Reporting Evidentials in Generic Structures of English Research Articles—From the Perspective of Engagement in Appraisal System

Linxiu Yang¹ & Xiaojuan Lv²

Abstract

Reporting evidentials are frequently used in Research Articles. By integrating Swales’ model of generic structure and Martin & White’s engagement system, this thesis intends to make a comparison of reporting evidentials in different generic structures based on the data analysis of 60 research articles. The study reveals that by choosing different information sources and lexico-grammatical realization forms, writers prefer to express different evaluative meanings in different generic structures. The various functions of generic structures lead to the different distributions. At the same time, the persuasive effects and implications are also analyzed.

Keywords: Reporting evidentials; English Research Articles; Generic structures; Engagement system

1. Introduction

As a common language phenomenon, evidentiality has recently become a hot topic in linguistics study. As for the definition of evidentiality, different people have different opinions. People with narrower understanding of evidentiality think that evidentiality is an obligatory grammatical category whose primary meaning is to indicate the source of information. (Aikhenvald, 2004). Some other researchers such as Chafe hold the opinion that evidentiality can not only indicate the information source but also can reveal the degree of the speaker’s certainty of the information. The author of this thesis prefers the latter one. The focus of this thesis is reporting evidential. Recently, evidentiality has been studied from many various aspects (e.g. Aikhenvald & Dixon, 2003, typological approach; Johanson, 2000, cross-linguistic approach; Chafe, 1986, cognitive approach; Mushin, 2001, pragmatic approach; Halliday, 2004, systemic functional linguistics approach etc.). It has also been approached in different genres. For example, Chafe (1986) compares the different evidential use between spoken and written languages. Tang (2007) discusses the discoursal features of evidentiality in English news reports. Yang (2009) analyzes the interpersonal functions of evidentials in research articles. As for those studies on the genre of academic discourse, the focuses are mainly about different sub-genres such as academic book review, academic lectures, research articles and so on. Lots of researchers have put their emphasis on RAs from various aspects. Some have concerned the structures of RAs (e.g. Swales have summarised the “Introduction-Method-Results-Discussion” macro-structure and CARS model of Introduction section in 1990.) Some have explored the lexico-grammatical features and linguistic categories such as citation (e.g. Hyland, 1996), tense and voice (e.g. Lackstrom, 1973), reporting verbs (Thompson & Ye, 1991) and evidentials (Yang, 2009). However, there are few studies combines the structures with lexico-grammatical features. Considering the inadequacies of the studies on the comparison of evidentials between different generic structures, this study prefers focus on the different use of reporting evidentials among different generic structures. What’s more, the author intends to use the engagement system of Martin and White’s appraisal theory to interpret the data and analyze the variations of engagement resources between different generic structures.

¹ Foreign Languages School, Shanxi University, Taiyuan, Shanxi, China. Email address: yanglinxiu1976@hotmail.com
² Foreign Languages School, Shanxi University, Taiyuan, Shanxi, China. Email address: jiaer2028683@163.com
Therefore, by integrating Swales’ model of generic structure and Martin & White’s engagement system, this thesis intends to make a comparison of reporting evidentials between different generic structures and comes to a conclusion based on qualitative and quantitative analysis in order to show how reporting evidential can do good to the negotiation of the relationship among the information, the writer and the reader.

2. Theoretical Framework

The theory we adopt is the engagement system, which is one of the three subsystems of Martin and White’s (2005) appraisal theory. Appraisal theory is located within the framework of systemic functional linguistics. It concerns how writers align their authorial personae with the stance of others, and how they manipulate their writings to convey a greater or lesser degree of strength and conviction in their propositions. It can be divided into three subsystems called attitude, graduation and engagement. Attitude focuses on gradable resources for construing evaluation and can be divided into three regions called affect, judgment and appreciation. All the three ways of feeling can be positive or negative. Graduation indicates the degree of one’s intensity. What we are interested in here is the engagement system. It indicates the positioning of oneself with respect to opinions of others and of one’s own. This theory is based on Bakhtin’s dialogism. Martin and White use two terms called “monogloss” and “heterogloss” to express whether the utterances allows for dialogistic alternatives or make no allowance for other viewpoints. Based on the dialogic functionality, Martin and White divided heteroglossic resources into dialogic expansion and dialogic contraction. Dialogic expansion can be realized in two ways called “entertain” and “attribute”. Entertain refers to “locutions by which the authorial voice presents the proposition as but one of a range of possible propositions, by explicitly presenting the proposition as grounded in its own contingent, individual subjectivity” (Martin & White, 2005:104). Attribute indicates “formulations which dissociate the proposition from the text’s internal authorial voice by attributing it to some external sources” (Martin & White, 2005:111). Dialogic contraction can also be realized in two ways called “disclaim” and “proclaim”. Disclaim refers to “locutions that invoke some prior utterances or some alternative positions in order to directly reject or replace it” (Martin & White, 2005:117). Proclaim limits the scope of alternative voices and in the dialogue. The illustrations are as follows:

![Dialogic Contraction Diagram]

3. Methodology

3.1 Data Collection

This study is based on a self-built corpus of research articles. 60 RAs (research articles) with almost equal number of words were downloaded from the Internet (www.elsevier.com).
The structures of these articles accord with the IMRD structure. (in addition to IMRD, conclusion is also included since it is an important part of research articles. In our data, conclusion is found to be an independent section with its own section headings. Thus, based on IMRD, conclusion is also included. What we will concern are Introduction, Method, Result & Discussion and Conclusion.) What’s more, in order to be more objective, the contents of the data involve three disciplines. They are electronics, physics and linguistics. And the journals selected are all authoritative magazine. In order to ensure the timeliness, the time of publication is from 2004 till now.

3.2 Classifications of Reporting Evidentials

Reporting evidentials can be divided into self-reporting evidentials and other-reporting evidentials according to the information source. Self-reporting evidentials are those come from whatever related to the writer himself or his own research. Other-reporting evidentials indicate that information comes from extra world. This paper will obey this kind of classification and make an analysis on the revealing meaning of self-evidentials and other-reporting evidentials. What’s more, both the two kinds of reporting evidentials can be divided more meticulously. See Table 1

<table>
<thead>
<tr>
<th>Information sources</th>
<th>Self-reporting</th>
<th>Other-reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human (H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific (S)</td>
<td>e.g. We found that soil C is of great importance to soil N.</td>
<td>e.g. Ashlibben(2006:11) points out that context has a crucial role for their interpretation.</td>
</tr>
<tr>
<td>Unspecific (U)</td>
<td>e.g. As mentioned above, the granular boundaries would create an interface resistance in the silver.</td>
<td>e.g. Recently, linguists showed that formal models used to derive scalar implicatures can be adapted to account for free choice inference.</td>
</tr>
<tr>
<td>Non-human (T)</td>
<td>e.g. Experiment 4 demonstrated that after 1000ms there was an equally strong preference for free choice.</td>
<td>e.g. Googles searches showed that all cities in Denmark had over 2 million people.</td>
</tr>
<tr>
<td>Concealed (Y)</td>
<td>e.g. It is worth noting that the verbs of attempted harm could have been felicitously used.</td>
<td>e.g. It has been shown that standard models for scalar implicatures can accommodate free choice inferences with little ado.</td>
</tr>
</tbody>
</table>

Considering the lexicogrammatical realization patterns, reporting evidentials can be divided into four kinds. They are author & date, reporting verbs, reporting nouns and adjunct. Table 2 will present a clear picture of the lexicogrammatical realization patterns and their illustrations.

<table>
<thead>
<tr>
<th>Lexicogrammatical Realization Forms</th>
<th>Typical Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author &amp; Date (A)</td>
<td>However, with expanding commerce, increasing transport speeds and modified recipient ports susceptible to invasion, the rate of exotic aquatic species establishment is increasing.(Bax et al, 2003)</td>
</tr>
<tr>
<td>Reporting verbs (V)</td>
<td>Wu et al. (2002) reported that automatic decomposition either does not take place, or may play a role in word recognition without reaching the semantic level.</td>
</tr>
<tr>
<td>Reporting nouns (N)</td>
<td>This is confirmed by the fact that the material cannot be etched by XeF2 and the refractive index measured from calibration samples by ellipsometry is 1.44.</td>
</tr>
<tr>
<td>Adjuncts (J)</td>
<td>According to Willett(1988), there are three main types of source of information that are encoded grammatically.</td>
</tr>
</tbody>
</table>
3.3 Research Procedures

The research procedures can be divided into the following steps:

1. Tag the reporting evidentials under the text format. The signals are as follows: "I" "M" "R" "C" represents the generic structures of Introduction, method, result & discussion and conclusion. "A" "V" "N" "J" represents the above four lexical grammatical realization patterns. "1" represents self-reporting evidentials and "2" represents other-reporting evidentials. "H" represents the information source of human while "T" represents non-human. "Y" represents the concealed information. "S" is Specific and "U" is unspecific.

2. Count the number of words in different generic structures and the number of reporting evidentials. Then, calculate the frequency and make analysis.

3. Use Antconc (which is a freeware, multiplatform tool for carrying out corpus linguistics research and data-driven learning(www.kku, baidu.com/li)) to do words retrieval in order to see the different expressing styles of reporting evidentials.

4. Result and Discussion

4.1 Overall Distribution

In each generic structure, the uses of reporting evidentials are different, as is shown in Figure 1.

![Figure 1](Overall_Distribution)

Figure 1 shows that the permillage of reporting evidentials varies from generic structure to generic structure. Introduction section has the biggest number of 15.35‰. Method section has the smallest number of 5.70‰. The sections of Result & Discussion and Conclusion have almost the balanced distribution (6.14‰ & 6.16‰). The above distribution is related closely to the function of each generic structure. Swales' CARS model of Introduction (1990:140-141) shows us the functions of Introduction. The content of the CARS model include establishing a territory, establishing a niche and occupying the niche. In Introduction section, a writer of research articles wants to present his research topic and method briefly. What's more, he also wants to review the related researches done by others so that he can lead up to a conclusion that his research is of great significance. In order to persuade the would-be readers to accept the research action and the value of the research, the author must provide basis for his own current study. It can be done by presenting others' researches and doing some assessment. By reviewing a lot of other researches, the author will certainly use lots of reporting evidentials especially other-reporting evidentials to show the rationale of his study. Only by doing so can the author move to the next step of research. The section of Methodology has the least number of reporting evidentials. A writer writes this section mainly to describe how he will do the research. In this generic structure, there are mainly such following parts to be described: the problems that need to be considered; some types of approaches the writer will use in conducting his own research; some techniques that are undertaken to collect data and the procedures for data analysis and so on.
What's more, by writing this section, the writer wants to let the readers know that his research method is scientific, rigorous and there are some certain criterion during the process of designing experiments. Thus, this part is mainly descriptive and of course has less reporting evidentials. Those relatively few reporting evidentials are the citations of other famous research methods. Result & Discussion is in fact argumentative. In this section, the writer will do a full presentation of the specific research data and detailed analysis of the data. The functions lie on the solid foundation on which the whole paper will rest. The part of result usually contains less reporting evidentials since the author will only present the data briefly. Sometimes, there is only one single sentence like “The results are shown in Figure 1”. That's why there is no need to use too much evidentials here. However, the part of Discussion can expound the interrelations among the observed facts and the writer will give his analysis here in order to tell others how his results and interpretations agree or contrast with the previously published work. It is worth noting that the number of reporting evidentials is not as big as that in Introduction. The author will use some reporting evidentials to make the analysis more objective. The generic structure of Conclusion is a section to summarize the research. The major function of Conclusion is to highlight the findings and to point out some possible lines of future research. In this part, the author wants to do convictions based on some evidence both from his own research above and on other researches. Self-reporting evidentials can show what has been found in this research and other-reporting evidentials are found to function as a comparison of the writer's own research and the cited ones. (Yang, 2009)

4.2 Distributions and Engagement Resources of Lexica grammatical Realizations

The distributions of lexica grammatical realizations are as follows:

<table>
<thead>
<tr>
<th></th>
<th>Introduction</th>
<th>Method</th>
<th>Result &amp; Discussion</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>803</td>
<td>348</td>
<td>799</td>
<td>36</td>
</tr>
<tr>
<td>Permillage</td>
<td>13.47</td>
<td>5.01</td>
<td>3.68</td>
<td>2.22</td>
</tr>
<tr>
<td>Author+date</td>
<td>118</td>
<td>40</td>
<td>479</td>
<td>62</td>
</tr>
<tr>
<td>Reporting verbs</td>
<td>1</td>
<td>1</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>Reporting nouns</td>
<td>7</td>
<td>1</td>
<td>22</td>
<td>1</td>
</tr>
<tr>
<td>Adjuncts</td>
<td>7</td>
<td>11</td>
<td>22</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 3 shows us that in each generic structure, the reporting type of “author & date” appears most frequently. Moreover, in the section of Introduction, the number of “author & date” is the biggest (f=13.47). This number vastly exceeds the rest ones. This kind of reporting evidentials is a way of showing dialogic expansion. Although the grammar of this reporting kind is usually the same as those dialogistically contractive endorsements, they are actually not the same. Those endorsements do not disassociate the proposition from the internal authorial voice. (Martin & White, 2008) However, the “author & date” form do this disassociation, at least momentarily, and the writer do not share responsibility with the cited source. Thus, the writer only uses this form to show the source of information and do not want to intrude into the proposition. That's the reason why the writer takes less responsibility for the validity of the information. Other people with different or same opinions can put forward their viewpoints. That's the features of dialogic expansion. Actually, writers of RAs may do some evaluation in the context, for example, they may use “importance”, “clear” etc to imply that they are in support of the ideas or they may use the expressions like “greater attention needs to be paid to...” to indicate that they are opposed to some of the ideas. However, these evaluations are not included in our research. So we only consider the form of “author & date” as a way of accepting the external voices and dialogic expansion. It can make the research article more objective and reliable. Apart from this form, people often use some reporting verbs (f=1.98) in Introduction. Research writers often use these above two forms to do some review and create a theoretical background for their own research. Reporting verbs and nouns are most frequently used in the section of Result & Discussion. The function of this section is not the same as Introduction. The writer will do some discussion on those previous researches so that he can pave the way for stating the value of his own research. On one hand, the writer will present his research result and make some analysis. On the other hand, he will also do some engaging evaluation for the other related researches.
By comparing, he will try to persuade the would-be readers that his research is credible. There are many reporting nouns and verbs in our data. As Biber et al. (1999) have stated that nouns are one of the most primary devices to express the writer's stance in RAs. The choice of reporting nouns are of great importance which can reveal different evaluative functions. What's more, using reporting nouns is relatively an objective way for the writer to evaluate. Usually, the writer will not state the specific names and sources of the information in using reporting nouns. The advantage of using reporting nouns is that it enables the RA writer to obscure the source of his evaluation and it is less open to dispute. For example,

1) It is due to the fact that determination of soil respiration rates can be done with relative ease.

In the above example, the writer didn't indicate the information source and specific names. He just uses a noun “fact” to elicit the proposition. It's relatively objective. Here, the writer prefers to use reporting nouns rather than verbs because this proposition is mainly existed in the world and has been accepted by readers. Expressing in this way reveals the writer's attitude of acceptance towards the information. If something is put forward as a fact, readers will be willing to accept it. Thus, it is also a strategy of persuasion. Actually, sometimes, the writer will also directly show the specific names and sources using such sentences like “Just as Jefferson's suggestion that....” to reduce his own responsibility. Here, the choice of the word “suggestion” rather than other words is an evidence of agreement. As for the specific use of reporting verbs as reporting evidentials, we will discuss in the next section. The last form is evidential adjunct. It is a kind of dialogic expansion and belongs to acknowledge. There is no overt indication to where the authorial voice stands with respect to the proposition. (Martin & White, 2008) For example,

2) According to Willett, who surveyed data from 32 languages, there are three main types of source of information that are encoded grammatically.

3) In Liu (1998)'s view, linguistic effects on cognition are more likely to be found in domains removed from perception.

“According to Willett” and “In Liu’s view” can reveal the source of information. The writers do not explicitly show his attitude towards the propositions. The content of propositions only belongs to Willett and Liu and the writers will take less responsibility for the validity of propositions.

4.3. Distributions and Engagement Resources of Information Resources

Apart from the lexicagrammatical realizations, another important question is the information source that the writer will choose. See Figure 2.

![Figure 2: Information Sources](image)
Figure 2 shows that the permillages of other-reporting evidentials are far more than those of self-reporting evidentials. The writer prefers to present information by using other-reporting evidentials and pays much attention to the cited information and the cited authors. By doing so, the writer can reduce the responsibility that he takes. In addition, because of the different functions of different generic structures, the contrast ratios between self-reporting and other-reporting are also different. In the section of Introduction, the permillage of other-reporting is far more than that of self-reporting. However, in the section of Result & Discussion and Conclusion, the gap narrows significantly. In the latter sections, the writer often introduces his findings and conclusions to the readers and prefers to use the expressions like “we may conclude that, the data show that etc.” Among those self-reporting evidentials, there is a considerable part of the writer’s own works. This is particularly so when the writer has a long history of engagement in an area. (Pichappan & Sarasvady, 2001). As has been discussed above, reporting evidentials enable writers to express their propositions against a heteroglossia backdrop. For example,  

4) However, this approach requires both good wettability and slow reaction with the liquid solder alloys. (Johnson, 2010)

In the above example, the writer could have chosen to say his idea directly. However, he attributed the proposition to her book published in 2010. By doing so, he constructed a heteroglossic backdrop and told his readers that he has been devoted in this area for many years. So his proposition is of great validity and objectivity. However, writers often weigh the extent of self-citation because that excessive self-citation is a dubious form of self-aggrandizement (Lawani, 1982). The following table will show a more detailed picture of information sources.

<table>
<thead>
<tr>
<th>Table 4: Distributions of Information Resources (Total &amp; Permillage)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
</tr>
<tr>
<td><strong>Self-reporting</strong></td>
</tr>
<tr>
<td>Human Specific</td>
</tr>
<tr>
<td>Non-human Specific</td>
</tr>
<tr>
<td>Concealed</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

As can be seen, in each generic structure, the frequency of specific human sources is largest and those of non-human and concealed sources are relatively low. Among the specific human sources, the number in the section of Introduction is largest (f=14.14). By reviewing others’ works, the writer paves the way for his own research. In order to be objective and accurate, the writer will usually choose the specific human sources in order to be more reliable. Just as Hu said in 1994, a specific source will add to the reliability of information because the reader has specific persons and sources to refer to. What’s more, it can also help building a professional persona because the writer will show his respect for the previous researchers by using evidentials with specific human sources (Yang, 2009). In the section of method, the most frequently used sources are also specific human sources. By citing other persons’ method, the writer can demonstrate the feasibility of his own research method. In the part of Result & Discussion, apart from specific human sources, specific non-human sources are also frequently used. Especially the self-reporting specific non-human ones (f=0.87). In this section, the writer usually uses data as proof to show his findings and analysis. For example,  

5) The data suggest that compared to inorganic P, organic amendments will enhance the formation of organic P pools due to increased microbial activity.

In the above example, the writer chose the research as the information sources and let the data to show the problems. He improved the reliability and let the facts speak for themselves. What’s more, the readers may feel that this expression is based on data and is more objective. In the section of conclusion, writers also prefer to use specific non-human sources (f=1.23) to make a summary of his findings.
There are such expressions as “our research showed that/this study demonstrates that/ the results indicate that etc.” It is worth noting that the frequency of self-reporting specific human sources (f=0.80) is almost a third of the frequency of other-reporting specific human sources (f=2.53). The D-value in this section is less than in the other sections. Just as the above examples, the writer usually uses “we” and “our” to include both the writer himself and the reader and emphasizes the cooperation. By doing so, the writer shows his willingness to bond with the readers. Quirk (1985: 350) explains the function of using this type as a “desire to avoid I, which may be felt to be somewhat egotistical”. This is quite a persuasive way. Apart from the writer and readers, other people related to the research are also included. That’s why the readers may treat the propositions as persuasive and feel hard to resist. As for the use of concealed sources, the four generic structures have little differences. This kind of sources usually contains a passive verb form and a It-clause such as “it is noted that/it has been claimed that etc.” This kind of clauses can distance the writer from the content. The choice of It-clause rather than a construction with a personal noun can allow the writer to depersonalize opinions. That’s why the opinion is more objective and the association between the opinion and the writer is reduced. As Martin says, “...it is less open to negotiation”. The above discussion has shown that in different generic structures, writers prefer to choose different information sources. They are meaningful and serve the basic persuasive purposes of research articles.

4.4. Engagement Resources of Reporting Verbs

Reporting verbs appear frequently in research articles. There are many functions apart from quoting or stating something. Reporting verbs can show the writer's stances towards the information. The writer may hold the stance of acceptance, neutrality or rejection. Thus, the propositions opened up a dialogic space for other viewpoints. Using reporting verbs is one of the most evaluative means. According to the engagement systems, reporting verbs can be divided into two categories: dialogic expansive verbs and dialogic contractive verbs. Reporting verbs can variously realize in dialogic expansion: acknowledge and distance. Acknowledge refers to those wordings by which the writer takes a neutral or disinterested stance towards the referenced propositions (Martin & White, 2005). The most common verbs in our data are “found”, “show” and so on. Writers use such reporting verbs that can reveal no clear attitude to open the evaluative space so that any alternative views can be put forward. Distance refers to those wordings that can segregate the authorial voice from the external voice. The writer disinclines to share responsibility for the reliability of the proposition. Distance can be realized by the word “claim”. This word reveals the writer's attitude towards the cited proposition. In contrast to disclaim, these distance reporting verbs do not convey explicit criticism. Both reporting verbs of acknowledge and distance allow for alternative opinions and voices. That’s the reason why they are both dialogically expansive. There are also two ways for reporting verbs to realize the dialogic contraction: endorse and disclaim. Endorse is usually realized via those reporting verbs which can show the writer's agreement and acceptance towards the proposition. For example, verbs like “demonstrate”, “argue”, “hold”, “advocate”, “point out”, “acknowledge” and so on can sometimes show that the writer validates the author's research findings. Disclaim means that some dialogic alternative is directly rejected or supplanted (Martin & White, 2005). The example words are “neglect” and “ignore”. The frequency of these words is very low. These words indicate a negative attitude toward the cited source by direct rejection. By using endorse and disclaim reporting verbs, those dialogic alternatives are confronted, challenged and excluded. Thus, they are dialogic contraction. As for the specific use of reporting verbs in each generic structure, the author listed the following table to show the top 10 verbs. (See Table 5.)
Table 5: Reporting Verbs

<table>
<thead>
<tr>
<th>Generic Reporting Verbs</th>
<th>Introduction</th>
<th>Method</th>
<th>Result &amp; Discussion</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show</td>
<td>28 (0.47)</td>
<td>6 (0.09)</td>
<td>92 (0.42)</td>
<td>9 (0.55)</td>
</tr>
<tr>
<td>Found</td>
<td>9 (0.15)</td>
<td>1 (0.01)</td>
<td>41 (0.19)</td>
<td>8 (0.49)</td>
</tr>
<tr>
<td>Suggest</td>
<td>9 (0.15)</td>
<td>2 (0.03)</td>
<td>62 (0.29)</td>
<td>3 (0.18)</td>
</tr>
<tr>
<td>Argue</td>
<td>8 (0.13)</td>
<td>0 (0)</td>
<td>10 (0.05)</td>
<td>3 (0.18)</td>
</tr>
<tr>
<td>Demonstrate</td>
<td>7 (0.12)</td>
<td>0 (0)</td>
<td>14 (0.06)</td>
<td>3 (0.18)</td>
</tr>
<tr>
<td>Indicate</td>
<td>6 (0.10)</td>
<td>4 (0.06)</td>
<td>47 (0.22)</td>
<td>3 (0.18)</td>
</tr>
<tr>
<td>Conclude</td>
<td>6 (0.10)</td>
<td>0 (0)</td>
<td>12 (0.06)</td>
<td>2 (0.12)</td>
</tr>
<tr>
<td>Note</td>
<td>5 (0.08)</td>
<td>4 (0.06)</td>
<td>27 (0.12)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Report</td>
<td>4 (0.07)</td>
<td>2 (0.03)</td>
<td>21 (0.10)</td>
<td>3 (0.18)</td>
</tr>
<tr>
<td>observe</td>
<td>0 (0)</td>
<td>3 (0.04)</td>
<td>14 (0.06)</td>
<td>4 (0.25)</td>
</tr>
</tbody>
</table>

According to the data in the above table, we can get the following findings:

1) No matter in which generic structure, the most frequently used verb is “show”. This verb is identified as 
   *acknowledge*. The author prefers to withhold his or her attitude towards the validity of the proposition without 
   presenting the statement as true or false. The writer himself prefers to avoid intervening into the assessment so 
   that he can take less responsibility of the validity of the information. Although writers distance themselves away 
   from evaluating the cited proposition, they have in mind presupposed it as true so that there is a chance for the 
   readers and writers to reach a consensus. It is a way to transform the validity and reliability into the writers’ 
   authority.

2) In the section of Introduction, the most frequently appeared verbs are “show”, “found (find)”, “suggest”. They 
   are all identified as *acknowledge*. The writer uses these verbs to review the past literature and distance the 
   information so that he takes no responsibility. Any doubts can be put forward without being against the author. 
   Apart from the form of *acknowledge*, writers also use some forms of disclaim in this section. For example,

6) Rowl neglected that the sensitivity of the water retention to changes in organic matter context was highest in sandy 
   soils.

   In the above example, the writer used “neglect” to show his critical attitude and explicitly spelled out the 
   limitations of previous research. He cast doubts on the previous conclusions because of some methodological 
   limitations so that he could occupy the gap and do some promotion based on the previous weaknesses. This word can 
   realize dialogic contraction in that it increases the interpersonal cost for those who want to show some alternative 
   voices. This form of disclaim reduces the degree of negotiation.

3) In the section of Result & Discussion, the most frequently used verbs are also “show” and “suggest”. In addition, 
   the frequencies of the rest verbs are almost the same. That is to say, apart from the above findings that reporting 
   verbs are used frequently in this section, there is another finding that writers prefer to make wider choices in using 
   reporting verbs. (see picture 1)
In the section of Conclusion, there are also some obvious verbs worth to be noticed apart from the words “show” and “found”. The permillage of “argue”, “demonstrate” and “indicate” are all 0.18. They are identified as endorse. Writers typically use endorse reporting verbs to present information explicitly as true and back up their own argument with the information of propositions. This is a persuasive strategy especially in this generic structure. As discussed above, the major function of Conclusion is to highlight the findings. Writers want to persuade the readers based on some agreements both from his own research above and on other researches. These words can add the stringency.

5. Conclusion

As Hunston (1993:70) noted, RAs are essentially persuasive in function and the label of “objective” is an indication of the indirectness of evaluation involved. The attitude and stance of the writer is usually expressed implicitly. This study has shown that by using different reporting evidentials, writers of RAs usually express their evaluation and stance. In different generic structure, the cases are different. The data of reporting evidentials varies from generic structure to generic structure due to the function of each generic structure. The lexicogrammatical realizations are also different. For example, in each generic structure, the reporting type of “author & date” appears most frequently. “Reporting verbs” and “nouns” are most significantly used in the section of Result & Discussion. In addition, in different generic structures, writers prefer to choose different information sources to achieve different persuasive and evaluative meanings. It is also worth noting that the choice of reporting verbs is of great significance and varies in different generic structures. We have conducted the analysis of reporting verbs from the perspective of Engagement system, explored the different reporting verbs in different generic structures of Engagement resources of endorse acknowledge distance and disclaim.
By making a comparison, this thesis intends to come to a conclusion based on qualitative and quantitative analysis in order to show how reporting evidential can do good to the negotiation of the relationship among the information, the writer and the reader. It may be a foundation for the future related researches. There are also many areas can be further unearth. For example, the functions of other types of evidentials can be studied. The difference of evidentials between different genres or different sub-genres can be noticed. In a word, we believe that evidentials will continue to be a burgeoning research topic.

References