

Rhetorical Structure and Metadiscourse in Research Work Abstracts: A Contrastive Genre Analysis.

البناء البلاغي و أدوات الميّا خطاب في ملخصات البحوث: دراسة تحليلية مقارنة للنوع

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Abstract :

The aim of this study is to investigate the rhetorical structure and metadiscourse devices employed by Algerian writers in their research article abstracts. Furthermore, the findings are compared to English native speakers' abstracts. To achieve the study aim, a corpus of 40 abstracts of different research papers is collected. Pho (2008) model has been used to investigate the rhetorical structure of abstracts while Hyland's (2005) taxonomy has been used to analyze the metadiscourse items. The findings revealed that move 2, move 3 and move 4 are obligatory moves in abstract writing while move1 and move5 are optional. Furthermore, there was some variation between Native speakers and Algerian learners in terms of the distribution of moves in their abstracts and the linguistic features employed in each move. The study findings revealed also that there was some variation in terms of the use of the metadiscourse devices.

Key Words: metadiscourse, genre analysis, abstract, research works, contrastive rhetoric.

ملخص

تهدف هذه الدراسة إلى التحقيق في البناء البلاغي ودراسة كيفية استعمال أدوات الميّا خطاب من طرف الجزائريين في ملخصات بحوثهم مقارنة مع استعمال الطلبة الأجانب لهذه الأدوات. لبلوغ هدف الدراسة، تم جمع 40 نوع خطابي متمثل في ثمانية رسائل دكتوراه، ثمانية رسائل ماستر، وثمانية مقالات كتبت من طرف طلبة جزائريين، سوية مع ثمانية رسائل دكتوراه، وثمانية رسائل ماستر كتبت من طرف طلبة أجانب. لانجاز هذه الدراسة تم تبني نموذج فو (2008) الخاص بالحركات البلاغية و نموذج هايلاوند (2005) الخاص ب تحليل أدوات الميّا خطاب، أظهرت النتائج أن الحركات الخطابية رقم 2 و3 و4 هي حركات إجبارية في كتابة الملخصات، بينما الحركات 1 و5 هي حركات اختيارية، أضف إلى ذلك أن هناك اختلاف في توزيع الحركات الخطابية وكذا استعمال أدوات الميّا خطاب بين الطلبة الجزائريين والانجليزيين.

الكلمات المفتاحية: أدوات الميّا خطاب، تحليل النوع الخطابي، الملخص، أعمال البحث، الخطاب المقارن.

1. Introduction

Writing has long been a vital language skill. Its importance lies in the fact that it is the means of social and academic communication. In academic settings, the written discourse has recently been the most debated and discussed subject among applied linguists, tutors, and researchers in different disciplines. The interest in the analysis of written discourse has been motivated by three reasons. First, the widespread of the English language throughout the world made it inevitably the language of innovations, sciences, and written academic discourse. Second, the significant changes in education policies led to changes in tertiary education, which, in turn, devoted special attention to the significance of the writing skill. Third, the importance of building knowledge through the analysis of academic discourse, either spoken or written, has been widely recognized by the discourse community (Hyland, 2011). These factors, therefore, brought an evident interest in the field of written discourse.

The study of discourse has been the focus of discourse analysis and register analysis from the beginning of the 1960s. Yet, these disciplines were mainly linguistic-based with no reference to pedagogical matters. In other words, RA and DA failed to meet the needs of a growing number of second and foreign language writers. The latter seeks to have knowledge and models about different genres of their disciplines. The first attempt to meet the learners' needs was in 1966 when Kaplan analyzed essays written by university learners from different linguistic and cultural backgrounds. His aim was to find out problems in English as a Second Language learners' essays. These problems were believed to be caused by first language and culture interference. Kaplan's analysis came to be known as Contrastive Rhetoric (Kaplan, 1966; Connor, 1996).

A few decades later, the focus of researchers in the field becomes wider to include not only students' essays but also different genres such as research articles, grant proposals, theses and dissertations, and many others. One pioneering figure in these studies was Swales (1990). He introduced the term genre analysis and related it to English for specific purposes studies. His aim, therefore, was to provide non-native and native learners with knowledge about the organization and the language forms of different genres. Inspired by Swales' ideas, other researchers and scholars, working within the genre analysis domain, investigated different kinds of academic discourse types (Swales, 1981, 1990; Crookes, 1986; Swales and Nadjar, 1987; Anthony, 1999; Bunton, 2002, Burgess, 2002; Samraj, 2002, 2005, 2008; Kawase, 2015, Qin and Uccelli, 2019). These scholars attempted to find out how language is used in such academic contexts.

The abstract, as an indispensable textual part of theses, dissertations and research articles, is defined as the summary of the whole academic work whereby readers may have a general idea of what and how a given research work was conducted. While Bhatia (1993) refers to the informative function of abstracts, claiming that they present 'a faithful and accurate summary' (p. 147) of the whole work, Hyland (2005) attributes the persuasive function to it, claiming that the abstract is 'actually heavily rhetorical' (p. 126). Regardless of its persuasive and informative functions, the abstract serves as an 'effective tool for readers to master and manage the ever increasing information flow in the scientific community' (Ventola, 1994: 333). Furthermore, foreign / second language scholars may easily admit to the research community if their research article abstract is written in a concise and accurate way (Cao and Xiao, 2013). Hyland (2004) considers that the way abstracts

are written convinces readers of research papers that the writers have the ‘professional credibility’ to discuss their topic as ‘insiders’ which may encourage the readers to read the related research papers. As an essential textual part of most research papers, the abstract has become a most interesting subject to be investigated by genre analysts and contrastive genre analysts in the last few decades.

Several studies have been devoted to the analysis of the rhetorical structure of the abstract (Santos, 1996; Pho, 2008; Notash and Aliabadi, 2012; Doré, 2013; Suntan and Usaha, 2013; Abarghooeinezhad and Simini, 2015; Ahmed, 2015, to name a few). Santos (1996) analyzed 93 Applied Linguistics research article abstracts. Based on his study, He claimed that the abstract needs to be composed of five different Moves. Namely, situating the research (STR), presenting the research (PTR), describing the methodology (DTM), summarizing the findings (STF) and discussing the research (DTR). Santos (ibid) noted that move2, move3 and move4 are mostly used by abstract writers while move 1 and move5 are used less frequently. Pho (2008) investigated the rhetorical structure of the research article abstracts in applied linguistics and educational technology using Santos' (1996) model. His study finding, which is in accordance with Santos (1996), revealed that most of the examined abstracts include Move2, Move3 and Move4. Pho (2008) considered these moves as obligatory moves in abstract writing while move1 and move5 as optional moves since they appeared less frequently in the corpus. Based on Santos (1996) model, Pho (2008) introduced a new model for the analysis of abstracts. These studies and others provided good insights about the schematic structure of the abstract, allowing us to see how writers apply different strategies in abstract writing.

Another feature that has been tackled in genre analysis studies is the use of metadiscourse in academic work abstracts. Defined as ‘the linguistic resources used to organize a discourse or the writer’s stance towards either its content or the reader’ (Hyland, 2000, p. 109), metadiscourse has become one of the most discussed topics in genre studies. Metadiscourse studies are great and varied, some studies explored metadiscourse devices, whether across different genres (Gillaerts and Van de Velde, 2010), disciplines (Hu and Cao, 2011, 2015; Hyland, 2004, 2005, 2008; Hyland and Tse, 2005; Jiang and Hyland, 2017; Wang and Zhang, 2016), different linguistic background, (Akbas, 2012), different cultures (Kim & Na, 2012; Navratilova, 2016; Ozdemir and Longo, 2014; Jezo, 2016) and students papers (McCambridge, 2019). These studies have demonstrated that there were some differences in the use of metadiscourse devices. These differences attributed to the influence of disciplinary culture (Hyland, 2004, 2005; Hyland and Tse, 2004) and linguistic and cultural factors (Jezo, 2016).

Most of the previous studies provided good insights on how academic writing is accomplished. Yet; many previous contrastive studies favored the research article genre, while other genres (MD and PhD thesis) seem to be less-investigated (Samraj, 2005). Moreover, a good number of metadiscourse studies in literature focused widely on metadiscourse across disciplines rather than different genres (Adel, 2006). In addition to that most of the previous studies appeared to be carried out in English as a first or second language settings. To the best knowledge of the researcher, there are no or few studies that were carried out in English as a foreign language setting, particularly Algerian setting where English is taught as second foreign language.

The current study; therefore, aims at examining not only the rhetorical moves of research works abstracts, but also it explores the use of metadiscourse devices in research work abstracts written by Algerian learners of English as a foreign language and English native speakers. It aims, then, to answer the following questions:

1. To what extent do the move-step structures in the research works abstracts written by Algerian learners differ from those written by native English native speakers?
2. Do the move-step structures of research work abstracts written by Algerian learners and native English native speakers conform to Pho (2008) model?
3. To what extent does the use of metadiscourse devices in research work abstracts written by English native speakers differ from those employed by Algerian learners?

1. Method :

Thirty abstracts taken from different genres (ten PhD theses, ten master dissertations and ten research articles)written Algerian writers, and twenty research works (ten PhD theses and ten research articles) written by English native speakers constitute the corpus of the current study. The Algerian research works were extracted from the online library of Constantine University (Revue Sciences Humaine). The Algerian PhD these abstracts (APhDT Abs), Master dissertation abstracts (AMD Abs) and research article abstracts (ARA Abs) contain 2768, 1533 and 1756 tokens, respectively. The research article abstracts written by English native speakers (NSRA Abs) were extracted from the ScienceDirect journal (Elsevier) while native speaker PhD theses (NSPhDT Abs) were taken from the Electronic Thesis Online Service (Ethos). ENS research articles and PhD theses contain 1472 and 2530 tokens respectively.

As an initial step, academic research works were downloaded from the previously mentioned websites. Then, only abstract sections were extracted from their original texts and coded as mentioned earlier .In order to analyze the data using ‘Antconc’ software, Microsoft Word files were converted to ‘txt’ format. This procedure helped the researcher to organize the corpus to be investigated.

In order to identify the rhetorical moves in each abstract, Pho (2008) model was used in the current study. We chose to employ this model rather than others because this model was supplied by a set of questions and functions that help the researcher to more practically code the moves in abstracts. Pho (2008) model is demonstrated as follows:

Pho (2008) framework for abstract analysis

Moves	Functions
Move 1: Situating the research (STR)	Setting the scene for the current research
Move 2: Presenting the research (PTR)	Stating the purpose of the research/research questions
Move 3:Describingthe methodology(DTM)	Describing the materials/subject/variables /procedures
Move 4:Summarizing the findings(STF)	Reporting the main findings of the study
Move 5:Discussing the research(DTR)	Interpreting the results/ giving recommendations / implication and application of the study

Source: Pho, 2008,(p. 5)

In order to detect the metadiscourse devices in research work abstracts, the researcher used two different methods. First, the researcher exploited Antconc¹ software, as mentioned earlier, to help the researcher locate and calculate the frequency of metadiscourse devices. Then, the whole corpus was carefully examined manually for two reasons. First, the identification of these devices is highly problematic in the sense that the same linguistic items may function as metadiscourse devices or propositional elements, and deciding whether these devices function as metadiscourse, as Hyland (2005) stated, depends on the contexts which they are located. Second, given that metadiscourse devices constitute a large part of the linguistic elements, Hyland's model may not include all these instances. Therefore, manual analysis may help to detect other instances not mentioned in the model. Metadiscourse items are identified using Hyland (2005) model as demonstrated below:

Interactive forms:

Transitions, which express semantic relation between main clauses, (e.g. in addition/ but/ therefore/ thus).

Frame markers, which explicitly refer to discourse shifts or text stages, (e.g. first/ finally/ to repeat/ to clarify).

Endophoric markers, which refer to information in other parts of the text (e.g. noted above/ see Fig. 1/ section 2).

Evidential markers, which refer to the source of information from other texts (e.g. according to X/ Z states).

Code glosses, which help readers grasp meanings of ideational material (e.g. namely/ e.g./ in other words/ i.e.).

Interactional forms:

Hedges: which withhold writer's full commitment to statements (e.g. might/ perhaps/ it is possible).

Boosters: which emphasize force or writer's certainty in message (e.g. in fact/ definitely/ it is clear).

Attitude markers: which express writer's attitude to propositional content (e.g. surprisingly/ I agree/ X claims).

Engagement markers: which explicitly refer to or build relationship with reader (e.g. consider/ recall/ you see).

Self-mention: which are explicit reference to author(s) (e.g. I/ we/ my/ mine/ our).

3. Results and Discussion

3.1. Rhetorical Structure

3.1.1. Move Structure Across Academic Levels

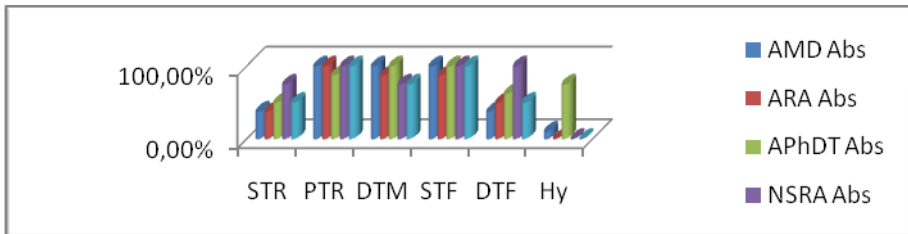
Graph(1) indicates that all Algerian writers' abstracts follow to some extent Pho (2008) model. In other words, all the moves (M1-situating the research, M2-presenting the research, M3- describing the methodology, M4-summarizing the findings and M5- discussing the findings) indicated in Pho (ibid) model are found in the Algerian research work abstracts. However, there were some discrepancies in terms of the importance given to each move. For instance, the moves 2,3 and 4 were frequently used in the three groups of abstracts more than 60%. These findings are in

¹ Antconc: The Antconc software is a free concordancer developed by Professor Laurence Anthony currently at Waseda University in Japan. The concordancer deals with the automatic identification of the text structure that can be applied to research in general

line with previous studies (Santos, 1996; Hyland, 2004; Pho, 2008, Qin et .al, 2016) which concluded that those three moves appear in nearly all abstracts. This finding allows us to consider these moves as the obligatory moves in abstract writing while Move 1 and 5 appeared less and have been identified to be realized differently in different genres hence they are optional moves. Although Hyland (2004) suggested that there is an increasing trend of opening abstracts with the first move (situating the research) , it appeared in this study less than 60% in PhD thesis abstracts, less than 40 % in research article abstracts and less than 30% in master dissertation abstracts(graph-1). Giving little attention to move one by Algerian writers might be explained by the fact that Algerian writers, particularly master students, have the feeling that the abstract, as the last section to be written, is not important. Therefore, they paid less attention to the persuasive function of the first move.

While move 5 appeared 90% in pho’s (2008) study, in Algerian research work abstracts, this move appeared less than40% in master dissertation abstracts, less than 50% in research article abstracts and more than 60% in PhD thesis abstracts. The absence of the fifth move in Algerian research work abstracts might be explained by the fact that Algerian writers, particularly of MD and RA writers, might be not certain about the application of their findings. Giving little attention to move one and move five particularly in research article abstracts can be seen, from the author’s point of view, as a deficiency. Generally speaking, research article abstract are meant to be read by a large number of readers; therefore, abstract writers should try to write a well organized, appropriate abstract in order to convince readers to read the whole article.

Graph-1 : rhetorical structure of Algerian learners and Native Speakers’ research work abstracts.



Source: prepared by the researcher

3.1.2. Move-Structure Across Cultures:

Although both native speakers and Algerian researchers follow Pho (2008) model, as demonstrated in graph 1 , there were some differences not only in the way they present their arguments but also in terms of the linguistic feature used in each move.

3.1.2.1. Move One (situating the research)

This move is also known as the ‘introduction’ move (Hyland, 2000). Researchers , in this move, usually introduce the research work by stating the present knowledge either by discussing some related points to the subject matter or defining the topic under study. One difference between Algerian research work abstracts and native speaker abstracts is that more than sixty percent (70%) of native writers indicated the gap in the first move of their abstracts , see examples *a1* and *a2* below, then followed by the purpose of their studies in the second move (presenting the research move) . Indicating a gap strategy is conceived to reflect the way skilled writers write (Hyland, 2000), but this strategy tends to be absent in all Algerian

research work abstracts. Algerian writers introduce their abstract either by presenting the purpose of their studies neglecting the first move or writing about the importance and the significance of their research (examples b1 and b2). This might be go back to the influence of Arabic and Islamic culture in which Algerian writers have the sense of working collectively and respecting the others' work without explicitly and directly criticizing the others' work.

a1: x as part of their y remains relatively unknown

a2: however, the research on x is limited

b1: The present study aims at evaluating the significance of x and y

b2: x in y is one of the most challenging and complex tasks for language learners

3.1.2.1. Move Two (presenting the research)

In this move, researchers state the purpose of their research. This move appears to be present in both Algerian and native speaker's abstracts (ARA Abs -100%, AMD Abs -100%, APhDT Abs -87.5 %, NSRA Abs -100%, NSPhDT Abs -100%), hence it can be considered as an obligatory move in abstract writing. While all the participants mentioned the purpose move, they tended to use different tenses and structures to introduce this move. In their research article abstract, for instance, both native speaker and Algerian writers introduced their abstract by verbs (in simple present or simple past) such as *shed*, *aims*, *investigate* while master dissertation (100% of writers) and PhD thesis (50%) abstract of both Algerian and native speakers tend to state their purpose with particular structures such as 'the study aims at investigating, aims at evaluating, aims at evaluating...etc. This variation can be attributed, as we believe, to the nature of genre.

3.1.2.2. Move Three (Describing the methodology)

The third move is used by writers to describe how the research was done by describing the materials, population and sample, instruments, and procedures. This move has been given more space in both native speakers' and Algerian writers' research article abstract while little space has been given to this move in other genres. In order to understand the reasons behind this, the researcher interviewed one Algerian writer who said the following: 'when I was writing my PhD thesis abstract, I knew that I was conducting an effective and original research, therefore I felt that my thesis' reader might need to know everything about how my research was conducted; hence, I described the material, the procedures, the population, the sample and even mentioned the hypothesis because I believe that this is an important piece of information that should be mentioned in an abstract.'

Another interesting finding that tends to make Algerian writers' abstract different is the presence of the hypothesis. All Algerian PhD writers (100%) and ten percent of Master writers (10%) of the selected corpus in this study mentioned the hypothesis (es) in their abstracts while native speaker writers, either in their RA or PhD thesis abstracts, did not. This step is considered to be inappropriate since the abstract, in the words of Bhatia (1993), is a 'synopsis' of the whole work in which writers use a limited number of words. In the same vein, Swales (1990) argued that an abstract is a 'summary matter' as well as an '...advance indicator of the content and structure of the accompanying text' (p. 179). In addition, the "hypothesis move", as shown in graph -1, is not found in most previous studies' findings (Santos, 1996; Pho, 2008; Dore, 2013, to name a few). In order to find out the reasons behind the inclusion of the hypothesis(es) in their abstracts, a questionnaire has been administered to the Algerian writers. Eighty 80% of the participants claimed that, as they believe, the

hypothesis has no role in the abstract since the relationship between the variables is clearly stated in the aim of the study, and the decision of including the hypothesis(s) goes back to their supervisors who obliged them to mention it particularly in their PhD thesis abstract. In an interview with one participant, he stated that 'one of the criticisms of one of the jury members in the day of the viva was about the absence of the hypothesis in the abstract. On the basis of what is discussed earlier, it could be claimed that the decision of mentioning the hypothesis in the abstract can be attributed to the local discourse community culture.

3.1.2.1. Move Four (summarizing the finding)

This move provides the space for researchers to present and summarize the findings and what they have achieved in their study. In all genres abstracts, more attention has been given to the fourth move by both Algerian and native speakers (AMD Abs, 100%; ARA Abs 87.5%; APhDT Abs, 100%; NSRA Abs, 100% and NSPhDT Abs, 100%). This indicates that this move is also obligatory, as we believe, in abstract writing. In terms of linguistic features, all researchers introduced the fourth move by the linguistic items such as 'the findings' or 'the result' and verbs such as 'shows, revealed, support, indicate, suggest, reinforced'. Most of the verbs have been either in the past or the present tense while verbs in present perfect tense were rarely used. Although all the participants appeared to give more attention and used the same linguistic features in this move, one difference in terms of space given to this move was highlighted. Native speakers tended to devote more space to the fourth move in their both PhD and RA abstracts, while Algerian writers, except their PhD abstracts, devoted less space to this move in their RA and master dissertation.

3.1.2.2. Move Five (discussing the research)

Researchers tend to fulfill a number of things in this move. They either present different interpretations related to what has been found in their study and give some recommendations, or foreground implications and draw attention to some application of the study. All in all, researchers try to demonstrate the effect of their study findings on a particular phenomenon in the real world. The fifth move (DTR) appeared in all research article abstracts of native speakers (100%) while it appeared less in both Algerian and native speaker PhD thesis abstracts and tended to be absent in Algerian master dissertation abstracts. These findings can be explained by the fact that native speakers made an effort to write a complete abstract that includes all the moves to promote their abstracts. Additionally, publishing an article in an international journal cannot be achieved if authors don't meet the criteria of scholarly publication in general and those set by journals in particular. The absence of this move in both Algerian and native speaker PhD thesis and Algerian master dissertation abstracts can be explained by the fact that PhD thesis and master dissertation abstracts can be explained by the fact that PhD thesis and master dissertation findings are rarely published (Swales, 2004). Therefore, abstract writers tried just to inform the readers about their researches. Another striking finding is that DTR move appeared less and tended to be absent in Algerian research article abstracts, although many scholars in the field emphasized the promotional role of the fifth move (Hyland, 2000). The reason behind this could be the fact that research articles written by Algerian researchers were published in Algerian journal (Constantine University) where there is less

competition in publishing which entails little efforts on the part of the Algerian researchers to write promotional abstracts.

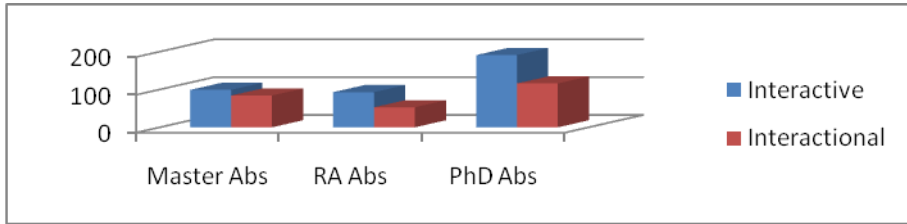
3.2. Metadiscourse in Research Work Abstracts

3.2.1. Cross Proficiency Levels

Though Algerian writers used more interactional metadiscourse than interactive in all their scholarly works, the way they used metadiscourse tools varies from genre to another. As shown below (graph-2), Algerian reserachers used more metadiscourse devices in their PhD theses than master dissetation abstracts (AMD Abs)and research aricles abstracts (ARA Abs).This can be logicaly explained by the fact that PhD thesis abstracts tend to be most of the time longer than RA Abs and MD Abs. Therefore , more metadiscourse devices are required to organize text and make it more cohesive. Another explanation for this finding is that , as Hyland (2005)stated , the more use of metadiscourse in the PhD theses indicates the more ‘determined and sophisticated attempts by writers to engage with readers and to present themselves as competent and credible academics immersed in the ideologies and practices of their discipline’(p. 56).As we can see also in figure-4, Algerian researchers used slightly the same number of interactive forms in their RA Abs and MD Abs while the number of interactional forms in MD Abs exceeds the RA Abs.

Algerian writers used 84 interactional and 99 interactive metadiscourse items in their master dissertation abstract ,53 interactional and 93 interactive metadiscourse devices were used by the researchers in their research article abstract, and 191 interactional and 191 interactive devices were used in their PhD thesis. Although interactional devices were used more than interactive devices in all research works .In terms of individual items, Algerian writers used both interactive and interactional devices differently . For instance, writers of MD focused more on hedges ,attitude , trasition and sef mention markers while the same writers focused on hedge , booster ,attitude , transition and frame marker in their PhD thesis and research articles. Another intersting thing to be mentioned is that writers used more both interactional and interactive metadiscourse in their MD than research articles. This finding can be explained by the fact Algerian master writers prefered to be present in their abstract with the use of self –expression and the inclusive ‘we’ cmparing to other genres. Although these expressions , as mentioned in manuals and guidelines ,might add subjectivity to academic works, master writers tended to use them widely in their abstracts. One reason for this might be that Algerian writers of MD relied heavily on their supervisors while writing their master dissertation ,which creates a sense of collective work that entails the use of these expressions particularly the inclusive ‘we’.

Figure-2 : Interactive and interactional metadiscourse in Algerian research work abstracts



Source: prepared by the researcher

3.2.2. Metadiscourse in NS and Algerian Learners Abstracts

After reviewing the data (see table-1), we found that in their research article abstracts native speakers used slightly more metadiscourse devices than Algerian writers did. In contrast, Algerian doctoral and master writers used more metadiscourse devices than native speakers did. Table 1 shows that native speakers used 99 and 100(ptw) items in their in their PhD and research article abstracts respectively. On the other hand, Algerian writers used less metadiscourse devices (only 95 (ptw) items) in their research article abstracts while they used more metadiscourse in their PhD thesis and master dissertation abstracts (111 and 104 ptw items respectively).

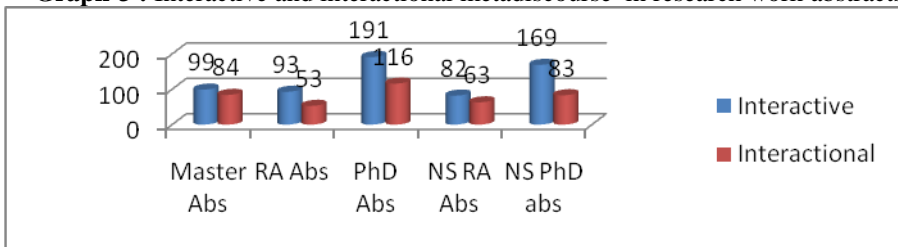
Table -1: metadiscourse in both algerian and native speakers research works' abstracts.

Corpus	No	Tokens	Number of metadiscourse	PTW
AMD Abs	8	1756	183	104
APhDT Abs	8	2768	307	111
ARA Abs	8	1533	146	95
NSRA Abs	8	1472	145	99
NSPhd Abs	8	2530	252	100

Source: prepared by the researcher

In terms of metadiscourse types , as we can see in figure 5, both native speakers and Algerian writers used more interactive metadiscourse than the interactional ones in all their academic works. This can be explained by the fact that interactive metadiscourse devices used more in academic writing due to their role in organizing the text.

Graph-3 : Interactive and interactional metadiscourse in research work abstracts

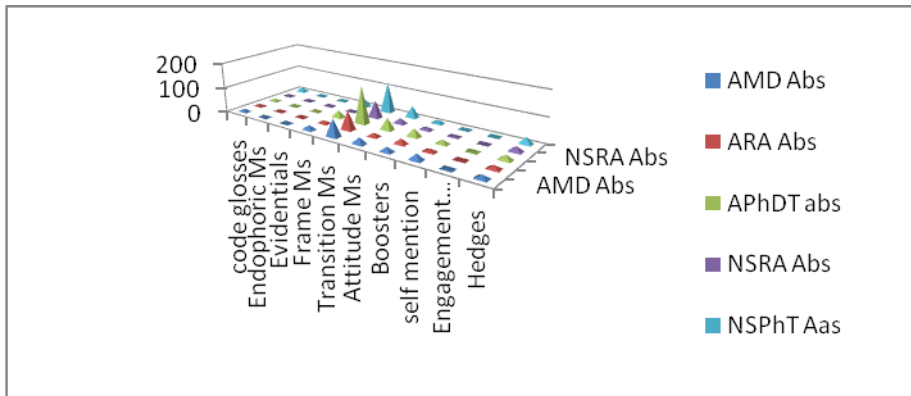


Source: prepared by the researcher

In terms of individual items , transition markers ,hedges, boosters and attitude markers were more frequently used by writers of the abstracts (as demonstrated in Graph-4).While code glosses,frame markers and sel-mention devices were less used ,

endophoric markers, engagement markers and evidential were rarely used. This finding can be explained by the fact that the wide use of transition markers in abstracts is considered as logical to achieve the coherence of the text. Hedges were used more in academic writing because, as Hyland (2005) stated, they demonstrate the writers' awareness of the limitations of knowledge. The low use of endophoric markers, engagement markers and evidential is due to the nature of abstract, i.e. since it is a brief summary of the whole work, these metadiscourse devices are not required in abstract writing.

Graph-4 : metadiscourse devices in research work abstracts



Source: prepared by the researcher

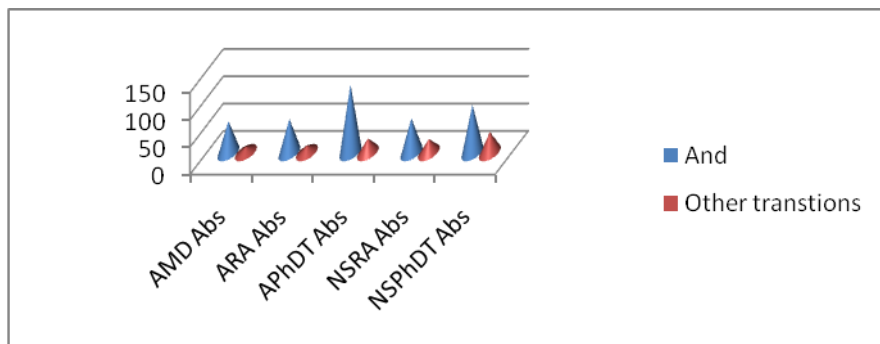
3.2.3. Differences in the Use of Individual Items

3.2.3.1. Transition Markers and Frame Markers

Graph 7 shows that the most transition markers used in research work abstracts is “and”. This finding agrees with the findings of Biber (1999) study. In his study, Biber stated that one of the most characteristics of academic works is the extensive use of the transition marker “and” (p. 71). The wide use of “and” in academic works makes the distinction between “and” that performs metadiscourse function and “and” that performs propositional function a very difficult task. It represents the default options for making conjunctive relations of addition and alteration rather than conscious rhetorical strategies for signaling particular writer intention (K, Hyland, personal communication, February 2, 2018). Therefore, ‘and’ is omitted from the transition markers that function as metadiscourse devices.

Taking the fact that the transition ‘and’ is used extensively in academic writing, Algerian writers tend to use more of this device (see graph -5), while native speakers used less ‘and’ and more varied transitions (e.g. but, however, in addition, thus... etc) in their abstracts.

Graph -5: Transitions in research works abstracts



Source: prepared by the researcher

The overuse of the transition ‘and’ by Algerian writers can be attributed to Arabic and Islamic culture. In fact, this finding is not new. In his study entitled ‘A contrastive rhetoric of students’ Arabic and English compositions: Awareness-raising for more effective writing’, Hamadouche (2015) analyzed 180 compositions written by university students. He came to the conclusion that Algerian students used more transition marker ‘and’ in their English composition. Hamadouche (Ibid) demonstrated that ‘[Algerian] students tendencies in the use of “and” were transferred to their English writing affecting negatively its quality’ (p. 158). However, the transition ‘and’ appeared approximately twice in the present study than in Hamadouche’s (2015) study. The variation in the use of transitions in Algerian writing can be attributed to the influence of genre since the abstract in academic works is a different genre compared to compositions in terms of their communicative purpose. In addition, this variation might be related to the Algerian writers’ focus. While Algerian writers focus more, in academic work abstract, on how briefly presenting a summary of their research, students’ focus (in Hamadouche, 2015 study) in their composition might be on how to write a well organized and clear composition since they were dealing with cohesion and coherence in writing essays instructions.

3.2.1.1. Boosters and Hedges

Algerian writers used more boosters in their academic work abstracts while native speakers used more hedges (see graph-9), this finding can be explained by the fact that native English speakers have the tendency to present their claims with cautious and less certainty, in addition to that, native English speakers appeared to take the readers into consideration through the use of hedges (hedges help the writer to withhold form the full commitment to the proposition and leave the space for other interpretations), while algerian writers tend to present their claims with more certainty through the use of boosters(boosters close the chance for other interpretations)

3.2.1.1. Self-Mention

Self-mention markers , according to Hyland (2005), demonstrate ‘the explicitness of author presence by the use of first-person pronouns and possessive adjectives such as *I, my, me, mine, exclusive we, us, our and ours*’ (p. 53). In this study, self –mention markers were widely used in Algerian master dissertation abstracts and used less in their PhD thesis abstracts. the reasons behind the overuse of self- mention markers by Algerian master writers ,as mentioned previously, can be either to the over-reliance on their supervisors which create a sense of collective work reflected by the use of the inclusive ‘we’ or might go back to the influence of Islamic

and Arabic culture. The latter has been recently proved by many researchers working in the field of contrastive rhetoric (recently becomes to be known as intercultural rhetoric, Connor, 2004) such as Abu Rass, 2011; El Khatib, 1994, and Hamadouche, 2015.

In contrast, self mention markers did not appear in the abstracts of native English speakers (0 item in both research article and PhD thesis abstracts) and Algerian research article abstracts. This might go back to the influence of the strong belief that was held in manuals and methodology books that the researcher should be objective towards his study or might go back to the traditional conception that academic works should be “objective reporting of an independent and external reality” (Hyland, 2001, p. 207). This result goes behind our expectation since metadiscourse, as Hyland (2005) noted, is very important in academic writing. It helps, according to him, to make a distinction between the writer and other researcher’s claims. In addition these devices, particularly the inclusive ‘we’, help writers to engage the reader to take part in the text.

4. Conclusion

Based upon Pho (2008) model and Hyland (2005) taxonomy, this study has demonstrated a genre investigation of rhetorical structure and metadiscourse devices employment in research work abstracts written by Algerian learners of English as a foreign language and English native speakers. Although this study is a corpus analysis based on quantitative and qualitative methods, a questionnaire and interviews conducted with Algerian researcher writers which provided valuable insights about the context and expectations of the graduate degree research proposals, thus complementing and enriching the textual analysis.

The investigation of the rhetorical structure of abstracts in different academic work written by different cultural and linguistic background academic writers has showed that there are three obligatory and two optional moves. Move two (Presenting the research), move three (Describing the methodology) and move four (Summarizing the findings) are the obligatory moves in abstracts in academic works of both Algerian and native speakers of English. Whereas move one (Situating the research) and move five (Discussing the research) are optional moves. Although both native speakers and Algerian writers followed Pho (2008) model in terms of rhetorical structure of abstracts, there were some differences and similarities in terms of the frequency of occurrence and the distribution of moves in abstracts of different academic works.

The analysis of metadiscourse in a corpus of 40 research work abstracts in Applied Linguistics has revealed the following pattern of distribution: overuse of metadiscourse in native speaker’s research article and PhD thesis abstracts compared by the use of these devices in Algerian research article abstract. However the number of metadiscourse in Algerian PhD and master dissertation abstracts slightly exceeded the number of these devices in native speaker research work abstract. In terms of individual items, Algerian writers used more transition markers particularly ‘and’ while native speakers employed varied transitions. While native speakers used more hedges, Algerian writers used more boosters in all their research work abstract. Self-mention markers were used extensively in Algerian master dissertation abstracts and used less in their PhD thesis abstracts; however they were rarely employed in native speaker research work abstracts.

The differences in the use of metadiscourse as well as the variation in terms of the rhetorical structure of academic work abstracts have been attributed to many influential factors such as culture, genre and academic proficiency level.

Although the current study has a number of limitations, including the small corpus (40 abstracts) and the focus on one discipline, it identified some interesting feature about the rhetorical structure and metadiscourse devices employed in research work abstracts written by Algerian learners and English native speakers. Such findings may have some implications for teaching Algerian learners on how to write this sub-genre.

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