

TOWARDS A THEORY OF NARRATIVE STRUCTURE

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Writing as a language skill in English as a foreign language on the college level has always been important for academic and practical needs in and out of school. It cannot be effectively taught due to the lack of applicable pedagogical theory and linguistic theory. As writing is not a sentence factory, dissected sentences removed from context and communicative intent in transformational grammar cannot account for the structure and meaning of a total discourse. Distastified with the study of narrow syntax, linguists, anthropologists, cognitive psychologists, and literary critics have turned to the study of text in the recent decade. The emphasis in textlinguistics is placed on the study of "any passage, spoken, or whatever length, that does form a unified whole" (Halliday and Hasan, 1976, p. 1). This "unified whole" should be the most important aspect in writing when we think of it as a whole thing.

It is generally agreed that expository writing is more important than narrative discourse in an American university. However, in an English as a foreign language context, we may regard expository writing as an end while narrative discourse is a means to an end. The mastery of writing narrative provides the means to control linguistic factors. This ability in writing narrative is in a certain sense tantamount to competence in writing exposition. If we are going to concentrate on narrative, we may first consider "What is the structure of narrative?" In order to find the answer to this question, we should test and verify a theory of narrative structure as the first step in developing a writing program for teaching narrative in English as a foreign language.

In order to know what to and what not to write about in narrative, we should first of all know how memory of narrative is structured. The representation of memory will provide a sound theoretical basis for narrative structure, the reason being that if our structure of discourse matches the structure of memory through processing and comprehension, our narrative will be effective input, or more exactly, intake, to memory. As the narrative is intended to be understood and remembered, we have to find the most acceptable structure of memory. In this respect, the revived theory of schemata in cognitive science seems to shed light on the structure of memory and processing of knowledge.

Schemata are defined as "interacting knowledge structures" (Rumelhart and Ortony). Generally speaking, schemata are data structures for representing the generic concepts stored in memory. They exist for generalized concepts underlying objects, situations, events, sequences of events, actions, and sequences of actions. A schema can be compared with a play with the internal structure of the schema corresponding to the script of the play. In their view, schemata have variables, can embed one within the other, represent generic concepts which vary in their levels of abstraction, and represent knowledge and so schemata are powerful for representing knowledge in memory. For our purpose, levels of abstraction are important to us. Representation of conceptualizations at more abstract levels such as action sequences or plots of stories may account for our ability to organize, summarize, and retrieve information

about connected sequences of events.

Episodic memory is those memories for particular events which we have directly or indirectly experienced while generic knowledge is the knowledge that we have of concepts abstracted from such memories. Our memories are natural side effects of the comprehension process. In comprehension, various aspects of the input are associated with a schemata's configuration, and these instantiated schemata constitute our interpretation of the input. Therefore, what gets stored is not the input itself but the interpretation that is given to that input as a result of the comprehension process. In fact, these memory traces are probably not complete copies of originally instantiated schemata, but a more or less complete set of fragments of them. After some time, only fragments of the copies of the originally instantiated schemata remain. Therefore, we must use these fragments to try to reconstruct the original interpretation and thereby to remember the input situation.

Schemata also serve an important function as powerful devices for making inferences. We may use schemata as predictors of as yet unobserved input in making inferences. Upon finding a schema which gives an account for an input situation, we can infer likely aspects of the situation which we have not observed. Thus, if someone tells us that he went to a restaurant for dinner, we can infer the process of his being given a menu, giving his order to the waitress, and paying for the meal after eating. We can make such inferences because the restaurant schema has things like dining as subschemata. The activation of such subschemata and their constituents serves as a vehicle for such inferences.

Rumelhart (1975) says that since a story schema can be regarded as a partially ordered set of rules which embody the presumed logical structure of a class of stories it would follow with minimal assumptions that less processing would be required to fit a story to a schema when the story corresponds more closely to the schema structure than when it does not. He further points out that if understanding is considered to be finding such a fit, one can conclude that it is easier to understand a story whose structure closely matches that of the story schema.

As a narrative usually consists of behavioral events, we have to prove that story schemata actually represent memory structures of these events. It is generally assumed in research in artificial intelligence and discourse processing that behavior is hierarchically organized into structures which are called plans (Schank and Abelson). A plan is any hierarchical process in the organism that can control the order in which a sequence of operations is to be performed. Plan-like structures have been used to describe or represent behavior sequences by these researchers who have suggested that action plans are organized hierarchially into goal-subgoal relationship. Rumelhart's theory of story comprehension is based on a "problem-solving" structure called TRY schema. Try schemata may be embedded, thus setting up a hierarchical structure of goals and subgoals directed toward a particular goal. Schank and Abelson use the term "script" to refer to the memory structure a person has encoding his general knowledge of a certain situation-action routine. This script theory is a specific elaboration of the schemata theory. In their theory, a goal means some state of mind of a character that causes him to take some premeditated actions. For example, wanting to satisfy one's hunger is a goal. A plan is some method for achieving a goal, like

asking somebody for something. We understand story through specific goals and planning and these goals and plans figure prominently in the process of finding an explanation for an event.

A series of experiments on comprehension and memory of common goal-directed events was carried out (Lichtenstein and Frewer). It is proposed that events are organized during encoding by a "plan" schema which takes into consideration inferences which an observer makes about the actor's goals, and about the intentional relationships between actions. The "in-order-to-relation" implies the goal-subgoal relationships that may be inferred to exist between actions. Knowledge about these relationships permits the construction of hierarchical structures of acts, each hierarchy being directed toward a single result or goal.

In Lichtenstein *et. al's* experiments, it has been found out that different observers of an event infer the same goals to be operating to organize the actor's behavior; observers also agree on the specific intentional (in-order-to) relationships between actions. As a result of these findings, they further propose that, in general, a goal-orientation strategy characterizes the recall of behavioral events. Subjects first locate and retrieve various goals achieved by the actor, and the superordinate actions which brought them about. The logical relationships in the plan schemata then form the basis for the retrieval and reconstruction of the temporal order of the subordinate actions.

Subjects recalling behavioral events organize their representation in terms of the actor's goals and the intentional relationships which define the plan schema. The recall rates for the most directly goal-oriented actions and for goal-directed units for higher than those of similar-no-goal-directed units. This supports the notion that a goal-orientation schema characterizes retrieval of actions.

These findings bear out the memory structure theory in terms of schemata which are organized around plans and goals in episodic memory and retrieval.

The story grammar first proposed by Rumelhart for a simple prototypical narrative structure is adapted by Thorndyke (1977). In this grammar it is assumed that stories have several unique parts that are conceptually separable. There are a set of productions providing the rules of the narrative syntax and independent of the linguistic content of the story. The requisite components of all stories are Setting, Theme, Plot, and Resolution. The Setting information in simple stories consists of one or a few stative propositions establishing the time, location, and main characters. The Theme of the story is the general focus to which the subsequent plot adheres. It is often a stated or implied goal for the main character to achieve. The introduction of the goal is often preceded by a sequence of events leading up to and justifying it. Thus, several events may precede the statement of the goal.

The Plot of the story is an indefinite number of episodes, each of which is a cluster of actions comprising attempts to achieve the goal or a subgoal and the outcomes of these attempts. A subgoal is a particular method of achieving the desired goal. An attempt to achieving a goal or subgoal may consist of an entire episode. Thus, episodes may be recursively embedded in the plot structure, producing a hierarchy of events in the representation.

The Resolution is the statement of the final result of the story with respect to

the theme. It consists of either a successful attainment of the goal or a response of the main character to the final state of affairs that is consistent with his satisfaction with the outcome.

In an experiment by Thorndyke, the effect of varying the degree of story structure on a person's memory for that story was evaluated. Four passages differing in narrative structure were constructed respectively out of two different stories: Original Story with its theme at the outset and the plot consisting of episodes depicting goals by the main characters in an attempt to satisfy the overall goal; Narrative-After-Theme with its theme of the passage removed to the end of the passage; Narrative-no-Theme with its top-level goal deleted; and Description without benefit of temporal sequencing or local causal implications. The results of the experiment indicates that recall of propositions from the passages just decreased in descending order. Rated story comprehensibility and recall were correlated and were found to be a function of the amount of identifiable narrative structure in the passages. Data from summarizations also indicate the prominence in memory of the general structural characteristics of narratives. Recall probability of any individual proposition from a story passage was function of its structural centrality as determined by the grammar rules of stories. Likewise, the probability that a proposition would appear in a story summary was a function of the hierarchical level of the proposition.

The narrative structure introduced here provides a simple characterization of a small class of narratives which are single-goal, single-protagonist narratives. This narrowness in structure and content, however, can be supplemented by the study by Labov and Waletzky (1967). Believing that the simplest and most fundamental narrative structures should be analyzed before any analysis and understanding of these complex narratives, they advocate that the most fundamental narrative structures are to be found in oral versions of personal experiences. Using the technique of discourse analysis, their study was both formal and functional: formal as it was based on recurrent patterns characteristics of narrative, and functional as narrative was considered as one verbal technique for recapitulating experience.

In their analysis, the over all structure of narratives is classified as Orientation, Complication, Evaluation, Resolution, and Coda. This structure is similar to the story schema discussed previously. In the following will be a brief introduction to the five parts of narratives.

1. Orientation. The orientation section is characteristic of most narratives to a greater or lesser degree. It consists of a group of free clauses (which can range freely through the narrative sequence). These groups of free clauses, in terms of their relation to referential function, orient the listener in respect to *person*, *place*, *time*, and *behavioral situation*. The group of free clauses precede the first narrative clause, which is defined as a clause that cannot be displaced across a temporal juncture which separates two temporally ordered clauses. Not all narratives have orientation sections and all orientation sections perform the four referential functions. However, orientation sections are typically lacking in narratives of children and less verbal adults whose narratives fail in other ways to carry out referential functions to preserve temporal sequence.

2. Complication. The main body of narrative clauses usually comprises a series of

events which is complication or complication action. In many cases, a long string of events may actually consist of several cycles of simple narrative, with many complication sections. This technique of organizing string of events is used by practised storyteller. The complication is regularly terminated by a result.

3. Evaluation. The evaluation section is typical of narratives of personal experience. A narrative which contains an orientation, complicating action and result is not a complete narrative. It may carry out the referential function, and may be difficult to understand. Such a narrative lacks significance and the overall effect is confusion and pointless.

The evaluation of a narrative is defined as that part of the narrative which reveals the attitude of the narrator to the narrative by emphasizing the relative importance of some narrative units as compared to others. The fundamental definition of evaluation must be semantic, although its implications are structural. Evaluation can be done by a variety of means: a) semantically defined evaluation: direct statement and lexical intensifiers; b) formally defined evaluation: repetition; and c) culturally defined evaluation: symbolic action and judgment of a third person.

The functions of narrative have an effect on the narrative structure. A simple sequence of complication and result does not indicate to the listener the relative importance of these events or help him distinguish complication from resolution. We also find that in narratives without a point it is difficult to distinguish the complicating action from the result. Therefore, it is important that the narrator use evaluation to delineate the structure of the narrative by emphasizing the point where the complication has reached a maximum: the break between the complication and the result.

4. Resolution. The resolution of the narrative is that portion of the narrative sequence which follows the evaluation. If the evaluation is the last element, then the resolution section coincides with the evaluation.

5. Coda. The coda is a functional device for returning to the verbal perspective to the present moment. The codas are separated from the resolution by temporal juncture and they are frequently not descriptions of events, or of events necessary to answer the question "What happened?" This can be achieved by a variety of means: a) exixis, such as *that, there, those, and this, here, these*: an incident in which one of the actors can be followed up to the present moment in actions which may be relevant to the narrative sequences, for example, "and I see him every now and again;" c) extending the effect of the narrative on the narrator to the present moment, such as "I quit, you know. No more problems."

Although Labov and Waletzky's study was based on subgroups of American population and conclusions are restricted to the speech communities examined, they have outlined the principal elements of simple narratives which perform both referential and evaluative functions. However, when they proceeded to more complex narratives told by speakers with greater overall verbal ability, they found a higher percentage of narratives which duplicate the form of orientation, complication, evaluation, resolution, and coda. This is similar to the really recurrent functions of Propp's (1958) folktales. Function as defined by Propp is an "act of a character defined from the point of view of its significance for the course of action." Botvin (1976) modified Propp's functions

to make it suitable for any story. Botvin's 91 elements were subcategorized into beginning (introduction, preparation, complication), Middle (development), and ending (resolution, and ending functions.)

In their study of the oral narratives collected from children between three and a half and nine and a half years of age, Peterson and McCabe (1983) utilized the modified framework of Labov's narrative structure. Instead of Abstract and Coda, an appendages function is used to include abstracts, attention-getters, and codas. Peterson and McCabe categorized the children's narratives on the basis of their structure into classic pattern, ending at the point pattern, leap-frogging pattern, chronological pattern, impoverished pattern, disoriented pattern, and miscellaneous patterns. The results in their study showed that more older children could produce the classic pattern of narrative, which is the best in meaning and structure close to the overall narrative structure of Labov's.

Stein and Glenn (1979) deserves special mention in that they improved the schematic representation of story structure in such a way that information categories are more independent of syntax and inter-episodic relations are taken care of. In this episodic analysis model, a narrative is composed of setting statements and an episode system. The episode system may consist of only one episode or several episodes. A simple story usually consists of one episode in addition to its setting. However, an episode should include the following components: Initiating Event, Internal Response, Internal Plan, Attempt, Direct Consequence, and Reaction. In their analysis, each narrative is parsed so as to yield quantitatively the number of each component in the story schema. In parsing, units conveying important distinctions are defined as statements. Most sentences or clauses are separate statements, but a single sentence can be parsed into more than one statement, depending on whether a goal directed-action or a state or the goal is involved. In other words, when two informational categories can be found within the same sentence or clause, they will be parsed accordingly. For instance, the sentence "The man climbed up the ladder to pick pears" will be considered two statements, parsing "The man climbed up the ladder" as a goal-directed action, whereas "to pick pears" is the goal. In this way, statements in most cases correspond to Labov's (1967) clauses. However, parsing in Stein and Glenn's fashion is less tightly tied to syntax and more influenced by informational categories than are the clausal parsings of Labov's grammar.

A story schema is culture-specific and it will therefore reflect the comprehensibility of the story. Mandler and Johnson's (1977) subjects in their recall protocols were found to have distortions and omissions of the story when the text deviate most from the expectations based upon a Western story schema. In Kintsch and Greene (1978), as the Indian story does not conform to a familiar Western schema, the subjects had great difficulty in transmitting the story from one person to another.

Schemata have proved to be useful in story comprehension and are therefore assumed to be useful for tapping a language learner's retrieving and production processes. The process of learning English as a foreign language is similar to a child's development in literacy as reported by Freedle and Hale (1979) and Scollon and Scollon (1981). In order to search a sound theory of narrative structure so as to find ways to teach writing narratives in English as a foreign language, an experiment on

episodic analysis of English narratives written by Chinese learners will contribute to establishing a universal theory of narrative structure. Such an analysis along the line of schematic theory incorporating story grammar and discourse analysis will be done in this short paper in order to testify to what extent schema theory can be applied to teaching writing and analyzing narratives.

An Overall and Episodic Analysis of Two Narratives by Chinese Students

This experiment is an analysis of overall structure and episodic structure of English narratives written by two sophomore students at National Central University. These are original narratives written in class as composition assignment entitled "A Real Dream." No corrections have been made. In order to save space, they are parsed in their original format with original punctuation and capitalization. The only thing left out is paragraphing which does not affect the content and form of the original narratives.

The purpose of this study is to find if these two narratives written by Chinese students of English as a foreign language conform to the overall and episodic structures as reviewed in the first part of this paper. After the analysis, we will see if they are good or bad narratives regardless of their conformity to the structure according to the schema theory and find out what causes difficulty in comprehension and evaluation of the narrative. In other words, a complete narrative must have a setting, initiating event, internal response, internal plan, attempt, direct consequence, and reaction. A complete episode or several complete episodes make a complete narrative. Prologue and moral at the end of the narrative serving as an epilogue will be considered as optional for a complete narrative. An incomplete narrative lacks one or more than one of the obligatory components of setting, initiating event, internal response, internal plan, attempt, direct consequence, and reaction. On the other hand, if an episode lacks or illogically omits one or more than one major component in the narrative except for setting will be considered an incomplete episode. If an episode lacks inter- or intra-episodic relations in terms of causality, temporal sequencing, it will be considered a jumping episode. Furthermore, if a complete narrative includes the ideal elements of optional prologue and/or epilogue, it will be considered a super-complete narrative.

Definitions of terms used in this paper are given below.

Narrative: A written narration telling what happened in the real world or in an imaginary world decided by the author. It consists of a setting and an episode system.

Episode: An entire behavioral sequence with its own internal structure (Rumelhart, 1975). An episode consists of an initiating event, internal response and plan attempt, direct consequence, and reaction.

Episodic analysis: Parsing the informational statements to find out the over-all com-

ponents of the narrative, the internal structure, and inter and intra-episodic relations in the narrative.

Setting: Introduction to the main character(s) and describing the social, physical, or temporal context referring to long-term or habitual states of characters, or locations.

Event: An immediate cause for a response on the character's part.

Initiating Event: A change of state in the physical environment, an action performed by either the major or a minor character evoking a response in a character or an action originating in the main character, and internal event(s) such as the perception of an external state, that will cause a response in the main character.

Internal Response: The psychological state of a character after an event. Internal Response includes affective responses, goals, and cognitions.

Internal Plan: A series of statements that define a character's strategy for obtaining a change in the situation.

Attempt: The character's overt actions to obtain a goal and the resolution including the remainder of the story sequence.

Direct Consequences: To express attainment or nonattainment of the character's goal(s) and to make any other changes in the sequence of events caused by the character's actions, and to initiate or cause a character's reaction to the direct consequence.

Reaction: Statements defining how a character felt about the attainment of his goal or what he thought about it.

Parsing Narrative #1

Category Type	Type of Information	Statement
Prologue		1. One day, I dreamed a very strange dream. 2. It made me excited and fearful. 3. The dream was as follows.
Major Setting	State	4. When I had fallen asleep,
Initiating Event	Action	5. I suddenly feeled (sic) that someone was touching my toes,
Internal Response	Action	6. so I awaited.
Attempt	Action	7. I opened my eyes,
Direct Consequence	Action	8. and saw a young man looking at me.
Direct Consequence	Action	9. He began to talk.
Major Setting	State	10. I am a prince.
Initiating Event	Action	11. As I intended to succeed my father's throne last year,
Initiating Event	Action	12. I was almost assasinated by two jealous brothers.
Attempt	Action	13. The purpose of my coming here is to want you to help me.
Internal Response	Affective Response	14. I was excited and angry about this thing,
Internal Response	Goal	15. and I decided to help him.
Attempt	Action	16. I set out for his kingdom right now.
Direct Consequence	Action	17. I met a trouble just on my way to his kingdom.
Direct Consequence	Action	18. Many assasins are waiting for me.
Reaction	Affect	19. I was very anxious and afraid.
Reaction	Action	20. I awaited all of a sudden.
Reaction	Cognition	21. I was excited that I should be safe and sound without any hurt.
Epilogue		22. Although it was a dream, 23. It taught me a lesson. 24. We cannot do anything without plans, 25. and we would succeed when we had enough preparation.

Parsing Narrative #2

Category Type	Type of Information	Statement
Prologue		1. "Blood" I would cry out, 2. when the terrible dream appeared every time in the night. 3. Whenever I thought about it, 4. I regretted and blamed myself, 5. but it was no use anyway.
Major Setting	State	6. That was a summer day
Major Setting	Action	7. when I was driving a motorcycle on the road.
Major Setting	Action	8. I used to drive very fast
Major Setting	Cognition	9. because I thought that was exciting.
Initiating Event	Action	10. When I was passing through a crossroad
Initiating Event	Action	11. a child appeared within my sight.
Internal Response	Cognition	12. But it was impossible to stop the motorcycle,
Direct Consequence	Action	13. and inevitably, I hit him.
Direct Consequence	Action	14. A yell came out of his mouth,
Direct Consequence	Action	15. and I could see nothing but blood on his head.
Reaction	Action	16. I stood up
Reaction	Action	17. put him on my motorcycle
Reaction	Action	18. and sent him to the hospital.
Reaction	Action	19. I could do nothing but praying to God
Reaction	Goal	20. that he would be all right.
Epilogue		21. He was fine later, 22. but since then this terrible dream interrupted me almost every night. 23. I never thought that it took courage to drive fast on the road 24. while it took more courage to bear the regret.

Having seen the parsing of the two narratives, we can find that Narrative #1 is an incomplete narrative consisting of three incomplete episodes, namely, seeing the prince, the prince's request for assistance, and the narrator's setting out for the kingdom. On the other hand, Narrative #2 is almost a complete narrative because it has contained five components of a narrative, lacking internal plan and attempt. The two missing components do not seem to have marred the narrative structure to a great extent as we may understand why he did not make any attempt to devise a plan and to carry it out in order not to hit the child on spur of the moment. Nevertheless, this lack of an internal plan and attempt to avoid a collision makes it hard for us to believe. At least for humanitarian reasons, the cyclist should have either diverted his direction a little bit or slowed down his speed. Without taking any one of these two actions we doubt his personality. As far as this point is concerned, the story is somewhat unbelievable. If we feel it this way, an internal plan and an attempt are two obligatory elements in the structure of an episode.

Before going further into more details in our analysis, it seems evident that we can easily find a "point" in Narrative #2 and Narrative #1 seems pointless. On the surface, our explanation is the episodic structure in Narrative #2 is more "solid" than that in Narrative #1. Using our theory of information processing in schema theory, we can say it takes less time to comprehend Narrative #2 than Narrative #1 regardless of their length. Comprehension and processing are mainly determined by episodic structure. If more obligatory factors are provided in a narrative, it is easier to understand as the input is more comprehensible and it follows that such a kind of narrative is a better one.

Narrative #1 has three episodes, seeing the prince in a dream, the prince's request for assistance, and the narrator's setting out for the kingdom. But no one episode is complete in structure. Episode 1 lacks an internal plan and reaction; Episode 2 lacks internal response, internal plan, direct consequence and reaction; Episode 3 lacks internal plan and initiating event. Let us see what is missing in each episode. In Episode 1, the narrator did not contrive any plan before opening his eyes although he "waited." After "he began to talk" the narrator did not tell us whether he listened or in what manner he listened. There was no reaction upon seeing the young man or hearing his story. In Episode 2, the missing elements are the direct consequence of the plea and no reaction from the dreamer. In Episode 3, the dreamer had no plan whatsoever to "help him" and it makes the story sound phony; even though direct consequences and reactions are there in Episode 3, we still feel this episode is very nebulous. What causes this nebulosity despite the existence of obligatory factors in its episodic structure? The answer is not far to find: lack of causality and temporal sequence. This aspect will be addressed in the next section.

In Episode 1, Narrative #1, no inter-episodic relationship is established in reference to Episode 2: What is the relation between the dreamer and the prince? This lack of inter-episodic relation also causes our difficulty in understanding "I was excited and angry about this thing." Why was the dreamer angry if he had no connection or relation with the prince? In Episode 3, what bothers us the most is what his assassins did to him or tried to do to him and what he himself did in order to help the prince. Why was he safe? Did he win a battle in any confrontation with the assassins and his

enemy? Did he escape or did his enemy capture him and release him? All these intra-linkages are not provided and under such circumstances we as the readers of the narrative have to make inferences without any help from the information provided. In such a case, our information processing becomes a troublesome burden and the story itself naturally loses its meaning and our interest in it. It is difficult for us to find a point in it as far as intra-causality is not provided by the participants involved.

From the analysis in terms of episodic structure, we can conclude that Narrative #2 has an incomplete episode while Episode #1 has three incomplete jumping episodes. All the episodes in the two narrative are incomplete because of the lack of obligatory factors. Incomplete episodes may not do too much harm to our comprehension; however, jumping episodes are hard to understand because of their lack of inter- and intra-episode causality.

Two optional factors, prologue and epilogue, are all provided in Narratives #1 and #2. The epilogues in both narratives are hard to understand and sound somewhat illogical. It might be due to the poor skill of the writers in moralizing on some abstract ideas. But it is clear that the epilogue in Narrative #1 is somewhat far-fetched as it does not relate closely to the narrative itself and loses its causal linkage with the story proper. The narrative does not provide any clue as to his lack of preparation and does not tell us that his mission was a failure although we may be able to infer from the context since he was "afraid" and never evaluated the theme in any favorable tone. The missing linkage results in necessary inference on the part of the audience. Too many inferences not only impede comprehension but also overload the audience in terms of memory.

Schema theory has been widely used in cognitive science, in artificial intelligence and cognitive psychology. Episodic analysis or discourse processing has been conventionally adopted in evaluating children's language development as native speakers (Anderson and McCabe, 1983). But as we can see from this experiment that episodic analysis can be fruitfully applied to teaching writing in English as a foreign language. The technique of analysis based on theoretical concept of narrative has laid down the over-all structure of narrative which can nicely fit in our teaching narrative in English as a foreign language.

In commenting on student's composition, teachers tend to criticize the structure of the composition without elaborating on its deficiency because there is no theory to guide them. Now this episodic analysis seems to shed light on what the deficiency can be and how to avoid it on the part of the student. It is not only a powerful instrument in analysis but also a useful instrument in teaching narrative writing in any English as a foreign language program.

This experiment is very narrow in scope. It is intended to show that in teaching narrative writing we need a narrative theory and this theory can be used as our basis for structure of narrative. Tentatively, we can say that the theory of narrative structure is already there, incorporating artificial intelligence, cognitive science, discourse processing, linguistic analysis and psycholinguistics. And yet, this theory should be comprehensive enough to accommodate cultural-specific differences in narratives in cultures other than English. For instance, we do not comment on the use of prologue and epilogue in the two narratives in this study since their use may be in-

fluenced by the moral teaching in Chinese culture and learned from Chinese narrative. In this respect, we can find the limitation of this experiment should prompt us to widen our area of investigation so as to cover these narratives. After a corpus of Chinese and English narratives has been analysed and their structure identified and compared, we can then set up a theory of narrative structure for pedagogical purposes in teaching writing narrative in an English as a foreign language program.

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