# Inadequacy of Hatch's Model of Formal Schema for American Short Stories

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### **Abstract**

Reading specialists have already argued for the existence of content and formal schemata. Anderson (1980) defines schemata as '..., complex, units of knowledge that organize much of what we know about general categories of objects, classes of events,...'. Research has shown that stories have schematic structures and that readers employ them to both facilitate and enhance comprehension and recall. The most recent story schema model, proposed by Hatch (1992), includes 'an abstract, an orientation, a story line, a resolution, and a coda'. In order to test the adequacy of Hatch's model, seven popular American short stories were selected and the formal schema of each story was represented in the form of a tree diagram. Results demonstrated the inadequacy of Hatch's Model for the natural, relatively long, short stories. As a result, two more elements were added to complement the model.

**Key words:** American, formal schema, Hatch, reading comprehension, short story.

## 1. Introduction & Objectives

Reading is clearly an important activity in any language class and narrative prose is a literary genre which has much to contribute to EFL/ESL reading classes. Research has shown that stories have schematic structures and that readers employ them to both facilitate and enhance comprehension and recall.

Anderson (1980) defines schemata as '... large, complex, units of knowledge that organize much of what we know about general categories of objects, classes of events,...'. Cook (1989) refers to schemata as 'mental representations of typical situations' which we retrieve from memory and employ in our comprehension of discourse. Kintsch, Mandel, and Kozminsky (1977) acknowledge that reader's story schema both accelerates reading comprehension and facilitates reorganization of the reading materials.

Carrel (1987) is a principle figure credited with first making a distinction between formal schema (knowledge of and experience with the formal rhetorical organization of different text types) and content schema (background knowledge of and experience with content area of a particular text).

One of the most extensively studied text schemata is the schema for short stories. Some models of story schema, along with some investigations on how these models work and are realized in different cultures, have been mentioned in literature. Of these models, one can refer to Rumelhart (1975), Mandler & Johnson (1977), Mandler (1978), and Hatch (1992).

The theoretical framework that provides the basis for defining the overall organization of the short stories included in this study is the one proposed by Hatch (1992:165-166). She claims that her template is a combination of the work of Labov (Labov 1972, Labov and Waletsky 1967) in linguistics and Mandler (Mandler and Johnson 1977, Mandler 1978) in cognitive psychology. Hatch's narrative schema model includes the following components: 'an abstract (a title for the story), the orientation (including time, place, and character identification), the story line (including the goal, the problem, and the plan), a resolution, and a coda (including a possible moral)'.

It is interesting, however, to point out that the stories analyzed through all these schema models have never exceeded one paragraph or at most one page. And no studies that are mentioned in the related literature and the researcher is aware of have dealt with such long stories as those included in this study.

## 2. Materials and Methodology

For data selection, first, using a literary anthology of American short stories, an almost complete list of American short story

writers was prepared. Second, the researcher decided upon the most famous writers. Third, the following short stories were randomly selected from among the available works of these outstanding writers.

- 1. "The Tell-Tale Heart" by Edgar Allen Poe
- 2. "The Adventure" by Sherwood Anderson
- 3. "The Christmas Gift" by O. Henry
- 4. "Bill" by Zona Gale
- 5. "Indian Camp" by Ernest Hemingway
- 6. "The Prison" by Bernard Malamud
- 7. "The shepherd's Daughter" by William Saroyan

These were and still are the most widely read and popular short stories in the United States. It is also interesting to point out that any modern collection of the best and most representative American short stories contains at least one or more from the pen of these writers. Thus, the characteristics of the American short story formal schema are more likely to get realization in these works than in others.

### 3. Data Analysis

For data analysis, each story was treated and analyzed in terms of its schematic constituents. In order to more clearly depict the structure of both high-level and low-level episodes of each story, its formal schema was represented in the form of a tree diagram. It should be pointed out that the assignment of nodes to sentences does not stand in a one to one relationship; on the contrary, at some time only part of a sentence and still at other times a bundle of sentences or even paragraphs act to form a proposition which corresponds to a terminal node in the tree diagram. For example, while the Goal, Beginning, and Outcome are sometimes introduced by part of a sentence, the Setting, Problem, Plan and Coda are more often than not defined by a collection of related sentences.

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1- "Bill" by Zona Gale

B= Beginning; C= Coda; G= Goal; O= Outcome; Pl= Plan; Pr= Problem; R=Resolution; S= Setting; T= Title

T.0 S B G Pr 0 R C 1 2 3 62 63 64 S B 0 4 38 B Pl Pr O S B Pr O S Pl S Pl 0 S B Pl O 8 9 10 11 24 25 39 40 41 42 43 44 B Pl Pr 0 S B Pr Pl 0 S B Pr Pl O 12 13 14 15 26 27 28 29 45 46 47 48 S B Pl Pr O S B Pl Pr O S B Pr Pl G O 16 17 18 19 30 31 32 33 49 50 51 52 53 S Pr Pl 0 S Pr Pl O S Pr Pl 34 35 36 37 20 21 22 23 54 55 56 S 57 58 P1 Pr 59 60 61

2- "The Tell-Tale Heart" by E. A. Poe

B= Beginning; C= Coda; G= Goal; O= Outcome; Pl= Plan; Pr= Problem; R=Resolution;

S= Setting; T= Title

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3- "Adventure" by Sh. Anderson

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#### 4- "Indian Camp" by E. Hemingway

B= Beginning; C= Coda; G= Goal; O= Outcome; Pl= Plan; Pr= Problem; R=Resolution; S= Setting; T= Title

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	B Pl C 18 19 20					

5- "The Shepherd's Daughter" by W. Saroyan

B= Beginning; C= Coda; G= Goal; O= Outcome; Pl= Plan; Pr= Problem; R=Resolution; S= Setting; T= Title

T.0 В Pr P1 0 R C 63 64 S Pl Pr O S B Pr O S B Pl O 3 4 5 10 11 12 32 33 34 S B Pr O S B Pl O S B Pr Pl O 6 7 8 9 13 14 15 35 36 37 38 S B Pl O S B Pr O 16 17 18 39 40 41 S B Pl Pr O B Pl O 19 20 42 43 44 45 S B Pl O B Pl Pr O 21 22 23 46 47 48 S P1 0 S B Pl 0 24 25 49 50 51 S B Pl O S Pr Pl O 26 27 28 52 53 54 S Pr 0 S B Pr Pl O 29 30 31 55 56 57 58 S B Pl O 59 60 61 62

6- "The Christmas Gift" by O. Henry B= Beginning; C= Coda; G= Goal; O= Outcome; Pl= Plan; Pr= Problem; R=Resolution; S= Setting; T= Title

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7- "The Prison" by B. Malamud

B= Beginning; C= Coda; G= Goal; O= Outcome; Pl= Plan; Pr= Problem; R=Resolution; S= Setting; T= Title

Each of these tree diagrams depict the formal schema of one of the stories investigated in the study. The diagrams show that all the elements included in the Hatch's model except for Goal are present in the main plots of these stories. However, this element turns out to be an optional constituent in the surface structure. In addition to the constituents presented in Hatch's Model, two more elements, i.e., Outcome and Beginning seem to be inevitable constituents of any story schema.

#### 4. Results and Discussion

The tree diagrams illustrate a remarkable degree of consistency in the patterns of type, number, and order of the nodes found in the high-level episodes of the stories. As it is shown, a detailed story schema is composed of Setting, Beginning, Problem, Plan, Outcome, Resolution, and Coda. However, not all these constituents occur in the low-level plots and most of these structures include only a Problem, a Plan, and an Outcome. On the other hand, in all the stories analyzed, elements like Coda and Resolution appear only in the high-level plots, but other constituents are likely to occur both in the high- and low-level episodes.

It is natural enough that any plan undertaken by the protagonist seeks to meet some goal; nonetheless, the Goal constituent may or may not enjoy a surface realization in the story schema. Moreover, this element is likely to strand anywhere between the Setting and the Outcome. It is also interesting to point out that the constituent Goal enjoys the least chance of occurrence in the story surface structure. For example, in the stories "The Prison", "The Christmas Gift", "Adventure" and "The Shepherd's Daughter", Goal does not have any surface realization. Outcome, on the other hand, proves to be an obligatory constituent in any high- and low-level plot.

The analysis of the material shows that all the aforementioned constituents are obligatory in American English short stories. All the stories contain these elements and in the same order; however, in "The tell-tale heart", the positions of the Problem and Plan are reversed.

As can be seen from the results of the data analysis, each story contains two other elements in addition to those suggested by Hatch's model. In all cases there appeared to be a Beginning and an Outcome constituent contributing to the formation of the story formal schema. While it is the job of the Setting to introduce the characters, time, place, and the initial states of affairs in the story, the crucial aspect of the Beginning is that it invokes the protagonist to action. That is to say, after the Setting gets established, there is usually an incident

happening causing the protagonist to respond to it in one way or another. For example, while the Setting in "Bill" includes the introduction of Bill, his family members, job, house, etc., the real story begins with his falling ill.

As for the Outcome, it is important to acknowledge that the Outcome is very different from the Resolution. An Outcome can be taken as the immediate result of a particular Plan performed to achieve some sub-goal which is itself in the service of the main goal of the high-level episode. Moreover, as the analysis illustrates, each of the short episodes embedded in the main episode is very likely to have an Outcome. The Resolution, on the other hand, tends to be connected to the high-level story line as a whole, i.e., the Resolution is not directly connected to any of the episodes alone. In other words, a story would never contain more than one Resolution. For instance, in "The Tell-Tale Heart", while there is a large number of Outcomes connected to their preceding Plans, only the protagonist's confession of murdering is considered to be the Resolution of the story.

After working out the main plot constituents, the researcher found it worthwhile to investigate the data further to see how subplots or low-level episodes are organized. For this purpose, each single node of the high-level episodes was subjected to analysis in detail. The results revealed that lowe-level plots are not as well organized as high-level ones. That is, there are cases in which an episode lacks one or more of the constituents postulated for the high-level episodes by the model. For example, some of the sub-episodes in "The Shepherd's Daughter" and "Adventure" are simply composed of either the Setting, Plan, and Outcome, or the Beginning, Plan, and Outcome.

In these episodes, interestingly enough, the order of the constituents is not the way anticipated. In a good number of cases, the Plan constituent precedes the Problem, something which rarely occurs in high-level episodes. In such episodes the Plan is almost always unsuccessful and the Outcome usually leads to another episode to provide more chance for the protagonist to try again. This can be interpreted to mean that the structure of episode is recursive.

While the model basic to this study does not allow for the story to include more than one from each constituent, that is, it accounts for single episode stories; a natural short story is rarely comprised of only one episode. To put it another way, in constructing a natural short story the phenomenon of embedding is usually at work.

#### 5. Conclusion

Results of this rhetorical study have led the researcher to the following conclusions:

First, a story is not a hodge-podge of events and actions. Rather, stories have schematic constraints (schematic structures) which make an easy following of them possible. The constituent elements of these structures turned out to occur in an almost fixed order to form a meaningful unit.

Second, the story formal schema suggested by Hatch proved not to be completely successful to account for schema in natural short stories. In addition to the elements included in the model, two more constituents, namely, a Beginning and an Outcome, are the two necessary parts of any story framework. Thus, the modified version of Hatch's model seems to be a more viable model of short story schema.

Third, while it is evident that in any story the course of plans are performed to reach some goal, and while each story assumes a Goal in this model, this element tends to be implied somewhere in the story. Only the high-level plots of three out of the seven stories investigated include the Goal element in their surface structures.

Fourth, Goal and Coda are the simplest constituents in any story grammar. None of these elements predominate any low-level episode. On the other hand, Plan appears to be the most elaborated portion of any plot, which indicates that the protagonist's reaction to the problem is often complex and detailed.

Fifth, while the main plots of the stories were strictly structured, that is, they all had the same constituents mentioned in the model and in that order, the internal structures (subplots) turned out to be very loosely structured. The position of the elements varied from episode to episode. Furthermore, these episodes varied from one another with regard to the number and type of the elements they contained. This can be raised as a good justification for Yekovich and Thorndyke's (1981) findings where they demonstrated that main plots are more recalled than the subplots.

Finally, the internal framework of the stories differed in their structures from writer to writer in a given culture. Moreover, the same writer utilized different frameworks in constructing the subplots of one single story. This also favors the view held by Kaplan (1966: 295-196) that 'Rhetoric ... varies from culture to culture and even from time to time within a given culture. It is affected by canons of taste within a given culture at a given time'.

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#### **APPENDIX**

#### The Shepherd's Daughter

<sup>1</sup>It is opinion of my grandmother, God bless her, that all men should labor, and at the table, a moment ago, she said to me, "You must learn to do some good works, the making of some item useful to man, something out of clay, or out of wood, or metal, or cloth. It is not proper for a young man to be ignorant of an honorable craft. Is there anything you can make? Can you make a simple table, a chair, a plain dish, a rug, a coffee pot? Is there anything you can do?"

And my grandmother looked at me with anger. "I know," she said, "you are supposed to be a writer, and I suppose you are. You certainly smoke enough cigarettes to be anything, and the whole house is full of the smoke, but you must learn to make solid things, things that can be used, that can be seen and touched." "There was a king of the Persians," said my grandmother, "and he had a son, <sup>2</sup>and this boy fell in love with a shepherd's daughter. He went to his father and he said, 'My lord, I love a shepherd's daughter, <sup>3</sup>and I would have her for my wife.' <sup>4</sup>And the king said, "I am king and you are my son and when I die you shall be king, how can it be that you would marry the daughter of a shepherd?" <sup>5</sup>And the son said, "My lord, I do not know but I know that I love this girl and would have her for my queen."

<sup>6</sup>The king saw that his son's love for the girl was from God, <sup>7</sup>and he said, "I will send a message to here." <sup>8</sup>And he called a messenger to him and he said, "Go to the shepherd's daughter and say that my son loves her and would have her for his wife." <sup>9</sup>And the messenger went to girl and he said, "The king's son loves you

and would have you for his wife." <sup>10</sup>And the girl said, "What labor does he do?" <sup>11</sup>And the messenger said, "Why, he is the son of the king; he does no labor." <sup>12</sup>And the girl said, "He must learn to do some labor." <sup>13</sup>And the messenger returned to the king <sup>14</sup>and spoke the words of the shepherd's daughter.

<sup>15</sup>The king said to his son, "The shepherd's daughter wishes you to learn some craft. Would you still have her for your wife?" <sup>16</sup>And the son said, "Yes, I will learn to weave straw rugs." <sup>17</sup>And the boy was taught to weave rugs of straw, in patterns and in colors and with ornamental designs, <sup>18</sup>and at the end of three days he was making very fine straw rugs, <sup>19</sup>and the messenger returned to the shepherd's daughter, and he said, "These rugs of straw are the work of the king's son." <sup>20</sup>And the girl went with the messenger to the king's palace, and she became the wife of the king's son.

<sup>21</sup>"One day," said my grandmother "the king's son was walking through the streets of Baghdad, <sup>22</sup>and he came upon an eating place which was so clean and cool that <sup>23</sup>he entered it <sup>24</sup>and sat at a table." <sup>25</sup>"This place," said my grandmother, "was a place of thieves and murderers, <sup>26</sup> and they took the king's son <sup>27</sup> and placed him in a large dungeon where many great men of the city were being held, and the thieves and murders were killing the fattest of the men and feeding them to the leanest of them, and making sport of it. <sup>28</sup>The king's son was of the leanest of the men, and it was not known that he was son of the king of the Persians, so his life was spared, <sup>29</sup> and he said to the thieves and murderers, 'I am a weaver of straw rugs and these rugs have great value." 30And they brought him straw and asked him to weave and <sup>31</sup>in three days he weaved three rugs, <sup>32</sup>and he said, "Carry these rugs to the palace of the king of the Persians, and for each rug he will give you a hundred gold pieces of money." <sup>33</sup>And the rugs were carried to the palace of the king, <sup>34</sup> and when the king saw the rugs he saw that they were the work of his son <sup>35</sup>and he took the rugs to the shepherd's daughter and he said, These rugs were brought to the palace and they are the work of my son who is lost." <sup>36</sup>And the shepherd's daughter took each rug and looked at it closely and in the design of each rug she saw in the written language of the Persians a message from her husband, <sup>37</sup>and she related this message to king.

<sup>38"</sup>And the king," said my grandmother, "sent many soldiers to the place of the thieves and murderers, <sup>39</sup>and the soldiers rescued all the captives and killed all the thieves and murderers, <sup>40</sup>and the king's son was returned safely to the palace of his father, and to the company of his wife, the little shepherd's daughter. And when the boy went into the palace and saw again his wife, he humbled himself before her and he embraced her feet, and he said, 'My love, it is because of you that I am alive, and the king was greatly pleased with the shepherd's daughter."

<sup>41</sup>"Now," said my grandmother, "do you see why every man should learn an honorable craft?" "I see very clearly," I said, "and as soon as I earn enough money to buy a saw and a hammer and a piece of lumber I shall do my best to make a simple chair or a shelf for books."