The Patterns of Paragraph Writing in the International Journals

Adi Sutrisno
Universitas Gajah Mada
e-mail: adisutrisno@ugm.ac.id

Abstract
The patterns of paragraph writing as commonly used in the international journal are deemed necessary to be studied by scholars of non-English background wishing to write an article for publication in the international journals. Scholars of non-English speaking background, according to a number of research reports on rhetoric contrastive, have a somewhat different approach in their paragraph composition. This difference might create difficulties for the scholars to swing their type of paragraph writing to the one which does not belong to them. Therefore, it is imperative that the scholars of non-English speaking background study the writing convention as commonly used in the international journal. This study sought to identify the patterns of paragraph writing that is commonly used in international journals. For the purpose of this study, a total of 250 paragraphs of the 25 international journal articles were selected for analysis whether the pattern of paragraph is more oriented to deductive or inductive one. Analyses were performed by two raters assisted by a native speaker of English. The results showed that more than 86% paragraph patterns were written using deductive pattern, while the rest, about 11% used inductive pattern, and the remaining 2% used a sandwich pattern.

Keywords: types of paragraph writing, deductive type, inductive type, international journal


INTRODUCTION
The pattern of paragraph writing can take the form of either inductive or deductive reasoning depending on the character of the topic introduced by the writer. Inductive pattern is typically used when the author proposes a topic imbued with controversial content while the deductive pattern is more widely used in academic and business contexts. As writing a journal article is in the realm of academic arena, the pattern of writing used in this kind of journal is strongly believed to be leading to a deductive one. This tendency creates problems to writers having non English speaking background as they are more familiar with the inductive pattern. Question arised in relation to this tendency. Is this because of cultural orientation (Clanchy and Ballard, 1996) or is it mainly because of their failure in presenting such pattern of writing?

In response to the question, Mathews (2016) asserted that students having non English-speaking background tend to use inductive pattern, not because they are influenced by their culture. It simply reflects a mental process of thinking using their logic or the way most people tend to think. “For the most part, people do not know what they are trying to say—that is, what they are trying to write—until they have worked through a mental process of inductive reasoning” (Mathews, 2016. P.3). When as students they are not trained enough to use deductive pattern they will easily fall into the inductive one because they often begin

……..in a position of uncertainty and indecision and moves, often clumsily, towards the formation of an opinion, a perspective, a thesis. Along the way their thinking branches out into paths that may lead nowhere or may circle back, after long diversion, to the starting point. (p.3)

What are inductive and deductive writing patterns, anyway? Is it true that the inductive writing pattern is less commonly used in the writing of journal articles in English? Why are the
patterns of paragraph writing in international journal important to be studied by journal writers of non-English background? Here is presented an inductive and deductive writing pattern and the urgency of understanding the types of paragraph writing in journal articles in English.

Inductive pattern is the pattern of paragraph writing which goes from specific to general idea (http://ocw.usu.edu/English/introduction-to-writing-academic-prose/inductive-and-deductive-reasoning.html). It is a method of reasoning in which the premises are viewed as supplying some evidence for the truth of the conclusion. Hence, it is more of a conclusion-oriented pattern. In this kind of writing, the topic sentence is placed at the end of the paragraph. It is no wonder then if this sort of paragraph is known as the conclusion-oriented paragraph. On the other hand, deductive writing pattern begins with the placement of a topic sentence at the beginning of the paragraph. Such a pattern is more "straight to the point" and is considered more suitable for writing with an academic tone (Inductive and Deductive Reasoning) (http://en.wikipedia.org/wiki/Deductive_reasoning).

There is, as a matter of fact, another kind of paragraph which does not belong to either inductive or deductive type. It is often called sandwich paragraph (Successful College Composition, 2016). This “sandwich” metaphor explains how the topic sentence clipped in the middle of a paragraph. Normally, it is in the form of a quotation which is written or put after a general statement leading to the quotation, continued with concluding sentence (Well, 2013).

Hence, judging from its character, the writing pattern most suitable for the needs of journal writing in English is deductive pattern. The foremost reason is that journal article is an academic work which requires clarity on every part of the information written by the author. If an academic work is expressed in inductive or sandwich pattern, there may surface problems in the focus of information given due to the nature in which this type of writing, if not handled carefully, will obscure the clarity of information (Bailey, 2017).

However, without sufficient evidence, it can not be said that for journal articles writing deductive pattern is more appropriate than an inductive or sandwich pattern; or on the contrary inductive pattern is more appropriate than deductive pattern. It is in this context of situation that the research on the types of paragraph writing in international journal articles becomes important (http://writingcenter.unc.edu/handouts/introductions/).

The research results reported a long time ago by Kaplan (1966) in the United States and Clanchy and Ballard (1996) in Australia showed that the writing pattern commonly used in academic articles performed by students of English background is the deductive pattern. This pattern is straight to the point with these characteristics: writing begins with a topic sentence and comes with detailed information that corresponds to the topic discussed. According to Kaplan

“an expository discourse in English began with a topic sentence, which was followed by subdivisions supported by examples and illustrations that central idea was developed to prove or argue the subject in question, relating the central idea to all the other ideas in the whole essay” (Kaplan 1966, p.5).

It is clear that the natures of deductive writing are straight to the point and started with a topic sentence followed by supporting details that are relevant to the topics raised in an article. This style of writing is common in the types of paragraph writing in the academic world in English speaking countries. Thus, the knowledge of how the main ideas are presented in paragraphs in English, especially in international journals, is very important for aspiring journal writers of non-English background. Such knowledge will help them plan, organize, and present ideas correctly so that these ideas can be easily understood by the global community (see Barras, 1986; Boardman & Frydenberg, 2001; Abdollahzadeh, Farsani, & Beikmohammadi, 2017).
This study specifically tries to answer the following questions: (1) Is it true that deductive pattern is more commonly used as the type of writing in journal articles in English than inductive pattern?; (2) Do the types of paragraph writing used in writing international journal articles use only one writing pattern alone?; and (3) If the pattern of paragraph writing used in writing international journal articles is not only one, how is the combination of these two models conducted in the international journal article writing?

RESEARCH METHOD

This study sought to assess the paragraph writing pattern in international journals in English. For the purpose of this research, purposive sampling method was used to obtain the necessary data, which were the international journal articles written by native English speakers in the UK / USA / Australia. The corpus of this study consisted of 250 paragraphs contained in 25 research articles in the field of social sciences from an accredited international journal originating from the UK / USA / Australia. The 25 articles were selected by using the following criteria. First, the articles were selected based on the ease of online access through the internet. Second, the article selected must be internationally accredited journal articles or journals listed in Web of Science Arts and Humanities Citation Index or Web of Science Social Sciences Citation Index. Based on both of these criteria, 25 articles were selected for examination.

After 25 journal articles were chosen, the next step was to take a sample in the forms of paragraphs from each article. Due to the different number of paragraphs in each of these articles, only 10 paragraphs were taken from each article for computation purpose. Overall, the number of paragraphs that were used in this study was 10 x 25 or 250 paragraphs.

After all the data were collected, as many as 250 paragraphs were analyzed one by one to see the tendency of its writing pattern, whether it was following inductive or deductive pattern. The criteria used to determine whether a paragraph is deductive or inductive is seen from the pattern of paragraph writing. According to Oshima and Hogue (2006) If in a paragraph there is a topic sentence at the beginning and is developed with details supporting the idea then this paragraph can be said to have deductive style; otherwise if the topic sentence in a paragraph is placed at the end of the paragraph, the paragraph is said to be inductive. If illustrated in the form of a figure, the deductive paragraphs' image resembles a triangle, with the 'topic sentence' as its peak; while that of inductive paragraph resembles the inverted triangle where the position of the 'topic sentence' is on its base. Figure 1 below shows how deductive reasoning is developed.

![Figure 1](image)

Figure 1. Paragraph writing using deductive reasoning.

Figure 1 shows the structure of a paragraph which reflects deductive reasoning. It starts with a topic sentence which consist of topic + controlling idea. The topic sentence is strictly followed by
supporting details. It describes the process of reasoning from one or more statements (premises) to reach a logically certain conclusion. “Deductive reasoning goes in the same direction as that of the conditionals, and links premises with conclusions” (http://en.wikipedia.org/wiki/Deductive_reasoning).

Figure 2. Paragraph writing using inductive reasoning.

Figure 2 shows the structure of a paragraph which reflects inductive reasoning. In this type of reasoning the topic sentence is put at the end of the paragraph (http://awesomeessay.us/content/structuring-school-essay-topic-sentences-and-paragraphs). It is a method of reasoning in which the premises are viewed as supplying some evidence for the truth of the conclusion. The truth of the conclusion of an inductive argument may be probable, based upon the evidence given. Many dictionaries define inductive reasoning as the derivation of general principles from specific observations, though there are many inductive arguments that do not have that form.

To determine whether the paragraphs (n = 250) were in the form of deductive or inductive, two raters, namely rater 1 and rater 2, were intensively involved. Rater 1 and rater 2 were research assistants who had taken the Academic Writing course with a > 95 score for all the assignments collected. Both raters were first given a brief training to distinguish deductive and inductive styles, and the two raters were given an analysis design with established procedures.

The data analysis procedures used by the raters included: (1) Set up a table to record whether a paragraph was written in deductive or inductive style, (2) Read carefully paragraph by paragraph of the chosen articles while at the same time determining the topic sentence of each paragraph, (2) Highlighted the topic sentence that had been found, (3) Marked ‘A’ in the prepared tables if a paragraph was written using deductive pattern; (4) Marked ‘B’ if a paragraph was written using inductive pattern; and (5) Marked ‘C’ if a paragraph was written using pattern of neither A nor B. (6) Calculated the percentage of each paragraph writing pattern.

The analysis results of rater 1 and rater 2 were evaluated by the main researcher, accompanied by a native English speaker who is also an Academic Writing lecturer. In the case of disagreement between the rater 1 and rater 2 in determining whether the writing style of the paragraph was deductive or inductive, a review of these paragraphs was made together by the two raters; and in case further assessment was required, the third rater who was the main researcher accompanied by a native English speaker was responsible for the decision. If all raters agreed to a certain writing pattern, then that decision was used in this study. In the case of a split decision and
there was no meeting point between rater 1, rater 2, rater 3, and native speaker then the sample data were replaced by a new sample.

**FINDINGS AND DISCUSSION**

By following the procedures set out in previous part, the corpus data were analyzed to identify the paragraph writing pattern which is commonly used in the journal articles in English. The following table summarizes the results of this analysis.

<table>
<thead>
<tr>
<th>Paragraph Writing Pattern</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deductive</td>
<td>217</td>
<td>86.8%</td>
</tr>
<tr>
<td>Inductive</td>
<td>28</td>
<td>11.2%</td>
</tr>
<tr>
<td>Sandwich</td>
<td>5</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Table 1 above shows that the paragraph writing pattern most commonly found in the writing of international journal articles is deductive pattern. Out of 250 paragraphs examined, 217 or 86.8% are written using deductive pattern; 28 or 11.2% are written using inductive pattern; and the remaining 5 paragraphs or 2.0% are written using sandwich pattern. The table confirms that the deductive paragraph writing pattern is more commonly used as the type of journal article writing in English than inductive pattern.

The dominance of deductive pattern in the writing of journal articles in English can be attributed to the tendency of native English speakers who use this pattern in academic writings. This illustration can be seen in the research reports by Hinds (2001; in Wang, 2012), Kaplan (1966), and Clanchy and Ballard (1996) which reported that the paragraph writing pattern in the writings with academic nuances made by the native English speakers tend to use deductive pattern rather than inductive pattern. This trend contrasts with the type of paragraph writing in English done by non-native English speakers from Japan, China, Korea, Thailand, Indonesia, Bangladesh, and other countries which use inductive pattern more (Hinds, 2001; in Wang, 2012).

The results also indicate the presence of other pattern of paragraphs writing, which are inductive and sandwich pattern. However, the number of paragraphs with inductive and sandwich writing pattern are far fewer in number than those with the deductive pattern. Out of 250 paragraphs examined, 28 paragraphs or 11.2% are written by using inductive pattern, and only 5 paragraphs or 2% are written with sandwich pattern.

The lack of paragraphs written in inductive and sandwich style does not mean that writing in this pattern is bad and should not be used. When inductive and sandwich pattern is used by an author along with deductive pattern, the final result can become more detailed and easy to follow. This is because the dynamics of the writing can feel more alive and not rigid with the sole usage of deductive pattern only (Inductive vs deductive reasoning, 200 Name of author, not title of the writing). Nevertheless, writing in inductive and sandwich pattern, if not handled properly, may lead to other complexities for the author because it can trap the writer with a roundabout writing with no clear ends (Clanchy and Ballard, 1996).

Paragraph writing style using inductive and sandwich pattern require accuracy on the writer so that the ideas' coherence can be well maintained (http://www.wheaton.edu/Academics/Services/Writing-Center/Writing-Resources/Paragraph-Unity-Coherence-and-Development). Of course, this pattern needs check and recheck more than the deductive pattern because in this pattern exists a 'delay' in the disclosure of the topic sentence.
Perhaps this is the reason why inductive and sandwich writing pattern in the writing of journal articles in English is only used to supplement the deductive pattern which is more to the point and easy to control (Clanchy and Ballard, 1996; Hinds, 2001, in Wang 2012).

Table 2 shows the distribution of the paragraph writing pattern in 25 international journal articles which covers the deductive, inductive, and sandwich pattern. Under the column 'deductive pattern' are code A1, A2, and A3. Code A1 is for deductive paragraphs which topic sentence is in the first sentence; then, code A2 is for deductive paragraphs which topic sentence is in the second sentence; and A3 is for deductive paragraphs which topic sentence is in the third sentence.

The data shows that the deductive pattern is more commonly found than other patterns. In each article examined, the average use of deductive pattern reaches 86.8%; while the use of inductive and sandwich pattern is respectively 11.2% and 2%. The data in Table 2 at the same time implies that the types of paragraph writing used in international journal articles writing are not purely deductive pattern or mono pattern, but there are other patterns that are also used or multiple patterns.
Table 2 also shows that the deductive pattern used does not always put the topic sentence in the first sentence of paragraph (A1); there is also a topic sentence that is brought in the second sentence (A2); even in the third sentence (A3). This variation of paragraphs writing pattern in international journal articles shows the pattern dynamics used by the author of journal articles. Nevertheless, the data indicates the presence of certain trends which are visible in the paragraphs writing pattern in international journals. The trends in which (1) deductive pattern is chosen more often than other patterns; (2) the topic sentence is placed at the very beginning of the paragraph, which is in the first sentence. The use of other patterns such as inductive and sandwich pattern and the topic sentence placement in the second or third sentence is only carried out by the authors when necessary and not as a pattern that is intensively used in the writing of journal articles.

Notwithstanding the criticisms for deductive paragraph writing, that it is rigid, predictable, with monotonous structure containing the main sentence-explanatory-conclusions this pattern remains as the primary pattern selected in journal article writing. The choosing of deductive pattern as the main pattern is perhaps due to its character which makes it easy for the creation of a coherent and controllable writing, making it easy for the readers to follow the text.

CONCLUSION

From the previous explanation it can be concluded that the deductive writing pattern is most commonly used in the writing of journal articles in English. Other types of paragraphs writing, which are inductive and sandwich, are also found in the 250 paragraphs examined but the amount is too small compared to the deductive pattern. Furthermore, in the international journal article writing multi-paragraph writing pattern is used, not mono pattern. Additionally, the results of this study indicate that the main pattern used in journal articles is deductive pattern with the topic sentence placement at the beginning of the paragraph. Deductive pattern with the topic sentence placement in the second and third sentences are also found in this study but the amount is too small compared to the deductive pattern with the placement of topic sentences in the first sentence of the paragraph. It can be concluded that the pattern of international journal articles paragraphs writing is deductive with the first sentence as the topic sentence of the paragraph.

REFERENCES


Mathews, C. (2016). Deductive and inductive structure in (and outside) the ESL writing class JAS4QoL, 2(4) 4:1-5. Online: http://as4qol.org/?p=1710#art4


