Rhetorical Functions in English Review Articles' Conclusions

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Abstract

Genre analysis studies have refined our understanding of the rhetorical organization of scientific articles. The present paper reports on a study which investigated the rhetorical organization of the conclusion section of English conceptual review articles in linguistics and applied linguistics fields. Drawing on a move-based genre analysis approach, the study was based on a corpus of more than 500 English conceptual review articles. The analysis involved detecting the generic moves and sub-moves that writers use to achieve communicative purposes. The results showed that first, conclusions in English conceptual review articles differ from conclusions in research papers in terms of primary communicative purposes. Second, conclusions of review articles contain a set five moves, including 1) territory, 2) purpose, 3) structure, 4) conclusion, and 5) suggestion. Third, conclusions of review articles feature a cyclic pattern in the last two moves, as the writer reports main findings of prior research, interprets them, relates them to educational practice, and recommends further research based on what is felt most necessary. Last but not least, unlike research papers conclusions, review articles conclusions contain 'suggestion' as a core feature of their rhetorical organization. The results of the study benefit both theoreticians and practitioners.

Keywords: English conceptual review article conclusions, move, sub-move, rhetorical function, linguistics, applied linguistics

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Introduction

The English scientific article is probably the most important publication genre that academics are required to deal with in higher education institutions (Moreno et al., 2011). The importance of English scientific articles is mainly because it is one of and probably the most important means of disseminating knowledge. To understand and advance knowledge in a certain scientific field, academics need to read and write scientific articles in English. Additionally, the importance of scientific articles is rooted in today's status of English as the international lingua franca. The Anglicization of the research world has caused almost all international peer-reviewed non-Anglophone journals to disappear (Cargill & Burgess, 2008; Lillis & Curry, 2010; Perez-Llantada, 2012; as cited in Moreno & Swales, 2018). Hence, to get a PhD degree, funding, or promotion, academics need to write scientific papers in English. As a matter of fact, it is through English that "knowledge is constructed, academics are evaluated, universities are funded and careers are built" (Hyland, 2016, p. 58). Therefore, nowadays, published papers act as an academic's permanent record of research and passport to the community of scholars.

Despite its importance, students find it difficult to write English scientific articles and have them published in reputable English-medium international periodicals (Martín-Martín et al., 2014; Paltridge, 1993; Zare et al., 2016). The main difficulty is related to the fact that most students even postgraduate ones are not aware of discourse elements and genre conventions of the particular field (Cooley & Lewkowicz, 1997). As Nwogu (1997) note, "most research article writers are familiar with the IMRD format, but not all are conscious of the fact that there exists an internal ordering of the information presented in the various sections of the research article" (p.119). Ever since Swales' (1990) seminal approach to the study of genres, namely 'genre analysis', many researchers have followed this approach to describe the underlying schematic structure of scientific articles (e.g., Basturkmen, 2012; Kanoksilapatham, 2005; Lim, 2010; Moreno & Swales, 2018; Moritz et al., 2008; Peacock, 2002; Posteguillo, 1999; Sheldon, 2019; Swales, 1990, 2004; Yang & Allison, 2003). However, almost all of these studies have been related to research papers and review articles have been neglected. The present study sought to investigate the move-based rhetorical organization of the conclusion section of English conceptual review articles in linguistics and applied linguistics fields.

Literature Review

Genre Analysis Research on Different Sections in a Research Paper

Swales (1990) defines genre as a class of communicative events, the members of which share some set of communicative purposes, ... recognized by the expert members of the parent discourse community, and thereby constitute the rationale for the genre. This rationale shapes the schematic structure of the discourse and influences and constrains choice of content and style. (p. 58)

Genre analysis relies on the identification of moves as "a socially recognized, highly structured and communicative discoursal event or activity which fulfills a particular communicative or social function in a certain community or in spoken or written discourse" (Swales, 2004, p. 29). Moves contain at least one proposition. Hence, they are realized by a clause or several sentences. Smaller segments of text that make up moves are known as sub-moves (Santos, 1996) or steps (Hyland, 2004). The difference between moves and sub-moves is mainly in the fact that a text fragment at the level of step is usually interpreted in more specific terms (e.g. 'indicating a gap') than at the level of move (e.g. 'establishing a niche') (Moreno & Swales, 2018). The ultimate aim of move analysis studies has been to discover textual regularities which characterize different communicative moves in different genres for pedagogic purposes (Moreno & Swales, 2018). Referring to this research gap as "the function-form gap", Moreno & Swales note that "filling this gap involves establishing the most salient types of text items, or patterns, occurring in a specific rhetorical context in an RA, or any other genre, that may lead a competent reader to interpret a given communicative function" (Moreno & Swales, 2018, p. 41).

Move-based genre analysis studies have refined our understanding of the rhetorical organization of scientific articles. These studies have explored different sections of the main body of scientific articles, i.e., introduction (e.g., Duszak, 1994; Swales, 1990, 2004), method (e.g., Lim, 2006; Swales & Feak, 1994), results (e.g., Basturkmen, 2012; Brett, 1994; Lim, 2010; Nwogu, 1997), discussion (e.g., Berkenkotter & Huckin, 1995; Peacock, 2002; Yang & Allison, 2003), and conclusion (e.g., Adel & Ghrorbani Moghadam, 2015; Moritz, et al., 2008).

Introduction is the first major section of the body of scientific articles. The purpose of introductions is to outline the goals of research and link it to the previous

body of research. Introductions move from general to specific (Gravetter & Forzano, 2016). Research on introductions of scientific articles shows that three moves are crucial in this section, including 'establishing a territory', 'establishing a niche', and 'occupying the niche' (Swales, 1990, 2004).

Method, another major section of the body of scientific articles, is mainly concerned with providing a description of the experimental design of the study. Details about how the study is done from the beginning to the end go in this section. Describing data collection and data analysis procedures are two central moves that almost all method sections share (e.g., Kanoksilapatham, 2005; Lim, 2006).

Results section, still another major section of the body of scientific articles, presents statistical analyses of the data. Swales and Feak (1994) point out that the results section is descriptive and deals with facts. The results section features a cyclic pattern of presenting results and commenting on them (Brett, 1994; Posteguillo, 1999; Yang & Edwards, 1995). Research on the results section of scientific articles points to the presence of three major moves in results, i.e., metatextual, presentation, and comment (Brett, 1994; Posteguillo, 1999; Yang & Edwards, 1995).

Two other major sections in the body of scientific articles are discussion and conclusion. Discussions are interpretive and deal with points (Swales & Feak, 1994). They are mainly concerned with commenting on specific results through interpreting, accounting for, evaluating, or comparing the results with those of prior research. On the other hand, conclusions deal with summarizing the study by highlighting overall findings, evaluating the study, suggesting implications and applications of research, and suggesting possible lines for further research (Yang & Allison, 2003).

The discussion section is seen as a mirror of the introduction section (Hill et al., 1982). Unlike introductions which begin with general information and proceed to specific ideas, discussions begin with a specific hypothesis and relate it to the existing literature (Gravetter & Forzano, 2016). Therefore, moves in discussions follow a reversed order of moves in introductions. Research on the discussion section of research articles points to the existence of three moves in discussions, including 'occupying the niche', '(re)-establishing the niche', 'establishing additional territory' (Berkenkotter & Huckin, 1995). 'Occupying the niche' is a

statement of the main findings of the study; '(re)-establishing the niche' involves comparing the results to those of prior research to show that they are either superior or of a different nature; 'establishing additional territory' is stating the implications/applications of the study or suggestions for further research. Swales and Feak (1994) observe three moves for discussions, i.e., 'consolidate research space', 'limitations', and 'further research'. What is important here is that like moves in results sections, moves in discussions have a cyclic pattern (Posteguillo, 1999; Swales, 1990).

Unlike research on other sections in scientific articles, research on the conclusion section of research articles, to the best of our knowledge, is scarce (e.g., Adel & Ghrorbani Moghadam, 2015; Amnuai & Wannaruk, 2013; Moritz, et al., 2008; Yang & Allison, 2003; Zamani & Ebadi, 2016). This may be due to the fact that researchers consider this section as part of the discussion section (Posteguillo, 1999; Swales, 1990), as some articles conflate conclusion and discussion sections into the same heading. Swales and Feak (1994) do not "distinguish between these two terms (discussion and conclusions) since the difference is largely conventional, depending on traditions in particular fields and journals" (p. 195). Research shows that the conclusion sections of applied linguistics articles consist of three moves, i.e., 'summarizing the study', 'evaluating the study', and 'deductions from the research' (Yang & Allison, 2003). The first move involves giving a brief explanation of the main points and overall findings from the perspective of the study; the second move deals with evaluation of the study by 'indicating significance/advantage of the study', 'indicating limitations', and 'evaluating methodology'; the third move requires 'recommending further research', and 'drawing pedagogical implications'. Research shows that 'summarizing the study' is the most frequent move (Adel & Ghorbani Moghadam, 2015; Amnuai & Wannaruk, 2013; Yang & Allison, 2003; Zamani & Ebadi, 2016).

In another study, six moves, including 'restating the introductory statement', 'consolidating the research space', 'summarizing the study', 'commenting on results', 'evaluating the study', and 'making deductions from the research' were found in applied linguistics articles conclusion sections (Moritz et al., 2008). The first move, 'restating the introductory statement', which appears at the beginning of conclusion sections incorporates three steps, including 'purpose,

research question or hypothesis', 'territory/niche', and 'reference to previous research'. The second move, 'consolidating the research space', involves five steps in conclusions, including 'summarizing findings/results', 'stating method', 'making reference to previous research', 'suggesting future research' and 'raising question'. The third move, 'summarizing the study', involves giving a summary of the study. The fourth move, 'commenting on results', involves validating the significance of findings in relation to the field by 'interpreting results', 'comparing results with literature', and 'raising questions'. The fifth move, 'evaluating the study', mainly evaluates the overall study by 'indicating limitations', indicating significance', 'evaluating methodology', and 'suggesting future research'. The last move, 'making deductions from the research', aims to go beyond the results of the study and link it to the wider world of practical and pedagogic implications/applications by 'drawing implications/applications', 'recommending/suggesting', 'making reference to previous research', 'suggesting future research', and 'making overall claim'. Among these six moves, the last one was the most frequent move. Bunton (2005) also observed five moves in the conclusions chapter of humanities and social sciences theses. These moves were 'introductory restatement', 'consolidation of research space', 'practical implications and recommendations', 'future research', and 'concluding restatement' He stated that conclusions restate purpose, consolidate research space, recommend future research, and address practical applications, implications, or recommendations.

Comparing the last three sections of scientific articles, Yang and Allison (2003) point out that the results, discussion, and conclusion sections differ more in emphasis than in kind. That is, moves recur across these sections. Therefore, moves dealing with the results can cross over to the discussion section in terms of the 'commenting on results', and discussion moves can appear in the conclusion section in the form of 'summarizing the study', 'evaluating the study' and 'deductions from the study' (Yang & Allison, 2003). As can be seen, all these move-based genre analysis studies have focused on research papers and the rhetorical organization of review articles is left, to the best of our knowledge, unexplored.

Research on Review Articles

A review article is different from a research paper in that the latter is written on original empirical research which involves collection and analysis of raw data, whereas the former summarizes the current literature in order to present the current understanding of the topic. Review articles are generally of three kinds: conceptual or theoretical review, systematic review, and meta-analysis or synthesis (Dochy, 2006). Conceptual or theoretical review articles are mainly descriptive, lack method sections and a systematic search of the literature (Uman, 2011). Systematic reviews, on the other hand, have a method section and involve a detailed and predetermined plan for searching the literature (Uman, 2011). Systematic review articles often include a meta-analysis component which involves synthesizing data from several studies into a single statistical measure or effect size (Petticrew & Roberts, 2006).

To the best of our knowledge, there is only one study that has investigated the rhetorical organization of review articles. Zare and Naseri (2021) investigated the moves of English review article abstracts, along with their associated linguistic realizations. They observed that writers of English conceptual review articles use a set of moves in their abstracts, different from that of writers of research papers. These moves include 'territory', 2) 'problem', 3) 'purpose', 4) 'structure', and 5) 'conclusion'. The move 'territory' deals with (1) 'making statements about the topic' and (2) 'summarizing what previous research offers'. 'Problem' is concerned with (1) 'indicating the abundance of research in an area' and (2) 'showing the gap or problem in that area'. 'Purpose' involves (1) 'stating the aim(s) of the article' and (2) 'narrowing down the scope of the article or focusing'. 'Structure' deals with (1) 'stating the methodology of review' and (2) 'structuring the article'. Finally, 'conclusion' involves (1) 'presenting the author's own reflection, argument, or proposed model' and (2) 'stating what it means or what contributions it makes to the literature'. In terms of range, Zare and Naseri (2021) found 'purpose' and 'structure' as the most widely used moves. In terms of frequency, they found 'structure' as the most frequently used move.

Review articles serve different functions, i.e., to organize literature, to evaluate literature, to identify patterns and trends in the literature, to synthesize literature, and to identify research gaps and recommend new research areas (Mayer,

2009). Hence, they advance dissemination of knowledge and are crucial. Nevertheless, they are few and far between which may be due to the fact that their overall structure is not clear (Webster & Watson, 2002).

With the above points in mind, a clear image of the rhetorical organization of the review article genre, in general, and its subgenres or different sections, in particular, is missing. As an attempt to fill this gap in the literature, this study was done to investigate the move-based structure of the conclusion section of English conceptual review articles in linguistics and applied linguistics fields.

Materials and Methods

Corpus

The present investigation was based on a corpus of more than 500 English conceptual review articles, published between 2000 and 2018. The corpus constituted articles mainly from linguistics and applied linguistics fields, each equally accounting for half of the articles. Only linguistics and applied linguistics articles were gathered in the corpus because the two fields are closely related. Linguistics concerns the scientific study of language and applied linguistics, as a branch of linguistics, deals with the practical applications of language studies. Due to varying publishing norms and as an attempt to ensure that the corpus presents a representative image of the language of this genre, the articles in the corpus were chosen from different journals and publishers. Attempts were made to include articles from major publishing houses and journals. The publishers include Oxford University Press, Cambridge University Press, Elsevier, Wiley, Sage, Routledge - Taylor & Francis, De Gruyter Mouton, John Benjamins, and Linguistic Society of America. The journals include Applied Linguistics, ELT Journal, Language Teaching, Annual Review of Applied Linguistics, ReCALL, System, Journal of English for Academic Purposes, Journal of Second Language Writing, TESOL Quarterly, Language Learning, Language Testing, Computer Assisted Language Learning, Language, Journal of Linguistics, Lingua, Theoretical Linguistics, Linguistics, The Linguistic Review, Australian Journal of Linguistics, Annual Review of Cognitive Linguistics, and International Journal of Corpus Linguistics.

In terms of authorship, articles with one or more than one author were all compiled in the corpus. However, the level of English language knowledge of the

contributors to articles and whether they were native speakers of English were not considered. It was assumed that publishing in major journals of the field requires a good command of English writing and as such the writers of articles have this level of familiarity with English. It also goes without saying that review articles, published in major scientific journals, are solicited by the journal editor(s) and written by key figures in the relevant fields and as such know enough English. In terms of intercultural rhetoric, as contributors to journals are members of the same discourse community and are assumed to stick to the norms and conventions of their discourse community, they were all considered English as a Lingua Franca (ELF) writers, whether English was their first, second, or foreign language.

From articles in the above corpus which had separate conclusion sections, a sample of 100 conclusion sections (50 from linguistics and 50 from applied linguistics articles) was randomly selected and standardized for further analysis, using AntFileConverter. The word count of the sample amounted to more than 30,000 words.

Analytical Procedure

We followed a two-level analytic approach, move and sub-move, for the analysis of review articles conclusions. That is, the analysis involved detecting and investigating the generic moves and sub-moves that writers use to achieve communicative purposes (Swales, 1990). A move is a semantic and functional unit in a text which is used for a particular purpose (Ding, 2007). Sub-moves (Santos, 1996) are smaller units of discourse that realize moves (Hyland, 2004). Due to their communicative purpose and linguistic boundaries, moves and sub-moves can be identified and used to describe textual regularities of genres (Connor et al., 1995).

Analysis of moves in English review articles involved a corpus-driven discourse analytic top-down approach. The discourse analytic top-down nature of the approach involved identifying moves based on the content or communicative functions of discourse units, rather than their lexical or structural features (Pho, 2008). Additionally, the corpus-driven nature of the study was related to the fact that instead of taking the moves and sub-moves, already identified and described in the literature as the starting point for analysis (e.g., Jiang & Hyland, 2017), we identified and described moves and sub-moves with no preconception about them

from the literature review. That is, the 100 English review article conclusion sections were carefully read and coded to see what moves and sub-moves emerge from them (Tognini-Bonelli, 2001).

Moves may vary in length from a phrase to a clause, sentence, an entire paragraph or multiple paragraphs. Because of the corpus-driven nature of our approach, we did not determine the unit of coding for moves and sub-moves in advance. Moreover, because of "our initial emphasis on function and content rather than form", and as moves and sub-moves were primarily identified based on their communicative purposes, we followed Moreno and Swales (2018) and did not adopt a formal criterion (Moreno & Swales, 2018).

Data Analysis

An emergent methodology, based on grounded theory, was followed in the present study. That is, instead of testing preconceived hypotheses about the data, we tried to uncover the theory and meaning in the data itself. The corpus-driven discourse analytic top-down approach, followed in the study, was in keeping with this. In terms of software, identification of the moves and sub-moves was done using MAXQDA 2018. Moreover, to ensure inter-coder reliability in identifying moves and sub-moves, we read and coded the conclusion section of articles independently. In case, the same portions of discourse were coded differently by the two researchers, a third coder was invited. For a more accurate and precise identification of moves and sub-moves, 50% of the coded conclusion sections were also coded by the third coder. Inter-coder reliability was also calculated, using Cohen's k in IBM SPSS Statistics 24. Cohen's kappa for the two reliability analyses were computed as 0.85 and 0.80, respectively.

After identifying moves and sub-moves, their range and frequency distributions were computed. Range is the percentage of conclusion sections that contained each move or sub-move. The basis of range comes from the presence or absence of each move or sub-move in every article. That is, if a certain move or sub-move is present in 50% of the articles, then we have a range of 50. In order to cater for the idiosyncrasies of individual writers and varying publishing norms and conventions of different publishers, no cut-off was determined for range. Frequency is the sum of the number of times each move or sub-move is repeated in the entire

corpus. Due to the exploratory nature of the study, no statistical tests, other than range and frequency distributions, were run for the data.

After computing the range and frequency distribution of each move and sub-move, the next step was to build sub-corpora from the associated texts of each move. The purpose of this phase of the analysis was to see if the identified moves vary from each other. Each sub-corpus was investigated, using AntConc's Concordance feature.

Results and Discussion

We observed a set of five moves in the conclusion section of conceptual review articles in English linguistics and applied linguistics fields. These include: i) 'reestablishing the territory' (territory), ii) 'reintroducing the present research' (purpose), iii) 'reorganizing the paper' (structure), iv) 'concluding or reflecting' (conclusion), and v) 'suggesting' (suggestion).

These moves are somewhat different from what Yang and Allison (2003) and Moritz et al. (2008) observed. Yang and Allison (2003) found three moves, i.e., 'summarizing the study', 'evaluating the study', and 'deductions from the research', in the conclusion section of applied linguistics research papers, among which 'summarizing the study' almost corresponds to our 'conclusion' move and 'deductions from the research' is the same as our 'suggestion' move. Here, the difference is mainly in the presence of 'territory', 'purpose', and 'structure' moves in our corpus. Moritz et al. (2008) found six moves, i.e., 'restating the introductory statement', 'consolidating the research space', 'summarizing the study', 'commenting on results', 'evaluating the study', and 'making deductions from the research'. Among them, 'restating the introductory statement' is partially similar to our 'territory' and 'purpose' moves; 'commenting on results' is somewhat similar to our 'conclusion' move; and 'making deductions from the research' is corresponds to our 'suggestion' move. Therefore, here the distinction is in the presence of 'structure' move in our corpus. On the other hand, our moves are almost similar to the moves found in English conceptual review articles abstracts, i.e., 'territory', 'problem', 'purpose', 'structure', and 'conclusion', with only one difference (Zare & Naseri, 2021). Instead of 'problem' move, conclusion sections of English conceptual review articles include 'suggestion'. The presence of 'structure' move in English

conceptual review articles, as Zare and Naseri (2021) note, is related to the fact that the overall organization of review articles is not clear and because of this they do not have a uniform structure; therefore, the writers of review articles inform their readers about their particular content structure. The presence of 'territory' and 'purpose' moves in this study may be explained by the fact that our corpus only contained conceptual review articles and because of their argumentative nature, it is crucial to situate the argument within a well-established area of study and discuss what earlier research has to offer, as Zare and Naseri (2021) note. The absence of 'problem' move in our corpus is related to the fact that reputable journals do not publish unsolicited conceptual review articles, as Zare and Naseri (2021) note. As such, authors of conceptual review articles are not required to write about the significance of their article by indicating the gap in the literature, as their article eventually gets a place in the journal.

In order to further explore our model of moves and see which ones are obligatory or optional, we computed their range. Table 1 presents the results of calculating the range and frequency of these moves.

Table 1

Range and Frequency Distribution of Moves

Moves	Range		Frequency distribution	
	Frequency	Percent	Frequency	Percent
Territory	43	43	88	8.53
Purpose	43	43	72	6.98
Structure	30	30	78	7.56
Conclusion	97	97	608	58.91
Suggestion	62	62	186	18.02
Total			1032	100

In terms of range, as Table 1 shows, of all the moves in the conclusion section of English conceptual review articles, only 'conclusion' and 'suggestion' had a range of more than 60%. According to Kanoksilapatham (2005), if a move is present in every article in the corpus, it is regarded 'obligatory'; if it occurs in less than 60% of the articles in the corpus, it is considered 'optional'; and if its occurrence in the corpus ranges from 60% to 99% of the articles, it is considered

'conventional'. Therefore, in this study, there were no obligatory moves in the conclusion section of English conceptual review articles; 'conclusion' and 'suggestion' were conventional moves; and 'territory', 'purpose', and 'structure' were optional moves. Also, in our corpus, 'conclusion' was the most widely used move, followed by 'suggestion', 'territory', 'purpose', and 'structure'. This is in line with the findings of Amnuai and Wannaruk (2013) who found 'summarizing the study' which almost corresponds to our 'conclusion' move as the only conventional move in their corpus. Amnuai and Wannaruk (2013) found the other two moves, i.e., 'evaluating the study', and 'deductions from the research' to be optional. Unfortunately, Yang and Allison (2003) do not report on the essentiality of their moves in the conclusion section of applied linguistics research papers.

Considering frequency distribution, as Table 1 shows, 'conclusion' was the most frequently used move, followed by 'suggestion', 'territory', 'structure', and 'purpose'. This is in keeping with the findings of Adel and Ghorbani Moghadam (2015), Amnuai and Wannaruk (2013), Yang and Allison (2003), and Zamani and Ebadi (2016). This finding also mirrors the results of Moritz et al. (2008) who found 'making deductions from the research' as the most frequent move, as Moritz et al.'s move is a combination of our 'conclusion' and 'suggestion' moves. Unlike Zare and Naseri (2021) study where moves dealing with 'purpose' and 'structure' were among the most widely and frequently used moves in the abstract of English conceptual review articles, their use was very limited in the conclusion section of English conceptual review articles. Instead, moves dealing with 'conclusion' and 'suggestion' were the most widely and frequently used moves. This may be due to the purpose of the conclusion which is to go beyond the findings of the study through "suggesting personal positions, attitudes and behaviors to solve the problems identified by the research, and as linking it to the wider world of practical and pedagogic implications/applications as well as to future research" (Moritz et al., 2008, p. 240).

Table 2 presents the results of computing the range and frequency distribution of the sub-moves, associated with each move, in the conclusion section of English conceptual review articles.

Table 2

Range and Frequency Distribution of Sub-moves

Moves	Sub-moves	Range		Frequency distribution	
		Frequency	Percent	Frequency	Percent
Territory	1	32	32	54	5.24
	2	23	23	34	3.29
Purpose	1	45	45	53	5.13
	2	11	11	19	1.84
Structure	1	23	23	50	4.84
	2	15	15	28	2.72
Conclusion	1	77	77	352	34.11
	2	72	72	256	24.81
Suggestion	1	42	42	102	9.88
	2	45	45	84	8.14
Total				1032	100

As Table 2 shows, moves in the conclusion section of English conceptual review articles were each realized through a distinct set of sub-moves. These sub-moves are outlined below.

i) Territory
   (1) making/drawing statements/generalizations about the topic
   (2) reviewing the results of previous research

ii) Purpose
   (1) restating the aim(s) of the article
   (2) narrowing down the scope of the article or stating limitations

iii) Structure
   (1) Structuring the article
   (2) stating theoretical framework/methodology of the article

iv) Conclusion
   (1) reporting the results or points derived from the literature
   (2) interpreting/commenting on the results or presenting the author's own reflection, argument, or proposed model

v) Suggestion
   (1) stating applications/implications of the article

(2) stating recommendations for further research

Overall, the presence of both moves and sub-moves in the conclusion section of English conceptual review articles indicates that authors of such articles "use alternative rhetorical strategies for the realization of the same rhetorical goal" (Tankó, 2017, p. 48). On the other hand, these moves and sub-moves are different from their counterparts in research papers conclusion sections (e.g., Amnuai & Wannaruk, 2013; Moritz, et al., 2008; Yang & Allison, 2003). The difference is due to the nature of articles in our corpus. Review articles, due to their particular audience, follow their own rhetorical structure.

The following five sub-sections deal specifically with each move and present examples for their associated sub-moves.

Territory

The first move, 'territory', in English conceptual review articles involves reestablishing the territory by giving an overview of the topic of the study. This is mainly done through two sub-moves, i.e., (i) 'making statements/generalizations about the topic' (1) and (ii) 'reviewing the results of previous research' which are deemed important to the argument of the article (2). The first step, as the name suggests, involves making general statements about the topic; the second step concerns reviewing previous research.

(1) *Sign* language shows that we can only hope to understand phonology … (L-5)

(2) … describe language as … (AL-10)

As Table 2 shows, both sub-moves are considered optional, with the first sub-move partially more frequent than the second sub-move. This mirrors Moritz et al.'s (2008) analysis where 'restating the introductory statement' is one of the least used moves, incorporating both of these sub-moves. What is important here is that Moritz et al.'s move corresponds to our 'territory' and 'purpose' moves in combination. The low occurrence of these two sub-moves in English review article conclusion sections is consistent with the fact that conclusions in research papers review articles are not summaries of other sections. The infrequent occurrence of the second sub-move is in line with Bunton's (2005) observation that conclusions contain the lowest number of references to previous research.

'Territory' is comparable to Swales' (1990) 'establishing a territory' in the

introduction section of research papers. However, Swales' move contains 'making a centrality claim' which was totally absent in the conclusion of English conceptual review articles. This sub-move aims to promote the significance of the article by informing the reader that the research being reported lies within a well-established area. The absence of this sub-move may be related to the fact that most linguistics and applied linguistics conceptual review articles, published in reputable journals, are solicited by the editor or board of editors and thus there is no need to indicate their significance.

Purpose

The second move, 'purpose', deals with restating the aim(s) of the article. Here, the article is introduced and its scope is determined (3). This is mainly done in two sub-moves. These are (i) 'restating the aim(s) of the article' (4) and (ii) 'narrowing down the scope of the article or stating limitations' (5).

(3) *This* article reviews the significant synergies CALL … *The* goal was to … (AL-34)

(4) *This* paper analyzes English aspectual particles and particle verbs … *(L-9)*

(5) *In* particular, it evaluated the mechanisms … (AL-1)

The second sub-move may also serve an evaluative function. That is, the writer evaluates the article by delineating areas which fall outside the scope of the article as limitations. In this sense, this sub-move is similar to Swales and Feak's (1994) 'limitations' move, Yang and Allison's (2003) 'expressing the limitations of the study' sub-move under 'evaluating the study' move, and Moritz et al.'s (2008) 'indicating limitations' sub-move under 'evaluating the study' move. According to Table 2, in terms of range and frequency, both sub-moves are optional, with the first sub-move being more frequent and widely present than the second one.

'Purpose' was also found in English conceptual review article abstracts with the same sub-moves. Yet, its rhetorical function in the conclusion section is different from that of the abstract (Zare & Naseri, 2021). In abstracts, the aim is to fill a gap in some cases where it follows 'identifying the problem' move. Here, however, the aim of 'purpose' move is only to introduce the article and put it within a scientific area, along with 'territory' move.

Structure

The third move, 'structure', concerns restructuring the article. Here, the conceptual organization of the article, along with its theoretical framework or methodology, is described. This is mainly done through two sub-moves, including (i) 'structuring the article' (6) and (ii) 'stating theoretical framework/methodology of the article' (7).

(6) *I* began by arguing for the centrality of language to culture … (AL-10)

(7) *The* semantic and syntactic aspects of each verb are represented by means of a semantic metalanguage … (L-12)

The presence of 'stating theoretical framework/methodology of the article' move is mostly related to linguistics articles (7). As Table 2 shows, in terms of range and frequency, both sub-moves are optional; the second sub-move is less frequent and widely present than the first one. This may be related to the fact that review articles do not report on empirical experimental research and thus lack procedural aspects to discuss within the article. Overall, according to Table 1 and Table 2, moves and sub-moves dealing with the organization of the article were among the least frequent and widely present moves. This is strikingly different from what Zare and Naseri (2021) found. Zare and Naseri (2021) observe this move as the most widespread and frequent move in English conceptual review articles.

Conclusion

The fourth move, 'conclusion', deals with highlighting main findings and interpreting them. This is done through two sub-moves, including (i) 'reporting the results or points derived from the literature' (8) and (ii) 'interpreting/commenting on the results or presenting the author's own reflection, argument, or proposed model' (9, 10).

(8) *Nonetheless*, this review of classroom studies finds that songs … (AL-20)

(9) *To* account for this pair of facts I have proposed an alternative to the … (L-69)

(10) *I* argue that English aspectual particles are not markers of telicity … (L-9)

What is important about the first sub-move in review articles is that it concerns the main findings of the research studies it reviews, whereas its counterparts in research papers, namely Yang and Allison's (2003) 'summarizing the study' and Moritz et al.'s (2008) 'commenting on results' moves, deal with the

main results of their own research. Presence of the second sub-move 'interpreting/commenting on the results or presenting the author's own reflection, argument, or proposed model' in English conceptual review article conclusions can be seen as another point of difference between the conclusion section of review articles and that of research papers. According to Yang & Allison (2003), "the Discussion focuses more on commenting on specific results, while the Conclusion concentrates more on highlighting overall results and evaluating the study" (p. 379). Therefore, unlike conclusions in research papers, conclusions in review articles spare some space to interpreting findings. This can be attributed to the fact that there is no such a section as Discussion in review articles. According to Table 2, both sub-moves were more widespread and more frequently used than any other sub-move which indicates their importance in conceptual review article conclusions. This is in keeping with the fact that the main aim of the conclusion section is advancement of knowledge. The first sub-move was more frequent and widely present than the second one. This is in line with the results of prior research (e.g., Adel & Ghorbani Moghadam, 2015; Amnuai & Wannaruk, 2013; Yang & Allison, 2003; Zamani & Ebadi, 2016).

Suggestion

The last move, 'suggestion', is concerned with relating the article to broader field issues. This is mainly done through two steps, including (i) 'stating applications/implications of the article' (11, 12) which involves linking theoretical knowledge to educational practice and (ii) 'stating recommendations for further research' (13) which requires stating what research areas are felt most needed.

(11) *When* it comes to design, CALL needs to closely observe and adopt … (AL-34)

(12) *Continued* efforts for classroom applications and teacher training will … (AL-40)

(13) *Many* questions of … remain to be illuminated by studies of lifespan change. (L-60)

The move 'suggestion' is analogous to Berkenkotter and Huckin's (1995) 'establishing additional territory' move. Berkenkotter and Huckin's move appears in the discussion section of research papers and gives information about the implications of the study or directions for future research. 'Suggestion' is also

similar to 'deductions from the research' in Yang and Allison (2003), 'making deductions from the research' in (Moritz et al., 2008), and 'further research' in Swales and Feak (1994) analyses. As Table 2 shows, the two sub-moves under 'suggestion' were both among frequent and widespread sub-moves with a slight difference. The widespread and frequent use of these sub-moves, along with their associated move 'suggestion' is in line with the results of Moritz et al. (2008). On the other hand, the widespread and frequent use of the second sub-move is in contrast to Berkenkotter and Huckin's (1995) observation that writers of English-medium science research ignore this move to avoid scientific competition.

Conclusion

The present paper reports on a study which investigated the rhetorical organization of the conclusion section of English conceptual review articles in linguistics and applied linguistics fields, drawing on a move-based genre analysis approach. Though limited in a number of ways, including the small number of articles in the corpus which was due to the small number of such articles published in peer-reviewed journals, and the fact that the analysis was restricted to investigation of English conceptual review articles conclusion sections as a genre product (Yang & Allison, 2003), the study resulted in a number of observations which are worth noting.

First, conclusions in English conceptual review articles differ from conclusions in research papers in terms of primary communicative purposes. Unlike writers of research papers who see the conclusion section as less prominent than the discussion section and only as an alternative for the discussion section (e.g., Nwogu, 1997; Posteguillo, 1999; Swales & Feak, 1994; see Bunton, 2005 for a complete review), this study finds it as an important section with different rhetorical purposes. This is evident in the new set of moves and sub-moves identified in this sub-genre.

Second, the moves and sub-moves identified in the conclusion section of English conceptual review articles include: 1) territory ('making statements/generalizations about the topic' and 'reviewing the results of previous research'), 2) purpose ('restating the aim(s) of the article' and 'narrowing down the scope of the article or stating limitations'), 3) structure ('structuring the article' and 'stating theoretical framework/methodology of the article'), 4) conclusion

('reporting the results or points derived from the literature' and 'interpreting/commenting on the results or presenting the author's own reflection, argument, or proposed model'), and 5) suggestion ('stating applications/implications of the article' and 'stating recommendations for further research').

Third, a cyclic pattern is observed only in the last two moves, i.e., 'conclusion' and 'suggestion', as the writer reports main findings of prior research, interprets them, relates them to educational practice, and recommends further research based on what is felt most necessary. In this sense, the conclusion of review articles is different from the conclusion of research papers, as the latter mainly summarizes the study by highlighting findings and indicating significance of the study. Additionally, in this regard, unlike most research paper conclusions, conclusions in review articles are considered more field-oriented than thesis-oriented, using Bunton's (2005) terms. This is mainly because the main goals of writing such articles are to identify patterns and trends in the literature, to evaluate, organize and synthesize it, and to identify gaps and recommend new areas of research (Mayer, 2009). Last but not least, unlike research papers conclusions, review articles conclusions contain 'suggestion' as a core feature of their rhetorical organization.

The results of our study can benefit both theoreticians and practitioners. Theoretically, our model of moves and sub-moves may be used by scholars as a basis for research on other genres and sub-genres. Pedagogically, our results may be used by EAP teachers and materials developers to raise the students' awareness of the rhetorical organization of review articles. Further research may focus on the disciplinary variation of the proposed model of moves and sub-moves, and the effect of linguistic and cultural differences on writing conclusions for review articles.

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