the text.

The impact of contrastive rhetorical studies on the teaching of English as a foreign language (EFL) especially in the teaching of academic writing is immense. Atkinson as cited in Connor et al., [22] states,

The contrastive rhetoric hypothesis has held perhaps its greatest allure for those in nonnative-English-speaking contexts abroad, forced as they are to look EFL writing in the eye to try to understand why it at least sometimes looks 'different' – often subtly out of sync with what one might expect from a 'native' perspective (p.319).

In other words, the findings of contrastive rhetorical studies have shown us how the compositions in terms of discourse and linguistic features of academic texts in our first language and English are similar and different and how we could adjust our writing to match the expectation of English speakers.

2. Methodology Issues in Genre Analysis

In terms of methods, text analysis has a closer connection to qualitative approach rather than with quantitative one [23]. According to Basthomi [23], one needs to differentiate between 'elicitation' and 'evaluation'; elicitation deals with the techniques of data collection from the field while evaluation with the techniques of analyzing the already collected data. However, as many examples have shown us that many discourse or genre studies rely on the already produced texts such as essays, letters, articles, thesis or dissertation and so on. This is why the combination of qualitative and qualitative method or mixed-method is often used by genre analysts recently.

2.1. The Corpus of the Study

A collection of written texts, especially the entire works of a particular author or a body of writing on a particular subject is called corpus [24]. The object of the study is the rhetorical analysis of texts on a particular genre often uses a corpus—that is a collection of the same or similar texts in a particular field. For example, studies on research articles in the collection of section/s or the whole research article in a particular or group of fields as the object of the study. A collection of texts in two or more groups will be used when the study uses a comparative method either of texts across fields in the same language or between the same fields in two different languages. Then, the length of the texts and the aspects to be analyzed will depend on the number of texts used in the corpus of a particular study.

2.2. Data Analysis Techniques

Studies on this topic are aimed at examining the rhetorical structures or features and the communicative purposes of RAs using a genre analysis approach in scientific texts developed mainly for English RAs. The organization of ideas in a particular text, or segment of a text and the textual features of the text based on an analysis of the semantic or communicative units of the text is referred to as rhetorical feature. The two important aspects of a unit analysis to consider in discourse analytic studies are what position or function it has in the structure of other larger units and what its own internal structure is [24]. In addition, a Move or the semantic unit (also often referred to as a communicative unit) of a text in the data analysis for this study that may consist of Steps (one or more subsequent elements) are also the important aspects to be analyzed. The Steps usually, their position, their communicative functions, and their sequence or order constitute the internal structure of a particular Move.

2.3. Definitions of a Move and a Step

In the area of English for Specific Purposes (ESP), some applied linguists have proposed several operational definitions of Move. Holmes [26], for example, defines a Move as a realization of a specific overall communicative purpose through a variety of linguistic strategies. Then, for Brett [27] a Move is a communicative category. Similarly, Dudley-Evans [28] describes a Move as '… a semantic unit which is related to the writer's purpose that lies between a sentence and a paragraph' (p. 131). In addition, Nwogu, Holmes, Brett, Dudley-Evans, Swales and other applied linguists working in the area of ESP, define Move as follows,

A communicative unit of a text (e.g., a clause or a set of clauses or a paragraph) which shows a clear indication of a specific identifiable communicative purpose, signaled by linguistic clues or inferred from specific information in the text. The communicative units or moves in a particular text together develop a set of communicative purposes relevant to the genre of the text.

Move can be also classified into the decision on whether or not a segment of a text, such as a clause(s) or a paragraph(s). It depends on whether or not the segment has a distinct and identifiable communicative purpose or function.

Moreover, RA authors normally need one or more constituent elements such as a Move is called a Step and a Move that consist of a single Step or a series of Steps in order to realize the communicative purpose of a particular *Move* as mentioned above. In this paper, following Safnil [16], a Step is defined as follows,

… a segment of text containing a particular form of rhetorical work necessary for realizing the communicative purpose of a Move. Steps are strategies for encoding communicative purposes. The Steps are mostly signaled by linguistic and discourse clues in the text or are inferred from the context.

Apart from classifying a Step as a particular segment of a text, it depends on whether or not the segment contains distinct and identifiable rhetorical work necessary for realizing the communicative purpose of a particular Move in the text.

2.4. The Identification of the Communicative Units (Moves and Steps)

Hatim [28] suggests that identifying the formal boundary of chunks or segments of discourse should reduce reliance on subjective— *a priori* specification of content in the segmentation of texts— in discourse analytic studies. The use of fixed or formulaic expressions often exists ways of identifying the boundaries which set one chunk of discourse, because speakers or writers normally provide explicit guidelines or clues to help readers or listeners understand what they write or speak [30]. So, when there are no such explicit clues or guidelines, the discourse analysts are often forced to depend on their inference about where one part of a conversation or segment of text ends and another one begins.

The boundary of the communicative units, such as the Moves and Steps in the Swales' CARS model was also discussed by Dudley-Evans [31]. In this model, the identification of Moves and Steps are mostly made on the basis of linguistics clues, comprehension of the text and understanding of the expectations that both the general academic community and the particular discourse community have of the text. Acording to Dudley-Evans, when the lexical clues are less obvious, one needs to make use of one's understanding of the text itself and of the way that the genre is generally expressed, then it is where a knowledge of the genre conventions may help both the readers and the text analysts to identify the boundary of the communicative units in a particular text.

Nwogu [32,33] gives a similar suggestion in which for communicative units, such as *Moves* and *Steps*, can be identified partly by inferring from the content of the texts, but mostly by relying on linguistic clues in the discourse. These linguistic clues occurred are fixed or formulaic expressions, specific lexical items and cohesive markers. This study is focused on techniques for determining the boundary of the semantic units of Moves and Steps (relying on the linguistic clues and inferring from the context in the text). In addition, some discourse clues, such as subtitles or sub-section titles and paragraphs are also used, because these clues provide important information for understanding a particular segment of the scientific texts, such as the communicative purpose/s of the segments of the text

2.5. The Use of Linguistic Clues in the Text Analysis

Nwogu [32,33] explain that linguistic clues, such as fixed or formulaic expressions, specific lexical items and cohesive markers as often used in English RAs. They are used as linguistic clues to indicate the segments of texts with specific communicative purposes or functions in the RA introductions. Moon [34] explains that fixed or formulaic expressions in a particular text may represent the content of the text or signal the rhetorical structure of the text. The fixed expressions signal the communicative unit of a text segment in which they appear in terms of the rhetorical structure. A fixed expression is used to signal the beginning of a particular communicative unit in the Indonesian RA introductions. Look at the following example taken from Safnil [16].

<u>The general aim of this study is</u> to find out whether or not there is a difference in children's attitude toward their parents when one of them suffer from chronic schizophrenic illness …

It can be seen in the above example that the fixed or formulaic expression is 'The main objective of this study is …'. This phrase introduces readers to the main purpose of the research project reported in the RA (PSY 3). It gives the guideline to the readers in identifying the communicative purpose or function of the text segment where it appears.

Nwogu [33] explains that particular lexical items may also signal explicitly the information contained in a Step or Move in a text. An example of lexical item is used to signal a definition or classification of a key term written In the Indonesian RAs can be seen in the following example taken from Safnil [16]:

Bronchial asthma <u>constitutes</u> a common respiratory disease which has multiple causes. Asthma is usually a long-term disease and asthma patients often suffer from relapses which decrease the quality of the patient's life. Although the death toll from asthma is relatively low, when the asthma patients experience an asthma attack, normally called 'mouse asthma status', the patients' life can be in danger.

As identified in the above example, the word 'constitute' or 'make up' in the underlined sentence has literally meaning 'means'. Then, other similar words in the RAs, such as 'is', 'is defined', 'is meant', 'refers to' and 'function as' are specific lexical items used to define or classify key terms in a particular text. In this example, the key term is 'bronchial asthma' that is defined as 'a common respiratory desease' which is extensively discussed in the introduction section of the RA introduction (PSY. 4). It is used to prepare readers before reading the entire part of the text. So, the author uses this specific lexical item to define or classify a particular key term. It is hoped that the readers' knowledge of specific lexical items in the Indonesian RA introductions will be improved in order to identify the communicative purpose of the text segment in which these lexical items are used.

Nwogu [30] also argues that although cohesive markers or devices are linguistic clues which function to relate linguistic items occurring in succession, but are not related by other structural means to each other in the discourse. Cohesive markers signal not only the discourse relations in a text but also the communicative units in the text especially in the Indonesian RAs. The example of cohesive markers or devices can be seen in the following illustration taken from Safnil [16].

Unlike the investigation of justice in economics, commutative justice (exchange) in a wider social context in rarely studied …

As shown in the example, the word 'unlike' is the cohesive marker of 'unlike' that indicates the contrary semantic relationship between the rhetorical work as presented before in paragraph 6 and the one in and after paragraph 6 of PSY. 10. The word 'unlike' as the cohesive marker in that sentence is also indicates a particular communicative purpose or function of the text segment and suggests a lack of scientific work in the field of 'exchange' 'commutative justice (exchange) in social context'. It can be concluded that, the word 'unlike' is functioned as a discourse marker in the coherence pattern of the text and as a discourse clue in identifying the communicative unit in the text.

2.6. The Use of Other Kinds of Discourse Clues

Other kinds of discourse clues or signals useful for identifying the semantic units in a particular text in an RA are subtitles or sub-section titles because the sub-titles often clearly signal the rhetorical work or the information contained in the text segment or section under the sub-title. The readers or analysts can get first understanding from reading the sub-titles given because there is the communicative purpose(s) or function(s) of a text segment under a particular sub-title that can be confirmed by.

Some commonly sub-titles or sub-section titles in the Indonesian RA introductions are 1) Problem Statement, 2) The Purpose of the Study, 3) Hypothesis, and 4) Advantages of the Study. Then, Background to the Study, Literature Review as the text section under a particular subtitle can be classified into more than one communicative unit. Its purpose is to identify the communicative units in the text as linguistic clues or inferences from the content of the texts.

As decribed by Australian Government Publishing Service [35], although there is no necessary connection between paragraphs and the semantic units (a Move or a Step) in the text, but a paragraph as a rhetorical or logical unit of a text in which all sentences relate to the same purpose is also a useful discourse clue in identifying the semantic units of a text. Corbett [36] argues that paragraph is often regarded 'as a typographical device for punctuating units of thought larger than the thought conveyed by a single sentence' (p.412). So, when a unit of thought conveyed in a particular paragraph has a distinctive communicative unit(s) of a Move and/or a Step, then the boundary of the paragraph signals the boundary of the communicative unit(s) at the same time.

2.7. Inferring from the Content of the Text

Linguistic or discourse clues are available to signal the boundary of the units in helping the readers to identify *Moves* and *Steps*. Inferencing from the content of the texts by understanding the information contained in a particular part or segment of a text is one possible technique to deal with identifying *Moves* and *Steps*. The authors may start by introducing the key term and

then followed by specific lexical items in defining a key term, But, usually, the end of the definition is not signaled by any particular linguistic clue. In this case, the readers' interpretation or inference of the text is necessary. Look at the following example taken from Safnil [16] to illustrate this case,

READING constitutes a complex psychological process. Readers are trying to reconstruct messages contained in the text. The READING activity involves processing visual and non-visual information (Smith, 1985: 12-13). Visual information deals with linguistic aspects while non-visual information with the readers' knowledge. READING constitutes one of the important language abilities in developing knowledge. In education in general, the READING ability function as a means of achieving the success of learning processes (Suhadi, 1976: 33). In developing the teaching of reading, an important factor that needs be considered is the choice of the reading materials. Nuttal's (1985) opinion is that reading texts must be choice based on their (1) readability, (2) content suitability, and (3) explicability. Similarly, Hafni (1981) claims that the readability of reading materials is the most important external factor of texts affecting reading comprehension processes. Therefore, the readability of texts is an important factor that needs to be considered in selecting reading materials (EDU. 9).

Based on the example, the authors of EDU. 9 define the key term 'reading' by introducing this term first which is then followed by a lexical item of 'constitute', 'includes', and 'functions'. These words are commonly used to define or classify a key term in Indonesian texts. In that text, there is no end of the definition of 'READING' that is showed by any specific linguistic or discourse clue. The whole paragraph describes the definition of 'READING'. Then, in paragraph 2, the authors of EDU. 9 introduce the important aspects in the teaching of reading as another aspect of the RA introduction. So, it can be concluded that the readers' interpretation on the rhetorical work contained in the text and its context is needed to identify the content because there is no signaled by a particular linguistic clue.

2.8. The Titles and Subtitles

The titles and subtitles of the RAs are important rhetorical clues to be read in order to get a rough understanding of the scientific texts although they do not directly help identifying the communicative units in the texts. In the introduction section of the RAs, the titles often contain important key terms which are later defined or classified, exemplified and elaborated.

2.9. Data Analysis Procedures

Some procedures used in analyzing the data: 1) read the titles, the abstracts and the key terms (if available) of the RAs in order to get a rough understanding about the research project reported in the RAs, 2) read one by one of the entire text of the 90 RAs in order to figure out the whole process of the research project reported in the RAs which is the main focus of the text analysis at this stage is to identify the major sections found in the Indonesian RAs and their communicative purposes or functions, and 3) analyzed the specific section of the RAs as the communicative units or Moves and their subsequent elements or Steps in the texts and their communicative purposes or functions which identified with the guidelines from the sub-titles or the sub-section titles, the linguistic and discourse clues and by inferring from the context.

2.10. Validation of the Data Analysis Results

Subjective judgment is one of the communicative units or Moves and their subsequent elements or Steps identified in this study. It bases of the validity of the analysis. Two possible approaches for validating the identification of the *Moves* and *Step* are the use of field specialists and the use of independent raters [31,37]. Bathia [8] views that field specialists are more aware of the generic features in a particular discipline than people outside the community since field specialists become active members of a particular discourse community because they can identify the communicative units more objectively than non-specialists.

However, working with field specialists can be very time-consuming and that it raises uncertainty when comparing RAs from different disciplines [4]. Swales adds that although they seem to offer a solution for the potential subjective of the text analysis by genre analyst, discussions with field specialists are also '… subject to all subjective features of personality, allegiance, status and so on that this repertoire exhibits' (p.129). It implies that relying too much on information from a field-specialist may be equally dangerous, although genre analysts working on their own may be in danger of misreading a particular RA (p.129). In comparison, the difference between the field-specialists and genre analysts is field-specialists may know more about the information contained in a particular RA, but genre analysts may know more about how the information is organized in the RA. It is concluded that the role of subject specialists in RA genre analysis remains somewhat controversial at least for the present time. Liddicoat [11] also shows the inconsistency of field specialist's perceptions on the features of the scientific genre. There is a gap between perception about the features of good French scientific texts suggested by French scientists and those of actual French scientific texts.

To overcome this accuracy problem of the text analysis, the use of an inter-rater validity technique is needed. By using an inter-rater validity technique, the accuracy of text analysis, such as the identification of the communicative units of Moves and Steps can be tested [37]. For example, by defining the Moves and Steps in a practical way so that independent raters can identify them and by confirming their decisions with a sufficiently high level of agreement. So, if the analysis model represents an accurate reflection of a particular text, then it should be possible to reach a high level of agreement.

3. Conclusions

Recently, genre specialists have conducted studies intensively on the rhetorical structure and linguistic features of a particular genre, such as research articles, essays, seminar papers, thesis and dissertation or other types of academic texts. The objects of genre-based studies are usually taken from some papers or research articles published in national or international journals by native or nonnative speakers of English. The results of these studies have given some benefits for the teaching of English as a second or foreign language especially on teaching academic writing especially research articles in the context of English for Specific Purposes (ESP).

Since the results of these studies are found useful to improve the quality of teaching and learning of English as a foreign language in Indonesia, studies of this kind needs to be further developed in the form of either descriptive analyses or comparative and/or contrastive evaluations. Studies on this topic are becoming more important because Indonesian scholars including postgraduate students must publish research articles in an international journal such as the one written in English. For this reason, Indonesian scholars must be able to write academic texts in English as they are expected by international readers in order to be accepted for journal publications or seminar presentations.

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