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Problem Solution Pattern in Text Analysis

Aghagolzadeh F.[1]

Abstract

This paper, largely motivated by Hoey (2001), revisits the issue of Written Discourse Analysis and, in particular, the Problem-Solution Pattern. Much discussion embarrasses the way in which texts are produced and understood. The 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. These approaches attempt to answer the question: what is a text? How is it constructed and how can it be interpreted? According to Hoey, the processes of reading and writing in any discourse are based on culturally popular patterns of organisation between the writer and the reader. The text may be seen as an interaction between the writer and the reader in which the reader seeks to anticipate the questions that the writer is going to answer. In conclusion, analysing some texts indicates that the problem solution method is a comprehensive and easy method for producing narrative and non-narrative texts.

Keywords: Text Analysis, Discourse Analysis, Problem Solution Pattern.

Introduction

The title of the paper "The Problem Solution Pattern in Text Analysis" is intended to introduce and describe the approach of Michael Hoey's text organization and analysis. It is supposed that the text is a site of interaction in which the writer's desire to meet the reader's needs or expectations. According to Hoey's approach the linguistic items, as a sample, cohesion devices are signals from the writer to the reader as a moment-by-moment guidance in this process.

Academic text books, newspeaper articles, novels and advertisment, telephone books, dictionaries, storereceipts are the samples of texts which are named just a few. They are texts as much as fictions or editorials, although their characteristics are in many respects markedly

1. Department of Linguistics, Faculty of Humanities, Tarbiat Modarres University, Tehran, Iran

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different. 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 writers control the interaction and produce most of the languages. The whole interaction can be referred to as a discourse.

In an academic text book or a bill receipt, there is nothing self-evident about them but to a regular user of such texts there seems to be, simply because each new instance of the type conforms to expectations that the reader has formed on the basis of previous encounters with texts of the same type. It means, once you've seen one academic text or bill receipt, in fact, you have seen them all! 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. Another feature of the text that makes the study of its production and reception complicated is that one text may appear inside another, the same as the sections and chapters in a book we can either look at how the sections/chapters work in their own terms or we can look at their place in the larger scheme of things. Hoey's model, Problem Solution (PS) is a successful attempt to make easy such complicated phenomena which is called text production and reception.

Review of Literature

In general, several approaches in written discourse have attempted to interpret and describe the text organization. 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 into the detailed meanings that enter individual sentence-length stretches. When a text is presented, there must be the operations which work in the other direction to extract the main idea back out again such as deletion (direct removal of material), generalization (recasting material in a more general way), and construction (creating new material to subsume the presentation). Accordingly, van Dijk turned to cognitive psychology for a process-oriented model of the text. According to cohesion device concerns the way in which the linguistic items of which a text is composed are meaningfully connected to each other in a sequence on the basis of the grammatical rules of the language. According to Halliday (1985/1994, chapter 9), in English, cohesion is created in four ways: by reference, ellipsis (including substitution), conjucnction and lexical organization. Of course, coherence as a non-linguistic factor is a key work in this approach.

By a procedural approach, de Beaugrand and Dressler (1981, p.31) mean an approach in which, all the levels of language are to be described in terms of their utilization. They define text as a communicative occurance which meets seven standards of textuality; namely, cohesion and coherence, which are both text centered, and intentionality, acceptability, informativity, situationality and intertextuality.

The model developed in Hoey's approach draws on the work of Eugene Winter. From him comes the idea that the sentences in a text can be seen as answering questions that the reader wants to be answered, and from him comes the notion of clause relations, with the major division being that between Matching (as he would term it) Logical Sequence. His work is now largely inaccessible but reference may be made to

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Winter (1977, 1979), where the notion of lexical signals and repetition patterning are spelt out in some details, (Hoey, 2001). Winter's book (1982) concentrates on the grammatical implications of his work, as are Hoey (1983) and Crombie (1985).

Michael Jordan has developed a distinctive version of clause relations, (see for example Jordan 1984, 1990). A more recent-and influential-thesis of some of these positions, called the Rhetorical Structure Theory can be found in Mann and Thompson (1986) and Mann, Thompson and Matthiessen (1992). Georga Kopoulou and Goutsos (1997) introduced a useful and thorough introduction to relational description (Hoey, 2001). Mc Carthy (1991) provides an introduction both to the notion of signalling and to the larger discourse description, oriented helpfully to language teacher. Rather different approaches to the description of signalling in text, through growing out of similar concerns with the interactivity of text, are those of Francis (1994) and Winter (1994). The concept of lexical signalling has been discussed in Hoey (1994).

Theoretical Discussion

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 Schank 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 static representation of knowledge, whereas a script is a narrative representation of knowledge. A schema represents the (non-narrative) connections between facts; a script represents the sequence in which likely events will occur (Hoey, 2001, p.21).

Hoey (2001, p.121) points out that the view of these authors is that knowledge of the world, our remembered experience of the world, is not randomly distributed in the mind, but is carefully organised in terms of schemata or scripts.

Consequently, whenever one part of that knowledge is activated, the rest becomes available at the same time and is brought to bear on the task of interpreting the text that provides the activation. The illustration of a restaurant is often used. If we enter a restaurant, we are not surprised if a stranger in smart clothes approaches our table with menu in his or her hand. If we sit at a table in a library, on the other hand, we expect no such thing. If we read about a meal in restaurant, the same knowledge is activated as if we were in the restaurant ourselves and so the writer does not feel obliged to explain the presence of an unnamed pro-active stranger in the way that she would in other contexts. Here, there is a question. What is the problem with schema and script?

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 schemata or scripts we can hold and the exact content and boundaries of each schema or script are open to real question. It is an accident that the restaurant script is so often cited-it happens to be an unusually self-contained and bounded set of knowledge and expectations.

Furthermore, even if these problems were solvable in principle, we would still never in practice be able to list all the schemata/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 generalise about these schemata/scripts without loosing the insight that readers cooperate with writers in

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making a common meaning.

Hoey's approach (2001, p.122) is an attempt to solve this problem by presenting culturally 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 knowlede described by schemata and scripts and a more generalised set of expectations that are shared across a range of texts. The basic concepts and units in Problem Solution Pattern (PS 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, 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 over come, 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 solution 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).

Methodology and Text Analysis

Methodology is shown in Figure 1. The general pattern, Figure 2, shows the Recycling effect of Negative Evaluation.

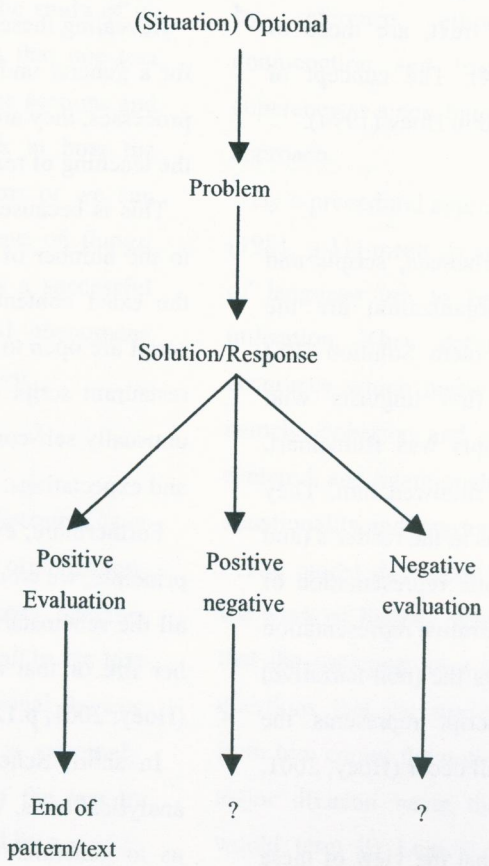

Figure 1 General Pattern

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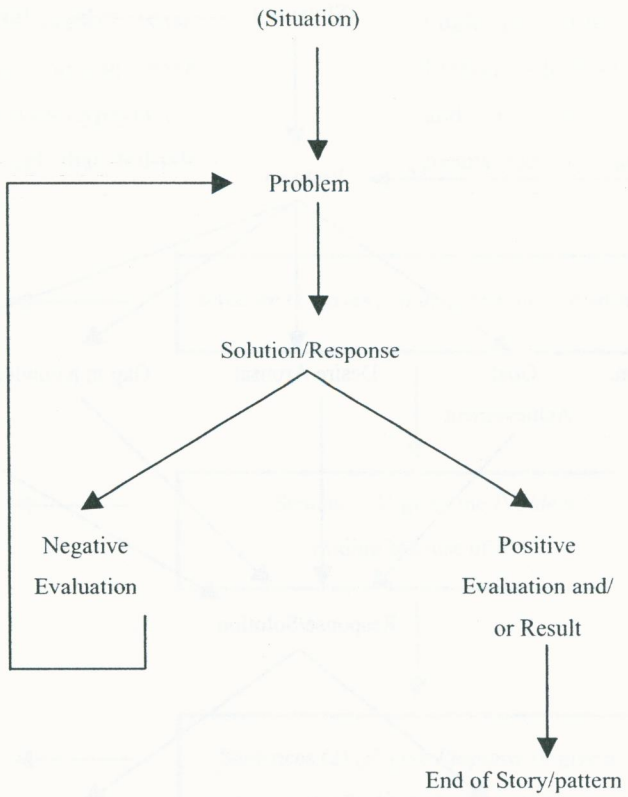

Figure 2 Recycling Process

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 3).

It is an important point to remember that the problem can be different such as Goal-achievement, Desire arousal-fulfilment, the Gap (or lack) in knowledge filling (e.g. most of scientific or non scientific text about: what is x? or How is that, and why?).

It seems that if we combine what have been mentioned above, the Problem Solution Pattern will be as follows:

Now, some texts will be analysed according to Hoey's Model: Here is an example:

Text of "Psychological Subject" by Halliday (1985, p.33): (text numbered for convenience).

> (1) Psychological subject meant that which is concern of the message. (2) It was called 'Psychological' because it was what the speaker had in his mind to start with, when embarking on the production of the clause.

In the above text, in sentence (1) the problem is lack of knowledge on psychological subject, which is solved by giving definition by Halliday. In fact, in sentence (1) the question was what is psychological subject? The sentence (2) is going to answer the question such as: why is it called psychological subject? The problem, in fact, is lack of knowledge about the reason. By giving

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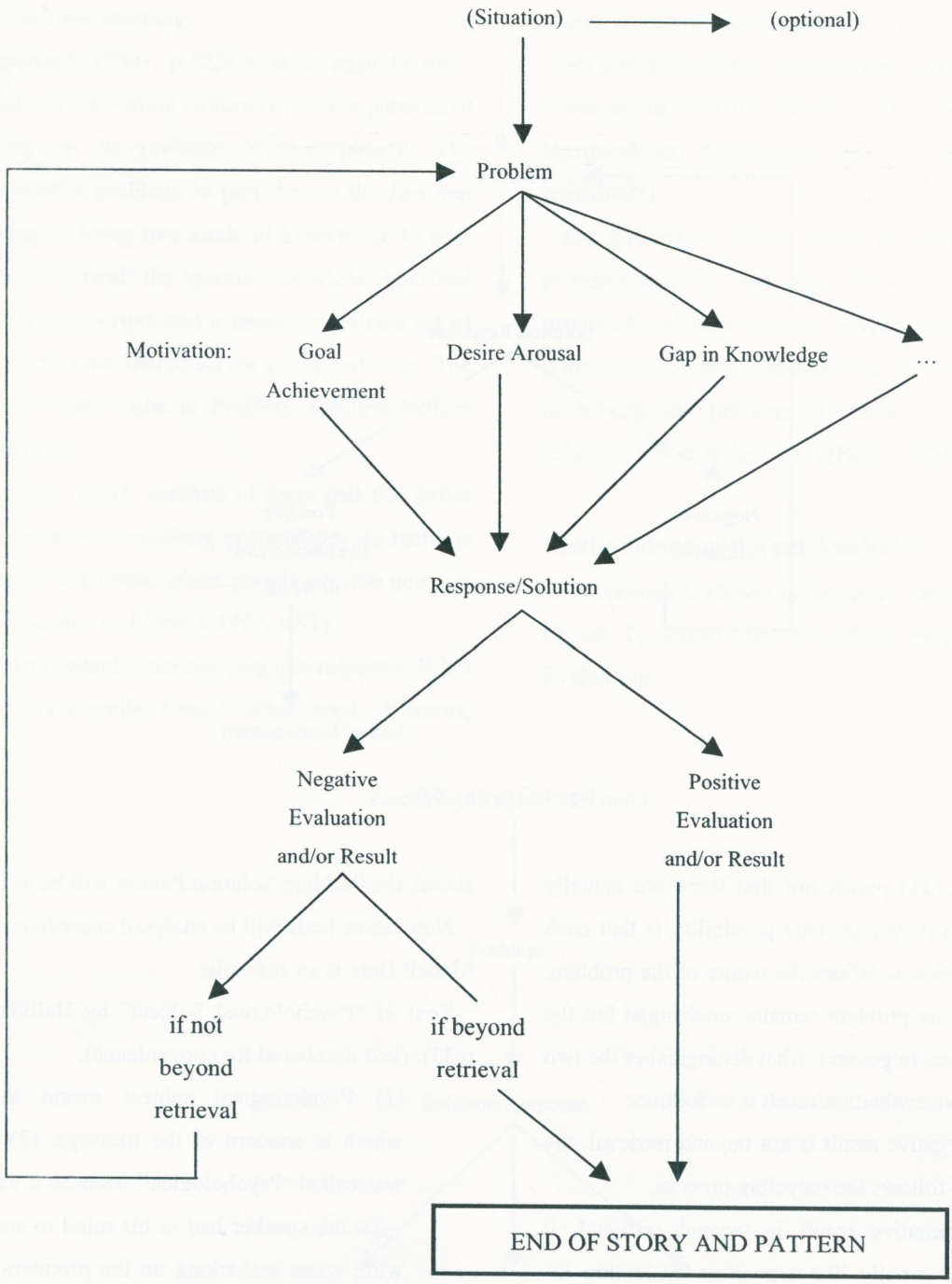


Figure 3 The options available in a Problem Solution Pattern

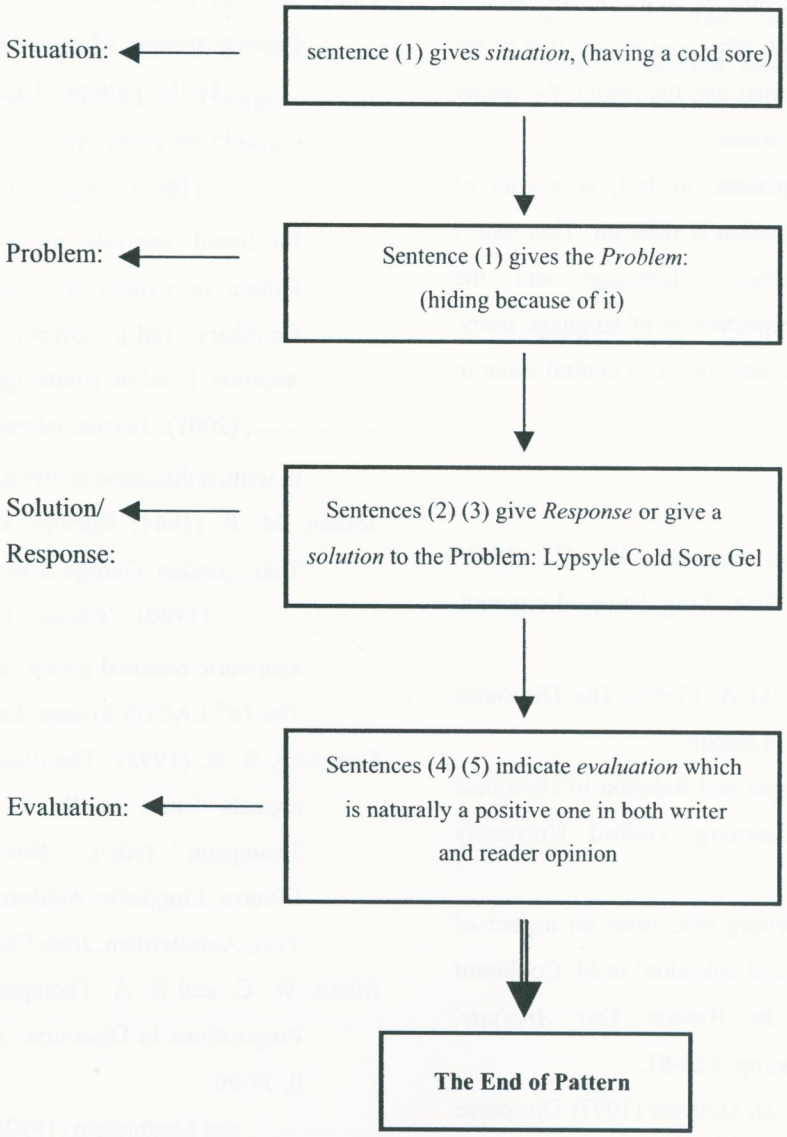
the reason the problem is solved. As another example, which shows the lack of knowledge:

Hassan (1994, p.138) has pointed out, "in any coherent discourse threads of semantic continuity are created through the constructuion of cohesive chains".

According to Hoey's PS Pattern, the problem of the above text is: How are threads of semantic continuity created? It is solved by "the construction of cohesive chains" which is suggested by Hassan.

Now, the last text (Salkie, 1997, p.92) will be analyzed in Hoey's "PS" Pattern as follows:

(1) In hiding with a cold sore? (2) Now, when a cold sore appears you don't have to disappear. (3) Treat it with Lypsyl Cold Gel, the minute you feel that tell-tale tingle. (4) Unlike many other treatments Lypsyl Cold Sore Gel is clear, colourless and completely invisible. (5) Which means you don't have to be.



Introducing the article, being an advertisement, is the goal of text. In Hoey's Pattern, the different parts of "PS" may be indicated at the same time.

Summary and 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, Michael Hoey clearly sets out his own approach along with key

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concepts and analytical technique. His approach has been successfully applied to a wide variety of narrative texts such as fairy-tales, novels, poems, short stories, jokes and non-narrative texts, such as posters, timetables, bill receipts.

(d) The approach shows how much these different text 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.

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