Analyzing Text Organization of Newspaper Articles on the Basis of M. Hoey's
Problem Solution Pattern (2001)

Ferdows Aghagolzadeh
Associate Professor
Department of linguistics, Tarbiat Modares University
Tehran, Iran
E-mail: aghagolz@modares.ac.ir

Jila Khanjani
PhD. Student
Department of Linguistics, Science and Research Branch, Islamic Azad University, Tehran, Iran
E-mail: J.khanjani@srbiau.ac.ir

1 Introduction

Much has been written over the past three decades regarding the use of textual patterning (van Dijk 1977; Hoey 1983, 1994; and McCarthy 1991). Texts, according to Widdowson (2007), are the noticeable traces of the process of mediating a message. In conversation, these traces are disjointed and vanish. They can be taped but they do not need to be, and are not recorded. Consequently, texts are produced by participants in spoken communication without making a recording, and their negotiation is regulated on-line. Written text, however, is recorded by the writer and is interpreted as a separate process. It is supposed that the text can be defined as the visible evidence of a reasonably self-contained purposeful interaction between one or more writers and one or more readers, in which the writer(s) control the interaction and produce most of (characteristically all) the language.

According to Hoey's approach writer's objective is to have an effect on their readers using their text. So there is an interaction between them. Interaction is necessarily personal and each person's experience of it will be different from everyone else's. When writers compose their texts, they draw upon models that have become normal within their culture; when readers process these texts, they do the same. It is this property of text that makes the study of reading and writing so interesting and so complicated. Hoey's model, problem solution seems to be a successful attempt to make easy such complicated phenomena which is called text production and reception.

The first aim of the present paper is to analyze the use of problem solution pattern in English and Persian newspaper articles, focusing on the categories used for problem solution (PS) approach of Michael Hoey. This study includes following research questions:

1. Is there any significant difference between Iranians and native speakers of English in their use of problem solution pattern employed by Iranians (non-native speakers) and native speakers in their newspaper articles written in English?

2. Is there any significant difference between Iranians and native speakers of English in their use of problem solution pattern employed by Iranians in their newspaper articles written in English and in Persian respectively?

2 Background and related literature

It should be mentioned that there are certain aspects of all discourse studies, such as stylistics, conversational analysis, discourse analysis, text linguistics, contrastive rhetoric (CR) and critical linguistics which also study the traits of speech and writing, among other things, have their roots in rhetoric and fall under this old branch of human knowledge. The text structure or world structure theory operates with factors relating to text users rather than to the text as an isolated artifact and with presentational devices drawn from formal logic. Their project is extremely complex. In this pattern, the reference of the text to objects or situations in the world is handled by a world semantics component at least some correspondence is postulated between text structure and world structure (De Beaugrander and Dressler 1981, pp.25-6). They reasoned that the generating of a text must begin with the main idea which gradually evolves in to the detailed meanings that enter individual sentence length stretches. One major school of thought with regard to genre is that associated with systematic-functional linguistics and in particular with Australian linguists working in this tradition. A pioneer among this group was Roqaiye Hasan(with Halliday 1985), though she has voiced some concern about recent developments (Hasan 1995). Norman Fairclough(1989,1992a) is the linguist who, with Gunther Kress(1991), can be credited with giving wide currency to the discourse perspective in critical linguistic analysis.
Fairclough’s check list of analytical questions to ask of a text is exemplary (1989, pp.110-11) and could usefully be put in the hands of every trainee analyst, but the analysis themselves do not always consider alternative positions.

Accordingly another important branch of text linguistics is that devoted to comparing and contrasting the different strategies for organizing texts employ. Aghagolzadeh is an innovator who studies the problem solution approach of M. Hoey (2001) in Iran. This pattern has been commonly identified as important during among the several linguistic scholars although they did not clearly label it (Hoey, 1994:p 27).

Aghagolzadeh(2004) refers to different functional approaches include Halliday and Hasan’s approach, van Dijk’s process- oriented approach, the procedural approach of de Beaugrande and Dressler, and the problem solution approach of Michael Hoey. He indicates that the problem solution method is a comprehensive and easy method for producing narrative and non- narrative texts.

Yarmohammadi (2004) mentions, meaning comes from culture, and there is a mutual and indirect relationship between language and culture. We can not create an effective dialogue with people in other languages without having knowledge of the organization used in those languages.

Ana Díaz Galán and Mª del Carmen Fumero Pérez (2005) analyze the applicability of the so called “problem-solution pattern to the teaching of writing”. An experiment was conducted in order to test M. Hoey’s (2001) belief that the pattern can serve as a ready-made template to help the learner-writer in their task.

Keiko Muto-Humphery(2001) in his article “The Use of Textual Patterns in Reading” discusses learning textual patterns was concluded to be an effective method for L2 learners in improving their reading ability. This tacit knowledge can be expected to make it easier for L2 learners to understand the text through the use of textual patterns, namely: ‘Problem-solution,’ ‘General-specific’, and ‘Claim-counter-claim’ patterns.


Yin Ze-sheng(2007) in ”Development of reading and writing abilities by teaching textual patterns” discusses that It is increasingly important for students to develop reading and writing abilities. Teachers should focus on the teaching of English textual patterns, which plays an important part in sending writers’ messages. The patterns used in the text help readers unfold the writer’s message positively and actively. Some instructional activities are discussed to develop students’ reading and writing abilities, including raising awareness of textual patterns, focusing on signaling factors, reformulating and making a frame or a diagram.

Maggie Charles (2011) in “Adverbials of result: Phraseology and functions in the Problem–Solution pattern” mentions differences in frequencies and phraseology with reference to genre, discipline, context and the function performed in the text. In this study she then takes a discourse approach, examining how the co-occurrence of an adverbial of result, thus, and an adverbial of contrast, however, is used to signal the Problem–Solution pattern. She found that both adverbials can contribute to signaling Problem, Response and Evaluation moves, while thus is also used to summarize the Situation move. This suggests that there is not a direct one-to-one correspondence between the semantic group of the adverbial (Result or Contrast) and the discourse move it signals.

3 Theoretical framework and methodology

3.1 Theoretical framework

Theoretically, concepts such as schemata, scripts and culturally popular patterns of organization are the fundamental principles in the Problem Solution (PS) pattern approach. One of the first linguists who considered the schemata and scripts was Rumelhart, then shank and Abelson (1977) followed him. They talk in terms of schemata and scripts in the reader's (and writer's) mind. A schema is a statistic representation of knowledge, whereas a script is a narrative representation of knowledge. A schemata represents the (non-narrative) connections between facts; a script represents the sequence in which likely events will occur (Hoey, 2001, p.21).revealing these notions such as schema and script are for a general understanding of the writing and reading processes, they are of limited value in text analysis or in the teaching of reading or writing. This is because there appears to be no practical limit to the number of schema or scripts we can hold and the exact content and boundaries of each schema or script are open to real question. Furthermore, even if these problems were solvable in principle, we would still never in practice be able to list all the schema/scripts that a reader develops in his or her life or that a writer is capable of making use of (Hoey, 2001, p.122).
In short, schemata and scripts are not practicable analytical tools. What we need is something that allows us to generalize about these schemata/scripts without losing the insight that readers cooperate with writers in making a common meaning (Aghagolzadeh, 2004, p.4). Hoey's approach (2001, p.122) is an attempt to solve this problem by presenting popular patterns of organization or the problem solution pattern. The answer to such a problem, in part, lies in the fact that readers seem to bring two kinds of knowledge to bear on the text they read: the specific knowledge described by schemata and scripts and a more generalized set of expectations that are shared across a range of texts. The basic concepts and units in problem solution pattern are:

(a) Situation: which consists of facts that the writer wishes to say about something or somebody? In fact it is a background: what time, place, people, etc. are going to be involved in this text (Salki, 1997, p.91).

(b) Problem: which normally requires response? What is the text principally about? What need, dilemma, puzzle, and obstacle does this text address?

(c) Solution: what is the solution to the problem? (How are or were the needs met, the dilemma resolved, the puzzle solved, the obstacle overcome, or the lack remedied?).

(d) Evaluation: there might be (an) evaluation(s), positive/negative, that purpose is to find out if the proposed solution actually overcomes the problem. (How should this situation be evaluated? How good is it at solving the problem? If there is more than one solution, which is the best? (Hoey, 2001; Salkie, 1997).

\[
\text{(Situation) } \quad \text{optional} \quad \text{Problem} \quad \text{Solution/Response} \quad \text{Positive Evaluation} \quad \text{Positive Evaluation} \quad \text{Negative Evaluation} \\
\text{End of pattern/text} \quad \text{?} \quad \text{?}
\]

**Figure 1. General pattern**

Hoey (2001, p.131) points out that there are actually several types of recycling. One possibility is that each negative evaluation redefines the nature of the problem; another is that the problem remains unchanged but the response changes. In general, what distinguishes the two kinds of negative evaluation/result is as follows: If the negative result is not beyond retrieval, the problem follows the recycling process. If the negative result is beyond retrieval, it functions exactly like a positive evaluation for the purposes of pattern completion (shown in figure 2.).
3.2 Methodology
A) Corpus
The corpus of the present study consisted of 90 discussion sections of articles written by auditors in some newspapers. It included the English texts written by native speakers of English, English texts written by Iranians, and Persian texts written by Iranians. Due to the Michael Hoey's pattern, the corpus was restricted to a one-month between 1st January and 1st February.

b) Instrumentation
In order to compare and analyzed probable differences between discoursal characteristics of the discussion section of English and Persian newspaper articles, it was necessary to choose a model. As mention above, in this research M. Hoey's problem solution pattern (2001) was used.

c) Procedure
Ninety newspaper articles were chosen from among three groups of writers: Iranian speakers of Persian, native speakers of English; and non-native speakers of English (Iranian). Since auditor sections of the articles are the most important parts, the auditor sections were analyzed. To begin, the texts were carefully read word by word in order to identify and locate the situation, problem, response, evaluation and result. Moreover, to identify and locate the possible differences between auditors section of English and Persian articles in terms of using Hoey's pattern, the texts in two languages were compared and contrasted. The next step was ensuring the reliability of the analysis, i.e., "determining that the data collection procedures can be repeated with the same results"(Conner and Mauranen1999:50). To determine that, a sample of 45 articles (15 from each group) was extracted from the corpus and given to some readers the rate of their understanding from that subject analyzed by an M.A. holder of TEFL who was familiar with this pattern. The results were correlated with those of the researcher. The resulting correlation(r=0.81) was an estimate of the inter-rater reliability of the judgments made by the researcher and the rater.

d) Data analysis
This study aimed to investigate whether there is any significant difference in the use of Hoey's pattern in English and Persian newspaper articles. Chi-squares were chosen as the appropriate non parametric statistical test to examine and determine the differences in this pattern frequency and the amount across the corpus.

Examples of articles used by a native writer of English
New York Times, 27th Jan 2011
Topic: Egyptians Demand End to Mubarak Rule
The trigger of the pattern is the word "anti-government", negatively evaluates a situation and invites a description of some response, and the pattern effectively begins at this point, with the identification of some problem. Problem can be defined as an aspect of the situation requiring a response (Hoey 1983) and gives rise to the expectation of a response. This element of the patterns often referred to in the literature as a solution, though strictly the latter label is in appropriate since what is expected is the description of something done to deal with the problem, not necessarily something that was successful in dealing with the problem- a subtle distinction, but an important one. It is important in any analysis to identify the signals that trigger recognition of pattern and subsequently confirm its existence, since they are a direct linguistic reflection of the pattern.

A problem having being indicated in the text, a response is sure to follow, and the offer of one comes in the second and last sentences. This also contains a negative Evaluation/Result within it "protests", "died", "riots", "urged". This Evaluation/Result are not repeated in the other sentences. As we have talked about it, a problem is being unambiguously signaled. But what is the problem? Again, the text is unambiguous: the problem is "riot".

In sentence 2 a situation is mentioned: "the pro-democracy youth group ………..urged people to head back to Cairo's main square Wednesday" what follows are positively evaluated the situation both by the writer and by the reader." demand", "right to life", "liberty", "dignity"," call on everyone to take the streets". What follows are negatively evaluated the situation "banned", "prosecuted", "no provocative moves". How ever the last sentence offers a negative result; the sentence answers the question "What did government do about it?"

"Legal measures will be taken against anyone (in contravention), will be transferred to the prosecution," the statement continued.

Examples of articles used by a non-native (Iranian) writer of English

Iran Daily, 24th, Jan 2011

Topic: Iran - 5+1 talks can yield agreement Ahmadinejad

This story is organized around repeated phrase to solve the same problem which is established in the very first clause, "in reference to the meeting".

The word "resumed" and "breaking a 14-month hiatus" inscribed negative evaluation of a specified situation and therefore triggers an expectation in the reader of a problem solution pattern.

In sentence 3 a plan for response is mentioned: "is still ready to engage in more negotiations based on logic". What follows is, however, a response to the problem, but it is negatively evaluated, the final response is repeatedly positively evaluated both by the writer and by the characters within the story. The pattern of the story, then, is shown in figure 3.

Although this analysis looks complicated, it is in fact extremely simple, consisting as it does of repeated pattern of problem- response- negative evaluation/ result, where each instances of the last element reinstated the original problem (Hoey, 2001, p.131).
Topic: Egypt protests

The pattern we find in this text is one of the options indicated in figure above, now shown in figure. Sentence 1 reflects a type of information that can be supplied prior to the onset of a pattern.

There is a negative evaluation and invites a description of some response. This sentence “the demonstrations of the Muslim Egyptian nation are a movement seeking the realization of justice and Egyptians’ national and ideological demands. Is clearly signaled as problem by the word “demonstration”. In sentence 2 we are told of a response to this problem: “expected to avoid the use of violence in dealing with the people” and the response is initially given a negative evaluation. So this signal returns to problem. Sentence 3 “to accept the Islamic awakening and to submit to the people’s demands” meets the expectation of another response to the problem, without implying a positive result. In last sentence, response to this problem would answer the question what did Mubarak do about it? “…Mubarak defended the actions of the security forces and asked the protesters to be vigilant in the face of a plot aimed at destablishing the country”. The pattern of the article, then, is shown in figure below.

Although this analysis looks complicated, it is in fact extremely simple, consisting as it does of repeated patterns of problem-response-negative evaluation/result, where each instance of the last element reinstates the original problem.
4 Discussion and Conclusion

4.1 Discussion

a) Null hypothesis 1

In order to compare the type and amount of problem solution pattern employed by Iranians and native speakers of English in writing their articles in English, the first chi-square test was run. Table 1 shows the summary of the results of this chi-square.

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<tr>
<th>p</th>
<th>df</th>
<th>value</th>
<th>x ≤</th>
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<tbody>
<tr>
<td>.05</td>
<td>4</td>
<td>15.020</td>
<td>1355</td>
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</table>

Table 1: Results of chi-square tests of native English and Iranian writers’ use of problem solution pattern in English.

As a result shows, the value of observed chi-square\( (\chi^2=15.20) \) was significant at \( \alpha \) level \( (\alpha =0.05) \) with degrees of freedom of \( 4(df=4) \) indicating that there is a significant difference between these two groups in their use of problem solution (PS) pattern. It means that hypothesis 1 is confirmed.

b) Null hypothesis 2

Another chi-square test was run to compare the type and amount of PS pattern used by Iranians in their writing newspaper articles in Persian and English, respectively. Table 2 shows the summary of the results of this chi-square.

<table>
<thead>
<tr>
<th>p</th>
<th>df</th>
<th>value</th>
<th>x ≤</th>
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<tbody>
<tr>
<td>.01</td>
<td>4</td>
<td>98.408</td>
<td>1144</td>
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Table 2: results of chi-square tests of Iranian writers’ use of problem solution pattern in Persian and English, respectively.

Again we see that the value of observed chi-square\( (\chi^2=98.41) \) was significant at \( \alpha \) level \( (\alpha =0.01) \) with degrees of freedom of \( 4(df=4) \) indicating that Iranians’ writings in Persian are significantly different from their writing in English in their use of problem solution pattern. Finally, on the basis of the findings, it can be concluded that Persian texts and English ones written by Iranians totally are based on PS pattern. It means that hypothesis 2 is confirmed.

Findings of the present research clearly demonstrate that there was a significant difference between the use of PS pattern employed by Iranians in their newspaper articles written in English and in Persian. It can be seen in Table 2 that Iranians have used PS pattern slightly more in their articles written in Persian than their articles written in English.

4.2 Conclusion

According to what has been discussed in the paper:

(a) The elements of problem solution pattern are attributed to participants in the text, those participants including the writer and reader.

(b) Participants attribution permits the recognition of the interweaving of different and co-existing patterns.

(c) By problem-solution patterns which are based on textual interaction between writer and reader, M. Hoey clearly sets out his own approach along with key concepts and analytical technique.

(d) The approach shows how much these different texts have in common with each other and argues that in the interaction between the writer and the reader, the reader has as much power as the writer.

(e) Problem solution pattern, in fact, is a way of indicating how the information is relevant. This model contains interaction between language and the knowledge, beliefs and expectations of language users. The exact nature of this interaction is a central issue in text and discourse analysis.

Text organization analysis of the present study indicated that writers of all three groups used PS pattern in their writings. Generally speaking, native speakers of English employed more PS pattern than Iranians. Comparing both groups of Iranians, we can observe that PS pattern was used more when Iranians wrote in Persian. The results of the present study have obvious importance in increasing students’ awareness of the way native speakers of English organize their writings. PS pattern is a valuable tool which provides rhetorical effects on the text such as providing logic and reliance in the text. In the era of dialogue among civilizations, it should be kept in mind that as Yarmohammadi (2004) mentions, meaning comes from culture, and there is a mutual and indirect relationship between language and culture. We can not create an effective dialogue with people in other languages without having knowledge of the organization used in those languages.
McCarthy (1991) indicates that finding patterns in texts is a matter of interpretation by the reader, making use of clues and signals provided by the author (McCarthy 1991: p.161). PS pattern provides part of this field knowledge for us. And PS pattern is a useful means for the teachers to help students control their writing practices for effective writing. All in all, this study could be considered as a launching pad for future research in text organization of English and Persian writers which has been abandoned and forgotten especially by Iranian researchers in TEFL and linguistics, who are most responsible for the development of the future trends in this field.

References