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CHINESE ADULT READERS: A PSYCHOLINGUISTIC AND TRANSACTIONAL STUDY OF THE READING PROCESS IN CHINESE, WITH COMPARISON TO ENGLISH

presented by

Su-O Lin Tien

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in English

James C Stalker
Major professor

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CHINESE ADULT READERS: A PSYCHOLINGUISTIC AND TRANSACTIONAL STUDY OF THE READING PROCESS IN CHINESE, WITH COMPARISON TO ENGLISH

By

Su-O Lin Tien

A DISSERTATION

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ABSTRACT

CHINESE ADULT READERS: A PSYCHOLINGUISTIC AND TRANSACTIONAL STUDY OF THE READING PROCESS IN CHINESE, WITH COMPARISON TO ENGLISH

By

Su-O Lin Tien

This study examined and compared the reading behavior of readers of English and readers of Chinese using two Western theories of reading, Kenneth Goodman's psycholinguistic model and Louise Rosenblatt's transactional theory of the literary work, to determine if the processes involved in reading an alphabetical and a non-alphabetical writing system are the same or different. Two empirical research projects were set up for this purpose.

Study I, utilizing the framework of the Goodman/Burke Reading Miscue Inventory (1972), investigated how readers used their phonological, syntactic and semantic systems while reading. Ten adult Chinese readers were selected from students at Michigan State University and asked to read Lǔ Syùn's short story "Medicine" in Chinese. Their taped readings were analyzed according to the RMI procedures and then compared to the findings reported by Blair (1977), Jensen (1972) and Devine (1980).

Study II focused on the experiential aspects of the

reading process. It involved a quantitative analysis of ten readers' response statements using the Purves-Beach (1972) coding system, and a qualitative analysis of five individual readers' protocols. Rosenblatt's transactional theory served as a guiding principle for examining the readers' performances. The same readers served as subjects in both studies. In Study II, the readers were asked to comment on what they read both during and after their reading and the results were analyzed in comparison to relevant studies done with English readers (e.g. Pollock, 1972).

Some conclusions reached in Study I and Study II are:

(1) There are no fundamental differences between readers of English and Chinese as far as the basic reading process is concerned.

(2) The Chinese differ from their English counterparts in that their substitution miscues show less graphic and sound similarity to the text items.

(3) The miscues of Chinese readers with high graphic similarity tend to show high semantic acceptability scores.

(4) Chinese readers produced a set of miscues which are high both in graphic similarity and semantic acceptability, but very low in sound similarity.

(5) Perception is the dominant mode of response made by Chinese readers, followed by Interpretation, Self-involvement and Evaluation.

(6) Qualitative analysis of individual readers' protocols demonstrates that reading a literary text is an unique

experience for each individual reader. It is also clear that each of these unique personal reading experiences is activated by the symbols of the one single text.

(7) The readers respond not only to the verbal signs afforded by the text but also to their own evocation activated by the verbal stimuli.

(8) The distinction between aesthetic and efferent reading is usually a question of degree, rather than an absolute difference.

(9) By combining the Goodman's psycholinguistic model of reading and Rosenblatt's transactional theory of the literary work, we find a productive way to reconstruct the process of how a reader makes use of different levels of information and combines such information in constituting a literary work.

Dedicated to

Wei-hsin, John and Feng
with thanks and love.

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CHAPTER I

INTRODUCTION

Purpose of the Study

In The Meeting of East and West, F. S. C. Northrop argues persuasively that the East and the West could mutually benefit, perhaps even to the degree of helping each other save civilization, by increased contact of an intellectual kind. Each could learn something from the other because the two are not saying the same thing. Each expresses different yet complementary things, both of which are necessary for an adequate understanding on a world basis of man's personal and social fulfillment. As Northrop put it, "the Orient, for the most part, has investigated things in their aesthetic component; the Occident has investigated . . . things in their theoretical component" (1966, p. 375). Northrop's implied suggestion that theoretical concepts are not quite at home in the East is perhaps relevant only to the last four or five hundred years of Chinese history, the period of the Renaissance in the modern world. There can be no doubt, however, that Northrop's desire to bring about significant mutual understanding between East and West is certainly praiseworthy, for the history of the relationship is troubled by a number of deep and repeated misconceptions despite the good intentions of many people.

Perhaps no single aspect of Chinese civilization has

been more misunderstood by the West than the Chinese language in its written form. Some two hundred and sixty years before Northrop published his book, the great philosopher Gottfried Wilhelm Leibniz expressed similar hopeful sentiments about the potential value of East and West to each other:

> If we are their equals in the industrial arts, and ahead of them in contemplative sciences, certainly they surpass us (though it is almost shameful to admit this) in practical philosophy, that is, in the precepts of ethics and politics adapted to the present life and use of mortals (Leibniz, 1957, p. 69).

Yet, along with such praise of China, Leibniz exhibited some of the misunderstanding of the Chinese language and writing system that had already become a tradition in the Western World, going back at least to several of "the Jesuits of Canton," who believed that China got its writing system, and much else, from the West (Derrida, 1976, p. 330). Leibniz seemed to believe, or to want to believe, that the Chinese writing system was a one-time invention by one person and was, therefore, an artificial language (1949, p. 287). He was apparently ready to believe that the Chinese writing system grew out of ancient Chinese symbols called trigrams that were themselves derived from ancient Hebrew, possibly imparted during a supposed visit by Hebrew Patriarchs to China in the remote past (1977, p. 23). According to Father Joachim Bouvet, who spent the years 1688-1697 in China and who, on his return to Europe, corresponded with Leibniz, the Chinese got their original

writing system by imitating Hebrew characters, but then at some later time forgot that origin (Leibniz, 1977, p. 22).

Much has been written about the fascination in the Western world in the seventeenth and eighteenth centuries with the Chinese writing system, as philosophers sought for the principles with which to construct an ideal universal language. James Knowlson in Universal Language Schemes in England and France (1975), Paul Cornelius in Language in Seventeenth- and Early Eighteenth-Century Imaginary Voyages (1965), and Jacques Derrida in Of Grammatology (1976) are among the many who have written about the Western obsession with the Chinese character script in the search for "the real character," "the universal characters," that was intended to provide Western philosophers with the kind of point-by-point, item-by-item system of naming and describing in writing the contents of the universe that they supposed the Chinese writing system offered the scholars of Asia. "The concept of Chinese writing . . . functioned as a sort of European hallucination," Derrida writes (1976, p. 80). What Derrida calls "the Chinese prejudice" brought Westerners to "hyperbolic admiration" of the Chinese script, Westerners as early as Francis Bacon and as recent as Ezra Pound.

In Knowlson we read about Bishop Francis Godwin's seventeenth century fantasy, The Man in the Moone or A Discourse of a Voyage Thither by Domingo Gonsales, the Speedy Messenger, in which the hero flies to the moon

helped by birds), learns that moon people speak a language of "tunes," and returns to the earth but lands in China, where he is able to learn the language quickly, since Chinese people also speak in tunes, each tune being associated in some way with a Western alphabetical letter (1975, p. 117).

The misunderstandings in the West of the Chinese language, especially in its written form, are too numerous to survey in even a preliminary way and are not the subject of this dissertation. They are, however, evidence of the need to clarify the differences and similarities that exist between the two writing systems, the Chinese character-script system and the Western alphabetical system. Such an investigation inevitably involves the process of reading, for, of course, writing systems came into being for the purpose of being read.

Undoubtedly the most famous modern example of the Western tradition of misunderstanding the nature of the Chinese writing system is that manifested by Ezra Pound and his mentor, Ernest F. Fenollosa. Fenollosa admired Chinese characters and character combinations as intensely as the most devoted seventeenth-century enthusiast, but Fenollosa turned the Western tradition of misunderstanding the Chinese script upside down. The earlier enthusiasts had supposed that the Chinese writing system was an essentially scientific way of naming and describing each separate piece of the universe, that each character directly represented

nature, and was thus a "real" character. Fenollosa took an exactly opposite position; he believed that the Chinese language as embodied in its writing system was essentially creative and poetic, far more so than any Western alphabetical language could possibly be. In The Chinese Written Character as a Medium for Poetry Fenollosa writes:

> I have alleged all this because it enables me to show clearly why I believe that the Chinese written language has not only absorbed the poetic substance of nature and built with it a second work of metaphor, but has, through its very pictorial visibility, been able to retain its original creative poetry with far more vigor and vividness than any phonetic tongue (1936, p. 24).

Western languages, because encased in a phonetic writing system open to what Fenollosa believes to be the abuse and erosion of speech, suffer by comparison with Chinese which, because its written character remains the same despite whatever pronunciation changes take place, retains its original, primitive, metaphoric richness.

> In this Chinese shows its advantage. Its etymology is constantly visible. It retains the creative impulse and process, visible and at work. After thousands of years the lines of metaphoric advance are still shown, and in many cases actually retained in the meaning. Thus a word, instead of growing gradually poorer and poorer as with us, becomes richer and still more rich from age to age, almost consciously luminous. Its uses in national philosophy and history, in biography and in poetry, throw about it a nimbus of meanings. These centre about the graphic symbol . . . . Their ideographs are like blood-stained battle-flags to an old campaigner (1936, p. 25).

Chinese symbols are visual manifestations of an original ancient metaphor, says Fenollosa, but he goes on to admit that these ancient visual metaphors are nowadays forgotten

and no longer traceable. He rejects the very possibility that in some cases perhaps they never existed.

As Hugh Kenner has shown in The Pound Era (1971, p. 204), when Ezra Pound worked from Fenollosa's notebooks in producing Cathay, he compounded Fenollosa's mistakes with his own. Even with these mistakes, however, Kenner believes Pound's translations are better than Arthur Waley's, though Waley knew Chinese and Pound did not (p. 195). But it cannot be argued that Pound and Fenollosa were corrected in their beliefs about the nature of the Chinese writing system. Both rejected the possibility that the meaning of some Chinese characters or combinations might be at least in part phonetically, not visually, determined. Fenollosa and Pound were still under that spell which the Chinese writing system has cast over many Europeans since the seventeenth century--what Derrida calls "the Chinese prejudice."

The Chinese writing system does, indeed, offer traps for the Westerner, not only for the unwary amateur but even for the careful scholar, as John K. Fairbanks, the eminent historian of China, has pointed out.

> If asked, "Do you read Chinese?" one answers, "No, only some kinds of Chinese." This is because the Chinese writing system has a different vocabulary of special terms for each special branch of learning or literature, yet each vocabulary may use the same characters, which are therefore laden with ambiguity, with the result that the special vocabularies have to exist in the mind of the beholder. They are not self-evident in the script . . . . Many weaknesses stem from this difficulty of the writing system. Reading widely in the styles of classical Chinese is quite beyond the capacity of most of us (1976, p. 222).

The difficulty of the writing system affects not only Western scholars but native speakers as well.

> As students of Chinese will tell you, the problem in reading the language is not to recognize the characters or even to find them in a dictionary but to decide what shade of various possible meanings they bring to the particular passage or context in which they appear. A Chinese character is an onion of many layers. The trick is to decide which one you want to use--verbal, nominative, or modifying; literal root meaning or extended abstract meaning (1976. p. 241).

Given the misunderstanding on the part of the West about the Chinese language in its written form, and given the real difficulties of some written Chinese for many Chinese speakers, we can legitimately wonder if the reading of the Chinese script is a process different from that employed in reading the alphabetical languages of the West.

This dissertation is designed to examine the reading behavior of Chinese readers using two Western theories of the reading process in an effort to answer the question of whether the reading processes these two writing systems involve are basically different or the same. The Western theories under discussion are Kenneth Goodman's psycho-linguistic theory of reading and Louise Rosenblatt's transactional theory of the literary work. The present dissertation appears to be the first application of these two theories of reading to a non-alphabetical language. In the past ten years, sixty major research projects in miscue analysis have been conducted within the framework of Goodman's psycholinguistic model. However, these studies

are centered on the oral behavior of subjects whose written languages are alphabetical. Except for the present study, apparently there has been no miscue research in non-alphabetical writing systems, such as Chinese. Chinese is a logographic writing system, the sound-spelling correspondence of which is not so obvious as in an alphabetic orthography. In this respect, to study how a Chinese reader makes use of his language system to arrive at meaning may shed some light on our understanding of the relationship between sound and spelling in the English language, a matter of controversy that has existed in the United States for over sixty years.

In her 1979 book Education and Popular Literacy in Ching China, Evelyn Rawski shows that even in eighteenth and nineteenth century China, a broad range of the male populace, including both peasants and urban dwellers, learned to read and write. Although the Chinese writing system consists of hundreds of thousands of different characters and character combinations, the Chinese have maintained a high rate of literacy, according to Rawski. If true, this is a fact of some importance in the matter of reading, East and West, for it has been widely assumed in the West that the Chinese writing system has kept the people illiterate. It is both interesting and instructive to apply the Goodmans' miscue analysis and Rosenblatt's transactional theory of reading to a language which is as utterly non-Western as Chinese. In accomplishing this

objective the procedure of this dissertation is two-fold. In the first place, this study examines how Chinese readers make use of their language system in the process of reading. Secondly, it investigates how Chinese readers respond to the reading of a short story, during and after their reading of the text. On the basis of the evidence provided, this dissertation asserts that THE READING PROCESS IN CHINESE AND THE READING PROCESS IN ENGLISH ARE ESSENTIALLY THE SAME PROCESS DESPITE THE DIFFERENCES IN THE WRITING SYSTEMS.

A Brief Description of the Research Design

Study I

The first study, Study I, is primarily designed to provide some preliminary answers to the question of how Chinese readers make use of their underlying language systems in the process of reading. Study I duplicates the research design originally developed by Yetta Goodman and Carolyn Burke and presented in their 1972 book, Reading Miscue Inventory Manual: Procedures for Diagnosis and Evaluation (RMI). The Goodman and Burke RMI procedures were based on the psycholinguistic model of reading originated by Kenneth Goodman and other psycholinguists who are interested in the reading process. The basic assumption of this reading model is that reading is systematic and rule-governed behavior which involves the interplay of all the parts of the whole language system. According to the Goodmans and other researchers, by looking at the overt oral responses of the readers in question, the researcher should

be able to discover patterns which describe and explain the product and the process of reading as well. There is much research in reading miscues done with English speakers which supports the Goodmans' argument. The present study is the first attempt to apply this psycholinguistic model of reading to the readers of Chinese to test whether there is a universal reading process as proposed by K. Goodman 1973c). Ten mature adult readers of Chinese were used as the subjects of this study.

Study II

Study II makes use of Rosenblatt's transactional theory of the literary work to answer the following questions:

(1) What kinds of responses do Chinese adult readers make to a short story?

(2) Is there any evidence which indicates that reading in Chinese involves simultaneously the reader and the text? If there is, how, where and when does this evidence appear?

(3) Does the unique nature of the Chinese writing system have any special and obserable effects on the readers' reading behavior?

The ten readers who did the oral reading for the RMI in Study I were the same readers for this Study II. These ten readers were asked to report any feeling, or thought, that came to their minds both during and after their reading. After they had completed the reading of the whole story, they were asked to comment on any additional feelings or thoughts about the story as a whole. The responses made by the readers were recorded. All of the data thus collected were then subjected to a content analysis, a system

originally developed by Purves and Rippere as presented in Elements of Writing about a Literary Work: A Study of Response to Literature (1968), and later revised by Purves and Beach (1972). The findings obtained from the content analysis were further compared to some relevant studies done in English (e.g., Pollock's 1972 study). In order to study the Chinese readers' reading behavior in greater depth, the content analysis of the data was complemented by some closely-scrutinized case studies.

A Brief Account of the Chinese Language

Before going into a detailed discussion of the data collected for this research, a brief description of how Chinese characters are constructed is necessary.

Since Westerners first encountered the Chinese writing system, they have given it many names. It has often been called a pictographic writing system. According to people who hold this particular view, the basic units of the script are pictographs, which originated as pictures of objects and still embody those pictures in their present state. This judgment of the nature of the Chinese writing system is true only as far as its origin, and perhaps also its early stages of development, are concerned. Very few characters can still be seen as pictures today. Another common belief about Chinese is that it is an ideographic writing system in which the visual symbols (ideographs)

are directly related to "ideas" or abstract concepts of objects, acts or qualities. The claim that Chinese is ideographic writing is also valid only to a certain extent, because the number of Chinese characters that are purely of this type is also very small.

Chinese characters are constructed in several different ways. They can be classified into six categories according to the traditional division of the Chinese writing system now almost two thousand years old. Only five classes will be introduced here since the class called 轉注 jwǎn jù has never been clear in its nature and there are very few established examples of characters that can be clearly assigned to this class. The other five classes are as follows:

1. Pictographs: Pictographs are characters that are derived directly from pictures of objects. Their pictorial aspects are not so clear in the present forms, but the straight-forward pictures of objects can still be seen in the primitive shapes, as in the following examples:

	Primitive forms	Present forms
SUN		日
MOUNTAIN		山
EYE		目

HORSE  

COW  

2. Ideographs: Ideographs are characters meant to stand for various abstract concepts, such as acts or events, as in 上 shàng 'up,' 下 syà 'down,' 一 yi 'one,' 二 èr 'two,' 大 dà 'big' (having the connotation of a man looking big or trying to look big).

3. Compound Ideographs: Compound ideographs are characters which rely for their meaning on the combination of the meanings of their parts. One famous example is 明 míng 'bring,' consisting of 日 'sun' and 月 ywè 'moon.' Another example is 武 wǔ 'military,' consisting of 止 jǐ 'to stop' and 戈 gē 'arms,' meaning "a war to end all wars" 東 dūng 'east' is said to consist of 日 'sun' rising behind 木 mù 'tree.'

These three types of characters are often thought to be representative of Chinese writing, but in fact, they represent types that are used in the formation of only a small number of the total Chinese character inventory. This important fact was not realized in the Western world for almost three hundred years. As a consequence there has persisted a profound misunderstanding in the West about the real nature of the Chinese writing system.

4. Phonetic loans: Phonetic loans occurred when a character was borrowed from one word for a word which is pronounced exactly the same way but does not have a written form. The meanings of the two words are nevertheless, quite different. For example, the form 來 lái, originally a pictographic character meaning '(a kind of) grain' began to be used as a homophonous word for 'come'. This class of characters clearly demonstrates the error of the notion that Chinese script never really got past its pictographic state.

5. Phonetic Compound: In a phonetic compound, a group of characters is phonetic in conception. About nine-tenths of modern Chinese characters come under this category. In this class, each character consists of two parts. One part is a phonetic which suggests the pronunciation, while the other part, a signific (or radical) will give, in a very general way, some part of the meaning of the character. For example, 訪 fǎng 'to visit' consists of a signific which means speech, indicating that it has something to do with speech, and a phonetic 方 fāng 'square' serving as a guide to the pronunciation. With alteration of the signific, the character can become 坊 fāng 'district' or fǎng 紡 'to spin', or 房 fáng 'house' (upper part is the signific, lower part the phonetic), or 放 fàng 'to put' (left sounding, right signifying). In this example, the principle of phoneticization seems to work, because the constant phonetic element 方 (fāng) does really give a clue

to the pronunciation of the various characters which use it, if we are willing to disregard the tone. However, tone in Chinese is phonemic. Changes in tones may result in changes in meaning. In this regard, as a clue to sound, the phonetic, at its best, can only suggest the basic sound itself. There is no indication in the phonetic concerning which tone to choose.

But the example cited above can be considered a good one. It is good in the sense that the phonetic 方 fāng at least gives some indication of how to pronounce the sound segments of these words. There are cases in which the phonetic can not even give a reliable clue to the sound components. For instance, the phonetic 隹 jwēi, in the character 錐 'an awl' is to be pronounced as jwēi, but in the word 惟 'only' or 'however' it is pronounced as wéi, in 誰 'who' as shéi, in 進 to 'proceed' as jyìn, in 堆 'to pile' as dwēi, and in 崔 'a Chinese family name' as tswēi, etc. One phonetic may have more than one possible pronunciation. A reader does not have any access to the pronunciation unless he or she already knows how the word should sound. On the basis of this inherent confusion and the fact that this phonetic-compound class of characters accounts for about 80-90% of modern Chinese characters in the research it might be expected that there would be some graphic and sound miscues of the Chinese readers which would come under this category. In fact, a

considerable number of miscues of this type were found in the data analyzed in the present study. A more detailed discussion of how to deal with this type of miscue is presented in Chapter III.

The preceding passages present a short description of how Chinese characters are put together. What now follows is a brief account of some specific features of the Chinese language which may have some effects on the Chinese readers' reading behavior relevant to this study.

Chinese is not an inflectional language. Chinese does not have number distinctions in its nouns. Since the forms of nouns are the same for both singular and plural meanings, the concept of agreement between noun and verb does not apply. In addition to this, the Chinese verb does not conjugate, and has neither tenses nor moods. Instead, Chinese uses word-order and markers to make structural distinctions that other languages make by means of inflection. Furthermore, the clear distinctions between verbs, nouns and adjectives which exist in English do not exist in Chinese. In short, a word in Chinese may serve as a verb, noun or adjective depending on its immediate context. Since these specific characteristics of the Chinese language may facilitate the task of reading, especially in oral reading, it should not be surprising that the readers of Chinese analyzed in this study did not produce many grammatically unacceptable structures when miscues occurred. The deviations from the text the

readers made could change the meaning of the original sentence or affect the semantic acceptability of the text words, but as far as the grammaticality was concerned, it was seldom affected by the misread structure.

The written-language style of modern Chinese seems to be another feature which was reflected in the patterns of miscues of the Chinese readers in their oral reading. Chinese is a morpheme-syllable language in which each syllable, known as a character, corresponds closely to a morpheme. Since the overwhelming majority of Chinese morphemes are mono-syllabic, each character is almost always a syllable. This does not mean that the words of Chinese are all mono-syllabic. In modern spoken Chinese, even though the majority of morphemes are still mono-syllabic, words often contain more than one syllable.

The classical writing style, called 文言 wényán 'literary language,' represented the norm of writing in China until the beginning of the twentieth century. It was the impact of Western civilization that made some Chinese scholars realize the importance of mass education and social progress. The main obstacle to social progress was, according to the revolutionists of the May 4th Movement in 1919, "the gulf between common speech and literary usage." They rejected the classical 文言 wényán as a proper means of written communication. As a result, the classical 文言 wényán was abandoned and in its place the

standard spoken Chinese was used as a new written language style. However, in spite of the fact that the classical 文言 wényán was rejected as the norm for written language, many of the phrases of 文言 wényán and some of its features are still being used today in writing. Classical Chinese has been valued by the Chinese people for thousands of years, and they have been unwilling to turn away from its vast literary heritage. Most of the educated people felt that the written language was verbose and redundant when its style conformed to the style of the spoken language. Consequently, the spoken language never really became the norm for written style in China. The accepted new written style of modern Chinese is a mixture of the new and the old, a mixture of the spoken language and wényán. This mixture has developed not only as a standard for written language but also for daily oral language as well. As P. Kratochvil observed:

> The classical wényán was rejected as a means of written communication as a whole, but some of its features have still been utilized in writing, and through writing, they have also penetrated into the oral standard (1968, p. 136).

In the study of the Chinese readers' miscues in their oral reading, examples emerge which demonstrate the fusion of the classical writing style and standard spoken Chinese as described by Kratochvil. The general features of the Chinese language presented here will prove useful in the presentation and discussion of the actual data in the subsequent

chapters, particularly in Chapter III, the analysis of the miscue data. In Chapters II and IV, two theories of reading which are utilized as the theoretical foundations for the two studies in this dissertation along with some related research are presented. Chapter V presents and analyzes the Chinese readers' responses to the reading of a short story. A description of the sample selection and data analysis as well as a comparison of research done with readers who are native English speakers are included. Finally, in Chapter VI a discussion of the relationship between the text and the reader based on the findings of the present study along with conclusions and recommendations for future research are proposed.

CHAPTER II

THE PSYCHOLINGUISTIC VIEW OF READING

Two theories of reading are used as the theoretical basis for investigating the Chinese readers' reading behavior in this dissertation. The first theory is the psycholinguistic view of reading developed by Kenneth Goodman and many other psycholinguists whose research has led them to the conclusions that reading is an active and meaning-oriented process. The second theory of reading, which will be presented in Chapter IV, is the transactional theory of reading developed by Louise Rosenblatt as a result of her actual experiences as a reader and as a teacher. In spite of differences in orientation, these two theories of reading share some very important insights into the process of reading, a process which is examined in this dissertation by studying the reading performance of the Chinese readers.

In his influential and controversial book, The Structure of Scientific Revolutions (1962), Thomas Kuhn challenged the traditional "accumulation mode" of scientific knowledge. Kuhn rejected the notion that progress in science is the result of the accumulative growth of factual discoveries, improvement in methods and theoretical generalizations. According to Kuhn, science advances not in a linear but in an alternating fashion. Kuhn's concepts of the growth of

scientific knowledge might be true for advanced, mature science, especially for the physical sciences, but in the field of social science, this would not always be the case. In the area of reading, for example, what makes the psycholinguistic model of reading important is not an outcome of a "sudden flash of insight" but of the continuous, accumulative contributions of numerous psychologists, linguists and psycholinguists. The invaluable research in eye movements conducted about one hundred years ago certainly contributed to our understanding of the reading process today. In other words, the existence of the psycholinguistic view of reading today is the result of the efforts and contributions of a large number of theorists and researchers interested in a model that takes both mind and language into account. The phrase "psycholinguistic view of reading" defines an area larger than the research of any one person. That having been said, it must also be made clear that the version of psycholinguistic reading theory to which this dissertation is most indebted is that originated by Kenneth Goodman and developed by him and his associates through two decades of substantial research.

According to Kenneth Goodman, reading is ". . . a phycholinguistic process, one in which the reader functions as a user of language" (1973, p. 1). In describing this model of reading he states:

> . . . reading is not a precise process of letter or word recognition but is in fact a process in which prediction, selection, and sampling of cues, and subsequent testing by syntactic and semantic screens occurs (1973, p. 2).

Several important concepts which are central to Goodman's miscue analysis and to the psycholinguistic view of reading are revealed in this statement. Especially crucial are the three key notions, namely, sampling, prediction and selection, which are the main focus of the present discussion.

One of the key operations which forms the nucleus of the Goodman's reading model and the psycholinguistic view of reading as well, is that reading can be accomplished by sampling the "visual information" or "graphic signals," without going through the stages of letter or even word identification. The viewpoint that visual information is sampled rather than exhaustedly analyzed is extremely important, because it is one of the fundamental concepts which distinguishes this model of reading from the structural or phonic methods. The psycholinguists who claim that reading does not involve a precise identification of letters and words are able to draw some evidence from empirical research to support their arguments. Studies in eye movements are probably the earliest proof that readers cannot possibly process all the printed material in a continuous, sequential way. Classical experiments on eye movements were conducted by Raymond Cattell in 1885 and 1886. It was found that within an exposure of 10msec only three

to four unconnected letters could be read, whereas in this same time two unconnected words could be read and as many as four connected short words. Furthermore, it was also found that it took a longer time to name letters than to name words. Catell concluded from these results that words were not read letter by letter, but as a whole (reported in Huey, 1908; Gibson and Levin, 1975). These results were further confirmed by Erdman and Dodge in 1898. They observed that readers did not read in a sequential, step-by-step, linear order. Rather, the eye movements in reading were quick jumps (saccades) from one fixation to the next. In addition, the reader's eyes did not always jump forward. Very often the jumps ahead were interruped by equally sudden movements back to the lines of the text that had been scanned (see Huey, 1908; Gibson and Levin, 1975). There are also a number of other sources of evidence supporting the idea that the identification of words need not depend on prior letter identification. For example, there is evidence that word identification is too fast for letter-by-letter analysis (Pierce and Karlin, 1957; Neisser and Beller, 1965). Also relevant are the demonstrations made by Frank Smith (1969) that words can be identified in conditions under which none of their component letters are individually discriminable.

Reading units at least as large as words are obvious. But does a reader have to process every single word?

According to the psycholinguistic theory of reading, the answer is negative. Research on the rate of reading indicates that the average reading rate of college students is about 300 words per minute. If a reader proceeded by a serial scan, he would not be able to read as fast as 300 words in a minute (Kolers, 1970). Research on the rate of reading also shows that there is a correlation between speed and comprehension (Huey, 1908). The slow readers who labored for exact understanding of every word and phrase were usually comprehending less than the faster readers who skipped words and phrases here and there but were able to read through a passage rapidly. Such empirical studies seem to support the claim that reading is not a linear visual process.

Another strong support for the view that reading is not a linear process comes from recent linguistic theory. A major linguist who has had definite influence on the development of the psycholinguistic view of reading is Noam Chomsky (1957). His distinction of the surface and deep structures together with his claim that there is no simple correspondence between the physical aspects of a sentence and its meaning provide some theoretical basis for the psycholinguistic reading model. The statement made by Frank Smith in the following quotation serves as a good example. "You cannot simply take a sequence of sounds or of printed words and immediately derive a meaning

from them, because there are aspects of meaning that are not present in the spoken or written words" (1973, p. 29). That is to say, to know how words are joined together to form a sentence it is necessary to understand the full meaning of a sentence. "Grammar is the key to comprehending language" (Smith, 1971, p. 38). The Chomskian notions of surface structure and deep structure and of syntax as a bridge between these two levels of language form the theoretical foundations for the position that the meaning of a sentence is not the sum total of the meanings of the individual words that comprise it. And by implication, if reading is for meaning, then it cannot be just a simple process of visual information processing.

The second key notion which characterizes the psycholinguistic view of reading is the idea that reading involves a process of prediction. According to Kenneth Goodman, reading is a "psycholinguistic guessing game" in which the reader

> as a user of language has both syntactic and semantic input to relate to graphic cues and interact with them. He uses graphic cues, perhaps supported by related phonological cues, to help predict grammatical sequences; he uses graphic and grammatical cues to trigger the search of his memory for related meaning; and he uses all, in turn, to predict subsequent input (1972, p. 154).

There are several important assumptions in this notion of prediction. First, the thesis that a reader is able to predict language structure is built upon the assumption that a reader brings into his reading his knowledge of the

oral language. K. Goodman (1970) described the relation between oral language and reading: "When a child undertakes to learn to read at the age of five or six, he is already a skilled user of language." From his past experience in acquiring the oral language system a child has already learned that language is systematic and rule-governed. A child does not put words together randomly even as early as the age of two. Instead, he constructs his first two-word sentences according to a rule, his first grammatical rule. This first grammatical rule is not found in adult language, but a child persists in using it, testing it and modifying it until finally he gets to the adult grammar. This hypothesis-testing is the fundamental mechanism of a child's oral language acquisition. The child who reads carries this hypothesis-testing process together with his knowledge of the oral language to the reading activity. "His ability to recreate meaning depends on this ability to associate those experiences and the concepts he has formed through them with the language" (Goodman, 1970).

Central to the notion of prediction in reading is the assumption that language is systematic and rule-governed. Strongly influenced by Chomskian Transformational Grammar, the psycholinguists took the view that the grammar of English consists of a set of rules for producing all the grammatical sentences and only the grammatical sentences. According to this view, grammar consists of a set of rules for distinguishing the grammatical sentences from the ungrammatical

sentences in the language. These rules, known to both the writer and the reader, are vital sources of the information that is necessary for effective communication.

English, like all natural languages, is systematic. There are certain kinds of regularities observed. For example, a verb tends to follow its subject and to precede its object; a preposition tends to be followed by its substantive. And if one reads the phrase no more, he expects to come upon a than; if one reads however at the beginning of a sentence, it is a yet, a still, or a nevertheless that he expects. A noun in a certain position requires a verb in a certain mood and number; in another position it demands a relative pronoun. Adjectives call for nouns, and so forth. English words are thoroughly organized according to a set of general grammatical rules and logical usages. Furthermore, hundreds of phrases and sentence structures have occurred so often in speech that they have a place in the mind and only a slight glimpse is needed to start the recognition. This kind of syntactic regularity in language allows readers to predict the sentence structures that they are reading. In Frank Smith's judgment syntax has a special function in this regard:

> Analysis of meaning at the deep structure level leads to the analysis of the surface visual structure. Syntax is a tool that the fluent reader uses to predict what the surface representation should be, and he needs only a minimum of visual cues to provide a confirmation of that prediction. . . (1971, p. 221).

Miller and Isard (1963) have also shown that the intelligibility of a sentence depends on whether it follows syntactic and semantic rules. Sentences which break semantic and syntactic constraints, such as "Tox ims glerf onmo nerbs" are more difficult to process than "The tox ims have glerfed the onmo nerbs," which in turn is more difficult than "The bad boys have chased the poor cats." The Miller and Isard experiment was conducted to demonstrate that readers do possess a knowledge of grammar and make use of this knowledge when it is necessary.

According to the psycholinguistic view of reading, syntactic prediction is a common practice among proficient readers. When a reader comes to a printed page, he comes with certain syntactic expectations. If the expectations fail to be correct, for example if what follows a noun phrase is not a verb or a verb phrase, he regresses or stops and reads the line again.

A cognitive process depends to a very great extent on the human capacity to anticipate elements in the sequence of experience. Because of the connections and relationships among incoming elements and of their tendency to cluster together in predictable ways, it is expected that certain kinds of things will follow from certain others. For instance, if a person hears someone speak his name, he usually looks in the speaker's direction. And he would be shocked, or at least surprised, if his expectation failed

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to be correct. The same kind of capacity is also found in reading.

In addition to the grammatical knowledge, a reader also brings with him his knowledge of the world into reading. A reader not only appears to seek out, either consciously or unconsciously, the underlying patterns that govern language as he reads, but he also forms his prediction of meaning based on his past experience and conceptual backgrounds. Huey (1908) pointed out in his The Psychology and Pedagogy of Reading that "in the second reading nearly one-third of the total time was saved." What this finding demonstrates is that some prior knowledge about the subject matter of the written material can be very helpful both in increasing the understanding of the text and the reading speed. In reading for comprehension, according to the psycholinguistic view of reading, there must be a "point of contact" between what is expected and what is already known. As Smith (1975) has noted: "Comprehension means relating new experience to the already known." Anything that cannot be associated with a personal "theory of the world" is nonsense, regardless of how meaningful it might appear to anyone else. Ulric Neisser and other researchers in cognitive psychology have offered versions different from, but compatible with, Frank Smith's account of the theory of the world.

One psycholinguist who has greatly emphasized the importance of the reader's prior knowledge about the material he is reading is Paul Kolers. In his "Introduction" to Huey's The Psychology and Pedagogy of Reading Kolers states "what the reader 'finds' in the printed pages reflects his knowledge, his assumptions and many other cognitive events that carry him beyond and give significance to the text itself" (Huey, 1968, p. xxv). Kolers seems to suggest that what the reader brings to the written material is as important as, probably even more important than, the text itself. It might explain why when a reader is confronted with totally unfamiliar material, his comprehension spirals down. It is not because he does not recognize the words, but because he is not familiar with the material. There is no "point of contact" that he can establish between what he expects to see and what he knows. K. Goodman is expressing the same idea when he says "all readers are illiterate in some senses, since no one can read everything written in his native language." (1973c, p. 25).

In sum, in order to make the strategy of prediction possible in reading, one needs to have two kinds of information. The reader must have the knowledge of his language, and the reader must know something about the world in general.

The third key operation in the psycholinguistic view of the reading process is selection. If reading is not simply a visual activity, then how does a reader handle all of the visual display in front of his eyes? Frank Smith proposed an answer to this question by saying

> it does not matter how much information enters the visual system, a reader can get only four or five items through the processing bottleneck into short-term memory. So, he must choose the four or five items that will best meet his information needs (1971, p. 94).

According to Frank Smith, it is the brain that makes the decision about what is seen. And what the brain sees depends on what is known, what is expected to be seen or what is anticipated (Smith, 1975, pp. 26-27). The brain is selective. Usually when too much visual information is exposed to the eyes at once, whatever is beyond the capacity of the brain to handle is ignored. The brain selects and processes only that information which is thought to be crucial and necessary. How precisely a reader selects his items is unknown because there is no reliable indicator of how the brain is working while reading. Nevertheless, the fact that the more familiar the subject matter of the text is, the faster and easier a reader can read seems to suggest that the reader's prior knowledge about the material may play an important role in the reading process.

Yetta Goodman and Carolyn Burke in their 1980 book Reading Strategies: Focus on Comprehension mention some factors which might affect readers' choices about which chunks of information are to be retained. Two of the most important ones are "the purpose of reading" and "the relationship of what I am reading to my view of the world" (1980, p. 8). The selections that a reader will make are always related to the purpose he sets for himself. If the information is not important or is irrelevant, according to Goodman and Burke, the reader will either ignore it or forget it. As for those chunks of information which are selected, they will be further integrated into the reader's belief system or his storehouse of knowledge.

We have discussed the three basic principles which form the nucleus of the psycholinguistic view of reading separately. However, it is important to remember that when a reader is in the act of reading these three key operations are working together as a unified single process. Indeed, the psycholinguistic view of reading can be described in the following way: reading is an active interaction between the reader and the text (created by the author) as the reader strives to get at meaning. The reader, any reader, comes to a piece of written material with certain kinds of expectations. The reader, guided by his knowledge of the language, looks at the text, forms his prediction, and samples it to see whether the meaning he predicts is the

same as that presented by the text. It is when his expectation is frustrated that he readjusts his reading. He regresses to correct his expectation or resorts to sounding out letters, words or using any visual information that is available to him. This process of reading is most vividly summarized by Kenneth Goodman in the following passage:

> . . . the efficient language user takes the most direct route and touches the fewest bases necessary to get his goal. He accomplishes this by sampling, relying on the redundancy of language and his knowledge of linguistic constraints. He predicts structures, tests them against the semantic context which he builds up from the situation and the ongoing discourse and then confirms or disconfirms as he processes further language (1973c, p. 23).

It is on the basis of these premises that the Goodman Taxonomy and the Reading Miscue Inventory (the RMI), a shorter and simpler version of the taxonomy, were developed as a means to examine and to provide some concrete evidence about how a reader processess the printed material before his eyes.

Miscue Analysis

Miscue Analysis was originally developed by the Goodmans as a tool to investigate the nature of the reading process by analyzing the reading errors produced by readers in their oral reading. As Kenneth Goodman said, miscue analysis has provided "windows" to look into the nature of the reading process. The central notion here is that miscues, or deviations from the text, are not simply random errors on

part of the reader, but rather parts of the total reading strategy. By looking at the overt responses of the readers in question, patterns which describe and explain the product as well as the process are discovered. By discovering the patterns of miscues that characterize a given reader, valuable insights into how this reader reads are gained.

Miscue analysis was first reported in a study by Kenneth Goodman in 1965. Goodman studied the oral reading of 100 subjects in grades one, two and three in Detroit. The results revealed that young readers at times regress in their reading primarily to get at meaning. Goodman found that children were able to recognize words read in context that they could not read in isolation. The study concluded that children are increasingly efficient in the use of the syntactic and semantic cue systems.

A result of this initial study in miscue analysis was the first version of the Goodman Taxonomy of Cues and Miscues in Reading (Kenneth Goodman, 1969). Yetta Goodman and Carolyn Burke (1972) designed the Reading Miscue Inventory based on the Goodman Taxonomy. A shorter form of RMI has also been designed by Y. Goodman, Burke and Lindberg (1974). It is this short version of RMI that is utilized as an instrument for analyzing the Chinese readers' oral miscues in the present dissertation (Appendix A).

The techniques and procedures of miscue analysis research are based on the theoretical assumptions embodied

in the psycholinguistic view of reading discussed in the previous section of this chapter. One of the most fundamental principles underlying miscue analysis research is the notion that reading is a systematic and rule-governed behavior which involves the interplay of all the parts of the whole language system. This interplay of the whole language system is described by Kenneth Goodman as follows:

> Three kinds of information are available to the reader. One kind, the graphic information, reaches the reader visually. The other two, syntactic and semantic information, are supplied by the reader as he begins to process the visual input. Since the reader's goal is meaning, he uses as much or as little of each of these kinds of information as is necessary to get to the meaning from the structure. In turn his sense of syntactic structure and meaning make it possible to predict the graphic input, so he is highly selective, sampling the print to confirm his prediction. In reading, what the reader thinks he sees is partly what he sees, but largely what he expects to see. As readers become more efficient, they use less and less graphic input (1973, p. 9).

In order to examine the interplay of the three language systems one studies the oral miscues of readers. In such an analysis both the full Taxonomy and the RMI provide a series of questions to ask about each miscue. Each miscue has to be examined through all these questions so that the researcher can determine to what extent and with how much success a reader can use each of the language systems available.

The shorter version of the RMI adopted for this study consists of six categories. The first and second categories concern the questions of how much a miscue "looks like" and "sounds like" the expected response. When judging

the graphic and sound similarity, the reader's observed response and the expected response are identified as beginning, middle, and end. If two of the three parts are similar, a "high" degree of similarity is assigned. If one of the three parts is similar, a "some" degree of similarity is rated. The miscue will be coded as "none" if none of their three parts is similar. The third category is grammatical function. When evaluating this category, the researcher compares the grammatical function of the miscue with that of the text word. The miscue and the text word are rated "same" if the grammatical functions of both words are the same; they are rated "questionable" if the miscue is "so disrupted" that it is impossible to determine whether the grammatical function of the miscue is the same or different from the grammatical function of the text word; the miscue and the text word are rated "different" if the grammatical functions of the two words are different. The fourth category concerns syntactic acceptability. In coding this category, the researcher has to decide whether the sentence containing the miscue is syntactically acceptable within the context of the story. If the sentence produced by the reader is syntactically acceptable, it is marked as "yes," and the sentence is marked as "no" if it is not syntactically acceptable in the story. Semantic acceptability constitutes the fifth category of this short version of the RMI. In this category, the researcher wants to know if the sentence involving the miscue

is semantically acceptable in the story. As in evaluating syntactic acceptability, the researcher has two choices. The sentence is marked "yes" if it is semantically acceptable, and is marked "no" if it is not.

The sixth category is comprehending. Evaluation of this category indicates the degree to which the reader changes the intended meaning of the author as he reads. The central question a researcher seeks to answer in coding this category is "Is there a change in meaning involved in the sentence?" The researcher is left with three options. When the sentence as read by the reader causes no change in meaning, it is marked as "no." If there is a "change, inconsistency or loss of minor incidents, characters or sequences in the story" the sentence is coded as "minimal." If the sentence read by the reader involves a major change in terms of meaning or causes a loss of major incidents, characters or sequences in the story, the sentence is marked "yes."

The following is an example of how this coding system works in evaluating a reader's oral miscues.

TEXT: He hesitantly produced a five-dollar bill.
READER: He hesitantly produced a give-dollar bill.

If the reader produced an observed response "give" for the expected response of "five," the first three categories would be coded as follows:

Reader	Text	Graphic			Sound			Gramm. Func.		
		High	Same	None	High	Same	None	Same	Quest.	Dif.
give	five	X				X				X

The substitution miscue "give" for the expected response of "five" changes the text sentence. The grammatical function of "give" and "five" are obviously different, since "five" in the original sentence functions as an adjective while the substituted word "give" can only function as a verb. Consequently, the resulting sentence is neither syntactically nor semantically acceptable and constitutes major loss in meaning. Categories four, five, and six involving the sentence in which substitution miscue occurred would be coded as follows:

Syntactic Acceptability		Semantic Acceptability		Meaning Change		
Yes	No	Yes	No	No	Minimal	Yes
	X		X			X

When the six inventory questions have been answered for all the miscues which will be coded, percentages are computed for each vertical column for statistical data. Statistical counting yields data both for the readers as a group as well as for the individual reader.

Related Research

Since 1967 a number of studies have been conducted within the framework of the Goodmans' miscue analysis. Despite the fact that these studies focused on the reading of a wide variety of materials in a wide variety of situations, the results generally support the Goodmans' hypothesis that reading involves an active reconstruction of a conceptual representation of the situation described in the text. When reading takes place, a reader makes use of the graphic, syntactic and semantic systems of the language interrelatedly and simultaneously in his search for meaning.

In this section, two groups of research projects were reviewed. The first group dealt with the readers who are native speakers of English. The second group are studies which investigated the reading behavior of the readers whose first language was not English. Since one of the primary concerns of this dissertation was to explore the nature of the reading process in general, the researcher selected those studies which investigated the reading process from different perspectives.

Allen (1970) analyzed the oral reading of a group of readers in grades two, four and six. His study confirmed the hypothesis that reading involves the interplay of the graphic, syntactic and semantic information systems. According to Allen, "One of the broadly stated conclusions of this study is that readers make use of all the available cue

systems in the reading process" (Allen, 1970, p. 125). He found that all of the children in his study seemed to exhibit a strong awareness of syntax in their reading. Some of the readers seemed to pay more heed to syntax than to meaning. All of the three grade levels made substitution miscues that were totally syntactically acceptable 70 percent of the time and 90 percent of the time syntactically acceptable to some degree. Readers at all levels made use of the strategy of correction, although there appeared to be no consistent relationship between the number of miscues and the degree of correction. Finally, Allen pointed out that phrase level substitutions constituted the largest number of substitutions at all three levels, which might suggest that a larger unit of syntax and meaning than the word level was processed in the activity of reading.

Carlson (1971) examined the oral reading patterns generated by some average fourth graders reading a basal reader, science material and social studies material. His conclusions indicated that readers were able to use grapho-phonic and syntactic cues as they read all the selections. However, it appeared that his subjects made better cues in the reading of basal stories. The ratio of non-correction was also much higher in the content area material than for the basal reader.

Yetta Goodman (1971) directed a longitudinal study of four elementary school readers over a period of one year

and nine months. All these four readers were black and represented a relatively wide socio-economic range in background. The study found that dialect offered no hindrance for the subjects in learning to read. Her study also revealed that there were some developmental changes which occurred as readers grew from beginning reading toward more proficient reading. In discussing the major differences between average and low readers Yetta Goodman concluded that although all readers used the same basic reading strategies, the average readers seemed to have better control over when to emphasize one strategy over the others while using all the language cue systems at the same time.

The effect of the context on comprehension was examined by Menosky (1972). Her study consisted of eighteen subjects reading various portions of text. The major finding of Menosky's study was that miscues change quality as readers progressed through a given piece of reading material. The length of a text was crucial, especially for poor readers. The task of reading became easier as context was developed. Menosky's study had direct implications for the construction of reading materials and reading comprehension tests.

In 1972, Jensen completed the first major RMI study at Michigan State University. In this study, she compared the oral reading errors of some proficient readers with that of readers who used reading strategies less effectively. The major findings were: The proficient readers retained meaning better than the less proficient readers did; and

proficient readers made fewer substitutions but a higher percentage of omissions, insertions and reversals. Her explanation for this phenomenon was that the more proficient readers had "freer use of optional transformations."

Bean (1976) conducted a study to examine the oral reading behavior of Hawaiian Island Dialect speakers in grades four, five and six. He concluded that dialect miscues were mainly phonological in nature and did not interfere with meanings. Below average readers across grades made greater use of graphic and sound cues than the average readers. As a group, sixth graders were more adept at applying semantic and syntactic information in reading than the fourth and fifth graders. And the fourth grade children relied more heavily on graphic-phonic cues than the two other groups.

A study conducted by Blair (1977) involved a group of young mature readers and a group of older mature readers. The assumption that reading is a psycholinguistic process is further substantiated by the results of this study. All the subjects in this research used the three cueing systems. Nevertheless, according to Blair, syntactic information seemed to be the most important cueing information for both groups of his readers.

Mabel G. Smith (1978) researched the oral reading behavior of normal and educable mentally retarded readers. Her conclusions revealed that the mentally retarded readers

exhibited a tendency to make a greater percentage of meaning-change miscues. Consequently, they produced a great number of structures which resulted in partial or complete loss of comprehension. However, it was also clear that the mentally retarded readers were able to utilize the reading strategies suggested by the Goodmans, though not as efficiently as the normal readers did.

The research studies reviewed above are a few examples of studies in miscue analysis done within the framework of a psycholinguistic model. Those studies are centered on the oral reading behavior of those subjects whose written and oral language is English. There are also a number of studies which deal with the readers whose native languages are other than English.

The miscue study by Romatowski (1973) was the first to include subjects whose first language was not English. She compared the reading of three bilingual fifth grade subjects in both Polish and English. Romatowski reported that for all of the subjects the influence of the Polish phonemic system was apparent, however, "In no instance did the phonemic differences disrupt the syntactic or semantic organization of the passage" (1973, p. 153). She also found that the influence of Polish syntax on the retellings and reading of her subjects resulted in omissions of determiners in their reading and omissions of determiners and word order changes in their retelling. Like the subjects

in Allen's study, the bilingual subjects relied heavily on the syntactic information. The predictions made by these bilingual readers in their reading of the English story were syntactically acceptable for about 65 percent of the miscues which is somewhat less than the 70 percent level of syntactically acceptable miscues reported in the Allen study.

Devine (1980) studied the miscues of fourteen Spanish-speaking adults reading English. Although Devine's primary interest is to find whether there are any "developmental patterns in native English and non-native reading acquisition" her analysis of data yielded some strong evidence to confirm the hypothesis proposed by the Goodmans. "A comparison of the two groups of readers with respect to their use of the cueing systems in language show that while there are a few differences in their behavior, for the most part, their oral reading is remarkably similar" (1980, p. 139).

Over the past decade, several dozen research projects have been carried out by examining the oral miscues of readers whose native language is either English or another Western language. The following are examples of the significant observations about the reading process made in these studies:

1. There is but one reading process common to all of the readers regardless of differences in language background or varying levels of proficiency among individual readers.

2. Dialect does not result in a disruption of meaning.

3. All readers make use in varying degrees of the three cueing systems available to them. Proficient readers have a better control over the syntactic and semantic cue systems than the less proficient readers do.

4. Readers regress primarily to arrive at meaning.

5. The frequency of miscues itself is not a significant measure of reading proficiency.

These findings involve readers whose native languages fall within the alphabetical writing systems of the Western world. The need for such a study involving readers of a non-Western, non-alphabetical writing system is obvious.

CHAPTER III

RESULTS OF STUDY 1: THE INTERPLAY OF READERS' LANGUAGE SYSTEMS

This chapter is divided into two parts. The first part of this chapter describes the general design of the Blair study cited in Chapter II and the current study. The Blair study is the closest one to the present study in terms of scope and nature; therefore, it was chosen as a basis for making a comparison between the reading behaviors of the English readers and the Chinese. The second part of this chapter discusses the findings of these two studies. The focus of this section is a comparison of these two studies made by looking at the oral reading miscues produced by these two groups of readers. A comparison is made on the basis of graphic and sound similarity, grammatical function, syntactic and semantic similarity and meaning change. In addition to the Blair study, reference is also made to Devine's and Jensen's study, both of which were cited in Chapter II.

Design of the Studies and Analytic Instrument

The Blair Study

The Blair study was designed to analyze and compare the oral strategies of twelve young mature readers and eleven older mature readers selected from reading classes

at Glendale Community College in Glendale, Arizona. All of these subjects were English speakers. The readers were chosen on the basis of ranking on percentile scores of the Nelson-Denny Standardized Reading Test (1960). Those subjects all had a reading score comparable to a reading grade level of 13.

The text selected for the reading was a short story, "Poison" by Raol Dahl. A pilot study was carried out with four students who were not in the study to ensure the material would pose some difficulty without leading to extreme frustration. The reading of the text usually took 30-40 minutes. The subjects in this study were instructed to read the material by following the procedures described in the Goodman and Burke RMI (1972). The first 25 substitution miscues were coded and analyzed according to the short version of the RMI as presented in Chapter II.

The Present Study

The current investigation was designed primarily to provide some preliminary answers to the question of how Chinese readers make use of their underlying language systems in the process of reading. Two research questions were posed to guide the investigation.

(1) Are there any significant differences in the oral reading strategies of the Chinese readers and English readers on any of the following categories: (a) Graphic and Sound similarity, (b) Grammatical function, (c) Syntactic acceptability, (d) Semantic acceptability and (e) Meaning change?

(2) What is the relationship between meaning and Chinese print? Can the readers get at the meaning of a character even if they assign an "unconventional" sound to the character?

The present study of this dissertation duplicated the research design originally developed by Y. Goodman and Burke in 1972. In the present study, ten adult Chinese readers were selected from the Chinese students who are currently living in the East Lansing area. These ten subjects were asked to read a short story in Chinese characters (Appendix B). The readers were chosen on the basis of one criterion: each of the readers came from Taiwan and had finished a bachelor's degree in one of the universities in Taiwan. This factor insured that the readers shared a similar educational background and had achieved a high level of reading proficiency.

These ten readers were asked to read a selection which they had never read previously and with which they were not at all familiar. The text selected for the present study was a short story written by Lǔ Syùn, whose works have been banned in Taiwan for political reasons. In order to control the differences in structure and conceptual load of the material, all of the readers were required to read the same text. An informal pilot study was conducted in order to ensure that the text was challenging enough so that it would elicit sufficient miscues. The actual reading time used by each reader was about 40 minutes.

In general, the present study followed the standard procedures outlined in the RMI except for the retelling part. Instead of instructing the readers that they were required to retell the story in their own words when they finished reading the text, the current investigator asked the readers to make comments on what they had read both during and after their reading.

By following the RMI procedures, the first 25 miscues of each reader were coded for analysis, which yielded a total of 250 miscues for the ten readers, an amount sufficient to find general patterns concerning how Chinese readers make use of their language systems. It seemed to be more appropriate to study the first 25 miscues, which included various types of miscues, rather than simply to concentrate on one type of miscue, as did Blair. The data were then subjected to statistical computation which yielded percentages for each individual reader as well as for all readers as a group in the categories of graphic-phonemic similarity, grammatical function, syntactic-semantic acceptability and meaning change.

The sections that follow include a presentation and discussion of the results obtained from the analysis of miscues from the readers of the Blair and the present study.

Graphophonemic Cueing System

In the RMI, the category of graphic similarity is designed to investigate a reader's effectiveness in

processing the visual information available to him. This category asks the question, how much does the miscue look like the expected response? When judging the graphic similarity of the observed response and the expected response, each single word or non-word substitution is broken into three parts--beginning, middle and end, and further compared to the text word. Three different ratings could be assigned depending upon the amount of similarity among each of them. This system of coding needs some modification when applied to Chinese to accommodate the specific features of the Chinese writing system. It is very difficult, and usually impossible, to break each Chinese character into three equal portions. This difficulty is partly due to the fact that Chinese characters are constructed by six different principles. Characters composed by each of these different principles may require different methods to decompose them. In this regard, it is extremely hard to set up a single or fixed criterion to apply to all of the characters. It is true that the majority of the Chinese characters belong to the category of phonetic-compounds in which most of the characters consist of at least two identifiable components. However, even with this group of phonetic-compound words, we find the criterion suggested in the RMI is still not directly applicable. The number of similar parts shared by two characters is not always a reliable measure to decide

how a miscue should resemble the original word in the text. The following examples should illustrate this point.

Observed miscue	Expected response	Common component	Degree of similarity
(1) 被	破	皮	High
(2) 掠	攫	扌	Partial
(3) 錠	綻	定	High
(4) 淺	深	氵	Partial
(5) 忽	突	None	Partial

Among these five examples, four pairs are phonetic-compound characters. Each character consists of two parts, a <u>signific</u> and a <u>phonetic</u>. Each character in each pair shares one identical component with its counterpart (e.g., 皮 in the characters 被 and 破; 定 in the characters 錠 and 綻). According to the RMI, all of these four pairs should be coded as having "high" graphic similarity since each of them has the same number of similar parts. However, if we examine each pair closely, it is clear that they do not have the same degree of similarity. The character 被 looks more similar to 破 than 掠 to 攫. Obviously, the common element 皮 in the characters 被 and 破 is dominant in the sense it is larger in size, while in the case of 掠 and 攫, the salient component is not the identical

component 扌 which they both share, but 京 in the character 掠, and 襲 in the character 攫. For this reason, the graphic similarity between 被 and 破 is high, while 掠 and 攫 is only partial. Miscues (3) and (4) are coded by following the same principle. The miscue (5) is a different matter. In the example of 忽, and 突, none of the components of these two characters can be considered similar; nevertheless, taken as a whole, they resemble each other to a certain degree. As a result, they are coded as having "partial" graphic similarity.

In coding the graphic similarity in the present study, several different criteria have been considered depending on the types of characters involved. Not only was there a comparison of the components of the characters but also the visual configuration of the words was taken into consideration. In order to eliminate subjective and arbitrary decisions as much as possible, a reader other than the researcher herself was asked to code the miscues. The percentage of agreement was about 90%. In the cases where the two readers disagreed, a third reader was used. The evaluation of the miscues by the third reader served as the last resort for coding the problematic miscues. Using more than one reader to determine the graphic similarity can make up for the disadvantage of not being able to set up a more systematic scheme.

In coding the sound similarity, no such complication as the one with the graphic similarity was found in Chinese

writing. The coding scheme designed by Y. Goodman and Burke was directly applicable to the Chinese language. Therefore, no modification was made for the current study.

Table I summarizes the data on graphic similarity in the present study. The data indicate that 18.2% of all the substitution miscues of the Chinese readers contained "high" graphic similarity and 19% contained "partial" similarity while 62.8% of miscues showed no graphic resemblance to the original text words.

Table 2 presents the degree of sound similarity employed by Chinese adult readers. As the figures show, the majority of the miscues (76.9%) produced by the Chinese readers have no similarity in sound sequences to the expected words in the text. And only about 24% of the observed responses contained either high or some similarity to the original words presented in the text.

This preliminary analysis of the graphic and sound similarity of the Chinese readers reveals a number of general features of the reading of Chinese readers. First, the data clearly demonstrate that reading requires some references to the print. Readers made use of the grapho-phonemic cues which are available to them. Readers produced miscues that both look like and sound like the text words. On the other hand, the data also indicate that although the graphophonemic cues are the first information available to the readers, reading does not operate on this level alone. Of 106 substitution miscues analyzed in the present study,

TABLE 1.

GRAPHIC SIMILARITY

CHINESE ADULT READERS

SUBJECT	HIGH		SOME		NONE	
	No.	%	No.	%	No.	%
1.	2	14	4	29	8	57
2.	2	15	0	0	11	85
3.	2	15	3	23	8	62
4.	3	30	4	40	3	30
5.	2	18	2	18	7	64
6.	3	33	0	0	6	67
7.	0	0	2	22	7	78
8,	0	0	2	29	5	71
9.	0	0	0	0	6	100
10.	8	57	4	29	2	14
TOTAL	22		21		63	
MEAN	2.2	18.2	2.1	19	6.3	62.8

TABLE 2.

SOUND SIMILARITY

CHINESE ADULT READERS

SUBJECT	HIGH		SOME		NONE	
	No.	%	No.	%	No.	%
1.	1	7	1	7	12	86
2.	0	0	0	0	13	100
3.	0	0	4	31	9	69
4.	1	10	2	20	7	70
5.	0	0	1	9	10	91
6.	1	11	2	22	6	67
7.	1	11	1	22	6	67
8.	1	14	2	29	4	57
9.	0	0	1	17	5	83
10.	0	0	3	21	11	79
TOTAL	5		18		83	
MEAN	0.5	5.3	1.8	17.8	8.3	76.9

about five-eighths bear no graphic resemblance to the text and three-fourths bear no resemblance to the text in sound. The finding seems to suggest that readers also used sources other than just graphic and sound cues in their word recognition. Thirdly, the fact that mean scores of the high and some graphic similarity categories (18.2% and 19%) are higher than that of the same sound similarity categories (5.3% and 17.8%) suggests that these readers made greater use of visual information than the sound property of the language in their oral reading.

Visual and sound properties of a language constitute an indispensable element in the reading process. This is obvious in the fact that in all taxonomic and RMI studies reviewed, readers have shown some dependency on the graphic and sound information. It is important to keep in mind that this generalization is true only as far as the fundamental reading process is concerned. This statement should not be taken to mean that all readers are using the grapho-phonemic cues in the same way.

Tables 3 and 4 are taken from Blair's study and summarize the data on graphic and sound similarity that he found in his research. Blair reported that 80.7% of all miscues produced by American mature readers contain high or some graphic similarity while 74.5% of their miscues contain high or some sound similarity. When these figures are compared with 37.2% of all miscues for the Chinese readers that contain high or some graphic similarity and 23.1% of

TABLE 3.

GRAPHIC SIMILARITY

AMERICAN MATURE READERS

SUBJECT	HIGH		SOME		NONE	
	No.	%	No.	%	No.	%
1.	6	24	12	48	7	28
2.	12	48	6	24	7	28
3.	13	52	8	32	4	16
4.	14	56	6	24	5	20
5.	12	48	9	36	4	28
6.	12	48	6	24	7	28
7.	8	32	10	40	7	28
8.	15	60	9	36	1	4
9.	15	60	6	24	4	16
10.	11	44	10	40	4	16
11.	10	40	12	48	3	12
TOTAL	128		94		53	
MEAN	11.6	46.5	8.5	34.2	4.8	19.3

TABLE 4.

SOUND SIMILARITY

AMERICAN MATURE READERS

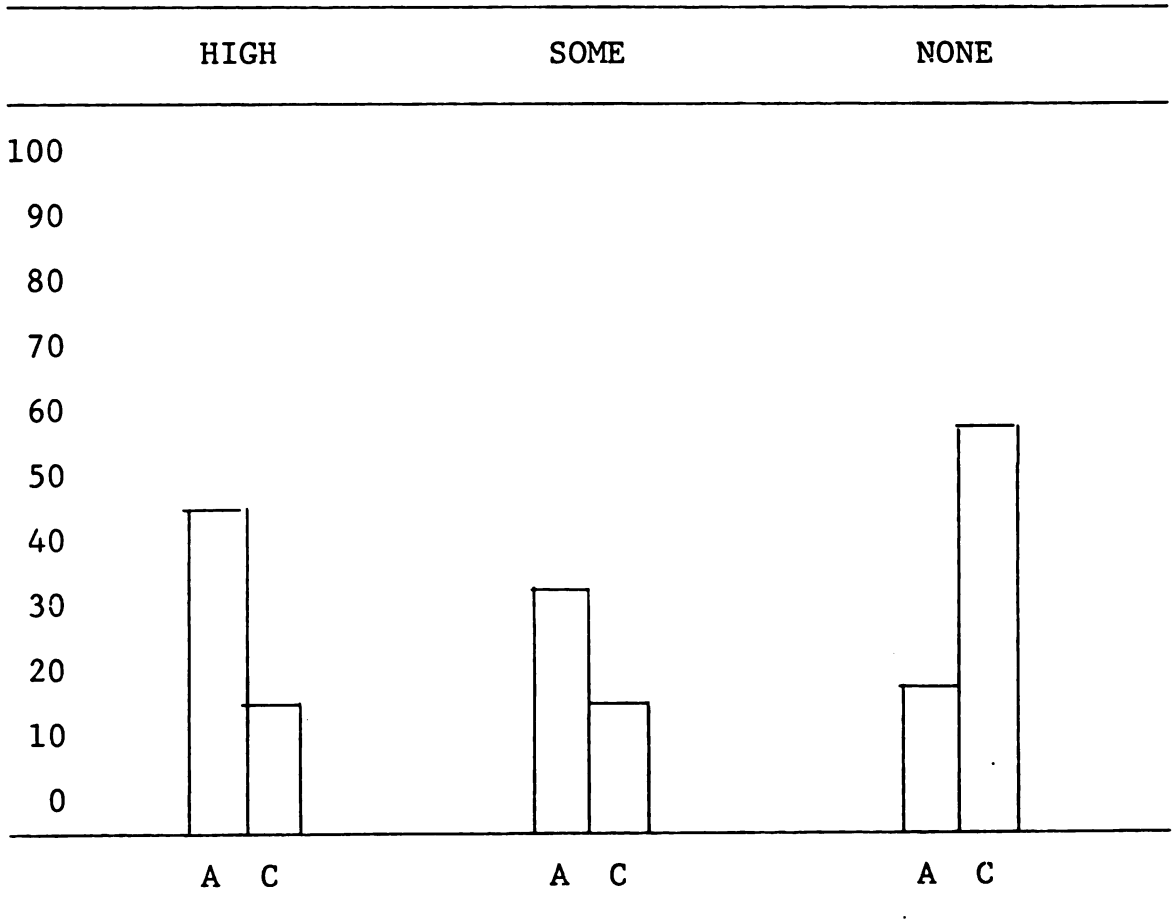
SUBJECT	HIGH		SOME		NONE	
	No.	%	No.	%	No.	%
1.	6	24	8	32	11	44
2.	6	24	14	56	5	20
3.	6	24	15	60	4	16
4.	11	44	8	32	6	24
5.	13	52	10	40	2	8
6.	5	20	11	44	9	36
7.	6	24	12	48	7	28
8.	11	44	9	36	5	20
9.	13	52	4	16	8	32
10.	12	48	9	36	4	16
11.	7	28	9	36	9	36
TOTAL	96		109		70	
MEAN	8.7	34.9	9.9	39.6	6.3	25.5

all the miscues for the group that contain high or some sound similarity, the differences between these two groups of readers immediately become obvious. As shown in Figures 1 and 2 the Chinese readers recorded the highest percentage in the category of "None" for both graphic and sound similarity while the English-speaking readers seemed to show a very different pattern. The Chinese readers, in general, seemed to show less dependency on the visual display than did their English counterparts.

One possible explanation for this high occurrence of "no similarity" in graphic and sound categories found in the Chinese readers is that those ten subjects are all mature and proficient readers. According to the psycholinguistic view of reading, fluent readers need only minimum visual cues to get at meaning (e.g., K. Goodman, 1973c; F. Smith, 1971). As a result, their reliance on the graphophonemic information tends to be low. In this regard, it is possible to attribute the high percentage of no graphic and no sound similarity in the scores of the Chinese readers to their high reading proficiency. However, it is important to note that the readers in the Blair study can also be considered as fluent readers. Blair points out that all of his 11 adult readers have a comparable reading grade level of 13. If high reading proficiency is the only factor which makes the Chinese readers in the present study produce miscues with no resemblance to the original text words both in physical forms and in sound sequence one

FIGURE 1.

GRAPHIC SIMILARITY MEAN SCORES

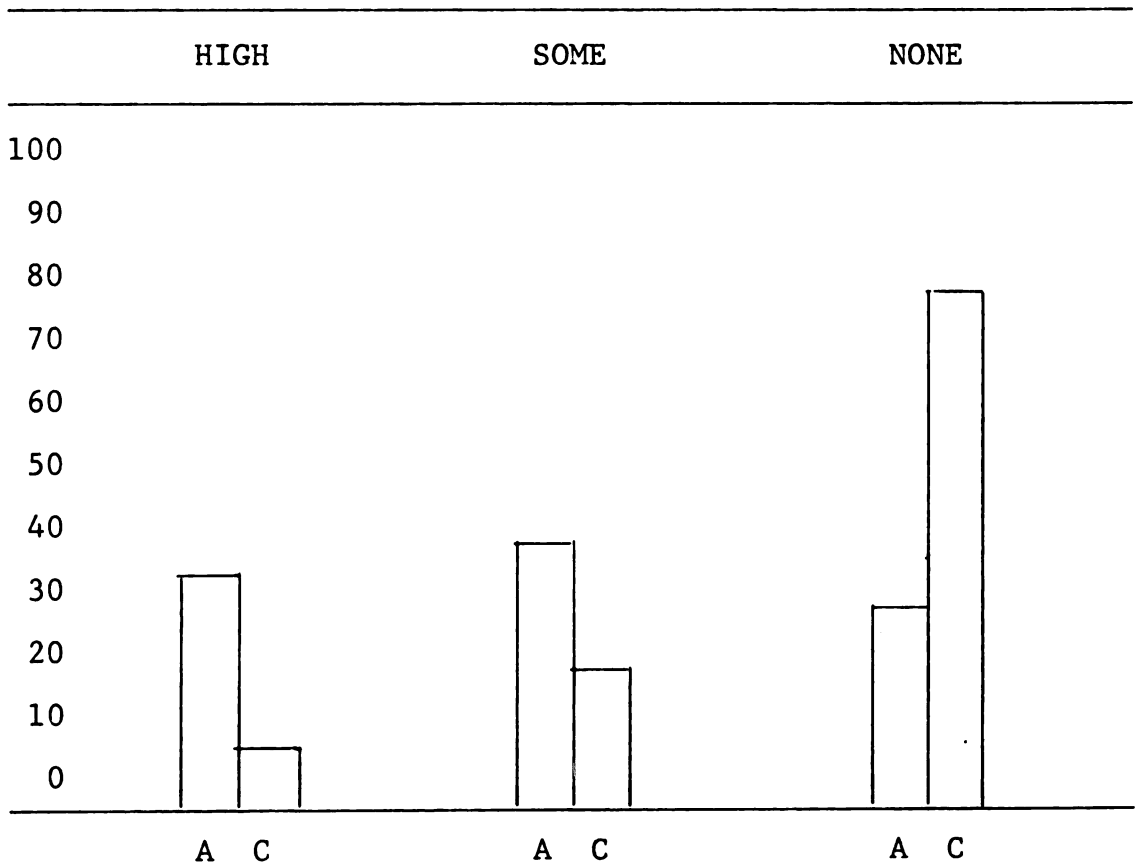


A = American readers

C = Chinese readers

FIGURE 2.

SOUND SIMILARITY MEAN SCORES



A = American readers

C = Chinese readers

would expect to find a similar pattern of performance from the readers in Blair's study.

Furthermore, the figures reported in Blair's study seem to correspond closely to the results of other miscue studies. Devine (1980), for example, reports that 58% of the miscues of her high group readers (Spanish-speaking adults reading English) show high graphic similarity and 52% of the miscues have high phonemic similarity to the text words. In her 1972 study, Jensen reveals that more than half of the total miscues produced by her highly proficient readers (native speakers of English reading English) have high or at least moderate similarity to the expected words of the text. From the findings of these three studies, it is possible to see a common practice which characterizes how the readers of English make use of the visual and sound information in their oral reading. The common practice tells us that the miscues produced tend to share some physical properties with the text words.

On the basis of the findings reported in the three studies cited above, it becomes obvious that the different patterns produced by the readers of the Blair and the present study in their use of visual information cannot be fully explained simply from the point of view of reading proficiency. Differences regarding the two language systems involved may offer a better and more convincing explanation. The high degree of graphic and

sound similarity found in the Blair, Devine and Jensen studies may reflect the relationship between the phonemes of the English language and the written alphabetic symbols used to represent them. Although the written language of English is not a direct representation of the sounds of the spoken language, nevertheless, the correspondence between the oral and written forms of language is still much more obvious than what one finds in Chinese. In English, graphically similar words also tend to be similar in sound, as in <u>though</u> and <u>through</u>, <u>better</u> and <u>letter</u>. No such generalization can be made for the Chinese language. In Chinese, characters of similar form can be also similar in sound, such as 仿 <u>fǎng</u> and 彷 <u>fǎng</u>, 吗 <u>mā</u> and 码 <u>mǎ</u>. However, in most situations characters which look similar are often distinctive in sound (e.g. 矽 <u>pwò</u> and 被 <u>bèi</u>; 綻 <u>jàn</u> and 錠 <u>dìng</u>). As pointed out in Chapter I, Chinese characters are constructed in six different ways. Pictographs, for example, are derived directly from pictures of objects. Ideographs are characters meant to represent abstract concepts or ideas. Compound-Ideographs are characters which rely for their meaning on the combination of the meanings of their parts. The combination of 日 'sun' and 月 'moon,' for example, form the word 明 'bright.' It is very clear that these three types of characters are semantic in conception. When these words were constructed, they were created to represent <u>meaning</u> rather than <u>sounds</u>. The sound value of a particular character was determined on the

basis of which object or concept the character was to represent. Of these three types of characters there is no internal consistency as far as sound system is concerned. A reader does not have any access to the pronunciation of a particular word unless he or she already know the meaning of the word and how it should sound.

Phonetic-Compound is a group of characters which contain some sound elements in their structures. In this class, each character consists of two parts. One part is a phonetic which suggests the pronunciation, while the other part, a signific, will give some part of the meaning of the character. However, even within this group, the correspondence between the oral and written forms of language is not always direct and obvious. In the first place, a phonetic may have more than one possible pronunciation (see discussion on pages 14-15). Secondly, most of those sound indicators are independent characters themselves. Unless a reader is already familiar with these characters, it is not likely that he will be able to figure out their pronunciation simply by looking at the printed forms.

In sum, the relation between written and spoken forms in English is much more direct and obvious, and we find that readers of English are greatly affected by the "visual convenience" offered by their written language and thus do produce more miscues which both look like and sound like

the expected responses in the text.

In comparing the studies conducted independently by Blair, Devine and Jensen with the present study, it seems that some significant differences exist between the readers of Chinese and English in terms of the way they use the graphophonemic cues available to them, which suggests that forms of written language may have some effect on how readers process visual information. Readers of English obtain cues from the visual properties of words to a much greater extent than Chinese readers do. It is obvious from the evidence that the majority of miscues produced by the readers of English contain high or at least some degree of graphic similarity to the text material. Deviations from the text made by the Chinese readers, on the other hand, tend to show no visual or acoustical relation to the text words.

The emphasis thus far has been on the discussion of the physical properties which might be shared by an observed response and the expected response. But is there any semantic relationship between these two? When a reader produces a miscue which looks very much like the original word in the text is he also able to preserve the meaning of the individual text word? In the investigation of the reader's efforts to preserve the meaning of the text words and its relation to graphophonemic similarity, Devine (1980) reports that there exists a very interesting semantic relationship between the miscue and the text word.

Devine points out for readers at all proficiency levels "high similarity" graphic miscues tend to have lower than average semantic acceptability (1980, p. 109). Devine uses miscues which result in non-words to demonstrate her observation. "In a taxonomy analysis, non-words are always coded as semantically unacceptable since the researcher cannot determine with any certainty, what, if any, semantic relationship exists between the miscue and the text word. When non-word miscues are separated from the rest of the miscue data and coded for graphic and phonemic proximity, the data indicate that these miscues have a higher than average degree of similarity to the text material [which] shows that non-words, which have no acceptability semantically, more closely resemble and sound like the text words than miscues in general" (1980, p. 110). A similar observation is made by Jensen (1972, pp. 25-6).

When comparing Devine's analysis with that of the present study with respect to the meaning relationship between miscues and text words, one finds similarity as well as difference among these two groups of readers. The data obtained from readers of Chinese support Devine's finding that "no similarity" graphic miscues tend to have a high percentage of semantic acceptability. As has been mentioned earlier in this section, the Chinese adult readers have produced a greater number of miscues with no

graphic similarity to the text words. Of a total of 106 substitution miscues, 63 of them are coded under this category. And about 71% of these 63 "no similarity" graphic miscues are semantically acceptable in the context of the story. Only 16% result in total loss of meaning.

However, when one looks at the semantic relationship between miscues with high graphic similarity and the text words, a somewhat different picture from the one reported by Devine emerges. According to Devine, miscues with high graphophonemic proximity, such as non-words, reveal a high degree of semantic unacceptability. No such generalization can be drawn on the basis of the data of the present study.

Table 5 illustrates the distributions of the 106 substitution miscues analyzed by graphic similarity and their relationship to semantic acceptability. The data indicate that Chinese adult readers produce a relatively small number, about 21%, of miscues closely resembling the text words.

TABLE 5

GRAPHIC SIMILARITY AND SEMANTIC ACCEPTABILITY
CHINESE ADULT READERS

GRAPHIC SIMILARITY			SEMANTIC ACCEPTABILITY			
			YES		NO	
	No.	%	No.	%	No.	%
HIGH	22	21	19	86	3	14
SOME	21	20	15	71	6	29
NONE	63	59	45	71	18	29

Among the miscues with high graphic similarity, 86% are semantically acceptable in the story as opposed to 42% in Devine's study. Quite contrary to the finding in the Devine study, the data suggest that for Chinese readers reliance on graphic cues, as in those miscues with high graphic similarity, does not necessarily result in disruption in meaning.

This disparity between these two groups of readers is probably attributable to the differences in their written language systems. To explain the reason for the high correlation between high graphic similarity and semantic acceptability, we need to consider the question of how the Chinese characters are constructed. The majority of miscues with high graphic similarity in the present study are characters of phonetic-compounds. As was mentioned in Chapter I, characters of the phonetic-compound group consist of two parts; one part (the radical or signific) indicates the meaning of the word in a very general way, and the other part, the phonetic, gives some clues to the pronunciation of the character. For example, the symbol 扌 is a radical which means 'hand; of the hand or having something to do with the hand.' Characters comprised of this radical 扌 in general have something to do with the hand. In modern Chinese, more than three hundred characters have this hand radical as part of their components.

Characters like 拍 pāi 'to strike with the hand,' or 拑 chyán 'to hold; to grasp,' or 指 jǐ 'to point with the finger' are a few examples of this hand radical category. For a proficient Chinese reader, sometimes a glimpse of the radical 扌 will give a sufficient clue as to what kind of words would fit the meaning in the context. In the present study, there are many miscues which clearly demonstrate that readers were making their prediction with the help of the radicals of the text words. For example, more than one reader substituted the observed response 掐 chyā 'to pinch; to cut with fingernails' for the expected response 捏 nyē 'to press with fingers.' In this example, both the deviation 掐 and the text word 捏 contain the hand radical 扌. In addition, there is also a reader who produced 剔 tì 'to separate bones from meat' instead of the expected response 刺 tì 'to pierce; to stab.' One reader miscued 剩 shèng 'left over; residue' for the original word 剝 bwō 'to peel; to make bare.' The four characters 剔, 刺, 剩, 剝 consist of the same radical 刂 dāu, meaning 'knife or having something to do with a knife.' It may become obvious from the few examples given above that Chinese characters comprised of an identical radical may share not only some physical features among them, but also some meaning elements. This is probably one of the main reasons that miscues of the Chinese readers with high graphic similarity also tend to be highly semantically acceptable.

In dealing with the questions of graphic and sound similarity and their relationship to meaning, the researcher has to face an interesting problem. Chinese is not a phonemic writing system, yet there are some phonetic elements built in some of the Chinese characters, especially in the group of phonetic-compounds. Almost every literate Chinese has the experience of being told by someone who knows how to read Chinese that most of the Chinese characters consist of an indicator of meaning and an indicator of sound. It has become a common practice among beginning Chinese readers as well as proficient ones, to try to find out the sound indicator of the word and pronounce it accordingly, when they encounter an unfamiliar Chinese character. In the present investigation, seven of the ten readers made at least one miscue in their first twenty-five coded miscues which can be recognized as readers' effort to make use of the phonetic element given by the word. The following are some instances of characters on which more than one reader miscued. The character 綻 jàn 'ripped seam; a crack' is a phonetic-compound. It is composed of two parts. The right side of the character is the radical 糸, which originally means 'a line; a connection link.' The left side of the character is the symbol 定 ding which is supposed to serve as a sound indicator to the word. Three readers in the present study did take 定 ding as the clue to the

pronunciation of 綻 and produced the observed response dìng while the correct pronunciation is jàn. In addition to the characters 綻 jàn, the symbol 定 dìng is also found in two other modern Chinese characters 碇 dìng 'an anchor (for a ship),' and 錠 dìng, 'ingot of gold or silver; a spindle.' For both 碇 and 錠, the phonetic 定 dìng does give a reliable clue to their pronunciation, but why this symbol does not work for the character 綻 jàn needs further study. It is possibly because of historical reasons, and it is also possibly because of dialectal influence. However, one thing is certain: when the readers miscued 定 dìng for the expected response 綻 jàn, they were not making random errors. They assigned the sound value to the word on the basis of their intuitive knowledge of the Chinese phonological rules.

Another instance of a multi-reader miscue is the character 拏. The correct pronunciation of this character is ná 'to hold with hand,' but several readers read it as nú by relying on the phonetic element 奴 nú, which constitutes the upper portion of the character 拏. There are at least seven other examples in modern Chinese which also utilize the symbol 奴 as part of their components. These seven characters are 孥 nú, 笯 nú, 駑 nú, 努 nǔ, 弩 nú, 砮 nǔ, and 怒 nù. Although these seven words differ in tones, they share with each other the same basic sound elements nu suggested by the sound

indicator 奴 nú. Again, it is not clear how and why the character 拏 is pronounced as ná instead of nú. It might have been at one time that the phonetic part of the character matched the sound of the character perfectly, but sound changed over time. Sound-change does not have the same effect on a writing system like that of English as it does on the Chinese writing system, because sound changes can be more readily accommodated by the alphabetical system than by the character system without necessitating a major change in the shape of the word. In Chinese, the sound might change, but the symbol would stay the same.

Thus, from the examples given above, the reliability of using the sound indicator of a character as a guide to its pronunciation seems dubious. On the other hand, mispronuncing a certain word in Chinese is not necessarily a strong indication that a person does not know the meaning of the word. In fact, mispronunciation of certain words is not uncommon among Chinese. Most Chinese seem to demonstrate unusual tolerance toward this "unscholarly" performance. When a person makes an error in his pronunciation, it might be the case that the person is able to arrive at the meaning of the word, but just does not pick out the right pronunciation. Or it is also possible that the reader already knows the word and had assigned a constant sound value to the word ever since

the first time he learned it by following the phonological rules of Chinese. Every time he sees the word, he will read it the same way, even though he does not pronounce it in the conventional way. In other words, it had become some kind of "idiolect." In analyzing the data for this present study, the researcher found that there were instances of correction. Often, when miscues did not make sense in the context, readers went back and corrected it for meaning. Interestingly enough, none of these seven readers made any attempt to correct their pronunciation when they produced miscues of this type. One possible explanation for this phenomenon is that the readers have sufficient confidence in their pronunciation to accept what they read when it makes sense to them.

The Chinese writing system has often been praised for its unifying power, which enables Chinese with different dialect backgrounds to communicate with each other. A literate man from Canton province, for example, should be able to comprehend a written text by associating the characters with his dialect as much as a literate man who speaks Mandarin. In fact, it is still a common practice among members of the older generation for a Taiwanese to read written Chinese in the Taiwanese dialect, for a Cantonese in Cantonese, and for people from Shanghai in Shanghai accent. Differences in pronunciation do not seem to interfere with the understanding of the text. Research in the influence of English dialects on reading

also demonstrates dialect does not result in disruption of meaning (e.g., Y. Goodman, 1971; Bean, 1976). Furthermore, according to the RMI, pronunciation deviations are acceptable as long as they can be explained within the sound system of the speaker's dialect.

The situation is somewhat more complicated in the present study, because it is not simply a question of dialectal differences. All of the readers in this study speak Mandarin. Their graphic and sound miscues cannot be attributed to the differences in regional dialects. However, in a sense, their graphophonemic miscues are one kind of dialect--an "idiolect"--since readers construct them by utilizing some kind of phonological rules of the Chinese language. In this regard, to decide whether a certain graphic and sound miscue should be coded as a non-word as a semantically acceptable word turns out to be the major analytical problem.

Two criteria are set up to deal with this problem. First, when a miscue of a phonetic-compound occurs, all the possible pronunciations which this particular phonetic might carry are listed. Then, the reader's miscue is compared with those sounds. If the miscue falls within this sound range, then the miscue has satisfied the first condition to be regarded as the reader's "idiolect" which would be coded both syntactically

and semantically acceptable if it also meets the second condition.

The second condition that a miscue of the phonetic-compound character has to meet to be qualified as a reader's idiolect is that the meaning the reader assigned to it has to be similar to or at least close to the original word in the text. To determine whether a reader is able to retain the meaning of a word when he assigned a wrong pronunciation to it, Y. Goodman and Burke have suggested a very useful guideline: "Any mispronunciations or name changes which the reader has instituted should be retained by the teacher" in collecting data (1972, p. 25). The method employed in this study to check whether a reader is still retaining the meaning of a character regardless of the mispronunciation is based on this principle. The researcher examined the reader's concepts of a word by reproducing the sound which was just produced by the reader and asked the reader to give some explanation of the sound.

In coding English readers' miscues, graphic and sound similarity can be judged independently of, or prior to, syntactic and semantic acceptability. To code the miscues of phonetic-compound characters in Chinese, the four categories must be considered together before one can make a decision on phono-graphemic similarity. This coding difference shows that Chinese

readers are encouraged by their written symbols to rely more on syntactic and semantic systems than on the grapho-phonic system.

It is important to note that the coding device just described might have some impact on the general patterns of Chinese readers' reading behavior as compared to that of readers of English. Some of the miscues which would be normally coded as non-words in the RMI system are treated as both syntactically and semantically acceptable, if they meet the two criteria. The influence of this modification in methodology will further show up in the analysis of syntactic and semantic acceptability.

In this study, miscues coded as a reader's idiolect take up about 15% of the total single word substitutions. Since an idiolect has to share the same phonetic with the text word, it should not be too surprising to find that about 73% of this type of miscue look highly similar to the text material. However, when judging sound similarity of idiolect miscues one finds that only 14% have high and 24% have partial similarity to the expected responses. These figures clearly demonstrate how unreliable and problematic it is to use a phonetic as a guide to the sound of a word. As a matter of fact, the Chinese have already been aware of this problem for many decades, and several attempts have been made to reform the writing system. Unfortunately, there has been a great deal of confusion as to the goals of reform. Should they make the

existing system easier to learn? Or should they create a new writing system? The use of Pīnyīn 拼音 (a type of Romanization) in China now is one of the products of this reform attempt.

In spite of this drawback of the Chinese writing system, the data obtained from the readers of Chinese do provide the researcher an excellent avenue to look into the nature of the relationship between meaning and sound. That "meaning is independent of sound" is hardly a new concept among psycholinguists and researchers who are interested in the reading process, but it seems that the finding of this present study is significant in the sense that it is able to provide concrete examples to support the argument. The Chinese readers seem to be able to extract meaning from the printed forms even if they fail to assign "conventional" pronunciation to the words. Chinese readers produce a set of miscues which score high both in graphic similarity and semantic acceptability, but very low in sound similarity. This factor appears to suggest that Chinese orthography can be mapped onto meaning at the level of words rather than of phonemes. Consequently, it is not necessary for a Chinese reader to translate the written symbols into spoken language in order to get at meaning in reading.

Syntactic and Semantic Cueing Systems

By the age of five and six when a child is about to read, he has already learned almost all of the fundamental syntactic structures of the spoken language. This syntactic knowledge possessed by the child consists of sentence patterns, function words, inflections and transformational rules. The knowledge of his oral language systems a person brings into his reading, according to the psycholinguistic view of reading, is crucial to the process of reading, because the written language is basically the same language as that of oral language. It consists of a set of rules for producing all the grammatical sentences and only the grammatical sentences of the language. It also consists of a set of rules for distinguishing the grammatical sentences from the ungrammatical ones in the language. Those rules, known to both the writer and the reader, are needed for effective communication. Just as the reader brings his knowledge of language into reading, so the writer brings his into writing. "Reading is a meaningful interaction between the language of the reader and the language of the author" (Y. Goodman and Burke, 1972, p. 5). But reading is not an exact process. An efficient reader does not make any attempt to use all of the visual information available to him. He samples and selects from the available information on the basis of what he knows about the language and the world. Since

reading is a process of prediction and sampling, there will at times be miscalculations. The prediction a reader makes does not always match the ideas or language patterns which the author presented in the text. These mismatches may lead to miscues. According to the Goodmans and many other researchers, if we know how to evaluate the deviations made by a reader from the text, we should be able to understand the strength and weakness of that particular reader. In this way we can also learn more about the nature of the reading process in general.

In addition to the categories of graphic and sound similarity which concentrate on a reader's use of visual information, the Goodman Taxonomy and the RMI provide a series of questions through which a researcher is able to study how a reader's knowledge of grammar interacts meaningfully with that of the author in the text. The three major categories chosen for detailed discussion in the present study are (1) grammatical function, (2) syntactic acceptability and (3) semantic acceptability.

Grammatical Function

To evaluate a reader's use of the syntactic cueing system, a researcher usually begins with an examination of the grammatical function of the miscues that have resulted from the deviations from the text. To determine the grammatical function of a miscue, the researcher

compares the observed response with the expected response. If the miscue has the same grammatical function as that of the text word, it is coded "same" as in the following example. 他便退了幾步,尋到一家關着門的舖子,蹩進簷下,靠門立住了。

In this sentence, the reader substitutes the observed response 戚 tsù 'to draw together' for the expected response 蹩 byé 'to limp.' The substitution word 戚 despite the fact that it does not make sense in the context of the whole sentence, fills the same grammatical role as the text word .

A miscue can be judged as "different" if the reader's production is grammatically different from the text word. For instance, in the sentence 太陽也出來了;在他面前,顯出一條大道,直到他家中,後面也照見丁字街頭被破匾上「古□亭口」這四個黯淡的金字。 the word 被 bèi 'to cover; to shroud; because of' was used in place of 破 pwò 'broken; ruined.' Although these two words are highly similar graphically, nevertheless, they have very distinctive grammatical functions. The original word 破 pwò 'broken; ruined' functions as an adjective, but the observed response 被 bèi is hardly ever used as an adjective. These two words differ not only in the grammatical roles they play, but also in meaning. The result is a nonsense sentence.

The third subcategory, in which the grammatical function of a miscue is regarded as "questionable," is provided for those instances when it becomes impossible for the researcher to determine the grammatical functions of the miscues confidently. In the present study, one reader produced an observed response jyē instead of the expected response 蹩 byé 'to limp.' It is not clear to the researcher exactly what word the reader intended to produce when the miscue occurred because there are more than a dozen Chinese characters with the pronunciation of jyē. Furthermore, the miscue jyē can not be coded as the reader's "idiolect" for it fails to meet the two conditions described in the previous section.

Table 6 summarizes the grammatical function data from the Chinese readers. The data indicate that 89.1% of all substitution miscues of the Chinese readers retain the same grammatical function as the original text words. Only 5.7% of the miscues result in a change of the grammatical function.

Table 7 presents the finding reported from the Blair study on the category of grammatical function. The figures show that 87.6% of the total miscues produced by Blair's mature readers play exactly the same grammatical role as the expected response, a finding very similar to that of the present study. The high percentage of same grammatical function of the miscues produced by these two

TABLE 6.

GRAMMATICAL FUNCTION

CHINESE ADULT READERS

SUBJECT	SAME		QUES.		DIFF.	
	No.	%	No.	%	No.	%
1.	12	86	1	7	1	7
2.	12	92	0	0	1	8
3.	13	100	0	0	0	0
4.	9	90	0	0	1	10
5.	10	91	1	9	0	0
6.	8	89	1	11	0	0
7.	7	78	1	11	1	11
8.	6	86	0	0	1	14
9.	6	100	0	0	0	0
10.	11	79	2	14	1	7
TOTAL	94		6		6	
MEAN	9.4	89.1	0.6	5.2	0.6	5.7

TABLE 7.

GRAMMATICAL FUNCTION

AMERICAN MATURE READERS

SUBJECT	SAME		QUES.		DIFF.	
	No.	%	No.	%	No.	%
1.	21	84	1	4	3	12
2.	20	80	3	12	2	8
3.	19	76	0	0	6	24
4.	22	88	1	4	2	8
5.	24	96	1	4	0	0
6.	22	88	0	0	3	12
7.	21	84	1	4	3	12
8.	25	100	0	0	0	0
9.	21	84	0	0	4	16
10.	23	92	0	0	2	8
11.	23	92	0	0	2	8
TOTAL	241		7		27	
MEAN	21.9	87.6	.6	2.6	2.5	9.8

groups of readers of very different language backgrounds suggests, that readers, in general, are very sensitive to the syntactic features of their languages, regardless of what kinds of writing systems they are exposed to. It can also be used as a strong evidence to support the claim made by the Goodmans and other psycholinguists that readers bring their syntactic knowledge with them into reading.

The analysis of the grammatical function provides a researcher with an important tool with which to evaluate a reader's strategies in dealing with grammatical structures of his language. Nevertheless, this analysis, like the analysis of grapho-phonemic similarity, allows the researcher to study miscues only on a word-for-word basis. It should not be too difficult to see the insufficiency and imcompleteness of studying miscues in isolation. Therefore, in addition to the grammatical function, the Goodman taxonomy and the RMI also contain the category of Syntactic Acceptability. When the two categories are considered together, a researcher can get an idea of how well a reader is handling syntactic cues available to him in the context of sentences and in the context of whole discourse.

Syntactic Acceptability

A reader may produce miscues which preserve the grammatical function of the text words, but when they are

considered along with other elements within the context of sentences, they become syntactically unacceptable, as in the following example.

TEXT:
他的 精 神 現 在 只 在 一個 包 上。
Tā de$_1$ jīng shén$_2$, syan dzài$_3$ jǐ$_4$ dzài$_5$ yi ge$_6$ bāu$_7$ shàng$_8$:
(His$_1$ spirit (interest)$_2$ now$_3$ only$_4$ is on$_5$ a$_6$ parcel$_7$ (on)$_8$:)

READER:
他的 精 神, 現 在 只 有 一個 包 上。
Tā de$_1$ jīng shén$_2$, syàn dzài$_3$ jǐ$_4$ yǒu$_5$ yi ge$_6$ bāu$_7$ shàng$_8$.
(His$_1$ spirit (interest)$_2$ now$_3$ only$_4$ has$_5$ a$_6$ parcel$_7$ on$_8$.)

In this example, the reader substituted 有 yǒu 'have; has' for the expected response 在 dzài 'to be at or on.' Both the observed response and expected response are verbs. However, the miscue is grammatically acceptable only with the portion that comes before it, because the noun phrase 一個包上 yī ge bāu shàng' is a complex place word consisting of the noun phrase一個包 yī ge bāu and a locator stem 上 shàng. In Chinese, place words or place word phrases share the general properties of nominals. They are distinguished from other nominals by the fact that they occur as objects of a set of verbs to indicate the general circumstances or location of the action expressed in the sentence predicate. The verb在 dzài of the original sentence is one of this kind of verbs which require a place word or a phrase as the object, while the miscue 有 yǒu is not subjected to this restriction. As a result, when the miscue有 yǒu is considered along with

the portion which follows it, namely, the complex place word 一個包上'yī ge bāu shàng' the whole sentence becomes syntactically unacceptable.

Unlike the category of grammatical function which evaluates word level substitution miscues, the category of syntactic acceptability involves an analysis of miscues in the context of sentence and whole discourse. According to the short version of the RMI which is adopted for the present study, the syntactic acceptability allows for two choices. First, the sentence involved with a miscue can be coded "Yes" if the sentence as finally produced by the reader is syntactically acceptable in the story. The alternative is to code "No" as being syntactically unacceptable if the sentence as finally produced by the reader is not syntactically acceptable in the story. To demonstrate how this coding scheme works, the researcher would once again use 他的精神,現在只在一個包上 as an example.

Tā de jīng shén, syàn dazì jǐ dzài yi ge bāu shàng.

If a reader reads 他的精神 現在只有一個包上
"Tā de jīng shén, syàn dzài jǐ yǒu yi ge bāu shàng"
the sentence will be coded "No" as being syntactically unacceptable, even if both the miscue and the text word share the same grammatical function. If a reader reads
他的精神 現在都在一個包上 the sentence
"Tā de jīng shén, syàn dzài dōu dzài yi ge bāu shàng."
will be coded "Yes" as being syntactically acceptable,

because the substitution of 都 dōu 'all' for the text word 只 jǐ 'only' does not change the syntactic structure of the original sentence.

Table 8 summarizes the data on the syntactic acceptability of the miscues for the readers of Chinese of the present study. The figures indicate that 87.6% of the sentences involved with miscues are syntactically acceptable in the story. These figures do not include all instances in which the readers appear to use syntactic information in their predictions which are acceptable only with the prior portion of the sentence. If we combine the totally acceptable predictions with those which are acceptable with the prior portion, a somewhat different picture is seen. With the combined scores, about 96% of the observed responses preserve at least partially the grammatical structures of the text, which indicates the readers' awareness of sentence structures and their ability to make use of syntactic knowledge in making predictions.

Table 9 presents the finding reported in the Blair study in terms of syntactic acceptability. According to Blair, 93.5% of miscues analyzed are syntactically acceptable in the story. This figure is somewhat higher than the figures reported in Devine's study (66%) and Jensen's (82.12%). The high percentage of syntactic acceptability found in the Blair study may be due to the type of miscues analyzed. As has been pointed out previously, Blair focuses

TABLE 8.

SYNTACTIC ACCEPTABILITY

CHINESE ADULT READERS

SUBJECT	YES		NO	
	No.	%	No.	%
1.	19	76	6	24
2.	22	88	3	12
3.	22	88	3	12
4.	21	84	4	16
5.	21	84	4	16
6.	22	88	3	12
7.	23	92	2	8
8.	24	96	1	4
9.	25	100	0	0
10.	20	80	5	20
TOTAL	219		31	
MEAN	21.9	87.6	3.1	12.4

TABLE 9

SYNTACTIC ACCEPTABILITY

AMERICAN MATURE READERS

SUBJECT	YES		NO	
	No.	%	No.	%
1.	24	96	1	4
2.	24	96	1	4
3.	24	96	1	4
4.	23	92	2	8
5.	22	88	3	12
6.	24	96	1	4
7.	21	84	4	16
8.	24	96	1	4
9.	23	92	2	8
10.	24	96	1	4
11.	24	96	1	4
TOTAL	257		18	
MEAN	23.3	93.5	1.6	6.5

only on the substitution miscues, while Devine, Jensen and the present study analyze all kinds of miscues identified in the readers' oral reading.

In spite of the minor variations in percentage reported from these four studies, a broad generalization based on these data may still be drawn. All readers, no matter what language they are dealing with, seem not to have any difficulty in responding to the syntactic cues available to them, which confirms the hypothesis set up by the Goodmans and other psycholinguists that syntax is one of the most crucial resources used by readers in reading.

The statistical analysis of the categories of grammatical function and syntactic acceptability yields very important information regarding to what extent a reader is using the grammatical features of his language. However, in order to get a better view of how a reader is making use of syntactic information, it becomes necessary to look more closely at the miscues themselves and their corresponding text words. As Rudine Sims points out "The syntactic constituents of our language are interrelated in such a way that a change within one constituent may also cause change in another. A miscue which involves one word, for example, may at the same time alter the phrase structure of the clause in which it occurs" (Sims, 1976, p. 46). One common method used by researchers working under the framework of miscue analysis to study the complex

interaction of a reader's syntactic system is to investigate types of miscues and the levels of language structures on which a miscue is operating. To examine miscues in terms of their relationship to the structural levels of language enables a researcher not only to treat a miscue locally, but at the same time to look into the complex interplay of a reader's grammatical system while he reads.

Miscue Types and Levels of Structure

Substitution, insertion, omission and reversal are the four types of miscues identified and analyzed in a taxonomy analysis. When a miscue occurs, it is first classified into one of these four categories and then the researcher decides at which language level the miscue occurs. A miscue may cause changes at any, or sometimes all, of the following levels: submorpheme, bound morpheme, word or free morpheme, phrase or clause. The use of this five-category system allows a researcher to capture the inter-relationship between categories as demonstrated in the following example.

Text: They drove until they found <u>a good place</u> to camp.

Reader: They drove until they found <u>a place</u> to camp. (Jensen, 1972). In this example, the reader omitted the word "good." According to the Taxonomy, this miscue is an omission on the word level, a substitution on phrase level (<u>a good place</u> is substituted by <u>a place</u>) and finally an

omission on clause level where the deep structural adjectival clause is lost.

The interrelation between categories of structural levels demonstrated in this example is by no means an uncommon phenomenon in readers' oral reading. In fact, according to the various miscue analysis research projects reviewed above in the present study, most miscues involve more than one level of language structure. Actual statistical figures reported from some of these studies will be given in the following section together with the presentation of the data obtained from the oral reading of the Chinese readers.

A few notes concerning the methodology for examining miscue types and the levels of operation of the present study are needed before the presentation and discussion of the actual data. In the standard form of a taxonomy analysis, each miscue is judged on a five-structure-level basis. But in the present study, each miscue will be examined on a four-language-level scale, namely, bound morpheme, word, phrase and clause. The reason for excluding the submorphemic level from analysis is quite obvious. Since Chinese is not an alphabetical writing system, its morphemes and words are not composed by the combinations of alphabetical letters. But the justification for using the other four levels of this system to study a language which is totally non-western is not so

obvious. A brief account of the internal structures of Chinese morphology may be helpful at this point.

Chinese is commonly described as a mono-syllabic language due to its lack of inflectedness and the physical independence of each individual written symbol. On the printed page, each Chinese character is equally spaced off and there is no functional marker to serve as a word boundry. In this regard, each written symbol has every right to become an independent word. However, that Chinese is a mono-syllabic language is true only as far as the classical Chinese is concerned. As Chao has said "The so-called 'mono-syllabic myth' is in fact one of the truest myths in Chinese mythology" (Chao, 1968, p. 139). The words of modern Chinese are by no means all mono-syllables. Words have become largely dissyllabic or polysyllabic, and many formerly free mono-syllabic morphemes now occur only as bound morphemes in compounds.

In modern Chinese, not even all of its morphemes are mono-syllabic. There are instances of morphemes which are represented by two or more syllables, none of these morphemes having any meaning or function without the other. One such example is 葡萄 pútáu 'grapes.' 葡萄 pútáu is an example of a polysyllabic morpheme. There are also a very small number of morphemes which are represented by parts of syllables. Cases of morphemes less than a syllable, however, are very rare. The only important ones

are the non-syllabic "diminutive suffic" 兒 -r as in 刀兒dāur 'knife' and the plural suffix 們 -men as in 他們 tāmen 'they.' Generally speaking, the modern Chinese morphemes can be classified into three major types: mono-syllabic morphemes which correspond with single syllables, polysyllabic morphemes which are represented by the arrangement of two or more syllables and subsyllabic morphemes which are represented by parts of syllables. Chinese, like its English counterpart, contains morphemes which can exist by themselves as independent units. Chinese also contains morphemes which function very much like "bound" morphemes in the western linguistic sense. In short, in spite of the drastic difference in symbols used to form morphemes, the internal morphological constructions of English and Chinese are quite similar.

To consider the status of "word" in Chinese is a much more difficult theoretical problem. In the first place, the Chinese term word 字 dż has never been clearly defined. In the traditional use, all of the mono-syllables are called 字 dż. Thus, what we call morphemes today are referred to as 字 dż. Furthermore, the term 字 dż is also used to refer to bisyllabic morphemes such as 葡萄 pútáu 'grapes,' 豆腐 dòufu 'beancurd,' 玫瑰 méigwèi 'rose.' This lack of an established tradition in Chinese as to what constitutes a word is central to the confusion. The other source of the problem comes from the fact that the Chinese

writing system does not have phonological or morphemic markers to indicate the word boundaries. Therefore, it is very difficult to establish a firm borderline between words and other segments. As Kratochvil has stated, at the present stage of the Chinese language "it is next to impossible to set up MSC (Modern Standard Chinese) words, or rather to find words in MSC by using the gauge of the set of features popularly associated with words in European languages" (Kratochvil, 1968, p. 94). Nevertheless, despite the difficulties, both linguists and Sino-logues believe that it is both necessary and possible to establish a linguistic unit which can serve as an intermediate link between the morpheme and the phrase or sentence. Instead of defining words in terms of precisely conceived features of morphological structure, of syntactic behavior, and most important of all, of meaning, words are defined from a more functional point of view. Chinese words are established on the basis of actual structural features of modern Chinese utterances.

The definition adopted for this present study is proposed by Kratochvil. He defines a modern Chinese word as "the smallest unit which may function as an immediate constituent of MSC segmental sentences" (1968, p. 94). To treat the Chinese word as a unit which may function as an immediate constituent of segmental sentence makes it possible to take into account the different morphological and syntactic behaviors of a word in different contexts.

Furthermore, to define the Chinese word in this way allows us to determine the size or numbers of morphemes which constitute a word unit on the basis of the actual structural features of the utterances rather than on any predetermined and fixed criteria. In other words, what is a word in one context is not necessarily a word in another context. The following example will demonstrate this point. In the sentence 火車開了 hwǒ chē kāi le. 'The train has left' the segment 火 hwǒ 'fire' is a "sometimes bound" morpheme which combines with another morpheme 車 chē 'vehicle' to form the polysyllabic word 火車 hwǒche 'train.' However, the same morpheme 火 hwǒ when it occurs in the context of 火熄了 Hwǒ syí le. 'Fire extinguished,' has become a single morpheme free word.

This dependency of word status on the environment in which the given segment occurs is not a feature specific to the modern Chinese language. In fact, in the Goodman Taxonomy, the terms word and free morpheme are also defined from a functional perspective: "Free morphemes are oral meaning bearing units within the language which can function independently or in combination with other free or bound morphemes. Words are graphic representations of free morphemes, and free and bound morpheme combinations" (K. Goodman and Burke, 1973). The definition of word given in the Goodman Taxonomy is comparable to the one established for the Chinese word. Both of these definitions

try to establish an operational unit rather than to characterize the word by some specified and fixed features.

At this point we may try to pin down the differences and similarities between English and Chinese syllable to word relations. The differences start with the lack of inflectedness of the Chinese language. The various English ways of enlargement of the root by affixed derivatives are seldom found in Chinese. In Chinese, on the other hand, there are a large number of morphemes which possess dual functions. They are "sometimes free" and "sometimes bound," depending on the linguistic environments they are in, a phenomenon found less often in English morphological constructions.

Early in its history, English was a "synthetic" language and had more bound syllables, but it has become more "analytic" as its free forms increased. Chinese has been and still is "analytic," but as the number of its bound syllables and compounds seems currently to be growing, so the language must in time become more "synthetic." In other words, these two languages are developing in opposite directions in such a way as to become more alike. As English becomes more "analytic" and less "synthetic" and Chinese more "synthetic" and less "analytic" the distance between these two languages shortens, and, as a result, they become more similar in the aspects of morphological constructions.

The following are illustrations of types of miscues generated from the Chinese readers' oral reading and the structural levels at which these operations take place.

1. Morphemic Level

In a taxonomy analysis, any change of the miscue at the morphological level requires an analysis of a two-part coding. The first part deals with the process involved, namely, substitution, insertion, omission and reversal. The second part determines the types of morphemes involved: inflectional, derivational, contractional or non-inflectional. These subcategories used to characterize the types of bound morphemes that occur in the miscues do not apply to the Chinese morphological structures due to the lack of inflectedness of the Chinese language and the way that Chinese characters are written down. Rather, miscue types at this level will be assigned on the basis of a morpheme's relation with another morpheme with which it co-occurs. Chinese morphemes can be roughly classified into two categories: free morphemes and bound morphemes. However, it is important to note that the term "free" has to be understood in its potential sense because Chinese "free" morphemes are not always free. They are sometimes free and sometimes bound, depending on the role they play in constructing morphological units. By the same token, the term "bound" cannot be taken in its absolute sense either.

The "bound" morphemes in Chinese consist of two subcategories. One type of "bound" morphemes consists of those "sometimes bound" and "sometimes free" morphemes. The second type of bound morphemes consists of those bound in the truest sense of the term. They are always bound. All such morphemes constitute a morphological subtype of morphemes which are generally called affixes, word-formation affixes or grammatical affixes (such as affixes 們 -men, 兒 -r and markers 了 le, 着 jė, etc.).

To describe the ways in which Chinese can be represented morphologically, it is obvious that just to distinguish between free and bound morphemes is not enough. It seems to be necessary to observe how individual morphemes behave in relation to the other morphemes with which they represent a word. To understand which of the two kinds of bound morphemes is used to construct a given word becomes the key to describing the complex morphological composition of a Chinese word. In determining the types of bound morphemes involved in a miscue, two categories are used in the present study. A miscue can be coded either "sometimes bound" or "always bound." The following examples illustrate the operation of this coding scheme.

(1) 老 栓 候 他 平 靜 下 去 才 低低的叫道：
來

Lǎu shwān hòu ta péng jìng sya chyù, tsái dī dīde jyòu dàu:

Substitution of sometimes bound morpheme for another sometimes bound

(2)義哥是一手好拳棒，這兩下，一定
Yì ge shì yi shǒu hǎu chywán bàng, jèi lyǎng syà , yí dìng

够他受(用)了。
gòu tā shòu (yùng) le.

Omission of a sometimes bound morpheme

(3)好一會(兒)身上覺得有點冷。
Hǎu yi hwé, shēn shàng jywé de yǒu dyǎn léng.

Insertion of an always bound morpheme

(4)幾個人從他(面)前過去了。
Jǐ ge rén tsúng ta myàn chyán gwò chyù le.

Reversal of sometimes bound morpheme

2. Word or Free Morpheme

Like the morphemic level miscues, miscues involving a word/free morpheme are examined first for the physical qualities of the miscues--substitution, insertion, omission, reversal--and then are analyzed for the kind of morphemic involvement. Here are some examples:

Text: 經 jīng 鋪子 pùdz 板滯 bǎn jì

Reader: 已 yǐ 店 dyàn 呆板 dāi bǎn

When the reader reads 已 yǐ for 經 jīng, he substitutes a single morpheme word for another single morpheme word. In the second example, the reader's miscue, 店 dyàn, is a single

morpheme word, while the text word,铺子pù dž has two morphemes. In the third example, the reader has substituted a multiple-morpheme word呆板dāi bǎn for another multiple morpheme word板滞bǎn jì.

As pointed out earlier in this section, in spite of the difference in symbols which are used to form words in Chinese and in English, there are some common features shared by these two languages in the morphological constructions. Like English, Chinese words can be roughly grouped into four major types: single morpheme words, multiple morpheme words, complex words and compound words. In this regard, the system originally developed for analyzing the structures of English words can be directly applied to the study of Chinese language.

3. Phrase Level

The analysis of miscues at the phrase level is proposed under the assumption that miscues may involve larger language units than morpheme and word. It may be a noun phrase, a verb phrase, or an adverbial phrase. When a miscue occurs at the phrase level, it may take the form of substitution, insertion, omission or reversal. For instance, when a reader reads腰带 yāu dài 'belt' for 玄色腰带 sywán sè yāu dài 'black belt' he has substituted one phrase structure for another.

4. Clause Level

The influence of transformational grammar on the Goodmans' miscue analysis is most clearly seen in the analysis of miscues at the clause level. As stated in The Goodman Taxonomy of Reading Miscues "The surface structure of a sentence can be composed of varying combinations of independent, dependent and embedded clauses. At the deep structure level, a clause is considered to be composed of a noun phrase and a verb phrase. At the surface level, a clause might retain both its noun and verb phrases or might be represented by any one or several of its constituents" (K. Goodman and Burke, 1973). By following this logic, an adjective embedded within a noun phrase represents a deep structure clause. An omission or insertion at the word level may cause some changes at the clause level. For example, when the reader deletes the adjective 玄色 sywán sè 'black' from the adjective phrase 玄色腰色 sywán sè yāu dài and results in miscue 腰帶 yāu dài he has altered the clause structure of the sentence. This miscue causes an omission of a deep structure clause. Miscues can also affect the dependency relationship between clauses or sentences. For example, if the reader reads 我們吃飯的時候,他來了。 Wǒmen chī fàn de shí hòu, tā lái le. 'He came while we were eating,' instead of 他來的時候,我們吃飯呢. Tā lái de shí hòu, wǒmen chī fàn ne. 'When he came we

were eating.' He alters the clause dependency within the sentence. The first clause, formerly dependent, becomes independent in the new sentence.

Tables 10, 11, 12 and 13 summarize the data for miscue types and levels of structure at which these miscues take place. As the data show, the readers of Chinese make use of almost the same types of operations in dealing with the syntactic information available to them as their English counterparts do. They substitute, delete, insert or reverse the order of the items. The data also indicate that miscues produced by the readers of Chinese involve various levels of language structures as described in the Goodman Taxonomy. In the present study, we find instances of miscues that involve more than one structural level. About 11% of the total miscues involve the phrase level, and about 13% the clause level. Most of the miscues of the current investigation occur at the word level (88.8%) and the next most frequent miscues are the bound morphemes. The observation that most miscues take place at the word level confirms the findings reported in both Devine (88.4%) and Jensen (89%) studies.

But the high degree of involvement at the bound morphemic level of the Chinese readers' miscues is something of particular interest. Jensen reported that 94 percent of her H group readers' miscues do not involve the bound morphemes. A somewhat lower percentage but similar pattern is observed in Devine's readers. Her high group subjects

TABLE 10.

TYPE OF MISCUE AT THE BOUND MORPHEME LEVEL

SUBJECT		SUBSTI-TUTION	INSER-TION	OMIS-SION	REVER-SAL	NOT IN-VOLVED
1.	No.	11	3	1	0	10
	%	44	12	4	0	40
2.	No.	12	0	3	1	9
	%	48	0	12	4	36
3.	No.	8	5	0	2	10
	%	32	20	0	8	10
4.	No.	7	2	4	2	10
	%	28	8	16	8	40
5.	No.	8	6	3	2	6
	%	32	24	12	8	24
6.	No.	6	3	5	1	10
	%	24	12	20	4	40
7.	No.	7	4	2	5	7
	%	28	16	8	20	28
8.	No.	7	6	1	2	9
	%	28	24	4	8	36
9.	No.	6	6	4	3	6
	%	24	24	16	12	24
10.	No.	6	5	2	0	12
	%	24	20	8	0	48
TOTAL		78	40	25	18	89
MEAN		31.2	16	10	7.2	35.6

TABLE 11.

TYPE OF MISCUE AT THE WORD LEVEL

SUBJECT		SUBSTITUTION	INSERTION	OMISSION	REVERSAL	NOT INVOLVED
1.	No.	18	4	1	0	2
	%	72	16	4	0	8
2.	No.	18	1	3	0	3
	%	72	4	12	0	12
3.	No.	19	0	2	1	3
	%	76	0	8	4	12
4.	No.	17	0	4	1	3
	%	68	0	16	4	12
5.	No.	20	1	0	0	4
	%	80	4	0	0	16
6.	No.	19	0	2	0	4
	%	76	0	8	0	16
7.	No.	19	1	0	3	2
	%	76	4	0	12	8
8.	No.	20	4	1	0	0
	%	80	16	4	0	0
9.	No.	22	1	1	1	0
	%	88	4	4	4	0
10.	No.	15	0	2	1	7
	%	60	0	8	4	28
TOTAL		187	12	16	7	28
Mean		74.8	4.8	6.4	2.8	11.2

TABLE 12.

TYPE OF MISCUE AT PHRASE LEVEL

SUBJECT		SUBSTI-TUTION	INSER-TION	OMIS-SION	REVER-SAL	NOT IN-VOLVED
1.	No	5	0	0	0	20
	%	20	0	0	0	80
2.	No.	4	0	0	0	21
	%	16	0	0	0	84
3.	No.	2	0	0	0	23
	%	8	0	0	0	92
4.	No.	2	0	1	0	22
	%	8	0	4	0	88
5.	No.	1	0	1	1	22
	%	4	0	4	4	88
6.	No.	2	0	0	0	23
	%	8	0	0	0	92
7.	No.	1	0	0	0	24
	%	4	0	0	0	96
8.	No.	2	0	0	0	23
	%	8	0	0	0	92
9.	No.	4	0	0	0	21
	%	16	0	0	0	84
10.	No.	2	0	0	0	23
	%	8	0	0	0	92
TOTAL		25	0	2	1	222
MEAN		10	0	0.8	0.4	88.8

TABLE 13.

TYPE OF MISCUE AT CLAUSE LEVEL

SUBJECT		SUBSTI-TUTION	INSER-TION	OMIS-SION	REVER-SAL	NOT IN-VOLVED
1.	No.	0	4	1	0	20
	%	0	16	4	0	80
2.	No.	0	0	3	0	22
	%	0	0	12	0	88
3.	No.	0	0	1	0	24
	%	0	0	4	0	96
4.	No.	0	0	1	0	24
	%	0	0	4	0	96
5.	No.	0	2	2	0	21
	%	0	8	8	0	84
6.	No.	0	1	3	0	21
	%	0	4	12	0	84
7.	No.	0	2	0	0	23
	%	0	8	0	0	92
8.	No.	0	4	1	0	20
	%	0	16	4	0	80
9.	No.	0	2	2	0	21
	%	0	8	8	0	84
10.	No.	0	0	4	0	21
	%	0	0	16	0	84
TOTAL		0	15	18	0	217
MEAN		0	6	7.2	0	86.8

have a mean of 76.1% of the total miscues which are free of bound morphemes involvement. However, in the present study, we find that about 64% of the miscues take place at the bound morphemic level.

The result of the bound morpheme analysis may provide some interesting information about the morphological constructions of the Chinese language. The miscues produced by Chinese readers at the morphological level can be used as good examples to demonstrate that Chinese is no longer a mono-syllabic language. Of the 250 miscues analyzed in the present study, 161 involve some sort of changes in their polysyllabic structure. There are 31.2% of them related to the substitution of one bound morpheme for another. The most common type of morphemic substitution is a "sometimes" bound for another "sometimes" bound. As mentioned earlier in this section, "sometimes" bound morphemes are morphemes which can exist independently in some other context as free morphemes. The observation that these "sometimes" bound morphemes occur as bound morphemes rather than as free morphemes seems to provide some evidence that Chinese is becoming more "synthetic."

The data obtained from the analysis of the miscues involving the operations of insertion and omission also support this observation. In fact, among the syntactic deviations produced by the readers of Chinese the researcher discovers that the examples in which omission and

insertion are involved are the most revealing as far as the current development of the Chinese morphology is concerned. On the basis of the data generated from readers' miscues at the morphological level, the instances of omission and insertion are two sides of one phenomenon. The following examples demonstrate this point.

Text: (1)經 jīng (2)現在 syàn dzài

Reader: (1)已經 yǐ jīng (2)現 syàn

In the first example, the character 經 jīng meaning 'already' is a mono-syllabic word while its counterpart 已經 yǐ jīng is a bisyllabic word which is made up by the "sometimes" bound morphemes 已 yǐ and 經 jīng both of which contain the same semantic element 'already.' The words 已 yǐ, 經 jīng, and 已經 yǐ jīng convey the same meaning, but only differ in the sense that the former two are more the classical literary style, whereas the latter is more colloquial. In the present study, several readers miscue on this character. They insert the "sometimes" bound morpheme 已 yǐ and produce the bisyllabic word 已經 yǐ jīng.

In example 2, the operation of omission is involved. The Chinese word 現在 syàn dzài 'now' is a polysyllabic word which consists of two morphemes. It has a mono-syllabic counterpart 現 syàn 'now.' In this example, readers alter the author's choice, which is more colloquial and redundant, by omitting the bound morpheme 在 dzài and

constructing a more compact structure

他的精神現只在一個包上
Tā de jīng shén, syàn jr dzài yi ge bāushàng.

Miscues as the result of omission and insertion make up 26% of the total miscues. The fourth and last kind of miscue type identified in the present study is reversals, which constitutes a little more than 7% of the total miscues of the current study. Despite the small number in percentage, this type of miscue needs to be noted in this context because such miscues represent one specific group of modern Chinese morphological composition not found in an alphabetical language. In modern Chinese there is a group of words in which the two morphemes within the given word have a similar meaning and the meaning of the whole word is again similar to the meaning of both the constituent morphemes. For instance, the word 前面 chyán myàn 'the front; ahead' is composed of the morpheme 前 chyán 'front' and the morpheme 面 myàn 'face; front.' Since the two components of the word are similar in meaning, the reversal of the order of the morphemes does not change the meaning of the original text words. Some other examples of this type of miscue found in the present study are:

Text: 動搖 dùng yáu; 察覺 chá jywé; 背後 bèi hòu
Reader: 搖動 yáu dùng; 覺察 jywé chá; 後背 hòu bèi

Miscues involved in reversal differ from miscues of insertion and omission in one aspect, namely, the two morphemes such

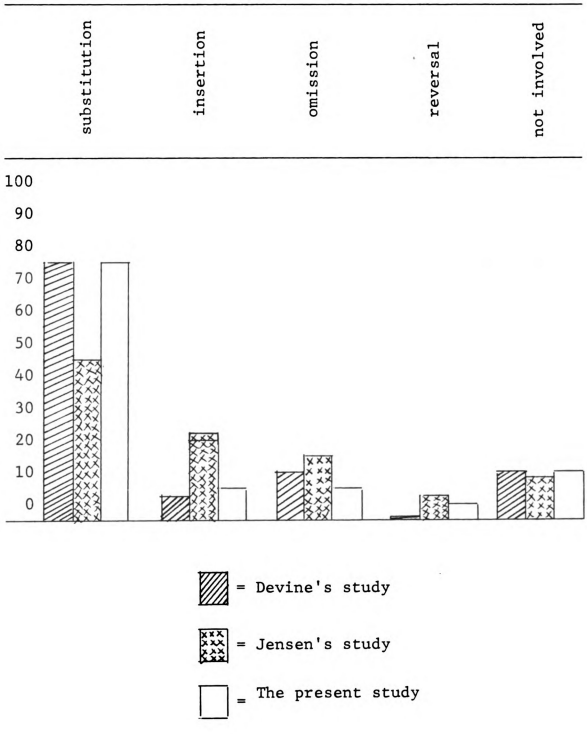
as前面 chyán myàn have to stay together as one word. The positions of the two morphemes are reversible, but the deletion of either one of the two constituents as in the case of omission will result in an unacceptable word.

Aside from the major differences that are noted at the bound morphemic level, there is no significant pattern of differences emerging from our data, as can be seen in Figure 3. Figure 3 summarizes the data of miscue types for Devine, Jensen and the present study at word level. For all these three studies, substitution miscues constitute the majority of the miscues produced by the readers. Both Devine's subjects and those of the present study show about 75% substitution miscues at this level, and Jensen's show 47.8%. The biggest difference between groups is in the insertion category with Jensen 21.1%, Devine 3% and the present study 4.8%. Jensen attributes the larger percentage of this type of her readers' miscues to their application of optional transformations. Based on the present data, no generalization can be made to account for the difference in the performance of the readers' in this category.

Miscues involving reversals are the least common among these three groups of readers, Both Devine and Jensen have very few reversals in their data. In the present study there are eighteen reversals at the bound morpheme level, seven at the word level and one at the phrase level. When

FIGURE 3.

A COMPARISON OF MISCUE TYPE AT THE WORD LEVEL



reversals occur in a text written in English, more often than not, they either result in non-words or cause some damage to the syntax. It is not the case with Chinese.

To recapitulate the finds so far: the data from miscue types and structural levels reveal that the performance of Chinese readers is very similar to that of the readers of English. For both groups of readers, the most frequent types of miscues overall are substitution, then insertion, then omission, and finally reversal. The data also indicate that Chinese readers, like their English counterparts, produce miscues which involve various levels of language structures. The major difference between these groups is that Chinese readers show a higher degree of involvement at the bound morphemic level.

Semantic Acceptability

In the previous section, we have dealt with the category of syntactic acceptability which concentrates on the success with which the reader is coping with the structure of the text sentence. In the present section, the focus will be on semantic acceptability, which deals with the question of how successful a reader is in producing understandable structures. In determining the semantic acceptability of a sentence, the major question is how well the miscue fits the context semantically. According to the short form of the RMI, there are two possibilities of

coding. If the sentence as finally produced by the reader is semantically acceptable within the whole text it is coded "yes." If the sentence as finally produced by the reader is not semantically coherent with the total passage it is coded "no." The following two examples illustrate how this coding device works.

(1) Text: 華大媽叫 小栓進了 屋裏。
Hwà dà mā$_1$ jyàu$_2$ Syǎu Shuan$_3$ jìn$_4$ le$_5$ wū$_6$ lǐ$_7$.
mother Hwa$_1$ call$_2$ syau Shuan$_3$ enter$_4$ particle$_5$ room$_6$ inside$_7$. (Mother Hwa called Syau Shuan into the inner room.)

Reader: 華大媽叫 小栓進了 裏面的 屋子
Hwà dà mā$_1$ jyàu$_2$ Syǎu Shuan$_3$ jìn$_4$ le$_5$ lǐ$_6$ myàn$_7$ de$_8$ wūdz$_9$.
mother Hwa$_1$ call$_2$ Syau Shuan$_3$ enter$_4$ particle$_5$ inside$_6$ side$_7$ particle$_8$ room$_9$. (Mother Hwa called Syau Chuan into the room inside.)

(2) Text: 太陽也出來了 後面照見
Tài yáng yě$_2$ chū lái$_3$ le$_4$.... hòu myàn$_5$ jàu$_6$ jyàn$_7$
丁字街頭 破匾 上 古□亭
dīng dz jyē tóu$_8$ pwò$_9$ byǎn$_{10}$ shàng$_{11}$ 'gǔ□ tíng
口 這 四個黯淡 的 金字
'kǒu'$_{12}$ jèi$_{13}$ sz̀ ge$_{14}$ an dàn$_{15}$ de$_{16}$ jīn dz$_{17}$.
the sun$_1$ also$_2$ come out$_3$ particle$_4$.... behind$_5$ shine$_6$ see$_7$ T-junction$_8$ worn$_9$ wooden tablet$_{10}$ on$_{11}$ 'Ancient Pavilion'$_{12}$ these$_{13}$ four$_{14}$ faded$_{15}$ particle$_{16}$ gold inscription$_{17}$. (The sun had risen, lighting up the worn tablet behind him at the T-junction with its faded gold inscription:"Ancient Pavilion.")

太 陽 也 出 來 了　　後 面 照 見 丁
Reader: Tài yáng yě chū lái le.... hòu myàn jàu jyàn dīng
字 街 頭 被 匾 上　古 □ 亭 口　這 四 個
dż jyē tóu bèi byǎn shàng 'gǔ tíng kǒu' jèi sż gę
黯 淡 的 金 字。
àn dàn de jīn dż.

In the first example, the reader substituted 裏面的屋子 lǐ myàn de wū dz 'room inside' for the expected response 屋裏 wū lǐ 'inner room.' This substitution is semantically acceptable in the context of the story. In the second example, the substitution of 被匾 bèi byǎn for the original text words 破匾 pwò byǎn is not semantically acceptable, because the miscue 被匾 bèi byǎn does not make any sense in the story. Furthermore, in modern Chinese the character 被 bèi has at least six different explanations (e g., quilt; to cover; to spread; because of; a passive voice marker; a Chinese family name, etc.). It is not clear to us which of these definitions that the reader had in mind when he produced the word 被 bèi.

It is important to note at this point that one of the very fundamental assumptions behind the Goodman taxonomy and the RMI as well is that any sentence can be studied from two perspectives. That is, it can be examined both for its sentence structure and its sentence meaning. The main reasoning behind this assumption is that a reader can produce a sentence which is grammatically acceptable but semantically nonsense. It is also possible for a reader to

change the grammatical structure of a sentence without altering its semantic content. It is for this reason that the semantic organization and syntactic organization of a sentence are treated in two separate categories in the taxonomy. Nevertheless, this separation of syntax from semantics is more for practical convenience rather than for theoretical consideration. The Goodmans and other researchers are fully aware of the intricate relationships between these two systems. As Montoro has stated, "The syntactic and semantic components of a language are virtually inseparable, and they are dependent upon each other in the most profound ways. The Gooman Taxonomy does, in fact, accommodate to this reality in several of its categories. However, when we consider the acceptability of a sentence and whatever changes the reader may have made, it is most useful to make an arbitrary separation of sentence grammar from sentence meaning" (Montoro, 1976, p. 34). One of the devices used to accommodate to reality is to put a conditional requirement when coding semantic acceptability. Semantic acceptability is never scored higher than syntactic acceptability (K. Goodman, 1969, p. 27). In other words, the semantic acceptability of a sentence is dependent upon or at least is limited by the grammatical acceptability. This condition puts the study of semantics within the context of syntax and allows the researchers to treat meaning as a function

of both grammatical and semantic interrelation. The other device suggested by the Goodmans and employed by many researchers is to present the data of syntactic and semantic acceptability together. When these two categories are considered together, they provide a very clear picture of how well the reader is handling syntactic and semantic information available to him in the text.

Table 14 presents the data on syntactic and semantic acceptability of the miscues for the readers of Chinese. The data on acceptability point to one general observation. All readers are more successful in using syntactic than semantic information in the text. This is obvious in the fact that the percentage of miscues totally acceptable syntactically for all of the readers is higher than the percentage of miscues totally acceptable semantically.

Table 15 summarizes the data on syntactic and semantic acceptability of miscues for the readers of Blair's study. Blair's data also indicates that readers are more likely to score higher in syntactic acceptability than in semantic acceptability.

Similar findings concerning the performance of readers in the categories of syntactic and semantic acceptability are reported in both the Devine and Jensen studies (see Figure 4). A general observation which emerges from the data is that all readers, regardless of

TABLE 14.

SYNTACTIC AND SEMANTIC ACCEPTABILITY IN %

CHINESE ADULT READERS

SUBJECT	SYNTACTIC	SEMANTIC
1.	76	76
2.	88	76
3.	88	84
4.	84	68
5.	84	80
6.	88	80
7.	92	84
8.	96	84
9.	100	92
10.	80	72
MEAN	87.6	79.6

TABLE 15.

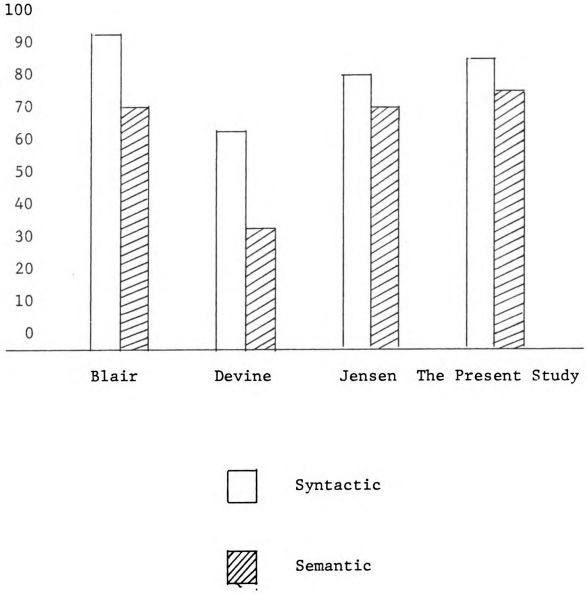
SYNTACTIC AND SEMANTIC ACCEPTABILITY IN %

AMERICAN MATURE READERS

SUBJECT	SYNTACTIC	SEMANTIC
1.	96	60
2.	96	80
3.	96	72
4.	92	72
5.	88	76
6.	96	68
7.	84	80
8.	96	68
9.	92	72
10.	96	72
11.	96	60
MEAN	93.5	70.9

FIGURE 4.

A COMPARISON OF SYNTACTIC AND SEMANTIC ACCEPTABILITY IN %



their language background, are more successful with syntactic than with semantic information in their reading. A comparison of the percentage of syntactic acceptability with semantic acceptability of these four groups of subjects demonstrates this observation: 93.5% and 70.1% for Blair's readers; 66% and 32% for Devine's group; 82% and 74.5% for Jensen's; 87.6% and 79.6% for the present study. For Jensen's and the present study, there is very little difference between the two categories. Blair does not provide information to explain this gap, therefore, no comparison can be made here. One major reason for the gap between syntax and semantics for Devine's readers is their use of non-words. Non-words usually result in structures which are grammatically acceptable but they must be considered as a total loss of meaning. In the present study, very few instances of non-words exist. Instead, miscues which cause a loss semantically are mostly involved with bound morpheme substitutions. In most cases, the substitutions end up with some types of new morphological compositions which are also "real" words in the Chinese language. They are coded as semantically unacceptable in the present study because they violate some kinds of dependency relations when miscues occur, as discussed in the example他的精神，現在只在一個包上 Tā de jīng shén, syàn dzài jř dzài yi ge bāu shàng. (See p. 84) This kind of miscue not only causes loss in meaning, but

also damages the grammatical structure of the text sentence. This seems to be the main reason that the difference in percentage between the categories of syntactic and semantic acceptability tends to be very low in the present study.

Comprehending

The category of comprehending or meaning change is another device used by researchers to discern a reader's processing strategies in relation to semantics. The major question to be answered in coding comprehending concerns how much of the "intended meaning of the author is changed by the reader" while he reads. To measure the degree of meaning change the sentence is read as the reader finally produced it. All corrected miscues are treated as finally resolved by the reader. Table 16 presents the Comprehending Scores of the Chinese readers. The data indicate 22.8% of all miscues produced some changes in the intended meaning of the text and 77.2% of all miscues produced no change in meaning. The Comprehending Score presented in the present study is obtained by combining together the percentage of miscues which result in totally semantically acceptable sentences and the percentage of miscues which are corrected to become acceptable. Sentences which are originally semantically acceptable take up 56.4%, and the remaining 20.8% can be attributed to the result of

correction. Correction attempts made by a reader indicate that he is getting meaning from the print. When reading fails to make sense to him, he goes back or regresses and corrects for meaning.

Table 17 summarizes the data on Comprehending Score of Blair's American mature readers. The figures indicate that 59.3% of all miscues are coded 'no' as having produced no change in meaning and 40.7% of the total miscues as having produced either some degree or major disruption in meaning.

When these two sets of data are compared one finds that except for the fact that the Chinese readers tend to score higher in 'no' meaning change than their English counterparts, there is no fundamental difference between these two groups as far as the reading process is concerned. Reading is primarily for meaning, as will become quite clear if the figures in both the 'no' and 'minimal' categories are combined. The new figures show that the majority of miscues (84% for Blair's readers of English and 95.2% for Chinese readers) preserve all or most of the intended meaning of the text. Only a small number of miscues (16% for Blair's and 4.8% for the present study) cause major changes or loss in meaning.

Summary of the Findings

In the beginning of this chapter, the researcher has

TABLE 16.

COMPREHENDING SCORE

CHINESE ADULT READERS

SUBJECT	NO		MINIMAL		YES	
	No.	%	No.	%	No.	%
1.	20	80	3	12	2	8
2.	20	80	5	20	0	0
3.	16	64	6	24	3	12
4.	22	88	1	4	2	8
5.	23	92	1	4	1	4
6.	14	56	10	40	1	4
7.	20	80	4	16	1	4
8.	17	68	8	32	0	0
9.	21	84	4	16	0	0
10.	20	80	3	12	2	8
TOTAL	193		45		12	
MEAN	19.3	77.2	4.5	18	1.2	4.8

TABLE 17.

COMPREHENDING SCORES

AMERICAN MATURE READERS

SUBJECT	NO		MINIMAL		YES	
	No.	%	No.	%	No.	%
1.	12	48	5	20	8	32
2.	13	52	7	28	5	20
3.	13	52	9	36	3	12
4.	18	72	3	12	4	16
5.	17	68	6	24	2	8
6.	16	64	6	24	3	12
7.	13	52	8	32	4	16
8.	19	76	4	16	2	8
9.	11	44	8	32	6	24
10.	16	64	7	28	2	8
11.	15	60	5	20	5	20
TOTAL	163		68		44	
MEAN	14.8	59.3	6.1	24.7	4	16

posited two research questions to guide the investigation.

These two research questions are:

(1) Are there any significant differences in the oral reading strategies of the Chinese readers and English readers in any of the following categories: (a) graphic and sound similarity, (b) grammatical function, (c) syntactic acceptability, (d) semantic acceptability and meaning change?

(2) What is the relationship between meaning and Chinese print? Can the readers get at the meaning of a character even if they assign an "unconventional" sound to the character?

The results of the study can be summarized as follows:

(1) There are no fundamental differences between readers of English and Chinese as far as the basic reading process is concerned. All readers regardless of their language backgrounds are using the visual information provided by the text. This is evident in the fact that both the readers of English and Chinese produce miscues which look like and sound like the original text words.

(2) The Chinese readers differ from the English counterparts, both in the Blair study and in other miscue studies reviewed, in that when the Chinese readers miscue, their substitutions show less graphic and sound similarity to the text items than do those of English readers. This is directly related to the differences in their writing systems.

(3) The miscues produced by readers of English demonstrate that the higher the grapho-phonic mean, the lower the semantic acceptability scores. However, the miscues of Chinese readers with high graphic similarity tend to show high semantic acceptability scores. This disparity between these two groups of readers is also due to the differences in their language systems.

(4) The examination of the grammatical function of the miscues produced by the Chinese readers reveal that 89% of all substitution miscues retain the same grammatical function as the original text words. Only 5.7% of

the miscues result in a change of the grammatical function. These figures are very close to that of the Blair study. 87.6% of Blair's American readers' miscues have the same grammatical function as the expected responses and 9.8% of the miscues have a different grammatical function.

The high percentage of same grammatical function of the miscues produced by these two groups of readers of very different language backgrounds suggests that readers, in general, are very sensitive to the syntactic features of their language, regardless of what kinds of writing systems they are exposed to. It is also a strong indication that readers bring their syntactic knowledge with them into reading.

(5) The data on syntactic acceptability of the Chinese readers' miscues indicate that 87.6% of the sentences involved with miscues are syntactically acceptable in the story. Blair reports that 93.5% of his American readers' miscues are syntactically acceptable. Blair's figure is somewhat higher then that of Devine's Spanish-speaking readers reading English (66%) and Jensen's native speakers of English reading English (82%). The extremely high percentage of syntactic acceptability found in the Blair study may be attributable to the type of miscue analyzed. Blair focused only on the substitution miscues, while Devine, Jensen and the present study analyzed all kinds of miscues identified in the readers' oral reading.

(6) The data from miscue types and structual levels reveal that the performance of Chinese readers is very similar to that of the readers of English. For both groups of readers, the most frequent types of miscues overall are substitution, then insertion, then omission, and finally reversal. The data also indicate that Chinese readers, like their English counterparts, produce miscues which involve various levels of language structures. The major difference between these two groups of readers is that Chinese readers show a higher degree of involvement at the bound morphemic level.

(7) The data on syntactic and semantic acceptability of the miscues for the readers of Chinese show that the Chinese readers are more successful in using syntactic than the semantic information in the text. This is obvious in the fact that the percentage of miscues totally acceptable syntactically for all of the readers is higher than the percentage of miscues totally acceptable semantically (87.6% vs 79.6%). Similar findings concerning readers' performance in the categories of syntactic and semantic acceptability are reported in both the Blair and the Devine studies: 93.5% and 70.1% for Blair's American readers: 66% and 32% for Devine's Spanish group.

(8) Reading is primarily for meaning. Both the Blair and the present study show that the majority of readers' miscues (84% for Blair's readers of English and 95.2% for Chinese readers) preserve all or most of the intended meaning of the text. Only a small number of miscues (16% for the Blair and 4.8% for the present study) cause meaning change or loss in meaning.

As to the question "What is the relationship between meaning and Chinese print?" the data in the present study seem to suggest that Chinese readers are able to get directly from the written symbols to meaning. This conclusion is reached on the basis of the following observations. First, miscues of the Chinese readers have a tendency to show high "no similarity" scores graphically and phonemically. Secondly, the majority of the Chinese characters have a built-in meaning component, namely, the radical. Readers in the present study appear to be able to make use of this specific advantage facilitated by the text language. It is clear from the evidence that miscues

with high graphic similarity also tend to show high semantic acceptability. Thirdly, the readers of Chinese are able to extract meaning from the printed forms even if they fail to assign "conventional" pronunciation to the words. Chinese readers produced a set of miscued words which are high both in graphic similarity and semantic acceptability, but very low in sound similarity. The third factor seems to indicate strongly that Chinese orthography can be mapped onto meaning at the level of words rather than on phonemes. Consequently, it is not necessary for a Chinese reader to translate the written symbols into spoken language. Here, we find a significant difference in possible silent reading strategies for English and Chinese readers. Because the bulk of the meaning lies in the signific, the readers of Chinese can ignore the phonetic component when reading silently. English readers, on the other hand, are easier to be seduced into attending to grapho-phonic similarity first, and then to translating spoken sound into meaning.

CHAPTER IV

THE TRANSACTIONAL THEORY OF READING

As Kenneth Goodman has said, miscue analysis provides "windows" that enable us to see into the actual reading process itself. Miscues are not simply random errors on the part of an ignorant or careless reader, but highly informative aspects of a reader's total language pattern if we know how to make use of them. Furthermore, in addition to the miscue analysis Goodman supplements the procedure with the "re-telling." In this way it could be argued that the model is a complete picture of the reading experience.

However, the retelling component has several intrinsic problems which merit serious consideration and which qualify to some degree any claim that the Goodman model is a complete and final picture of the total reading process in itself, not that Goodman has made such claims himself. One of the major problems of the retelling was pointed out by James Kalmbach (1980) when he said

> Perhaps the most serious flaw of a story outline. . . is that it is forced to treat each event and each character more or less equally. . . . Consequently, a retelling score does not yield insight into the nature of the narrative the subject has created. It only measures that narrative against the original story (pp. 14-5).

Another reservation about the Goodman model was expressed by Louise Rosenblatt (1978) in her The Reader, the Text, the Poem. Rosenblatt repeated and expanded this reservation in a 1981 article. She does agree with Goodman in finding it useful to use the conception of cue-systems to describe and analyze the reading process:

> The process of reading a text, a process of organizing meaning, can be understood as a selective and synthesizing activity. . . . One seeks in the opening lines of a text syntactic cues as to the sentence pattern to anticipate, and semantic cues on which to base expectations about what is forthcoming. . . . The reader carries on a complex process of selection and synthesis, the arousal and fulfillment (or frustration) of expectations, the construction of a growing "meaning" until the final synthesis or organization is achieved . . . (1981, p. 15).

But she finds the Goodman presentation handicapped by a lack of awareness of the difference between reading a literary document and reading a non-literary writing.

> This general outline of the reading process is still severely incomplete, however, precisely because it does not provide for the important distinction between the reading process that produces a scientific report and the reading process from which emerges a literary work of art (1981, p. 15).

In Rosenblatt's view, the Goodman's preoccupation with information presented in the text in a sense hinders a reader's fruitful appreciation of the reading experience when that experience is concerned with poetry or fiction, say, as opposed to scientific writing. Rosenblatt's criticism is especially directed toward the technique Goodman and other researchers use to elicit retelling.

According to Rosenblatt, giving instructions to a reader before the actual reading starts to the effect that the reader is to summarize when he completes the reading amounts to forcing the reader to focus his attention on certain kinds of information. In her 1981 article, Rosenblatt uses a persuasive example to demonstrate her point. She argues that a reader can read solely for factual information if directed to do so. Suppose that before presenting Yeats's line "I will arise and go now, and go to Innisfree. And a small cabin build there, of clay and wattles made," the researcher tells the reader that he wants to know what information these two lines offer concerning the material used in the building. In Rosenblatt's opinion, the reader would then approach the lines "with an efferent stance" and focus his attention on the "referents" (1981, p. 17). In this situation, whether the word in the poem is "cabin" or "cottage" or "dwelling" is not a matter of importance because the reader's concentration is on trying to find out what kinds of material are used in the building; the aesthetic aspect is lost.

Rosenblatt feels that one of the earliest and most crucial steps in any reading experience is the "selection of either a predominantly efferent, or a predominantly aesthetic stance toward the transaction with the text" (1981, p. 18). In this regard, the RMI model's special

emphasis on factual comprehension in the retelling is a drawback, according to Rosenblatt, when it comes to the reading of literary works of art as opposed to scientific material.

Rosenblatt's own reading theory, which she has termed "transactional," is an alternative which she believes gives a fuller and more accurate account of the reading process. Two basic tenets of her reading theory are especially relevant to our discussion.

Central to Rosenblatt's theory of reading is the view that reading is an "on-going" process which involves both the literary text and the reader of the text. Although this point of view is increasingly acceptable in the early 1980's, she pioneered in such thinking as long ago as 1938. In 1938, Rosenblatt published Literature As Exploration, a book aimed at increasing the teacher's awareness of the existence and importance of the reader's contribution to the reading activity. The main thesis of her reading theory, which she refined and expanded over the next forty years, appeared for the first time in Chapter Two: "The Literary Experience," In the opening paragraph of this important chapter, she says

> Terms such as the reader, the student, the literary work, have appeared in the preceding pages. Actually, these terms are somewhat misleading, though convenient, fictions. There is no such thing as a generic reader or a generic literary work; there are only potential millions of individual readers of the potential millions of individual literary works. A novel or poem or play remain merely inkspots on paper until a reader transforms them into a set of meaningful

> symbols. The literary work exists in the live circuit set up between reader and the text: the reader infuses intellectual and emotional meanings into the pattern of verbal symbols, and those symbols channel his thoughts and feelings. Out of this complex process emerges a more or less organized imaginative experience (p. 25).

In Literature as Exploration Rosenblatt proposes that both writer and reader are creative and that the literary experience that exists between reader and text is an interaction. By 1954 she came to believe that the relationship between these two is a transaction, not an interaction. This is a major change. The "interactional" terminology was rejected by Louise Rosenblatt because it implies that reader and text are two separate, independent entities acting on one another. The concept "transaction," developed by John Dewey and Arthur F. Bentley, seemed to her to be more appropriate to designate those situations where two entities are truly only separate aspects of a single total situation in an ongoing process. A knower cannot exist without a known. Nothing can be known if there is not a knower. The relationship between a knower and a known is transactional. The two exist only in relationship to each other. In the same sense, there can be no "reading" unless there is a reader and something to be read. The term "transaction" is able to capture the dynamic nature of the reading process, in which reader and text are no longer two separate, distinct entities,

each self-contained, that interact, but rather two things involved in a process that demands the existence of the two simultaneously in a special relationship. Rosenblatt describes this two-way, reciprocal relationship between a reader and a text in the following fashion:

> The poem, then, must be thought of an an event in time. It is not an object or an ideal entity. It happens during a coming-together, a compenetration, of a reader and a text. The reader brings to the text his past experience and present personality. Under the magnetism of the ordered symbols of the text, he marshals his resources and crystallizes out from the stuff of memory, thought, and feeling a new order, a new experience, which he sees as the poem. This becomes part of the ongoing stream of his life experience, to be reflected on from any angle important to him as a human being (1978, p. 12).

Thus, the text constrains the reader. On the other hand, the reader brings to the text a special, unique, individual set of experiences from life. The reader also offers certain constraints on the process. Rosenblatt further distinguishes the "text" from the "poem." The text consists of ink marks on paper. The poem is created by the reader in his mind through a transaction with the text. The text has invited the reader to construct certain meanings and to live through certain experiences; and the text has also constrained the reader by its particular pattern of verbal symbols. In Rosenblatt's view, the notion that text is all-important, which she says is the assumption of many teachers (including those called "New Critics" in the 1950's), misses the reader's contribution.

Also, in her view, the notion, now widespread, that the reader is all-important (she attributes this position to David Bleich's Subjective Criticism, 1978), what she calls the "psychological" view, misses the vital constraining influence of the text. The position Louise Rosenblatt sets forth clearly in her recent book The Reader, the Text, the Poem is that reader and text are equally important in the transaction that creates the poem.

The concept of the poem "as experience shaped by the reader under the guidance of the text" bears very significant implications for classroom teachers and for those who are interested in the reading process. If both reader and text are active elements in a reading situation that produces a literary work of art, one does not need to accept the idea that there is one and only one "correct" reading of the text. However, she does believe it is possible to decide in many cases which reading is more relevant to the text, due to the guidance and constraints provided by the text, a matter she takes up under "validity of interpretation."

The second important premise of Rosenblatt's theory of reading is her distinction between two "stances" that a reader may transact with a text. One is the "aesthetic," the other is the "efferent." The reader actively elicits meanings guided by the verbal stimuli of the text, no matter whether he is reading a newspaper or the text of

Joyce's Ulysses. However, there are some qualitative differences between these two kinds of reading. In an aesthetic reading, the reader is reading a text for literary experience. His attention is focused directly on his "moment-to-moment alertness to what is being activated in his consciousness" by the printed symbols during his relationship with the text. In an efferent reading, the reader is reading a text for information he wishes to carry away after the reading event has taken place. Efferent comes from effere, Rosenblatt says, a verb meaning "to take or carry away." The distinction between these two stances of reading derives from the reader's choice of focus. Here Rosenblatt borrows William James's notion of "selective attention" as her theoretical basis for formulating literary experience. Human consciousness, according to James "is always interested more in one part of its object than in another, and welcomes and rejects, or chooses, all the while it thinks" (1890, pp. 284, 288). This "choosing activity" is central to Rosenblatt's reading theory. First, it provides theoretical support for the transactional stances that a reader is to adopt, and secondly, it makes it possible for a reader to choose from the multiple possibilities provided by the text those elements which he synthesizes and organizes into a literary experience.

Theoretically speaking, any text can be approached either efferently or aesthetically, since "referents and associations are all elements of the same stream of thought" (Rosenblatt, 1981, p. 16). That is, a menu may be read aesthetically by a gourmet, and a poem may be read efferently by a would-be critic or examination-taker. However, it is crucially important to make the distinction between the reading process that results in a scientific report and the reading process in which a poem is evoked. In Rosenblatt's view, failure to recognize the difference is to treat all kinds of reading as if they were the same. One cannot look at the text and predict the response that will emerge from a reading. Reading, according to Rosenblatt, is always an event which involves a particular reader with a particular text in a particular situation. Furthermore, she says, the text of a poem, if the poem is to be a poem, must be read aesthetically before it is read efferently. If the would-be reader of poetry does not value his own lived-through experience of aesthetic reading, he will see the text of the poem as some kind of puzzle he must solve. Without the pleasure of the aesthetic experience to motivate him in future poetry reading, he may simply turn away from poetry as something he cannot make sense of. He will not value the experience of reading poetry, only the process of gathering information. As I have mentioned earlier in this section,

the main criticism Rosenblatt makes against the Goodmans' RMI is that it fails to make the distinction between the two stances that a reader may take toward a text, and concentrates the reader's discussion on efferent reading.

Rosenblatt's emphasis on the lived-through experience should not be taken to mean that she believes reading is purely emotive. In fact, as she carefully points out, even in great poems, which require the extreme aesthetic stance, there are some ideational elements. While Rosenblatt does indeed emphasize the importance of aesthetic experience in reading literary works, she is aware that "although many readings may fall near the polar extreme, many others may fall nearer the center of the continuum" (1981, p. 17). In other words, many readers may initially approach the text with an aesthetic stance, but after the reading experience, the reader may find that he has retained much of the information in spite of the fact that retention was not the primary concern of his reading. Or some readers may select a "predominantly" efferent stance, but still possess some degrees of awareness of the qualitative and affective appreciation of the text. Reading, as a form of a thinking process, is characterized by a "continuing stream of choices" on the part of the reader.

Rosenblatt followed up the idea of "reading as transaction" by conducting experiments in reader response. An example of the kind of research she has been carrying

out during the last forty years that centered on the use of poetry in the classroom is given in Chapter Two in The Reader, the Text, the Poem. Here she shows how a classroom of students responded to a Robert Frost poem, "It Bids Pretty Fair." The advantage her kind of research has over the pioneering work of I. A. Richards in Practical Criticism (1929) is immediately clear to the scholar who knows both methods of research. She does not show I. A. Richards' rather fixed notion of how meaning is built in the reading process. Out of Richards' view came, eventually, New Criticism with its emphasis on the text at the expense of the role of the reader. She demonstrates in what way the reader is active and in what way the text constrains.

In spite of Rosenblatt's fundamental and seminal ideas about the reading process, the value and significance of her theory is yet to be sufficiently recognized. It is only recently that researchers interested in reading have begun to understand the central importance of Rosenblatt's point of view. Researchers at Indiana University, originally working within the tradition of miscue analysis, have started investigating the nature of the act of retelling. Jerome Harste and Robert Carey (1979) reported that a retelling is the result of a "semantic transaction" between the reader and the text, a creation of a new text "as original and distinctive as the author's" (p. 17). Other research which also supports Rosenblatt's position was

conducted by Sharon Smith. In her "Retelling as Measures of Comprehension: A Perspective" S. Smith argues that

> The analysis of the retelling, then, should not emphasize recall in the form of repetitions or paraphrases, although these will be of interest in the analysis. The focus here is on the reader as author of his own version of the content, which will indicate the nature of his own active structuring processes. The analysis, then, should attempt to reveal how the reader is breaking meaning out of the text's language and then reconstructing it in language of his own (1979, p. 90).

From the passage, it is obvious that S. Smith is arguing for the need to take both the contribution of the text and of the reader into consideration when analyzing the retelling.

The second part of this dissertation is a further study of the Chinese readers already examined through the techniques of the RMI but now making use of Rosenblatt's transactional theory of the literary work. Instead of looking at the cues, we are now looking at the responses.

One of the very first and essential problems which faces most of the researchers on literary response is the problem of measurement devices. Different measurement devices may channel the subjects' responses to certain modes of responses, due to the kinds of questions asked, the instructions given, the influence of the investigator and the ways response statements are coded. The RMI, for instance, may encourage more text-based responses.

As noted earlier in this chapter, Rosenblatt has conducted a series of experiments in classrooms to find

empirical evidence to support her notion of "reading as transaction." The method she used to elicit responses from her readers was simply to ask them to read the text chosen and to write out whatever thoughts and feelings had come to their minds. This technique would allow a reader to select a reading stance on the basis of the verbal stimuli of the text on the reader and the particular expectations that reader might bring into the reading situation. In Rosenblatt's view, the selection of a dominant stance from which to transact with the text is the earliest and most important decision in any reading event. It can be argued that the device "let a reader choose his own stance," or to use Beach's term, "free-association," may bias a reader toward more subjective responses. However, since Rosenblatt's method imposes no prior restrictions on the reader, the reader has the freedom to adopt any modes of reading which he feels most appropriate. If reading is a problem-solving and decision-making process, this very first step of deciding an appropriate reading stance should be considered as a part of the whole reading process. Rosenblatt's method of eliciting response statements from the readers appears to be the most unbiased research technique that we have at the present time.

Rosenblatt has provided a very useful way to collect data if one wants to conduct research within the framework

of the transactional theory of reading. After the data was collected, Rosenblatt analyzed the data in what she called an "intuitive" study, which is especially relevant when a small number of subjects are involved. When a larger-scale investigation or a cross-cultural comparison is intended, this kind of "intuitive" study may no longer be sufficient. Although Rosenblatt did not develop any coding system for this type of research, she does make it clear what she thinks will be the possible solution to this problem. In her 1977 paper delivered at the Buffalo Conference on Researching Response to Literature and the Teaching of Literature, Rosenblatt made the following remarks: "Research designs for study of response under my direction have included both systematic analysis of multiple elements present in the responses of appropriately-selected groups, and also intuitive study in depth of full individual responses" (1977, p. 23). The research strength to be found in a method that combines a content analysis with "intuitive" study, or case study, is obvious. These two approaches complement each other and enable researchers to study a reader's reading behavior in breadth as well as in depth.

Louise Rosenblatt is not the only person who sees the possibility of using these two analytical devices together as a way of understanding the complex nature of the reading process. Alan C. Purves, co-author of the Elements of

Writing About a Literary Work: A Study of Response to Literature, has made a similar suggestion: "The next direction in research, thus, might well be exploration into the complex system of literary responses. Such exploration might well employ the case-study technique of exploring many aspects of responses of a few individuals. This technique should be combined with multivariate analysis, multidimensional scaling, partition analysis, and other more sophisticated treatment" (Purves and Beach, 1972, p. 37).

From the two quotations given above, it seems that both Rosenblatt and Purves believed that the best possible way to look into the dynamic nature of reading is by joining content analysis methodology and case-study techniques into a unified measurement device. Since the major purpose of this part of the present study is to discover whether the Chinese adult readers approach a literary text in the ways Louise Rosenblatt has described in her transactional theory of reading, it has proved best to follow the research designs recommended by her as closely as possible.

Content Analysis

The inquiry into the literary "response" of a reader is certainly not a recent interest. As early as 1929, I. A. Richards pioneered an approach to the study of

reader's reactions to literary texts by analyzing the readers' interpretations of thirteen poems. Richards' method, set forth in his still very useful Practical Criticism, is characterized by the "intuitive" judgment of the researcher rather than by scientific control and statistical analysis. Over a period of several years, Richards issued printed sheets of poems with the authors' names withheld to his Cambridge students. The readers were asked to study poems at their leisure and then to make and return comments on what they had read. Richards found that to the majority of his readers these poems were difficult, obscure and unmanageable. After intensive analysis of a wide range of students' comments, Richards identified ten chief sources of difficulties: (1) the difficulty of making out the plain sense of poetry; (2) difficulties of sensuous apprehension; (3) difficulties that are connected with the place of imagery; (4) pervasive influence of mnemonic irrelevances; (5) stock responses; (6) sentimentality; (7) inhibition; (8) doctrinal adhesions; (9) technical presuppositions; and (10) general critical preconceptions. The theoretical assumption underlying these ten categories is clear. As pointed out by Purves (1979), Richards' conclusions followed "from the premise of hermeneutics that the literary text contained a verifiable essence." Not only the meaning of the text could be verified, so could imagery, feeling, tone and the

intention of the author. If one accepts Richards' position, then the primary concern of research will be to determine how close the reading of an individual is to a hypothetical "correct" reading of the text.

In 1964, thirty-five years after Richards' first research, James Squire undertook to study the responses of fifty-two ninth and tenth grade students ranging from age 14 to 16 while reading four short stories. The rationale for Squire's research is that "the study of literature must involve not only consideration of the literary work itself but also concern for the way in which students respond to a literary work" (1964, p. 1). What makes this statement significant is the whole notion of the reading process. Implicitly stated are the ideas that meaning does not reside in the text alone, and the recognition of possible contributions from the reader which help to shape the meaning. Perhaps the most important contribution Squire made to the study of literary response is the notion that reactions to a text should be obtained during the act of reading. Squire believes that since most of the studies of literary responses have been based almost entirely on written responses obtained after the reading is completed the facts gathered under this kind of condition "may conceal as much as they reveal" (1964, p. 1). In Squire's view, it is crucial to study "how the students came to think and feel" while they read and responded to a

literary text. In order to capture the developmental sense of the reading process, Squire developed a research design which allowed him to gather data while readers were reading. He divided each of the four stories selected into six divisions. Each reader was asked to comment orally on what he had read immediately after finishing reading one segment. All of the subjects' responses were recorded. A total of 14,494 response statements were generated from the 52 readers' reading. Squire identified the following seven categories of responses: Literary Judgments; Interpretational Responses; Narrational Reactions; Associational Responses; Self-Involvement; Prescriptive Judgment and Miscellaneous.

Purves began his research on literary response shortly after Squire's work was published. The conceptual grounding of Purves's work is very similar to that of Squire; however, Purves believes that some of Squire's categories overlap and are too broad. There is a need to refine these categories and have a higher degree of discrimination. In 1968, Alan Purves and Victoria Rippere published their book, Elements of Writing about a Literary Work: A Study of Response to Literature, in which they proposed a new system for content analysis of responses to literature. They first organized into four major categories the statements respondents made about a literary text:

> Engagement-Involvement, the first category, defines the various ways by which the writer indicates his surrender to the literary work, by which he informs his reader of the ways in which he has experienced the work or its various aspects.
>
> Perception. . .encompasses the ways in which a person looks at the work as an object distinct from himself.... This conception (analogous to "understanding") is analytic, synthetic, or classificatory and deals with the work either in isolation or as an historical fact needed to be related to a context.
>
> Interpretation is the attempt to find meaning in the work, to generalize about it, to draw inferences from it, to find analogies to it in the universe that the writer inhabits. . . . Interpretation can be either of the form or of the content. If it is a form, interpretation is the drawing of inference from a formal aspect of the work. . . . If the interpretation is of the content, it can be as simple as the inferred generalization that is character analysis, for such generalization is based on knowledge or a preconception about human nature. Generalization leads to more complex interpretations: that of seeing the work as imitative of the world, that of seeing the work as distillation or abstraction from the world, and that of seeing the work as a medium of judgment or didacticism.
>
> Evaluation, encompasses the statements about why the writer thinks the work good or bad. His judgment may be derived from either a personal or an objective criterion (Purves, 1968, pp. 6-8).

In addition to these four main categories, Purves proposed a fifth category, "miscellaneous." This category was designed for those statements which do not deal directly with the work itself. Under "miscellaneous" appear two elements often seen in literary response, references to other writers on literature and comparison with other works.

The four categories exist as the general framework of the elements. They are further divided into 24 subcategories, distributed as follows: 4 subcategories for Engagement-Involvement; 9 for Perception; 6 for Interpretation; 4 for Evaluation and 1 for Miscellaneous. Under these 24 subcategories there are 115 elements. 10 of them are distributed to the category of Engagement-Involvement; 49 to Perception; 34 to Interpretation, 16 to Evaluation and 6 to Miscellaneous.

Purves's concern with readers and the roles they play in the relationships with a literary text can be easily seen in the fact that he devoted two of the four main categories to report the response statements which are more reader-based. The categories of Engagement-Involvement and Evaluation can be regarded as being regulated by the readers, while Perception and Interpretation can be regarded as being regulated by the text. However, when it comes down to the subcategories and elements, we get a quite different picture. Out of 115 elements, only 26 can be identified as either Engagement-Involvement (10) or Evaluation (16), yet there are 34 elements in Interpretation and 49 in Perception. Since there are almost three times as many in the categories of Perception and Interpretation, the readers have more chances to be coded either as "Interpreters" or "Perceivers." While what has been pointed out does not necessarily mean this

analytical system is invalid, it suggests that there are some limitations (Cooper & Michalak, 1981, p. 165).

In 1972, Purves and Beach presented a shorter version of the original Purves coding system. This new Purves-Beach scheme still maintains the four main categories, but each is further divided into at least two subcategories:

Engagement-Involvement

(1) personal statement about the reader, an "autobiographical digression"

(2) personal statement about the work, expressing personal engagement with it

Perception

(3) descriptive statement or retelling part of the work

(4) descriptive statement of aspects of the work: language, characters, setting, etc.

Interpretation

(5) interpretative statement of parts of the work

(6) interpretative statement of the whole work

Evaluation

(7) evaluative statement about the evocativeness of the work

(8) evaluative statement about the construction of the work

(9) evaluative statement about the meaningfulness of the work

The newer Purves-Beach coding method has one major advantage over the older one. As is pointed out by Odell and Cooper, "the newer scheme enables us to capture information that would

be lost by using only the four broad categories. At the same time, it allows a more convenient analysis than that permitted by the use of either the twenty-four subcategories or 115 elements of Purves' original system" (1976, p. 206). Furthermore, this newer system is more neutral in the sense that it has a more balanced distribution of reporting components of the readers' response statements.

It is this Purves-Beach scheme which was adopted for the present study.

Related Research

Knowledge of the nature of the reading process has increased noticeably over the past fifteen years, largely due to the great growth of interest in the reader and improved research methodology. Advances in methodology make it possible for researchers to do research with a larger number of subjects and to deal with a wider range of issues. For instance, since Squire's content analysis was published in 1964, and followed by the Purves-Rippere system in 1968, two large-scale investigations have been completed, one of which involved ten countries, and several dozen of doctoral dissertations at universities across the United States have been completed. These studies have covered a great range of interests, from the effects of schooling (e.g., Weiss, 1968; Kirkpatrick, 1972; Heil, 1974; Lucking, 1975), to age differences (Purves and Rippere,

1968; Mertz, 1972; Purves et al., 1973; Applebee, 1973), sex differences (Purves et al., 1973; Applebee, 1973), attitude and personality (Faggiani, 1971; Kuehn, 1973; Cornaby, 1974), and the effects of different texts on the readers (Cooper, 1969: Angelotti, 1972; Somers, 1972; Haug, 1974 and many others). There is another group of researchers whose main concern was with the "process of reading" itself. They addressed themselves to such matters as how responses were initially formulated or the differences between reactions made during small-group discussions and private reading. Pollock (1972) and Beach (1972) belong to this group.

The following examples of research on the reading process were selected to demonstrate some of the common traits found in the reading behavior of native speakers of English reading in English. Since one of the major purposes of the present study is to discover whether there are any discernible patterns of Chinese readers' reading behavior which are comparable to that of readers of English, these findings from the discussion further serve as the basis for comparison.

As previously mentioned, Squire explored the development of responses of fifty-two ninth and tenth grade students while reading four short stories. After intensive analysis of the data according to the seven categories, Squire reported that in spite of the discernible individual variations in responses, "group tendencies are clearly

demonstrated in the development of interpretational, literary judgment, self-involvement, and narrational scores" (1964, p. 51). Among the categories of response, Squire found Interpretational statements were the most common (42.7%), followed by Narrational (21.36%), Literary-judgment (14.85%) and Self-involvement (13.29%). Finally, he saw that there were some obvious correspondences between statements of Self-involvement and those of Literary - judgment: "One of the more interesting findings is the strong positive correlation between percentages of responses labelled literary judgment and self-involvement, indicating that readers who become extensively involved in stories are also inclined to evaluate the literary qualities of a selection. The two types of reactions were found to covary during the average reader's process of responding to an entire story" (1964, p. 51).

Squire also identified six sources of difficulty in literary interpretation: failure to grasp meaning, reliance on stock responses, happiness binding, critical predispositions, irrelevant associations, and unwillingness to suspend judgment (1964, pp. 37-47), a format which clearly indicates strong influence from I. A. Richards.

Using the Squire system of coding, Wilson (1966) studied the responses to three novels written by fifty-four college freshmen before and after class discussion. Wilson's research structure was very similar to that of Squire, but

with a more in-depth investigation of nine of his subjects. Comparing the response patterns for the two set of protocols (before and after), he found a decrease in the number of literary judgments and self-involvements as a result of class discussion and an increase in interpretational reactions. The results of statistical analysis repeated Squire's finding, namely that Interpretation was the dominant mode of students' responses, account for 65.6 percent of the total responses. Wilson's more important findings, however, were derived from the in-depth studies. There were very few examples of the six sources of difficulty noted by Squire, a finding which could be attributed to the result of careful analysis of individual protocols. Wilson pointed out that although some responses "were unsophisticated or evasive . . . fragmentary or partial . . . it would have been difficult to demonstrate that these interpretations were misinterpretations based on misreading or on stock responses." Wilson's finding was not necessarily contrary to Squire's; however, it suggested that statistical analysis can be supplemented profitably with in-depth study of a limited number of subjects.

Another example of Wilson's conscious attempt to test some of Squire's findings was found in his exploration of the relationship between self-involvement and literary-judgment. Squire reported that these two kinds of responses tend to appear in the same reader's responses, but he did

not explain why they seemed to go together. On the basis of the statistical results and individual study of certain selected protocols, Wilson speculated that effective interpretation might require an initial self-involvement: "Perhaps most subjects can begin to concern themselves only with questions which have personal importance. That is to say, interpretation may be a secondary predictive process, impossible without initial self-involvement" (Wilson, 1966, p. 38).

Angelotti (1972) looked at the patterns of responses to dissimilar works by comparing sixty-six eighth graders's responses to a junior novel and to an adult novel. By following Squire's lead, Angelotti divided each of the two novels into four segments representing the exposition, development, climax and the conclusion. The reactions of the readers to each division of the junior novel Tuned Out were compared to the corresponding division of the adult novel A Separate Peace and analyzed by using Purves' (1968) coding system. Angelotti's major findings include:

(1) The reaction to the more easily understood novel was most often interpretative, while the more difficult adult novel generated more perceptual and factual responses.

(2) The ability of students to understand the content of literature is the main factor in determining their mode of responses.

(3) There were some discernible patterns of developmental process across sections of the stories. Involvement increased as the

> story progressed, reaching a high point at the climax, whereas evaluation declined to its lowest point at the moment of climax. For the simpler novel, statements of perception were highest at exposition and lowest at the climax, while for the harder novel they were lowest during the exposition, and highest at the climax. Interpretative responses to the junior novel rose from a low during exposition to a peak at the climax before falling sharply in response to the conclusion. In response to the adult novel interpretations were at their highest during exposition and decreased to the low point at the conclusion.

In 1972, Pollock explored the responses to short stories made by seventy-three students selected from ninth graders, eleventh graders and college freshmen. Among these seventy-three readers, twenty of them were college students. Pollock's college group was close to the present study in terms of age and scope, therefore, the findings reported in Pollock's study concerning the reading behavior of college freshmen were used as one basis for comparison.

Content analysis was performed on the response statements using Purves' major five categories and subcategories. Pollock's data reveal for the college group that interpretation was largest for the categories at 34.8%, with perception next at 26%, ahead of engagement (19.1%) and evaluation (18.2%). The ninth graders produced the largest percentages of perception and evaluation while the dominant mode of the eleventh graders was engagement. One of the major conclusions Pollock drew from his data was "Maturity and additional schooling were associated with more total response, increased attention to interpretation, and

decreased attention to perception and evaluation in free responses to stories" (Pollock, 1972, p. v).

CHAPTER V

RESULTS OF THE STUDY II: FIVE READERS' EXPERIENCES OF A LITERARY TEXT

This chapter is divided into three major parts. The first part describes the design and procedures employed in this study (Study II). The second part presents and discusses the data for the overall group. Data are presented in terms of mean percentage in each of the four Purves categories. The third part of this chapter contains a qualitative analysis of the responses made by five individual readers.

Design of the Study and Analytic Instrument

Sample and Data Collection

The ten readers who did the oral reading for the RMI in Study I were also the same readers for this Study II. As mentioned in Chapter III, these readers were chosen under two conditions. First, they had to have come from Taiwan and to hold a bachelor's degree from a Taiwanese university. This condition was intended to insure that the readers would have shared a similar educational background and have achieved a high degree of reading proficiency. Second, the subjects could not be literature majors. This

criterion was set up because the primary concern of this study is to discover some general reading behavior patterns of Chinese readers. A literature major may respond differently from non-majors due to his/her special training. To have included one or two literature majors in the group might have complicated the issue by adding unnecessary variables.

These ten subjects were asked to read one contemporary short story written by Lǔ Syùn. This story was selected on the basis of a set of criteria originally suggested by Squire (1964). The story ought to be

(1) interesting enough to be able to evoke responses from different readers

(2) unfamilar

(3) rich and complex so that it will generate a wide range of reactions from the readers

(4) of appropriate length

These ten readers were asked to read the story "Medicine" in Chinese. Since "the lived-through experience" is so important in Rosenblatt's transactional theory of reading, the researcher felt it was necessary to find some way to look into a reader's responses to a literary work while the reader is actually in the process of reading. Following the leads of Squire and Angelotti, the method used for this purpose in the present study was to ask the reader to comment on what he had just read when he completed reading a certain part of the story. The story chosen for this

study contains four natural divisions made by the author. Therefore, it was not necessary for the researcher to make any arbitrary interruptions. The following form would be presented to the subjects before assignment of the actual reading:

> This story consists of four parts. When you finish reading each part, please stop and tell me any feelings or thoughts that have come to your mind. When you complete the reading of the whole story, you may add any additional feelings or thoughts about the story as a whole.

The responses made by the ten readers in Chinese were taped and later transcribed into print. The protocols of five readers were further translated into English to be presented and discussed in the section of qualitative analysis of individual reader's reading.

Instrumentation and Data Analysis

The transcribed data were analyzed and classified according to Purves' 1972 version of content analysis described on page 150. A fifth category "miscellaneous" was added for those statements which were either not relevant in the context or references to other literary works. Two independent readers were used to analyze the data to ensure the reliability of the coding. The degree of agreement between these two independent analysts is 88 percent.

The basic unit used for scoring an essay is called a response "statement," which Purves described as "anything

that is set off by its own terminal punctuation, including sentence fragments and epithets" (1968, p. 68). According to this definition, a statement does not necessarily closely correspond to a "sentence" in the purely linguistic sense. A response statement can be a simple, complex, or compound sentence, or simply a fragment. The choice that a researcher makes to divide readers' responses into statements affects the number of responses reported. Those researchers who choose to treat "a single theme or idea" as a scoring unit will tend to divide protocols into more and smaller units. Wilson, for instance, used this device and coded the following utterance as four units: "What a way to live. No money or food or job" (1966, p. 34).

Pollock's study was used as one of the sources for comparison with the findings of the present study, especially in the area of quantitative analysis. In order to stay as close as possible to Pollock's research, the present study adopted the definition of "statement" used by Pollock and treated "the entire sentence" as the basic coding unit. The following is a protocol collected in the present study, which is meant to illustrate how response statements are marked and coded:

Sample Protocol

"Medicine"

Reactions to Division I

Many words in this section are used metaphorically./1 For example, "road" and "lantern" seem to be used in accordance with emotion./2 He, [the author] says, "His [Lau Chuan's] hope lies in front of him;" later when he takes the steamed bread mixed with blood home he is again hopeful./3 The metaphors used here are obvious./4 I feel that these episodes are very vividly described./5

Reactions to Division II

This section is entirely about how they treat the steamed bread before their coughing child eats it./6 He does not use any obvious analogy./7 To write about the procedure he uses only a simple undisguised technique./8

Reactions to Division III

I think that this section in comparison is slightly disorderly./9 If it is not read from beginning to end, it is difficult to understand in many areas how the characters come to be related./10 But after all, Lǔ Syùn's writing style I believe has always been of this kind./11 It is his customary manner to use highly concise language to express the things he wants to express./12

Reactions to Division IV

I feel that this story is very sorrowful./13 The parents try many means to carry out their hopes for their son./14 They use all their energy to get the medicine that can cure their son's illness; nonetheless, their son died in the end and only a grave remains./15 I think in his early years Lǔ Syùn also wrote of ignorant people who are always tender towards their own offspring./16 I find this kind of story very distressing because there is nothing they can do about it./17 This is a story full of metaphors

and suspenses./18 Though short, the proceedings hold the reader's attention./19 More than anything else, I perceive an extremely strong sense of hopelessness in this story./20

Not only is the main character ignorant, but the other characters around him are all ignorant as well./21 Even after the sons were dead, they continue to pray that a crow appear and fly in the right direction indicating that "it is the son's divine manifestation."/22 Though they are ignorant people, their affection for their children is by no means less than that of educated people for their children./23

Sample Scoring

Paragraph	Statement	Subcategory	Category
1	1	4 descriptive of aspects of the work	Descriptive statement
1	2	4 descriptive of aspects of the work	Descriptive statement
1	3	3 retelling part of the work	Descriptive statement
1	4	4 descriptive of aspects of the work	Descriptive statement
1	5	7 about the evocativeness of the work	Evaluative statement
2	6	3 retelling part of the work	Descriptive statement
2	7	4 descriptive of aspects of the work	Descriptive statement
2	8	8 about the construction of the work	Evaluative statement

Paragraph	Statement	Subcategory	Category
3	9	8 about the construction of the work	Evaluative statement
3	10	1 about the reader	Personal statement
3	11	4 descriptive of aspects of the work	Descriptive statement
3	12	4 descriptive of aspects of the work	Descriptive statement
4	13	1 about the reader	Personal statement
4	14	3 retelling part of the work	Descriptive statement
4	15	3 retelling part of the work	Descriptive statement
4	16	6 of the whole work	Interpretative statement
4	17	2 about the work	Personal statement
4	18	4 descriptive of aspects of the work	Descriptive statement
4	19	7 about the evocativeness of the work	Evaluative statement
4	20	6 of the whole work	Interpretative statement
4	21	6 of the whole work	Interpretative statement
4	22	3 retelling part of the work	Descriptive statement
4	23	6 of the whole work	Interpretative statement

Presentation and Discussion of Results: Quantitative Analysis of the Coding Data

Following the procedures outlined in the previous section, a total of 436 response statements obtained from the ten readers were coded. Table 18 presents the results of this statistical analysis. As the data indicate, the category with the largest mean percentage is Perception (37.84%), followed by Interpretation (24.31%), Engagement-Involvement (22.9%), Evaluation (9.86%), and finally, Miscellaneous (5%).

This finding is somewhat different from Pollock's. Pollock analyzed 497 response statements to six short stories by twenty freshmen college students (native English speakers) and found the category of Interpretation to be the dominant form of responses (34.8%), with Perception next at 26%, ahead of Self-Engagement 19.1% and Evaluation 18.2%. Miscellaneous responses account for 1.67 percent (Pollock, 1972, pp. 136-140).

The difference may be attributed to the difficulty of the text chosen for the present study. In fact, almost half of the readers complained at some point that the text was obscure and hard to grasp. In this regard, Angelotti (1972) in his research on the effects of the difficulty of the text on the patterns of responses has pointed out that the ability of students to understand the content of

TABLE 18

MEAN SCORES OF RESPONSES BY CHINESE ADULT READERS

	RESPONSE CATEGORY	NO	%
I.	ENGAGEMENT	100	22.935
	1. about the reader	32	7.339
	2. about the work	68	15.596
II.	PERCEPTION	165	37.843
	3. retelling part of the work	90	20.642
	4. descriptive of aspects of the work	75	17.201
III.	INTERPRETATION	106	24.311
	5. of parts of the work	73	16.743
	6. of the whole work	33	7.568
IV.	EVALUATION	43	9.862
	7. about the evocativeness of the work	15	3.44
	8. about the construction of the work	22	5.045
	9. about the meaningfulness of the work	6	1.376
V.	MISCELLANEOUS	22	5.045

literature is a major factor in determining the mode of response. When a reader dealt with a text of more complex form and content, he had a tendency to produce more factual responses, while the leading response pattern to a less sophisticated story was interpretational. Studies of the age factors on the patterns of responses also reported that interpretational responses increased at older ages, which also suggests that the cognitive load contained in a text might have some effects on the performance of the reader. The differences in story genre may be another possible explanation for this discrepancy. The story selected for the present study adopts a structure which is commonly found in the genre of "mystery" story. Generally speaking, a story of suspense requires close attention to the textual clues from the readers. In addition, the fact that the borderline between the categories of Perception and Interpretation is not always very clear might have influenced the outcome of the statistical analysis. Alan Purves might have anticipated this potential problem because in many places in his Elements of Writing About A Literary Work he stresses the distinction of these two (cf. pp. 7, 21-22, 27, 31-33). It is possible for a researcher to move across categories; thus,in small-scale studies such as Pollock's and the present ones, a few "crossing-over" response statements would be enough to change the picture.

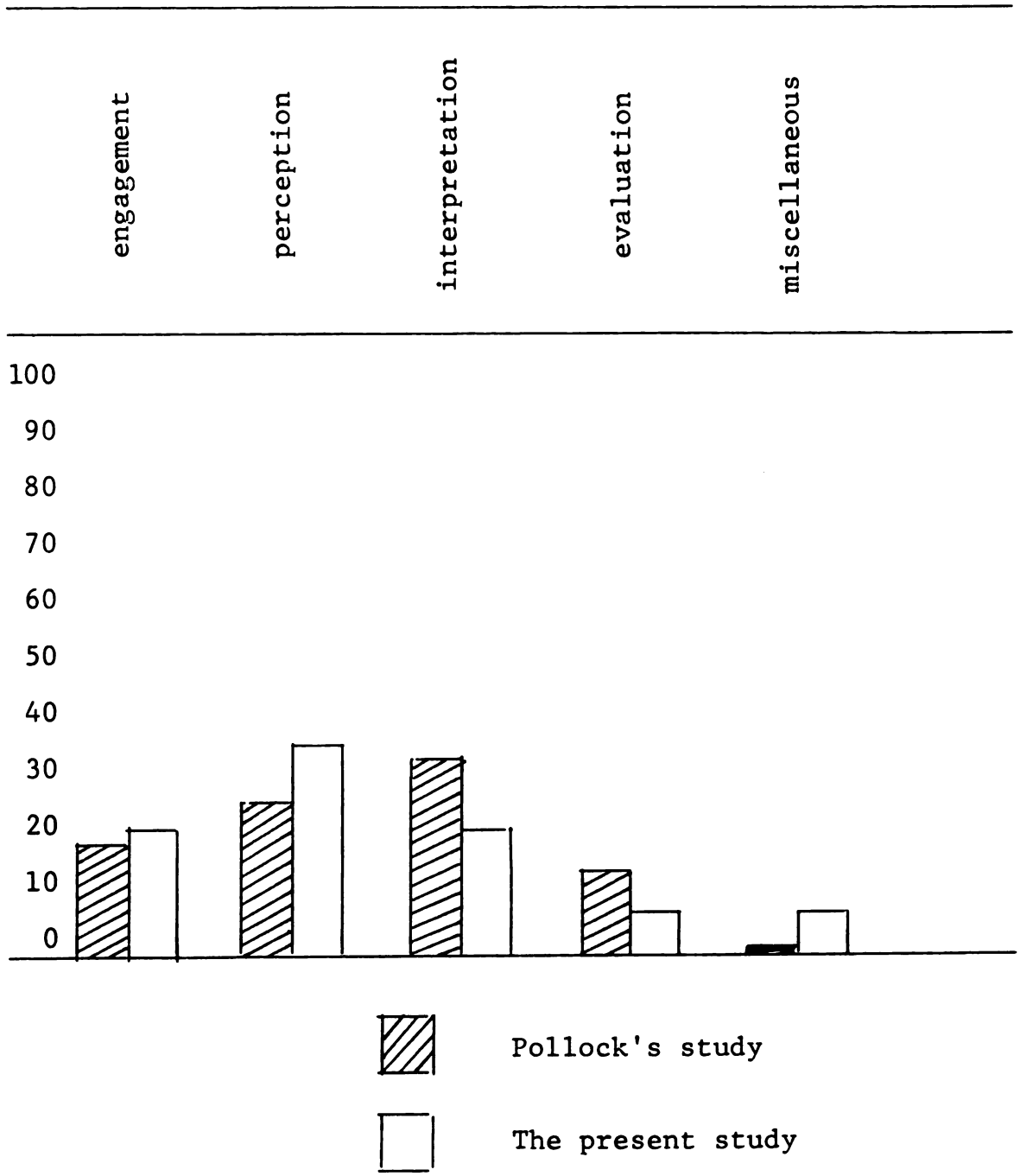
Examination of the subcategory reveals that Chinese readers are most sensitive to the factual information contained in the text. Narrational and retelling part of the work led in percentage (20.6%), with descriptive aspects of the work, such as language, characters, setting, etc. next (17.2%), followed by interpretative statements of parts of the work (16.7%). These three subcategories account for 55 percent of the total response statements. Pollock's study reported that four subcategories--reaction to content, content itself, general interpretation, and interpretation of content together--constituted about 60 percent of all responses (Pollock, 1972, pp 139-140). The fact that these subcategories make up more than half of the readers' responses in both studies suggests that the linguistic symbols play a very important role in the readers' process of reading. The subcategories such as personal statements about the reader, or about the work, or about the evaluative statements about the construction of the work, which highlight more personal and idiosyncratic reactions to literature, take up about 38 percent. The figure is very significant because more than one-third of all of the responses bear some traits of creation from the individual readers. They cannot be directly related to any overt verbal symbols of the text.

A number of generalizations emerge from our data. First, the data indicate that the overall patterns of

responses made by the Chinese adult readers are not drastically different from that of Pollock's American college readers. It is true that Chinese readers seem to favor the perceptional information offered by the text, whereas Pollock's readers tend to produce more statements which are interpretative; nevertheless, the differences are marked only by a very slight margin, as shown in Figure 5. The second observation, which appears to be even more valuable, is that we are able to identify and classify from the Chinese readers' reactions to a literary text response elements similar to those discussed by Purves and many other researchers. This second observation clearly demonstrates that readers, regardless of their diverse language background, seem to approach the reading of literature in a very similar fashion. They are sensitive to the verbal symbols and are able to respond to them. They try to make sense out of the text by using various sources of information, such as clues from the text and the reader's own prior experience and knowledge of the real world. Readers make statements about the factual inputs contained in the print, about actions in the plot, and also offer their explanations of certain events. They make evaluational remarks about the construction or meaningfulness of the work which they are reading. They also make statements about their personal reading experience with the text. We see those general patterns of responses not only in Pollock's study but also in the studies of Squire, and of Wilson, and

FIGURE 5.

A COMPARISON OF PATTERNS OF RESPONSE OF POLLOCK'S AMERICAN READERS AND THE CHINESE READERS OF THE PRESENT STUDY



of other researchers.

At this point, it seems appropriate to discuss the findings of the present study in the context of Louise Rosenblatt's theory of reading. Rosenblatt has repeatedly claimed that reader and text are equally important in the transaction that creates the poem. It is true that quantitative analysis can only provide a general picture concerning what kinds of information a reader is likely to use in the act of reading and gives very little help in answering the question of how a reader and a text come together to evoke a poem. Nevertheless, the results obtained from the content analysis do confirm the notion that reader and text are mutually essential in the transaction. Our data indicate about 60% of the responses are more or less text-based and about 40% of the reactions are reader-oriented.

The third observation evolved from the data concerns the development of responses as readers move from one division of the story to another. If reading is an on-going process which takes place over time, as asserted by Rosenblatt, we should be able to find some indications which reflect this process from our data. Table 19 presents the numbers of response statements made by each reader in each of the four story division. It is clear from the data that readers produced more response statements in Division IV than in the other three sections. Division IV alone generated 219 units of the total 436, but this fact does

TABLE 19

NUMBERS AND PERCENTAGES OF RESPONSES
MADE AFTER EACH DIVISION FOR EACH CATEGORY

Division of the Story	I					II					III					IV				
Category	P	D	I	E	M	P	D	I	E	M	P	D	I	E	M	P	D	I	E	M
*Reader 1	4 30.7%	6 46%	3 23%	0	0	3 37.5%	5 62.5%	0	0	0	9 37.5%	1 4%	11 45.8%	3 12.5%	0	8 26.6%	4 13%	16 53.3%	0	2 6%
Reader 2	4 44%	3 33%	0	1 11%	1 11%	0	3 100%	0	0	0	2 25%	6 75%	0	0	0	2 11%	5 27.7%	7 38.8%	0 22%	4
Reader 3	0	2 66.6%	0	1 33.3%	0	0	2 100%	0	0	0	0	0	1 33.3%	2 66.6%	0	1 11%	1 11.%	5 55.5%	2	0 22%
*Reader 4	2 40%	1 20%	0	2 40%	0	0	2 100%	0	0	0	1 25%	2 50%	1 25%	0	0	6 26%	3 13%	5 26%	8 34.7%	0
*Reader 5	3 15%	13 65%	4 20%	0	0	1 14%	4 57%	2 28.6%	0	0	2 37.5%	4 50%	1 12.5%	0	0	1 2%	8 19%	8 19%	11 26%	14 33%
Reader 6	1 50%	1 50%	0	0	0	1 12.5%	5 62.5%	2 25%	0	0	0	1 33.3%	2 66.6%	0	0	1 8.3%	5 41.6%	6 50%	0	0
Reader 7	3 50%	1 16.6%	0	2 33.3%	0	8 66.6%	3 25%	0	1 8.3%	0	3 50%	2 33.3%	0	1 16.6%	0	14 50%	7 25%	4 14%	2 7%	1 3.5%
Reader 8	2 50%	2 50%	0	0	0	2 33.3%	4 66.6%	0	0	0	1 12.5%	4 50%	3 37.5%	0	0	7 31.8%	13 59%	0	2 9%	0
*Reader 9	3 33%	2 22%	4 44%	0	0	0	5 50%	4 40%	1 10%	0	2 20%	3 30%	5 50%	0	0	0	9 50%	8 44.4%	1 5.5%	0
*Reader 10	0	2 66.6%	0	1 33.3%	0	0	9 100%	0	0	0	0	3 100%	0	0	0	3 16.6%	9 50%	3 16.6%	3 16.6%	0
Total	22	33	11	7	1	15	42	8	2	0	20	26	24	6	0	43	64	62	29	21
Mean (%)	29.7	44.6	14.8	9.4	1.3	22.3	62.7	11.9	3		26.3	34.2	31.6	7.8		19.6	29.2	28.3	13.2	9.6

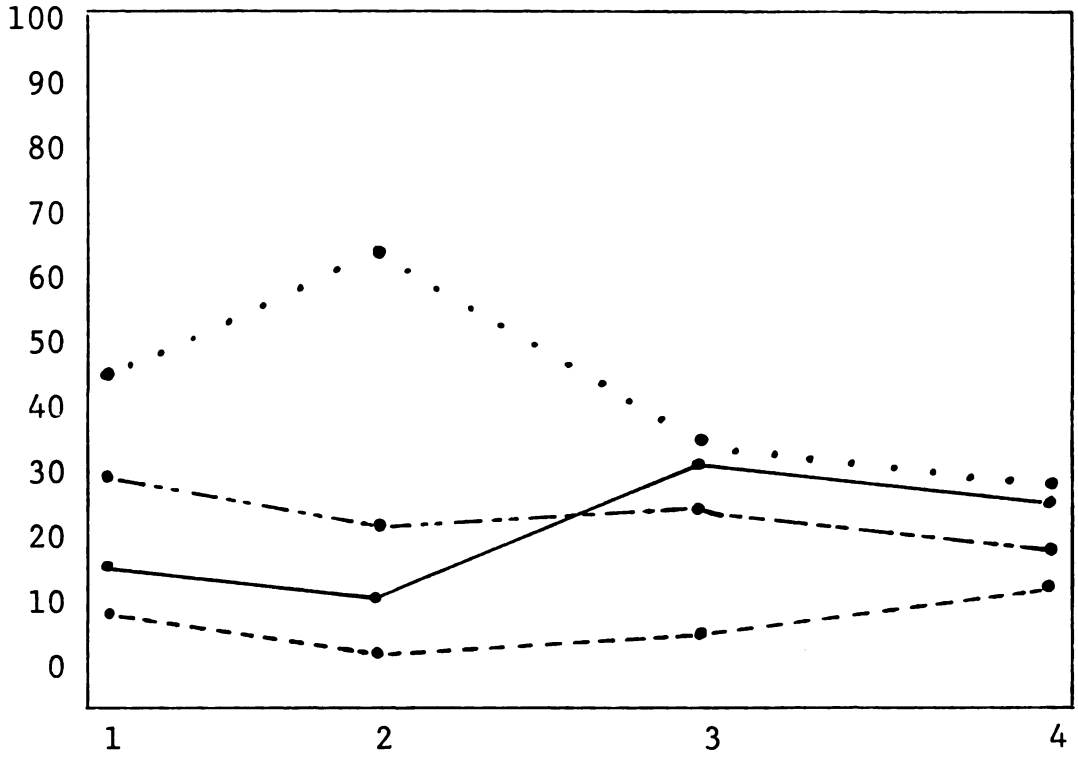
Legend of Statements: P = Personal D = Descriptive I = Interpretative E = Evaluative M = Miscellaneous
* are the readers whose protocols were chosen for case-study.

not necessarily mean that all of the response statements of the four categories arrive at the highest point in percentage simultaneously when the readers got to the final section. Figure 6 is a graphic representation of the data summarized in Table 19. Figure 6 reveals that:

(a) The dominant response is the descriptive one. More than 40 percent of the responses to the first segment of the story are descriptive, which strongly suggests that readers responded to the verbal stimuli provided by the text right from the very beginning of their reading. The statements of perception increase in number and reach a peak of occurrence at division II (62.68%), then decrease through division III (34.2%) to a relative low percentage of responses at the fourth division (29.2%). It is interesting to note that at division II, nine out of the ten readers scored more than 50 percent on the category of Perception. Four of them produced nothing but factual retelling from the text. The reason for the sharp increase in perception from division I to II may have something to do with the way in which the story is presented. When we get to the analysis of the protocols of individual readers in the following section, it will become more obvious how the author manipulates the readers' curiosity. In fact, more than half of the readers demonstrated their frustration by complaining that the story was "obscure" and "scattered." As a result, they did not understand "what is going on."

FIGURE 6

THE DEVELOPMENT OF RESPONSES



Divisions of the story

— - - I. Personal statements

···· II. Descriptive statements

——— III. Interpretative statements

---- IV. Evaluative statements

To find out "what is going on" seems to become the central concern of their reading. Furthermore, the writer of the story seemed to have anticipated the readers' anxiety, because in section II he did provide some more obvious clues to the mystery which he deliberately created in the beginning part of the story. Probably that is the main reason why factual retelling became the dominant mode of responses. In other words, what we have learned from the data is that the form and content of the text might have a definite effect on the readers in terms of which mode of response to take.

(b) Percentage of interpretative response tend to be low at the first two divisions (14.8% and 11.9% respectively), then to rise sharply in reaction to the third and fourth divisions (31.57% and 28.3%). What is being suggested here is that the sense of meaning and interpretation develop over time. Readers first have to establish some kind of relationship with the text before they can actually "generalize about it, . . .draw inferences from it, . . . find analogues to it in the universe that the writer inhabits" (Purves, 1968, p. 7).

(c) In his discussion of the development of responses, Squire has pointed out that there is "a strong positive relationship of self-involvement responses and literary judgments" (1964, p. 35). No such correlation has been found in the present data. However, except for readers 3 and 10 who produced no personal statements in the first section of

the story, our data seem to support Wilson's argument that "an initial self-involvement is necessary for effective interpretational processes" (1966, p. 38). As shown in Table 19 and Figure 6, personal statements started at the highest point at the beginning of the story (29.7%). The fact that the statements of perception and personal engagement take up about 74 percent of the total response in the first section suggests that information from the text and the personal knowledge and experience which a reader brings into the reading situation might be the very first resources that help him in making sense of what he reads.

(d) Evaluative responses remain relatively low for all four divisions of the story. However, the percentages of literary judgment appear to be a little higher in reaction to the first division (9.5%) and to the final division (13.24%) as compared to the second (2.98%) and third (7.8%). This observation seems to correspond to the one made by Squire: "Clearly the readers . . . tend to judge stories in terms of literary values to a greater extent when they commence reading or complete reading than they do as they become engrossed in the central experiences depicted in the literature" (1964, p. 31). The evaluative statements made after the reading of the first section tend to be sweeping generalizations regarding such stylistic matters as the writer's presentation of the story, while the final judgments tend to evaluate the work as a whole, its construction and meaningfulness.

It is evident from the data that reading is accomplished in a temporal process in which readers reassess their relationships with the literary text continually while in the activity of reading. But it is not directly observable from these figures how a reader modifies his expectations or how he readjusts his strategies in the process of evoking his responses. To understand the constructive operations of the reader in the development or shaping of meaning, we must examine the linkage between the source of given information and the response made to it. One possible way to look into this complex matter is to study the actual responses made by the readers closely. To serve this purpose, case-study reports of five individual readers are presented in the following section.

Presentation and Discussion of Results: Responses of Individuals

As pointed out in the previous section the statistical analysis of data can only reveal in a very general way how a reader approaches a literary text during the reading process. In order to have a better understanding of how a reader deals with the reading material, a closer and more detailed study of the actual data becomes an indispensable operation. For this reason, this section is devoted to the discussion of individual readers' protocols. Due to the nature and scope of this present study, the researcher felt it necessary to eliminate as many variables as possible;

therefore, the producers of the five protocols are all male readers. However, using the same sex also has limitations. Female readers may not read in the very same way as male readers. To reach a broader generalization, a comparative study would be required.

Another point concerning methodology needs to be mentioned here. In analyzing these data, two independent readers other than the researchers herself were involved. These two readers were asked to read the five subjects' protocols, and then rank these five readers on a ten-point scale with the highest aesthetic rating being ten, and the highest efferent rating being zero. The total points for each reader are ten, which could be allocated to either the efferent or to the aesthetic or a combination of the two. For example, if a reader is assigned a six on the efferent scale, his rating on the aesthetic scale must be four. The agreement among the three independent readers was remarkable, with only slight variation in point assignments.

Responses of Case Study Subjects

The presentation of this section takes the forms of (1) a "response profile" chart for each subject with the percentage of responses in the five Purves categories and (2) a discussion of each subject's protocol based on the finding presented in the chart as well as the actual response statements of the individual subject.

Lin's response profile

	Personal statements	Descriptive statements	Interpretative statements	Evaluative statements	Miscellaneous
Lin:	9.2%	38.2%	19.7%	14.5%	18.4%
Group means:	22.9%	37.8%	24.3%	9.9%	5%

Lin's response profile indicates that he is a reader who is able to draw upon information from many levels simultaneously. A detailed analysis of his protocol confirmed this initial observation. One of the two independent readers who read Lin's transcribed response statements pointed out that "this reader is very sensitive to a lot of what is going on in the story and read information into the smallest details" but "this is also a person for whom experience is rich and as sensuously as cognitively." Lin demonstrated this unusual quality of reading style right from the very beginning of his reading of the story:

I feel that this passage is the beginning of a plot development. For instance, the atmosphere and the handling of atmosphere point to plot development. The backdrop of the story is midnight. Furthermore, there are dogs. Usually if a dog barks it makes a person feel less nervous. But in this story the dogs do not bark, which makes the atmosphere even more mysterious. In addition, the colors are either black or gray. The arrangement of details is on the T-junction. The main character is Lǎu Chúan. He suddenly stopped at the T-junction and did not move. It means, of course, that a new episode is going to take place. What follows is that between the person in black and Lǎu Chúan "one hand hands over the money, the other hand hands over the goods at the same time." It makes a reader feel a sense of urgency and you want to know what is in the parcel.

Although on the surface this is just a steamed bread, a very common thing, it seems that inside the steamed bread, there is something else. Furthermore, because the setting is night time, the main character a senile old man, and the business that he is doing with the other stranger, all point to the parcel as being uncommon, not usual. Because all of the descriptions are of how Lǎu Chúan got there, this passage tells two things. One, is the setting: the time is deep into the night and the location is the T-junction. Second, is the crucial thing, the parcel, the steamed bread.

It is evident from the very beginning that this reader made use of the textual sources as the vehicle for construing the meaning of the text. For example, he talked about Lǎu Chúan, the person in black, the T-junction, the dogs and the steamed bread. However, he was not just trying to give all of the facts that occurred in the story. This is a reader who is alert to how the information is given in ways other than by simply being told that first this happened, then that happened. He seemed to be most interested in colors, and in the atmosphere in which the first section of the story takes place, because he repeatedly said "the backdrop of the story is midnight... the dogs do not bark, which makes the atmosphere even more mysterious." He associated characters in the story with colors: the man in black, the senile old man, and everything is "either black or gray." The way in which this reader talked about the first section makes one feel that he was actually living in the story, as if he were actually feeling the sense of mystery and "urgency."

The quantitative analysis of Lin's reactions to the first division of the story shows that about 60% of his response statements are related to the textual stimuli. It seems particularly revealing to study these two sets of data together. On the basis of Lin's reading behavior as evidenced in his reactions to the first part of the story, it can be said that the amount of information from the text a reader makes use of is not the only crucial factor in determining whether the reader is to have a literary experience or not. It is indeed true that a reader must pay close attention to the verbal signs of the text because "the literary work is always anchored in the text," as Rosenblatt states. But what is also very important is that the reader has to pay "an equal closeness of attention to what that particular juxtaposition of words stirs up within each reader" (Rosenblatt, 1978, p. 137). From the ways that Lin recounted his experience with the text, he seemed to possess a high degree of sensitivity to verbal nuances, but at the same time, he also demonstrated that he had a capacity for intellectual and emotional involvement. Lin was not only alert to the ways in which textual information was given, but was also fully conscious of the effects they had produced on him. This is probably the reason why he was able to talk about the sense of urgency and strong desire of knowing what was happening. In sum, what can be shown about Lin as a reader on the basis

of his responses to the first section of the story is that he was an anticipating reader who was emotionally as well as cognitively involved in evoking his responses.

From the reactions that he made to the reading of the second division, there is evidence for the idea that this reader is someone who is both intellectually and emotionally involved.

In the second passage, it seems that the location shifts to the character's own house. The time is the next day, oh, the next morning. And the character brings back the steamed bread. Oh, it seems to be some kind of medicine. It seems that in this section another plot has been arranged. What I mean is that the hunchback has arrived; although the author hardly touched upon the arrival, it seems that this character is a foreshadowing for the next development because the time of this arrival is the same time as the making of the steamed bread. Maybe the author will explain later why he suddenly appeared at this crucial moment. That parcel looks like some kind of medicine because it is given to Lǎu Chúan. Oh, possibly it is some kind of medicine to cure coughing. The atmosphere in this passage is not as urgent and tense as the first passage. What I mean is that now it is daylight and you feel that everything has become more mild!

The results from the quantitative analysis show that about 57% of the total responses to section II were coded as descriptive, which indicates that this reader was able to pick many cues from the text. What is not so directly observable from the figure is that Lin's personal and emotional investment is as great as his cognitive one. However, a close reading of his reactions to the second part of the text reveals his evocation and responses to it are also a "blending and balancing of overtones, attitudes, feelings and ideas." He says "the atmosphere . . . is not as urgent and tense . . ." and "daylight . . . you feel

everything has become more mild." What these statements reveal is that this person was emotionally living through the story which he was reading because he talked in terms of things being mild. Furthermore, Lin was also a reader who anticipated what was coming next when he mentioned that the appearance of a certain character was "a foreshadowing for the next development." This reader appears to have been anticipating what might happen and setting up his own hypothesis in line with what he thought the author's intentions were. In this sense, this reader was creating his own possible developments for the story on the basis of the verbal cues provided by the print.

One major difference between this section and the first one is that there is more factual information given in the second section, whereas there are more impressionistic accounts in the first. It may well be that the reader tried to orient himself, or, in Rosenblatt's terms, began "to develop a tentative sense of framework within which to place what will follow" (1978, p. 54) when he began the opening part of the story. He tried to develop certain kinds of expectations about the setting, about the characters, about the ideas, about the themes and about what kind of text that would be forthcoming. Since he did not have enough context to build up the textual meaning of the story, he could only guess on the basis of what he had. Perhaps this is the primary reason that his

response statements in the opening section tend to be more impressionistic. When he moved to the second section new elements were introduced, and apparently he found it necessary to develop new structuring principles. Consequently, he reproduced more factual details in this later part which were not available to him when he first started his reading. Indeed, this sudden increase in factual retelling seems to be a general trend for almost all of the ten subjects, as shown in the quantitative analysis.

Lin's responses to the third section are only three in number; this part of his total response is short.

> In this section the development of plot seems to move forward; that is, Kāng Dà Shú shows up, and because the people in the teahouse react to him in such a submissive manner he seems to represent some kind of power. What I mean is that all those people agree with whatever he says.

The ways in which this reader chose to react to this most puzzling section of the story is interesting. It is surprising to see how consistent a reader could be in terms of selecting cues to respond to. His concern for the development of plot has been the organizing power which helps him to put the story together, and his use of characterization as the main source for organizing the plot development has been very consistent up to the third section. For example, in the first section, he mentioned that Lǎu Chúan, the man in black and many more characters

all came to the T-junction which means "the beginning of plot development." In the second section when he saw the hunchback appear at the moment when the family was in the process of preparing the steamed bread, Lin was speculating that "this character is a foreshadowing for the next development." Now in the third section, among so many incidents, he chose to deal with characters and their relationships to the possible plot development.

In contrast to the short responses of section three, Lin's reactions to the fourth section make up a relatively long passage. It takes up almost half of Lin's total response statements. In the first part of this section of retelling, Lin began to connect up the beginning and middle of the story with the ending of the story.

> The setting for this paragraph is a graveyard. From this we know that Syǎu Chúan died. His mother went to the grave to pay her respect.

The fact that Syǎu Chúan died at the end seemed not to surprise him. It is possible that he had figured out at the very beginning of the story the death of this young man to be inevitable. Otherwise, he would not have picked up on the colors and atmosphere in the first section and guessed what they were leading to. They seemed to set the theme for him. Many other readers did

not feel the atmosphere was as dark and gray in the first section of the story as he did.

In the fourth section, Lin also finally came up with his answer to his own implicit question: what is the message that the story is trying to convey? This question, apparently, was central to Lin's reading, because he was continually looking at the foreshadowing.

> At the beginning of this paragraph there is an account of the graveyard where one section is reserved for the poor common folk and in the other part lies executed criminals. The description is very poignant. "On the left of the road were burial mounds of such criminals as had been executed or had died from exposure in jail; on the right was a burying ground for paupers. Both sides were already crowed with rows and files of mounds like the ceremonial cakes at a rich man's birthday party." I feel those who died are probably the victims of the vicious power of pressure groups. . . . Kāng Dà Shú represents some sort of evil power. He exchanged steamed bread for money. This action is an action of immorality because Kāng Dà Shú does not care about people's lives. He only cares for money.

Some of the readers did choose to read the story for its poignancy, that is, for the pity and the sadness one feels for the family itself. But Lin sought a larger sociological context and treated the young man who died of tuberculosis and the young revolutionary as victims of society. The society is so sick that none of the characters are normal people.

> The entire setting is very gloomy; the colors are always dark and gray. First there is night, then later bright daylight. But even in daylight there are a lot of people who are either old, sick or handicapped, or who are soldiers. So in this story we do not see one who can be considered normal. And with the death of Syǎu Chúan a great impact on

> our psyche is created. The senile old man, the hunchback and the graveyard. . . everything is in decay.

Here is a reader who talks as if he was experiencing anger and sadness as he went through the reading experience.

Lin's responses to the fourth section of the story constitute half of his total responses. The distributions of these statements to the five Purves categories are as follows: Personal statements (2.4%), Descriptive statements (19%), Interpretative statements (19%) and Miscellaneous (33.3%). About 33 percent of his responses in this section were identified as Miscellaneous because at the middle of his retelling he departed from the text by bringing in the French writer Maupassant.

> The short story written by Lǔ Syùn reminds me of the French writer Ma...Ma...Maupassant, especially in their ways of writing and treatment of details. They both tend to focus on an event in great detail, and then make a very sudden surprising ending. In a short story by Maupassant there is an old man living in the city. Every day he goes to the park and sits there watching young couples driving around in carriages. The old man is a lonely bachelor. This story revolves around the old man's visits to the park and going to work. Whenever the old man deviates from this pattern of life he is unable to function properly. The author does not explain how the old man died at the end of the story. But his corpse is found hanging from a tree. I find this technique of a sudden ending similar to the ending in Lǔ Syùn's story. I find this to be a typical way of short story writing. That is, you focus on a single plot, and then develop it

The reader departed from the text at the end of the story at a very crucial point where there are some mysteries that can only be solved by the way in which the reader interprets signs like "the flowers without roots" and "the crow."

Instead of staying with the text and trying to figure out what these signs might have meant in the context, he backed off from the text by bringing in Maupassant and his horror story. His separation from the text is disappointing because he ended up by saying "plot becomes not so crucial." On the other hand, this deviation is still satisfying in the sense that his departure is a departure into literature by another author from another culture. He was making a cross-cultural comparison and developing a world-like truth.

Lin's protocol reveals him to be a reader who undertakes a "spontaneous transaction" with the text. This is a reader who is able to pick many cues from the text and who responds to them emotionally as well as cognitively. He pays close attention to the verbal symbols of the text while at the same time he is equally aware of the "feelings, sensations, images, ideas that he weaves between himself and the text." In short, in Lin's account we have found a reading experience that can be accurately described by using Rosenblatt's terms "aesthetic." On the ten-point scale, Lin is ranked with an average of 8.5 at the top end of the aesthetic scale and with an average of 1.7 on the efferent side by the three independent readers of his protocol.

Gu's response profile

	Personal statements	Descriptive statements	Interpretative statements	Evaluative statements	Miscellaneous
Gu:	9.1%	69.7%	9.1%	12.1%	0%
Group means:	22.9%	37.8%	24.3%	9.9%	5%

Gu's approach to the text is very different from our first reader Lin. Instead of responding widely to the visual and sensuous possibilities afforded by the text, Gu selected out just one incident from the first section to focus on and ignored many other incidents.

> This passage seems to describe a scene where a prisoner is being beheaded in Ancient China. The setting of the story is probably in the northern part of China. There is some flavor of northern China here, m m m. It is very compactly written. This is my impression of the first passage.

How did he know that it is a scene in which a prisoner is beheaded? None of the other readers were able to get this point until the very last section. How did he sense that "there is some flavor of northern China" in the story? Gu was coming at the story much more personally. As it turned out in the later part of his retelling Gu had actually been to the northern part of China.

All of Gu's response statements to section two were coded only as Descriptive, but the way in which he recounted the story reveals interesting things about him as a reader.

> I forgot to mention one point; that is, the plot of the story centers on the son who has tuberculosis. People in China formerly believed that bread made with blood can cure tuberculosis. The father's name is Lǎu Chúan. This story is about how the father bribed the executioner into getting blood with which to make the bread that can cure their son, hoping that their son will be rid of his illness soon. Naturally, the parents care a lot. The incidents of the story are not explicitly presented of course. The family seems to have opened a tea house, probably that is. Then in the second passage the incidents became more clear and easier to understand. It is about how the father took the bread home and had it prepared by steaming it or putting it in the oven for his son. It is not shown clearly whether the son had known that the bread he ate is made with blood or not. Probably he will know it in the end. I am not sure. At this point he simply ate it and went back to sleep.

This is a reader who when he does not understand something will not speculate verbally about it, but who is still seeking understanding by collecting information from what he has read. In contrast, the first reader seemed to understand a great deal without having put everything together concretely the way this second reader seemed to have done. Gu did not want to mention Lǎu Chúan's family until he was absolutely certain what was going on. In fact, in the second section he does mention that "the incidents became more clear and easier to understand." It is very interesting to look at this reader's reaction to the first section and the second section together. At first, he made some generalizations about the setting, then when he got to the second portion of the story he said "I forgot to mention one point..." and went back to comment on what he thought had happened in the first section. The fact

that he digressed and tried to recapture some incidents that occurred in the first passage tells us something not only about Gu as a reader but also the reading process in general. It provides us with a clear demonstration that a reader does not process information in a linear order. Readers not only look forward but also backward to modify the tentative hypothesis they have set up as new information enters their focus of attention. Readers select, organize and synthesize ideas, feelings and attitudes on the basis of what seems to be most interesting or relevant to them at the particular moment of their relationship with the text. That Gu failed to follow the main line of the story, that is, Lǎu Chúan and the steamed bread at the beginning of the story, but instead talked about northern China, can be used to demonstrate this point. The recognition of something familiar which reminds him of his childhood experience might have created a greater emotional impact on him than the story itself. He chose the northern China theme as his center of attention and pronounced the expression "there is some flavor of northern China here." That a reader can reserve judgment on something until an appropriate moment arises is not unique to Gu. In the first reader's retelling, we find a similar example. The reference to "soldiers" appears in the first section of the story. However, Lin did not say anything about soldiers until he was in the fourth section. In commenting on the

sick, decayed society Lin said that in this society we do not see any normal healthy people, and those who we do see are "either senile, sick, or handicapped, or...soldiers."

Gu's comments on the third passage are short. They are mostly factual retelling from the text.

> This passage is about the prisoner who was killed. He seems to have been a revolutionary who was captured and imprisoned by the China government. During that time China was run by the aliens from Manchuria. The jailer wants to make some money. He is very poor, that is all.

It is clear from his retelling of the second and third sections that this reader read mainly for information as opposed to reading for pleasure. Except in the first section in which he demonstrated some degree of emotional involvement, we do not get any idea at all that this person was having any emotional responses to the reading experience. But this is a reader who is very careful and offers much information. In his factual retelling, he demonstrated that he had some prior knowledge about the Chinese people, culture and history which the rest of the readers might not have had. For example, he said "people in China formerly believed that bread made with blood can cure tuberculosis," and "during that time China was run by the aliens from Manchuria." This prior knowledge that he possessed and his experience of actually being in the northern part of China enabled him to put a rather obscure plot into a coherent reading.

Gu's reactions to the fourth section cover a wider

range of response statements, although the dominant one is still descriptive. The results of quantitative analysis of this section show that the category of Perception leads the other three with a percentage of 50, and followed by Engagement, Interpretation and Evaluation, each of them taking up 16.7%.

> This passage is about two mothers who visit their son's graves. It is already the time of the year when the annual journey is made to ancestral graves. Obviously, Hwà Dà Mā is the mother of the man who ate the bread made with blood, and yet who died; and through implication only, it is probably that the other woman is the mother of the prisoner who was beheaded. The outward appearances of the two graves are not unalike. The two mothers grieve differently although, of course, they are both very sad. And it turns out, one woman comforts the other. At this point they see a crow on a tree branch. One mother hoped that the crow would reveal to her that her son is innocent. In addition, this shows that Chinese people are still superstitious.
>
> This story is good. The episodes are not explicitly told; they are all implied. The author does not force his viewpoint. Also, there is nothing superfluous. The author of the story is Lu Syun. He is a northerner. Actually he was not born in the north. Usually, southerners do not write this way. I know that the setting is in the north because I used to live there myself, and I also know that some writers use north China as background for their stories. I know this is true because the vocabulary, tone, and dialect of northerners and southerners differ.

Although I am still making the point that this is a reader who was reading for information (that is, as an "efferent" reader) we must notice that he put information in a clear and coherent way. He was able to get an important point across, namely, that the two mothers grieved differently, one woman comforting the other. The woman whose son died of tuberculosis comforted the mother whose son had died as a

prisoner. The bare outline of the plot abstracted of any colors is what this reader got, but what he got he got constantly and well.

Furthermore, at the end of his retelling, this reader made very interesting statements about the story's vocabulary, tone and the dialect. These are elements which create atmosphere. Thus, we know that he did see these elements used by the author, but we also know that he did not respond to them emotionally. He was looking at these elements simply as information. Gu also mentioned that the story was written in north China because he gathered the evidence from the diction and the structure of the language used. He knew that the setting of the story is in the north because he actually at one time lived in the north. But he did not seem to bring any personal feelings into his responses. He was simply retelling what he thought had happened. In terms of reading for textual information, this reader is consistent, both in his choice of clues to respond to and in the ways in which he made use of his prior knowledge. He tends to focus only on what he does understand and to dismiss what he does not.

In contrast with the first reader, Lin, who was placed at the top side of the aesthetic scale, Gu was rated as an efferent reader with an average 7.7 on the efferent and 2.3 on the aesthetic.

Chen's response profile

	Personal statements	Descriptive statements	Interpretative statements	Evaluative statements	Miscellaneous
Chen:	32%	21.3%	40%	4%	2.7%
Group means:	22.9%	37.8%	24.3%	9.9%	5%

Chen, like the first two readers, began by picking up textual cues offered by the print. But the verbal signs Chen chose to select are quite different from those chosen by the other two readers. Whereas the first reader focused on a relatively inclusive set of the literary aspects, and the second one sought mainly the details that connected with the development of the story, this third reader seems to be particularly interested in characters.

> After reading the first paragraph I began to speculate on the possible ending of the story. I cannot guess exactly what the ending will be, but at the present time I know that Syǎu Chúan is sick and that probably the cure for his illness came from a human body gotten by illegal means. The only remedy for Syǎu Chúan's illness is something dripping with blood.
> Then we learn the father Lǎu Chúan got some money and asked someone to get the thing that he needs. Although he has some reservations about whether or not he will be able to get it, one thing is definite; he loves his son. And we also know that Syǎu Chúan is a very good son, a responsible son, which is shown in the ways he tried to help his mother. And Lǎu Chúan suddenly felt young again because he was able to provide the money which would make his son healthy again. Even though a lot of money is required, to him this is a form of relief. It brings him a sense of happiness. That is why he feels young. But of course, this is only my interpretation. And what about the red badge on the numbered jackets? I think they are some kinds of decoration on the uniform worn at the end of the Chīng Dynasty.

On the basis of his retelling here, Chen emerges as a reader who was seeking to comprehend the story through trying to understand the characters. He fixed his attention on the characters that in his mind he believed the author created and tried to identify with. He demonstrated an understanding of what the two parents in the story had been going through. For instance, this reader noted that the father, Lǎu Chúan "suddenly felt young again because he was able to provide the money which would make his son healthy again." This reader also tried to see the son, Syǎu Chúan , through the eyes of the parents when he said "Syǎu Chúan is a very good son, a responsible son." So this is a reader who is very alert to characterization and who pays close attention to the relationships of the characters.

Another point made by this reader is especially noteworthy. This reader was able to talk about what was actually going through his mind while he was reading the first section: "After reading the first paragraph, I began to speculate on the possible ending of this story." What Chen was doing confirmed Rosenblatt's statement that "As he engages with the text, the reader. . . sets up hypothetical frameworks, entertains expectations as to what will follow, and uses these as guidelines for selecting out from alternative responses" (1978, p. 137).

> This paragraph makes the first paragraph more clear. I mean that what I said in the first paragraph is very close to what is presented in the second

> paragraph. Now they talk about the two halves of the steamed bread; therefore, we know that it is definitely steamed bread. In addition to that, there is the blood dripping scene. I guess the background is the end of the Chīng Dynasty and the beginning of the Republic and that someone was executed. Someone took the steamed bread and dipped it in to cure Syǎu Chúan's ailment. I believe that all this confirms my original hypothesis about the story. Of course, I cannot be sure whether Syǎu Chúan is cured or not because I have not finished reading the story yet. I can only say that these are my responses to the reading, which confirms my previous statements. Now a bunch of characters enter the story. I did not receive any special impression from this part.

Responding to his own evocation which itself arose during his reading of the first section of the story, this reader was talking about whether the hypothesis he set up at the beginning of his reading was correct or not: "I believe that all this confirms my original hypothesis about the story." From these various retelling it would appear that readers can be extremely conscious of ideas, sensations or feelings that are stirred up in their minds in the transaction with the text. This reader as well as the second reader could reveal confusion and uncertainty about what things might mean and comment on the actual process of trying to make sense of what was being read.

> Now it is obvious. The setting is the end of the Chīng Dynasty and the beginning of the Republic. I felt that the author was possibly using the common fold's ignorant behavior to express people's general attitude toward revolution. So human blood, bribery, and the scene where the jailer hit the prisoner for refusing to give him money, all point to society's corrupt nature. It has become very obvious now that the central theme of this story is that at the end of the Chīng Dynasty and the beginning of the Republic the common people's concept of revolution is as of yet

> undeveloped. Consequently, it is extremely difficult, if not impossible, for revolutionaries to communicate their revolutionary ideas.

One of the obvious characteristics of this reader's strategy in approaching a text is that he always reads ahead. He made predictions about what might happen, and then commented on his own predictions. For example, reflecting on what has been evoked in the second section, Chen began his responses to the third section by saying "Now it is obvious. The setting is the end of the Chīng Dynasty and the beginning of the Republic." Chen's reading offers a concrete example which clearly demonstrates the central notion of Rosenblatt's transactional theory of reading. That is, the reader responds to the evocation he, himself, makes under the guidance of the textual signs.

Up to this point, Chen's reading has followed the main line of the story. His responses have covered most of the central events that happened to the family. In the first half of the third section, Chen proposed his interpretations of what all those incidents meant to him: "I felt that the author was possibly using the common folk's ignorant behavior to express people's general attitude towards revolution." However, in the middle of his retelling, he changed his focus on the story and entered into a discussion of democracy and saw this story as a piece of propaganda.

> If this story had been written by a modern Taiwanese writer, I would say that it depicts the first stage of the development of the Taiwanese democracy. It reminds me of an article written by Professor Móu, Jūng-Sān. He said that democracy is something like a skeleton. What I mean is that this skeleton becomes alive only when everyone in this skeleton understands democracy and cooperates. For instance, every meeting has its set procedures. If the participants do not follow the procedures then the skeleton collapes. In other words, if we want democracy we need to heighten the consciousness of the common people, then the common people can operate the skeleton of democracy.
> The main idea of this third paragraph is that there is someone who wants to build the skeleton, but unfortunately, the common people are not ready. Because the common people do not understand the need for revolution they said several times "Crazy! crazy!" They believe that rebelling against the government in power is very unwise. I think that the author is probably an early advocate of democracy; in this story, it is clear that he is expressing the concept of democracy, and that is gradually spreading. I am not sure but maybe this is a piece of propaganda writing.

For a person who was bent on understanding the story through the characters in the first two sections of the story to drop the main line of development suddenly and to move into a discussion of democracy is striking. Chen had been very consistent in his using characters as a path to the meaning of the story. However, it is not clear until the third section that he was not interested in the characters themselves as individuals or in their destiny, but rather in them as a group that can fit into his political scheme. On the basis of his retelling, there is no clear evidence to show for certain that this reader had already sensed the political overtones right from the beginning of his reading and had anticipated that the story was going to develop into a political writing. Therefore, it is quite possible that he

changed his original way of perceiving the story as the new details presented in the third section entered his consciousness. Of the three readers studied so far, this is the only reader who shows great interest in this section. Probably this is because in this section there is a prisoner who might have died unjustly, which seems to be more important to him than the fate of the other young man who had a fatal disease that may or may not be related to his poverty. It is true the third section contains a lot of information with political implications. Maybe that is the major reason why those readers who are less alert to the political issues tended to ignore this third section or found this section somewhat "disorderly." Apparently, they did not find the political problems implied here relevant to their understanding of the story. One of the important things shown by these three readers' responses concerns the matter of "selective attention" that Rosenblatt has talked about. It is clear from these protocols that each reader seemed to bring into the reading situation his own special interest and intellectual strength, which in turn seemed to affect his choice of what to focus on. We have seen that each reader selected from "the multiple possibilities" offered by the text those elements that can be fitted into the relevant patterns of ideas, feelings, and attitudes.

> Now I start to wonder why they want to use steamed bread mixed with blood to cure Syǎu Chúan's illness. I think that the meaning of the blood may play a very important role in this story. I remember a story called "Dai Mai Ju Tswei Ji." In this story there are some people who like to drink human blood. When I first came across the steamed bread mixed with blood I associated it with this. But it may mean something else in the story. I do not want to dwell on this. It is just a momentary association. I think that maybe the steamed bread mixed with blood is only a surface meaning.
>
> I believe that the deep meaning of the story is that the Chīng Dynasty will fall. As far as those flowers, the flowers without roots, it is obvious that they were put there by someone. It indicates that there are people who sympathize with the revolutionary cause already. Then the crow. Especially the crow mentioned in the last sentences. The crow flies like an arrow into the distant sky. It gives the impression of a lift-off. The impression is very close to what Jwāng Dž́ said "an eagle spreading its wings" after long captivity and oppression to enjoy newly discovered freedom. Perhaps I am looking at this story from a political perspective. It may be due to the fact that I have read a lot of articles concerning politics. I have my own point of view on the subject of democracy. I feel that sooner or later democracy is an inevitable route.

Readers are found to talk more about the story itself in the fourth section. Perhaps this is because there are some obvious symbols in this section. It is interesting to see how these readers reacted to these symbols that they chose and to see how each of them manages to fit the symbols into his own over-all structure of meaning. Chen, like the two readers before him, responded to the symbols of flowers and crow, but came up with a different interpretation. Instead of reading "the flowers without roots" and "the crow" as a sign of superstition or as a sign of ignorance of the Chinese people, as given by the first two readers

respectively, the third reader thought the flower symbol was an unspoken sign of support of the revolutionary activity. His idea about the crow is also tinged with political color. He mentioned that the crow flying like an arrow into the distant sky gave him the impression of a lift-off, which reminded him of a famous phrase made by an ancient Chinese philosopher, "an eagle spreads its wings after long captivity and oppression to enjoy newly discovered freedom." And he finished his retelling by saying that democracy was bound to come sooner or later.

Analyzing Chen's responses has been an interesting learning experience for the researcher. What can be learned from his retelling is that a reader while reading the story can actually talk about his confusion and doubts about the meaning of the story and explain how and why he came up with a certain kind of interpretation. Chen was fully aware of why he approached the story from a political point of view. He said that he was looking at the story from a political perspective perhaps because he had "read a lot of articles concerning politics." What he was saying here is that his past experience was responsible for the approach he took to the text.

From the retellings it can be seen that readers do reach for information from their own background and try to apply that information to the situations at hand. So readers

really bring their own understanding of life in general to the body of the reading rather than staying strictly with the verbal symbols provided by the text. The first of the three readers brought in his knowledge of literature, the second one his personal experience in Northern China, and this third one his interest in politics, and as a result, the three readers produced three different kinds of readings out of the same set of verbal signs. These protocols offer insight into how impossible it is for readers to rely simply on the textual information to figure out what is happening in the story. All three readers went outside the text at certain points when they felt confused to find ways of understanding what they were reading. In going outside of the text, what matters is where one seeks information and what one brings back to the text.

Obviously, readers have different intentions when they read, just as writers have different intentions when they write. This third reader seems to be more concerned with his own intention than that of the author, so he apparently feels free to cast off the information in the text and build up his idea of what the story is about on the basis of limited details of the text. This is a person who reads not for literary pleasure, but as a means to an end. Rather than being immersed in the story, he took the story in his own hands and used it as a tool

for his end, which was to speculate about establishing democracy in Taiwan. As a reader, Chen was intensely conscious of what was going on in his mind and was able to articulate it. But he, like the second reader, was reading for information. He was interested only in those details which were related to a larger political context. Chen's response statements reveal that he is more an efferent reader than an aesthetic one. He scores 4.7 on the aesthetic scale and 5.7 on the efferent.

Dung's response profile

	Personal statements	Descriptive statements	Interpretative statements	Evaluative statements	Miscellaneous
Dung:	27.3%	24.3%	30.3%	18.2%	0%
Group means:	22.9%	37.8%	24.3%	9.9%	5%

Except for the first reader who seemed to show no frustration about the story's occasional obscurity, the other readers demonstrated some degree of uncertainty at some point in their reading. The fourth reader, Dung, bluntly admitted that he did not have any clear idea of what was going on in the first section of the story, partly due to the fact that he was not accustomed to reading orally while responding at the same time, and partly because "the descriptions are scattered."

> I really do not understand the purpose of the descriptions in the paragraph. When I read this section I felt that Lǎu Chúan wanted to do something, but I am not sure what. Maybe I didn't understand because I am not accustomed to reading orally and simultaneously responding. I don't have any way of connecting the author's thought to my own. Furthermore, I feel that the descriptions are scattered. I have no way of understanding why Lǎu Chúan went to the T-junction to look at all the unusual people or what these people were doing. I do not have a distinct idea of what is going on.

On the basis of his retelling, we may say that we are now looking at a reader who does not have much confidence in his ability to read. He felt frustrated because he did not know how to pick clues from the text and put them together.

Unlike the third reader who, though also confused, yet tried very hard to find out the possible direction of the story, this fourth reader seemed to be willing to wait to see what the story was going to tell him.

> Ok! This section is more clear. He says that Lǎu Chúan is going to get some steamed bread. I don't know what kind of medicine is in the steamed bread. It does not matter what kind of medicine it is. The purpose of it is to cure his son's illness. This is the main theme of this section.

In reading the second section, Dung began his responses by saying "this section is more clear." He felt somewhat relieved because he began to see the connection between Lǎu Chúan, the group of strange people in T-junction and the medicine for Lǎu Chúan's sick son. But he was interested in plot. He paid no attention to such literary details as colors or the implicit relationships between husband and wife or father and son. All he wanted to know was that there was a theme which connected section one and two. From the response statements he made in these two sections, it can be seen that he was a reader whose primary concern was seeking textual information from the printed material.

When he got to the third section, he still talked mostly about what he had gained from the second section. He mentioned the prisoner only in passing and went directly to the slogan "The great Chīng empire belongs to all of us."

> In this passage it is very clear that the medicine he brought home is to cure his son's illness. No matter what kind of lung disease, no matter what kind of tuberculosis, this passage seems to suggest when the medicine is taken the illness will go away--the son is saved. In this passage, the author introduces another plot. It is about Syà. Syà's son, namely, the prisoner of Á-Yì. Something needs to be noted here; that is that he said "The great Chīng empire belongs to all of us." This may be foreshadowing a future development.

This third section is interesting because of the ways in which the retelling is given. This reader has a lot more capacity and capability than he used. Although this reader seemed not to have much self-confidence, he actually has a rather interesting style of retelling. The expressions "No matter what kind of lung disease, no matter what kind of tuberculosis. . ." indicate that this reader has a sense of poetry or a sense of individual creative force which he was not consistently making much use of.

To be sure, Dung is not an experienced reader in reading a literary text, but even so, his reading of the story offers valuable insights. Once again the protocol provides a concrete example which illustrates how the process of reading a text is a process of the constant shaping and revising of meaning. Dung began his reaction to the fourth section with the sentences "In the passage, I found my predictions to be incorrect. The son was not saved; he died of tuberculosis." Obviously, this reader had already formed his version of what the story <u>should</u> be like, namely, that the medicine should be effective.

But when he moved into the fourth section, it turned out that what he had been thinking was incorrect, and Dung admitted that his predictions were wrong. As seen in this example, Dung was responding simultaneously to the verbal stimuli of the text and to his own responses evoked from his previous reading. What Dung was doing was very much like what the third reader did. Both of them show involvement in the process Louise Rosenblatt calls the "second stream of response." According to Louise Rosenblatt ". . . the shaping of a sense of the work demands a kind of embryonic critical testing of tentative organization against the text itself. As he engages with the text, the reader, we have seen, sets up hypothetical frameworks, entertains expectations as to what will follow, and uses these as guidelines for selecting out from alternative responses. As the text presents new elements, he may find it necessary to revise earlier syntheses or to develop new structuring principles. Thus an element of self-criticism vis-a-vis the text--a concern with validity of interpretation--enters into the very evocation of the work" (1978, pp. 137-8).

The second insight that can be gained from analyzing Dung's retelling is that a reader can gain confidence over time in the act of reading. Both the quality and quantity of this reader's reading have progressively improved, especially in the fourth section. In the first two sections he was struggling with his confusion and was just able to

deal with the most obvious factual information. In the third and fourth sections, he was beginning to show a certain degree of sensitivity to the more delicate aspects of textual clues. For example, he started to talk about foreshadowing, and the subtle, delicate descriptions of the tombs. The fact that he was actually able to recite the exact wording of the text and to say that contrast was very attractive to him strongly indicates that he was emotionally involved in the part of the story.

> In this passage, I found my predictions to be incorrect. The son was not saved; he died of tuberculosis. I felt that descriptions of the differences between the tombs of the rich people and the poor people were very subtle and delicate. He said, "The tombs of the poor are piling up just like the ceremonial cakes at the rich men's birthday party." This sort of contrast attracts me very much. The rest of this passage is a description of those people. However, we do not know whether they died of tuberculosis as did Syǎu Chúan.

There is no question about his being emotionally involved because he ended up by saying that he did not like the story. He felt that the story was unfinished.

> I felt that this story was left unfinished because the author just touched upon Ā-Yì without giving us any explanation. We do not know what happened to him. Ā-Yì mentioned what the prisoner had said, that is, the "Chīng belongs to us." I think that this may be the main idea which Lǔ Syùn is trying to express in this story. This is his political ideology. What surprised me is that the ending of the story has nothing to do with politics, but instead shows the country folk's ignorance. I felt that this story was unfinished because there are still several plots which remain to be developed. What captures my greatest interest is the phrase "The Chīng is ours" and the vivid descriptions showing the differences between the rich and the pauper, especially the point that the tombstones are like steamed bread on the tables of the rich. I do not

> think that I like this story very much, probably because of the way of describing ignorance about medicine and the wrong belief that medicine can alter fate. The reason that I do not like this story is that it does not appeal to my senses. I guess that the purpose of this story is to show how when the country people are ill, they rely on folk remedies. I think that the only purpose of this story is to demonstrate the ignorance of the country folk. If that is the main idea that he is trying to convey, then he has succeeded. The final scene at the cemetery is another good indication of the country people's ignorance.

The way this story is ended "does not appeal to my senses." This is a reader who had some particular interest when he came into the reading situation. There are two places in his retelling which illustrate this point. The first example occurred at the place in the third section when he first saw the expression "The great Chīng empire belongs to all of us," and the second one took place at the beginning of the fourth section when he read the descriptions of the graveyard. He was definitely interested in political issues, as was the third reader. However, there is a basic difference between them. Chen, the third reader, used the reading occasion as a springboard to express his own political ideology, while Dung was more willing to wait to be told by the text. Somehow he was not aware of the possibility of connecting the political theme with the death of the prisoner and with the flowers without roots. When he missed the prisoner and his relationship to the other old woman at the cemetery, his perception of the whole story changed.

The third observation derived from Dung's protocol concerns the problem of aesthetic and efferent reading. In her discussion of the distinction between aesthetic and nonaesthetic reading, Louise Rosenblatt pointed out "Actually, no hard-and-fast line separates efferent--scientific or expository--reading on the one hand from aesthetic reading on the other. It is more accurate to think of a continuum, a series of gradations between the nonaesthetic and aesthetic extremes. The reader's stance toward the text. . . may vary in a multiplicity of ways between the two poles" (1978, p. 35). In Dung's case, it is clear that he is capable of taking either stance. He was taking predominantly an efferent stance when he dealt with the first two sections of the story. However, as he was reading the first part of the third section and the beginning of the fourth, he was apparently enthralled by the content of the text, but he lost the intensity of his interest and literary awareness when he found out that the ending of the story was not what he had expected. He went back to his former mode of responding, that of retelling the factual details of the story. In short, we find there is a back-and-forth movement of attention between the two stances of reading in this reader's reading which clearly supports the position set forth by Rosenblatt.

Wong's response profile

	Personal statements	Descriptive statements	Interpretative statements	Evaluative statements	Miscellaneous
Wong:	10.6%	40.5%	44.6%	4.2%	0%
Group means:	22.9%	37.8%	24.3%	9.9%	5%

The first impression that one gets from reading Wong's reactions to the first section is that he is a positive and confident reader. Instead of making personal comments or expressing frustration at not being able to figure out what was going on in the story, he went right into the process of transacting with the text and responded to the clues that he chose to focus on by giving his interpretation.

> I do not know what to say. Mm. . . , let me put it this way. At the start, he [the author] mentioned that it was after midnight, then later on he talked of the sun rising. It seemed to me that he is saying that there is some hope when he [Lǎu Chúan] got the steamed bread. Then he described a group of people standing there watching the soldiers. I think there is an ironic, sarcastic element there because under these kinds of conditions it should have been taken very seriously. However, he described those people in a very ridiculous way. For instance, he said that their necks are stretched out very long like duck necks. This sort of description, in fact, is Lǔ Syùn's style. He thinks that when a group of people gather together they become a mass without any individual thoughts.

Like the first reader, Lin, this reader is also able to pay close attention to some of the more refined elements of the story instead of producing a bare factual recounting. For example, both of these readers are interested in details

such as background setting. However, it is interesting to note that they picked up on different clues and consequently came up with very different readings of the story. As pointed out earlier in this section, the first reader focused his attention on the colors of grey and black. As a result, his view of the story is bleak and gloomy. This reader, on the other hand, chose to see the bright side of the story: ". . . after midnight, . . . the sun rising. It seemed to me that . . . there is some hope when he got the steamed bread." It appears to be a clear example demonstrating how a reader's perception can affect the meaning of a story.

That the prior knowledge and personal experience of a reader play a critical role in the act of reading has constituted a recurring theme in the present study. As we have seen in the discussion of the previous four readers, each reader brought some characteristics of his unique understanding of the world into his reading of the story, which obviously has further influenced his perception of the written text. Knowing the author and prior acquaintance with his works is what the fifth reader, Wong, has brought into his encounter with the text. It is apparent from his retelling that he has read some other works by the same author because he said "this sort of description, in fact, is Lǔ Syùn's style." That Wong sees the story as a satire distinguishes his reading from the

others. Perhaps he had read other works by the same writer which are indeed satirical and so was putting this story into a category already established in his mind.

Wong is definitely a reader who responded to the descriptive elements as well as to factual events of the story. In the second section we have further evidence to support this observation.

> From the first paragraph to the second paragraph he did not explain clearly what the steamed bread, or we may say, the thing dripping with red blood, is. In other words, he deliberately tried to keep the object obscure to the reader in order to suspend the reader's interest. Then came the hunchback who asked what it was. Then the suspense is heightened. And the author moved on to describe the son, but he did not spend much time describing his personality. But he did mention the way he ate the steamed bread. From this very brief description I felt that he was a very selfish person. What I meant is, he is eating something and I think that he also wants to know what it is; but he did not ask. It took him only a minute to eat all of it. It seems that it is for his own illness or something. It is not explicitly stated. In this paragraph we also learn something about his family's background. They own a small teahouse. It does not look like they have a good business, a lot of customers. I know this because there are a lot of patches on their clothes. It shows that their life is not a good one.

In this section Wong talked about the sense of suspense he felt in reading the first two sections of the story because the author refused to explain explicitly what the thing dripping with red blood is. A similar comment was made by the first reader when he said that he felt a sense of "urgency and wanted to know what is in the parcel." In fact, another reader (whose protocol was not analyzed)

made a similar observation. She used the word "mysterious" to express the feeling and sensation that she had experienced in reading the beginning part of the story. In viewing these responses of these three readers, we see that we must question any proposal that treats reading as a completely subjective matter in which the text has no part to play. Obviously, reading cannot be purely and only subjective, because sometimes different readers react to a text in what appears to be the same way. For example, different readers sometimes select the same verbal symbols or images to respond to. In the present study, almost all of the readers chose to comment on phrases such as "steamed bread mixed with blood," "the flowers without roots," "the crow" and the character Lǎu Chúan and his sick son. All of the readers undoubtedly have been affected by some of the verbal stimuli of the text. Although our data affirm the essential role of the text in the literary transaction, the presentation of the readers' protocols in the preceding section has also shown us how illusory it is to see the text as all-important and to treat the reader "as a tabula rasa, receiving the imprint of 'the poem'" (Rosenblatt, 1978. p. 4). As Edward Sapir has pointed out, most of the words have an "associated feeling-tone" and it "varies remarkably from individual to individual according to personal association of each" (Sapir, 1921, p. 41). The protocols discussed so far have illustrated

the wide range of referential and affective responses that might be activated by the verbal symbols.

In addition to responding to the descriptive elements of the work, Wong also made use of the factual information as a resource for making sense of the story. The statistical analysis of his second section data indicates that 50% of his response statements are coded descriptive statements. Wong demonstrated a unique way of using the factual cues from the text. Most of the readers in the present study presented their retelling in an order of actions, but Wong concerned himself not only with the actions but also with the contexts in which these actions might take place, and in this way managed to put the actions into meaningful contexts. For instance, Wong felt that the family was poor because he noted that there were patches all over their clothes. The way in which he talked about the incident of Syǎu Chúan's eating the steamed bread is another example. Wong pointed out that "it took him [Syǎu Chúan] only a minute to eat all of it" and "from this brief description" that he felt that Syǎu Chúan was a "very selfish person." Wong's approach to the story is by picking up on clues presented in the text and then putting them all together through his own interpretation of those clues. In other words, he gave the text new dimensions which might not exist in the text, because, given all of the same cues, the other

readers either did not notice them or else came up with a different view. From Wong's reading we are able to see how a reader's responses to the text become integrated into the work as perceived.

Wong's reactions to the reading of the third section reinforced the statements that I have made concerning his particular modes of responding to a literary work. Wong is a reader who was getting a developing sense of the story as much, if not more, from the author's style and the atmosphere of the story as from the actual details of the story.

> He used the people's conversation in the group to tell the readers what the steamed bread is used for and what kind of illness Syǎu Chúan has. Then from the conversation we learn the blood on the steamed bread was from Syà's son. And as usual Lǔ Syùn satirizes the ignorance of this group of people. Through these people and their self-conceited conversational tones we see that Syà's son is a revolutionist. I like this kind of technique because it is more convincing. If he presented it in a very direct way, you would feel that he was preaching or pushing some kind of slogan. It is very obvious that he is making use of the speech of the common people to show their ignorance. But there is one thing that is not quite clear to me, that is, what is the relationship between Syà Sān Yé and Syà Sì Yé? Are they brothers? Oh yes, they are in the same family. And again we can see the selfishness of Syà and the ignorance of the common people.

Wong mentioned how some of the incidents were presented in this section and how this specific technique employed by writer has affected him as a reader "I like this kind of technique because it is more convincing. If he presented it in a very direct way, you would feel that he was

preaching or pushing some kind of slogan." In this reader, we find a wholly different way of looking at retelling. He was interested in the author's style and intent and talked in terms of whether they were acceptable to him or not. This is definitely a kind of deep emotional involvement which has to come down on the side of aesthetic appreciation rather than on the side of strictly cognitive acquisition.

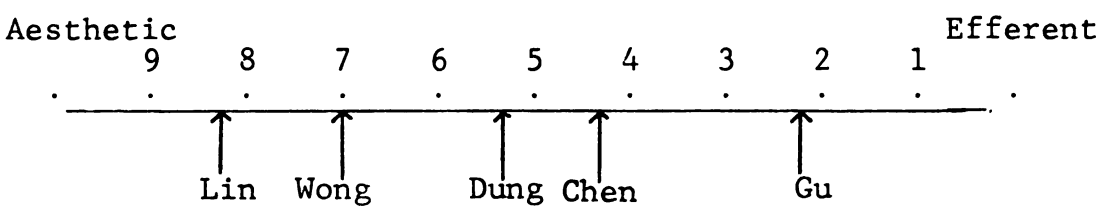
It may be appropriate to rehearse here the matter of aesthetic and efferent readings again. In dealing with the protocol of our fourth reader, Dung, we noted that there is a back-and-forth movement of aesthetic and non-aesthetic transactions with the text during his reading activity. His response statements are fused with information obtained from the text and the qualitative literary experience aroused in him. In fact, if we examine the reactions of individual readers closely, we will find most of the reading is a mixture of these two modes of experience. The distinction between the aesthetic and the efferent is usually a question of degree, rather than of an absolute. Table 20 presents the points assigned by the three independent readers to the five readers on the aesthetic/efferent scale based on each reader's protocol.

TABLE 20

Five Readers on Aesthetic/Efferent Rank

	Reader I		Reader II		Reader III		Average	
	A	E	A	E	A	E	A	E
Lin	8	2	8	2	9	1	8.3	1.7
Gu	3	7	2	8	2	8	2.3	7.7
Chen	5	5	4	6	4	6	4.3	5.7
Dung	5	5	6	4	5	5	5.3	4.7
Wong	7	3	7	3	7	3	7	3

If we rank these five readers on a scale with the aesthetic at one end and the efferent at the other, we will get a continuum like the following:



As the diagram shows, most of the responses fall somewhere between the aesthetic and efferent poles, which is exactly what Louise Rosenblatt has claimed. A mixture of these two modes of experience is, in fact, quite

characteristic of our reading behavior; it is rare to find either in a pure form. Yet though they often mixed, it is crucially important to make a clear distinction between the two kinds of reading because they are fundamentally different.

Wong has maintained a fairly high degree of consistency both in his style of responding and in the selections of cues to respond to. As we have noticed all along in our discussion of his protocol, he demonstrated a clear pattern of responses from the very beginning of his reading. That is, he stayed very close to the text, yet at the same time he managed to arrive at a meaningful explanation for the particular situation that interested him. With respect to the selections of cues and the construing of their meaning, Wong is also very consistent. From the outset of his reading of the text of this story he was predisposed to disliking the characters and found them somewhat comical. For example, he sees Syǎu Chúan as "selfish" and the group of people as "a mass without any individual thinking." The way in which he perceives the opening scene seems to set the tempo that determines his future relationship with the text. His attention was directed to those elements which bear the negative qualities of human nature. In the third section, he repeatedly stressed the ignorance of the common people. In the fourth section, while some

readers felt deeply for the two mothers involved, Wong found them comical and ridiculous figures, who add "a satirical dimension" to the story.

> Obviously, eating the so-called steamed bread mixed with blood doesn't help. Here, Lǔ Syùn adds a satirical dimension. He satirizes superstition, including Mother Syà and Mother Hwà. He arranges for these two women to appear at the same time in this paragraph. One is the mother of the revolutionary. The other one is the mother of the child who ate the steamed bread mixed with the revolutionary's blood. However, so far as I can see, there isn't much difference between these two women. It is apparent that Mother Syà loves her son although she does not understand him and is even so ashamed of his behavior that she feels ashamed to go to the cemetery. She is afraid to let other people know what kind of a son she had. She said that all her relatives have cut relations with her and she did not understand why flowers had been put on her son's grave. I think that during this period not only this old woman, but many people, were ignorant and superstitious. One thing is certain: she loves her son. There is another part that I find ridiculous; Mother Hwà came to her son's grave. She came to the cemetery to mourn her son. However, it seems that she is more interested in what is going on at the cemetery. I think it is pretty funny. How can she be so easily distracted? I am wondering whether she really felt sad or not.

Almost all of the details that he chose to comment on fit nicely into the over-all theme that he has established for the story, namely, that many Chinese people were "ignorant and superstitious." However, the two most mysterious images, the flowers without roots and the crow seemed to give him some difficulty.

> Finally, the crow is mentioned. I think that the author may have a specific idea to convey, but I cannot figure it out yet. However, it created a very strange atmosphere. The other thing that I want to bring up is the flowers on the revolutionary's grave. From this incident it may be said that revolutionists are not lonely.

He responded to the crow image by saying "the author may have a specific idea to convey, but I have not figured it out yet. However, it created a very strange atmosphere." It is uncharacteristic of him to pick up on something that he could not explain. From a researcher's point of view, this part of the protocol provides us with a precious opportunity to look into the thinking process of this reader in his shaping of meaning. Apparently, he had vaguely sensed that there was something deeper in the story than the interpretation that he had so far reached. His reactions to the symbols of red flowers on the grave of Sya's son seem to confirm this suspicion. Twice Wong had mentioned the flower image. At first, he saw the incident of the red flowers without roots as an indication of ignorance and superstition of the common people. However, after the crow image, he went back and commented on the flowers incident again: ". . . revolutionists are not lonely." It is not clear to us in the present context whether this final evocation was activated by the reinforcement of these two symbols, or whether Wong, too, like the third and fourth readers perceived the political overtones long before he made the concluding statement. Whether he would read this story as a political writing as did the third reader is a question that can only be answered by further investigation, such as the study of re-reading. It would be interesting to see how a reader alters his interpretation of a story

during subsequent reading experiences.

Our detailed study of Wong's protocol reveals that Perception and Interpretation are his favorite modes of response. This observation seems to agree with the finding obtained from the quantitative analysis of his response statements, which yield 40 percent for descriptive statements and 44 percent for interpretative statements.

Summary of the Findings

In this chapter, two types of evaluative devices were adopted to analyze the collected data. One dimension of the investigation was quantitative, a statistical analysis of five categories of responses. Another dimension of analysis was qualitative, an exploration of the readers' experience with a literary text.

The statistical analysis

(1) The category with the largest mean percentage is Perception (37.8%) followed by Interpretation (24.3%), Self-involvement (22.9%), Evaluation (9.9%) and finally Miscellaneous (5%). These figures are somewhat different from those of a comparable study conducted by John C. Pollock (1972). Pollock reported that the dominant mode of response made by American readers is the category of Interpretation (34.8%) with Perception next at 26%, followed by Self-involvement 19.1% and Evaluation 18.2%. Miscellaneous responses account for 1.8%.

(2) Examination of the subcategory reveals that Chinese adult readers are most sensitive to the factual information contained in the text.

Narrational and retelling parts of the story led in percentage (20.6%) with descriptive aspects of the work, such as language, characters, setting next at a percentage of 17.2, followed by Interpretative statements of parts of the work (16.7%). These three subcategories constitute about 55% of the total response statements. Pollock's study found that four subcategories--reaction to content, content, general interpretation and interpretation of content together--take up about 60% of all responses. The fact that these more text-based subcategories make up more than half of the readers' response statements in both studies suggest that the linguistic symbols as well as information designated by the verbal signs play an essential part in the process of reading. The subcategories, such as personal statements about the reader, about the work or evaluative statements about the construction of the work, which pertain to individual characteristic of the readers account for about 38% of the total responses. The fact that more than one-third of the entire responses cannot be directly related to any overt symbols of the text is a strong evidence that reading is not simply an automatic reaction to the print. In sum, the results obtained from content analysis of the subcategory support the notion proposed by Louise Rosenblatt that reader and the text are mutually essential to the reading process.

(3) Analysis of the response statements made after each division for each category indicate that there are some discernible patterns of developmental process across sections of the story (See Figure 7). Descriptive statements are the leading mode of response. More than 40% of the responses to the first section of the story are descriptive, which suggests that readers respond to the verbal stimuli provided by the text right from the very beginning of their reading. The statements of description increase and reach to the highest in number at division II (63.2%), then decrease through division III to a relative low 29.2% in the fourth division. Percentages of the category of Interpretation tend to be low at the first two divisions (14.8% and 11.9% respectively), then to rise

> sharply in reaction to the third and fourth divisions (31.6% and 28.3%). Evaluative responses remain relatively low for all of the four divisions. Nevertheless, the percentages of this category appear to be a little higher in reaction to the first division (9.5%) and to the third (7.8%). This finding seems to agree with James Squire's (1964, p. 31).

The results of the qualitative analysis are, in general, congruent with the findings of the content analysis of response statements. However, the additional dimension of qualitative exploration of the readers' protocols illuminates the complex relationship that exists between a reader and a literary text.

Qualitative Analysis

(1) Reading a literary text is an unique experience for each individual reader. The five protocols under investigation manifest five totally different kinds of reading experiences. However, although it is obvious that each experience is personal (how could it be otherwise?), it is also clear that each of these unique personal reading experiences is activated by the symbols of the one single text.

(2) Reading is an "on-going" process during which the reader continually reassesses his relationship with the text. The reader responds not only to verbal signs offered by the text but also to his own evocation activated by the verbal stimuli. The reader is intensely conscious of what goes on in his mind and is able to articulate it.

(3) One of the most important things that we have learned from reading the five protocols concerns the problem of "selective attention" that Rosenblatt talks about. It is clear from these protocols that each reader does bring into his reading situation his own special interests and intellectual strengths, which in turn affect his choice of what to focus on. Readers select from

"the multiple possibilities" provided by the text those elements that can be fitted into the relevant pattern of ideas, feelings and attitudes.

(4) Readers do reach for information from their own background and try to apply the situations at hand. People go outside of the text for interpretation. It is impossible for readers to stick within the text until they are completely through a story to figure out what is happening. All of the readers we have studied go outside of the text at certain points when the text is confusing, to find ways of understanding it.

(5) Readers do not process information in a linear fashion. The reader looks not only forward but also backward to modify the tentative hypothesis that he has set up for the text which he is reading as new information enters his focus of attention. The reader selects, organizes and synthesizes ideas, feelings and attitudes on the basis of what seems to be most relevant or interesting to him at the particular moment of his relationship with the text.

(6) The distinction between the aesthetic and the efferent is usually a question of degree, rather than an absolute difference. In dealing with the protocols of the five readers, we notice in almost every case that there is a back and forth movement of aesthetic and non-aesthetic transactions with the text during the reading activity. Most of the reading contains a mixture of these two modes of experience.

CHAPTER VI

CONCLUSIONS

The purpose of this dissertation has been to explore the nature of the reading process by using Chinese adult readers as subjects. Two empirical research projects were set up for this purpose. The first study, conducted within the framework of the RMI, concentrated on the linguistic aspect of the reading process, namely, on how a reader made use of the phonological, syntactic and semantic knowledge of his language systems in his encounter with a written text. The second study, in contrast, focused on the experiential aspect of the reading process while a reader attempted to arrive at a meaningful and coherent reading of the text. This second study consists of two parts: a quantitative analysis of the readers' response statements by making use of the Purves-Beach coding device and a detailed exploration of five individual readers' protocols. Louise Rosenblatt's transactional theory of reading served as a guiding principle for explaining and interpreting the readers' behavior. The results obtained from these two studies were presented in Chapters III and V. In this concluding chapter, rather than rehearse the detailed findings which

have already been highlighted in the chapter summaries of these two chapters, it seems more appropriate to discuss the relationship beteen a reader and a text as reflected in our data, and also consider some possible implications for future research.

The Relationship Between a Reader and a Text

From the five protocols presented in the preceding section, we have seen five entirely different readings of the same text. We recognize that each reader carried on a dynamic and unique personal activity. Each reader brought different expectations, attitudes, moods and prior experience to the reading activity, which inevitably affected their focus of attention and consequently resulted in differences in responses. In view of these unique experiences, we find the idea that "the text is merely an object of paper and ink until some reader responds to the work on the page as verbal symbols. . . and to bring a poem into being requires always a reader" (Rosenblatt, 1978, pp. 12-5) not merely acceptable, but demonstrably true and useful. The concept of the poem as an experience shaped by a reader allows us to account for the wide range of diversity which we have discovered in each individual reader.

However, we can say with equal justice that of course a reader cannot have a literary experience without a text.

Despite the obvious diversity of readers' literary experiences, we observe that there are significant common features and operations which can only be attributed to the influence coming from the text.

At the beginning of our reading, we find ourselves confronted with paper covered with written or printed signs. Thus the first thing we experience is the visual perception of these signs. The study of oral miscues produced by Chinese adult readers provided the first evidence in our study that a reader was under the guidance of a text. As demonstrated in Chapter III, the visual and sound properties of a language constitute an indispensable element in the reading process. Readers in the present study, in fact in all of the RMI studies reviewed, have shown some degree of dependency on the graphic and sound information. Readers produced miscues that either look like or sound like the original text words. The following is an example demonstrating how Chinese readers made use of the visual information afforded by the text. Several readers miscued the character 錠 dìng for the character 綻 jàn. The physical resemblance between these two characters is quite obvious. Readers also produced miscues which retained the grammatical functions of the text words. The data on syntactic acceptability of the miscues of the Chinese readers show that 87.6% of the sentences involved with miscues are syntactically acceptable in the story.

These figures do not include all instances in which the readers appeared to use syntactic information in their predictions which are acceptable only with the prior portion of the sentence. If we combine the totally acceptable predictions with these which are acceptable with the prior portion, we see that 96% of the observed responses preserve at least partially the grammatical structures of the original text. It is a strong indication of the readers' awareness of sentence structures offered by the text and their ability to make use of them. If reading were a totally subjective behavior on the part of the reader in which the text had no role to play, it would be difficult to explain why readers produced sounds, words and grammatical structures which are so closely related to the original symbols of the text. In fact, the whole notion of miscue analysis is built upon the assumption that a reading activity engages both a reader and a text. "Reading is a meaningful interaction between the language of the reader and the language of the author. . . . All readers do deviate from the text, and these deviations . . . in oral reading are called miscues" (Y. Goodman and C. Burke, 1972, p. 5). The importance of the written symbols in an act of reading is unmistakably assumed here in this statement. But the Goodmans feel it is equally essential to make it clear that reading is <u>not</u> an exact process of letter or word identification, but rather a process of

predicting, selecting and sampling of cues offered by the text. Based on this assumption, the Goodmans have evolved an elaborate analytical system to examine how a reader makes use of his three cueing systems while reading. Louise Rosenblatt also recognizes the necessity for a reader to refer to the linguistic elements of the text while reading:

> As one decodes the opening lines or sentences and pages of a text, one begins to develop a tentative sense of a framework within which to place what will follow. . . . One evolves certain expectations about the dictions, the subject, the ideas, the themes, the kinds of text, that will be forthcoming. Each sentence, each phrase, each word, will signal certain possibilities and exclude others, thus limiting the arc of expectations (Rosenblatt, 1978, p. 54).

Our analysis of the Chinese adult readers' oral miscues confirms both the claim of the Goodmans and the claim of Louise Rosenblatt that readers respond to the verbal cues right from the outset of a reading activity. The fact that the miscues of the Chinese readers do relate to the original words in one way or another is strong evidence that readers rely on the textual cues offered by the text.

The study of the readers' response statements is another source which provides us with examples demonstrating that readers indeed must use the textual information to organize their literary experience. As shown in the protocols, all of the five readers under detailed investigation, responded to certain details of the story. They all chose to react to the clues such as "the steamed bread mixed

with blood," "the flowers without roots" and Lau Chuan and his family. The fact that readers all chose to respond to those incidents indicates that the text did serve as a basis for the readers to construct the meaning of the text.

Readers are sensitive not only to the verbal signs of the text but also to the ways in which the story is presented. The structure of a text constitutes another type of constraint. In the present study, we find readers demonstrated their sensitivities to the structure of the story by either saying the story is "disordered," "obscured," scattered," or "mysterious." Although readers used different terms to describe the impression they got from reading the first section of the story, nevertheless, they shared one thing in common. That is, they all reacted to the technical devices employed in structuring the text. Rather than following a general scheme of a short story with events ordered and introduced according to a casual, temporal relation, the story "Medicine" adopts a device which is commonly found in the writings of a "mystery"story. The story starts with several events in juxtaposition, and none of them is explicitly described in detail, only hinted at. As soon as a reader began to read, he immediately found himself surrounded by obscure details which he was expected to put together. Probably this is the main reason that readers

felt frustrated and complained about the text being unclear. However, as the readers moved into the second section, they sensed that the story was told in a much more straightforward fashion. They showed their awareness of this change either by saying "it becomes much more clear," or simply by trying to explain what they thought had happened in the story. The quantitative analysis of response statements also reflects this trend. Nine of the ten readers devoted more than 50% of their responses in the second section of the story to factual retelling. In other words, readers are generally sensitive to the technical devices used to organize the text and are able to readjust their strategies in their transaction with the text.

Research on the relationship between discourse structures and the comprehension activities of the readers appears to support this observation. G. Olson, R. Mack and S. Duffy, for example,state in their 1981 report that

> Our main claim about these readers is that they know, either explicitly or tacitly, a number of conventions for how texts of these types are written, and they use this knowledge actively during their comprehension of the text. They have strong expectations about what they will find in the text, and use these expectations to guide their understanding. When their expectations are violated. . ., their verbal protocols reveal confusion and their silent reading times are slowed down considerably. When their expectations are met. . . they appear to be able to profit from the application of their knowledge of genre conventions to the process of understanding (p. 39).

The preceding are the three most obvious kinds of textual constraints found in our data. It should be sufficient to illustrate the point that the text is a "necessary" condition if a reading activity is to take place. The second question is how to specify the degree of constraints coming from the text and how to account for the readers' experience of it. In view of the readers' miscue data, evidence exists to demonstrate that the readers are responding to cues set forth in the text while reading. Difficulties arise, however, when one seeks to specify how a reader and text actually come together to evoke a poem. The analysis of the three cueing systems provides very little information as to how a text is translated into a reader's mind. It is important to note, however, that the RMI contains an area of investigation which may provide valuable insights into this process if proper research questions are asked, namely, the study of the readers' correction strategies. According to the Goodmans, when a reader becomes aware that his prediction does not fit the information, he has two options. One of these options is to digress and make a new attempt. An attempt to correct is an indication that the reader feels that his prediction is not acceptable in some way. The readers' corrections of oral miscues offer evidence that it is the readers who formulate and modify the expectations, not the text; in addition, the readers' correction attempt allows the

researcher to look into the reading process in action.

The study of the readers' response statements, on the other hand, yields some valuable information which may help us to picture the relationship between the text and the reader in the dynamics of the reading process. As pointed out in Chapter V, the results of the quantitative analysis show that about 55% of the total responses are related to either linguistic symbols of the text or information designated by those symbols, while about 40% of the reactions bear no direct relationship to any overt verbal symbols of the text. John Pollock studied the responses made by American college freshmen and found very similar results. These statistical figures are significant in the sense that they present a clear picture concerning what kinds of information a reader is likely to use in the act of reading. However, they still give very little help in answering the question of how a reader and a text actually work together to re-create a literary work of art. In this regard, the exploration of the individual reader's protocols proves to be most useful.

It is evident from our data that a literary work of art is not manifested in the printed text, nor produced solely by the reader's imagination, but rather is the result of the transaction between the two. Throughout the process of our five readers, we find that there is continual interplay between expectations and modified

expectation. A reader looks not only forward but also backward to modify the tentative hypothesis which he himself has set up as he obtains new information. As you may recall, the fourth reader, Dung, began his reaction to the fourth section by saying "In this passage, I found my predictions to be incorrect. The son was not saved; he died of tuberculosis." It is clear from this statement that Dung had already formulated his hypothesis about the outcome of the story, namely, that the medicine should be effective. But when he moved into the fourth section, it turned out that what he had been thinking was incorrect, and Dung admitted that his predictions were wrong. As seen in this example, Dung was responding simultaneously to the verbal stimuli of the text and to his own responses evoked from his previous reading. So a reader responds not only to the verbal signs afforded by the text but also to his evocation activated by the verbal stimuli, as Rosenblatt has proposed. The fact that a reader actually reacts to his own evocation constitutes the vital link between the text and the reader. The reader's reactions to some aspects of the emerging work will become integrated into the work as perceived. Thus a reader's communication with the text possesses a continuous and cyclic character. At each moment, the reader is in a process of reconstructing, in which new information is picked up, modified and in turn directs further exploration.

Writing about the act of reading, Louise Rosenblatt says:

> The dynamics of the literary experience include, then, first the dialogue of the reader with the text as he creates the world of the work. . . responding to cues, adopting a predominantly efferent or aesthetic stance, developing anticipatory framework, sensing, synthesizing, organizing and reorganizing. Second, there is the concurrent stream of reactions to the work being brought forth: approval, disapproval, pleasure, shock; acceptance or rejection of the world that is being imagined; the supplying of rationale for what is being lived through. There may be also awareness, pleasant or unpleasant, of the technical traits of the text (1978, p. 69).

This notion of "concurrent stream of reactions" is crucial to her transactional theory of reading and to our understanding of the reading process as well. It is this mechanism which is responsible for the continuous and cyclic nature of the readers' reading behavior found in this present study.

In fact, reading is not the only human experience that depends on "spatial and temporal continuities." Perception, attention and memory all have the same structure. Ulric Neisser, the prominent cognitive psychologist, argues that perception involves an active transaction between the perceiver and the object perceived. Perception, according to Neisser, is operated by "anticipatory Schemata" which "accept information as it becomes available at sensory surfaces and is changed by that information; it directs movements and exploratory activities that makes more information available, by which it is further modified"



(1976, p. 54). Schemata direct our perception, but are affected by what is perceived. So the perceiver and what is perceived become part of a total situation. Similarly, the text functions as a guide for "selecting, rejecting, and ordering of what is being called forth" (Rosenblatt, 1978, p. 11), but a physical text is transformed into a literary one by virtue of a reader.

In sum, on the basis of the data in the study, the researcher discovers the relationship between the reader and the text is not the kind in which one side does everything for the other. It is a relationship of equality and reciprocity. The reader is expected to imagine, to be sure. But the reader's imagination is not unrestricted; it must play on a given body of material, that which the text provides.

Suggestions for Further Study

Certain questions and concerns emerged during the course of this study which indicate a need for further research.

(1) Do female readers react to a literary work of art the same ways as male readers do?

(2) Rosenblatt suggests that the act of reading a scientific article is very different from the act of reading a literary text.

How do these two modes of reading differ?

(3) Rosenblatt also suggests that any text can be read either efferently or aesthetically.

(a) What makes a reader choose a particular stance?

(b) What effects do various types of instructions given before a reading activity takes place have on a reader's relationship to a written text?

(4) What is the relationship between oral miscues and the quality of a reader's reading experience? Are we able to tell whether a reader is reading efferently or aesthetically by looking at the oral miscues he produces?

(5) What is the relationship between oral responses and written responses?

(6) What is the relationship between first reading and re-reading? Does a reader transact with a text in his second reading the same way as he does in his first reading? If there are differences, what are they? and why?

The conclusion reached from our discussion of the functions of the text is significant in two respects. First, it offers some theoretical justification for the claim that THE READING PROCESS IN CHINESE AND THE READING PROCESS IN ENGLISH ARE ESSENTIALLY THE SAME DESPITE THE DIFFERENCES IN THE WRITING SYSTEMS, since our data clearly demonstrate that the Goodmans' miscue approach and Rosenblatt's transactional theory of reading do indeed hold for both Chinese and English. Secondly, it suggests a methodology for the study of reading experience. By examining the oral miscues and response statements produced by the readers together, we find a way to reconstruct the process of how a reader makes use of all different levels of information and his experience of them in the re-creation of a literary work of art.

BIBLIOGRAPHY

BIBLIOGRAPHY

Allen, P. D. 1970. A Psycholinguistic Analysis of the Substitution Miscues of Selected Oral Readers in Grades Two, Four, and Six and the Relationship of These Miscues to the Reading Process: A Descriptive Study. Ph.D. dissertation, Wayne State University.

Allen, P. D., & Watson, D. J., eds. 1976. Findings of Research in Miscue Analysis: Classroom Implications. Urbana, Ill.: ERIC Clearinghouse.

Angelotti, M. L. 1972. A Comparison of Elements in the Written Free Response of Eighth Graders to Junior Novel and an Adult Novel. Ph.D. dissertation, Florida State University.

Applebee A. N. 1973. The Spectator Role: Theoretical and Developmental Studies of Ideas about and Response to Literature, with Special Reference to Four Age Levels. Ph.D. dissertation, University of London.

Beach, R. W. 1972. The literary Response Process of College Students While Reading and Discussing Three Poems. Ph.D. dissertation, University of Illinois at Urbana-Champaign.

Bean, T. W. 1976. An Analysis of the Oral reading Miscues of Hawaiian Islands Dialect Speakers in Grades Four, Five and Six. Ph.D. dissertation, Arizona State University.

Blair, H. L. 1977. A Psycholinguistic Description of the Oral Reading Behavior of Mature Readers. Ph.D. dissertation, Arizona State University.

Bleich, D. 1978. Subjective Criticism. Baltimore: The Johns Hopkins University Press.

Cantril, H., & Livingston, W. K. 1963. "The Concept of Transaction in Psychology and Neurology." Journal of Individual Psychology 19: 3-16.

Carlson, K. L. 1971. A Psycholinguistic Description of Selected Fourth Grade Children Reading a Variety of Contextual Material. Ph.D. dissertation, Wayne State University.

Chao, Y. R. 1968. Language and Symbolic Systems. Cambridge: Cambridge University Press.

Cooper, C. R. 1969. Preferred Modes of Literary Response: The Characteristics of High School Juniors in Relation to the Consistency of Their Reactions to Three Dissimilar Short Stories. Ph.D. University of California at Berkeley.

Cooper, C. R. 1971. "Measuring Appreciation of Literature: A Review of Attempts." Research in the Teaching of English 5: 5-23.

Cooper, C., & Michalak, O. 1981. "A Note on Determining Response Styles in Research on Response to Literature" Research in the Teaching of English 15: 163-169.

Cornaby, B. J. 1974. A Study of Influence of Form on Responses of Twelfth-Grade Students in College-Preparatory Classes to Dissimilar Novels, A Short Story, and a Poem. Ph.D. dissertation, University of Washington.

Cornelius, P. 1965. Languages in Seventeenth-and Early Eighteenth Century Imaginary Voyages. Geneva.

Derrida, J. 1976. Of Grammatology. Translated by Gayatri Chakravorty Spivak. Baltimore: The Johns Hopkins University Press.

Devine, J. J. 1980. Developmental Patterns in Native and Non-Native Reading Acquisition. Ph.D. dissertation, Michigan State University.

Dewey, J. 1934. Art as Experience. New York: Minton Balch.

Dewey, J., & Bentley, A. F. 1949. Knowing and the Known. Boston: Beacon Press.

Faggiani, L. A. 1971. The Relationship of Attitude to Response in the Reading of a Poem By Nineth Grade Students. Ph.D. dissertation, New York University.

Fairbanks, J. K. 1976. China Perceived: Images and Policies in Chinese-American Relations. New York: Vintage Books.

Fenollosa, E. 1936. The Chinese Written Character as a Medium for Poetry. San Francisco: City Lights Book, Inc.

Gibson, E. J., & Levin, H. 1975. The Psychology of Reading. Cambridge: The MIT Press.

Goodman, K. S. 1965. "A Linguistic Study of Cues of Miscues in Reading." Elementary English 42: 639-643.

_____. 1967. "Reading: A Psycholinguistic Guessing Game." Journal of the Reading Specialist 6: 126-135.

_____. 1969. "Analysis of Oral Reading Miscues: Applied Linguistics." Reading Research Quarterly 5: 9-30.

_____. 1970. "When a Child Reads: A Psycholinguistic Analysis." Elementary English 47: 121-128.

_____. 1972. "The Reading Process: Theory and Practice." In Language and Learning to Read: What Teachers Should Know about Language. R. Hodges and H. Rudorf (eds). Boston: Houghton Mifflin.

_____. 1973a. "Miscues: Windows on the Reading Process." In Miscues Analysis: Applications to Reading Instruction. K. S. Goodman (ed.). Urbana, Ill.: NCTE.

_____. 1973b. The Psycholinguistic Nature of the Reading Process. Detroit: Wayne State University Press.

_____. 1973c. "Psycholinguistic Universals of the Reading Process." In Psycholinguistics and Reading. F. Smith (ed.). New York: Holt, Rinehart and Winston.

Goodman, K. S., & Burke, C. 1968. Study of Children's Behavior While Reading Orally. Washington, D. C.: Department of Health, Education and Welfare.

_____. 1973. Theoretically Based Studies of Patterns of Miscues in Oral Reading Performance. Washington, D.C.: Department of Health, Education and Welfare.

Goodman, Y. M. 1967. A Psycholinguistic Description of Oral Reading Phenomena in Selected Young Beginning Readers. Ph.D. dissertation, Wayne State University.

_____. 1971. Longitudinal Study of Children's Oral Reading Behavior. Washington, D. C.: Department of Health, Education and Welfare.

Goodman, Y. M. & Burke, C. 1972. Reading Miscue Inventory Manual: Procedures for Diagnosis and Evaluation. New York: Macmillan.

_____. 1980. Reading Strategies: Focus on Comprehension. New York: Holt, Rinehart and Winston.

Goodman, Y. M., & Burke, C., & Lindberg, M. 1974. Reading Miscue Inventory: (Evaluation Form) Evaluation Questions, Coding and Summary Sheets.

Harste, J., & Carey, R. 1979. "Comprehension as Setting." In New Perspectives in Comprehension, J. Harste and R. Carey (eds). Monographs in Teaching and Learning, School of Education, Indiana University, pp. 4-22.

Haug, F. M. 1974. Young Children's Responses to Literature. Ph.D. dissertation, University of Minnesota.

Heil, C. 1974. A Description and Analysis of the Role of the Teacher's Response While Teaching a Short Story. Ph.D. dissertation, University of Pittsburg.

Holland, N. M. 1975. "The New Paradigm: Subjective or Transactive?" New Literary History 7.

Huey, E. B. 1968 (orig. publ. 1908). The Psychology and Pedagogy of Reading. New York: Macmillan.

Ingarden, R. 1973. The Cognition of the Literary Work of Art. Translated by R. A. Crowley and K. R. Olson. Evanston: Northwestern University Press.

Iser, W. 1978. The Act of Reading: A Theory of Aesthetic Response. Baltimore: The Johns Hopkins University Press.

James, W. 1980. The Principles of Psychology. New York: Henry Holt, pp. 284-86.

Jensen, L. 1972. A Psycholinguistic Analysis of the Oral Reading Behavior of Selected Proficient, Average and Weak Readers Reading the Same Material. Ph.D. dissertation, Michigan State University.

Kalmbach, J. R. 1980. The Evaluation of Narrative Retellings by Sixth Grade Students. Ph.D. dissertation, Michigan State University

Kenner, H. 1971. The Pound Era. Berkeley: University of California Press.

Kirkpatrick, C. 1972. The College Literature Class: Observation and Description of Class Sessions in 'The Scarlet Letter.' Ph.D. dissertation, Columbia University.

Knowlson, J. 1975. Universal Language Schemes in England and France 1600-1800. Toronto: University of Toronto Press.

Kolers, P. 1970. "Three Stages of Reading." In Basic Studies on Reading. H. Levin and J. P. Williams (eds). New York: Basic Books, Inc.

Kratochvil, P. 1968. The Chinese Language Today. London: Hutchinson University Library.

Kuehn, W. L. 1973. Self-Actualization and Engagement-Involvement Response to Literature among Adolescents. Ph.D. dissertation, University of Minnesota.

Kuhn, T. 1962. The Structure of Scientific Revolutions. Chicago: The University of Chicago Press.

Leibniz, Gottfried Wilhelm. 1949. New Essays Concerning Human Understanding. Translated by Alfred Grdoen Langley. Honolulu: University Press of Hawaii.

_____. 1957. The Preface to Leibniz ' NOVISSIMA SINICA. Translated and edited by D. Lach. Honolulu: University Press of Hawaii.

_____. 1977. Discourse on the Natural Theology of the Chinese. Translated by H. Rosemon, Jr., & D. J. Cook. Honolulu: University Press of Hawaii.

Lucking, R. 1975. A Study of the Effects of a Hierarchically-Ordered Questioning Technique on Adolescents' Responses to Short Stories. Ph.D. dissertation, University of Nebraska at Lincoln.

Menosky, D. M. 1972. A Psycholinguistic Analysis of Oral Reading Miscues Generated During the Reading of Varying Portions of Text by Selected Readers from Grades Two, Four, Six and Eight. Ph.D. dissertation, Wayne State University.

Mertz, M. P. 1972. Responses to Literature among Adolescents, English Teachers, and College Students: A Comparative Study. Ph.D. dissertation, University of Minnesota.

Miller, G. A., & Isard, S. 1963. "Some Perceptual Consequences of Linguistic Rules." Journal of Verbal Learning and Verbal Behavior 2: 217-228.

Montora, C. B. 1976. "Syntactic Acceptability, Syntactic Change and Transformations." In Findings of Research in Miscue Analysis: Classroom Implications. P. D. Allen and D. J. Watson (eds.). Urbana, Ill.: ERIC Clearinghouse.

Morris, E. C. 1976. "Critique of a Short Story: an Application of 'Elements of Writing about a Literary Work.'" Research in the Teaching of English 10: 157-175.

Neisser, U. 1976. Cognition and Reality: Principles and and Implication of Cognitive Psychology. San Francisco: W. H. Freeman.

Neisser, U., & Beller, H. K. 1965. "Searching Through Word Lists." British Journal Pyschology 56: 349-358.

Northrop, F. S. C. 1966. The Meeting of East and West. New York: Macmillan.

Odell, L., & Cooper, C. R. 1976. "Describing Responses to Works of Fiction." Research in the Teaching of English 203-225.

Olson, G. M., Mack, R. L., & Duffy, S. 1981. Cognitive Aspects of Genre. Technical Report No. 11, University of Michigan.

Pierce, J. R., & Karlin, J. E. 1957. "Reading Rate and the Information Rate of a Human Channel." Bell Systems Technical Journal 36: 497-517.

Pollock, J. C. 1973. A Study of Responses to Short Stories by Selected Groups of Ninth-Graders, Eleventh-Graders, and College Freshmen. Ph.D. dissertation, University of Colorado.

Purves, A. C. 1979. "That Sunny Dome: Those Caves of Ice: A Model for Research in Reader Response." College English 40: 802-812.

Purves, A. C. & Beach, R. 1972. Literature and the Reader: Research in Response to Literature, Reading Interests, and the Teaching of Literature. Urbana, Ill.: NCTE.

Purves, A. C.; Foshay, A. W., & Hansson. 1973. Literature Education in Ten Countries. Stockholm: Almoqvist & Wiksell.

Purves, A. C., & Rippere, V. 1968. Elements of Writing about a Literary Work: A Study of Response to Literature. Research Report No. 8. Urbana, Ill.: NCTE.

Rawski, E. S. 1979. Education and Popular Literacy in Ching China. Ann Arbor: The University of Michigan Press.

Rene Wellek & Warren, A. 1956. Theory of Literature. New York: Harcourt Brace and World.

Richards, I. A. 1929. Practical Criticism. New York: Harcourt, Brace and World.

Romatowski, J. A. 1973. A Psycholinguistic Description of Miscues Generated by Selected Bilingual Subjects During the Oral Reading of Instructional Material as Presented in Polish and English Basal Readers. Ph.D. dissertation, Wayne State University.

Rosenblatt, L. M. 1938. Literature as Exploration, New York: Noble and Noble.

_____. 1964. "The Poem as Event." College English 26: 123-128.

_____. 1977. "The Transactional Theory of the Literary Work: Implications for Research." Paper presented at the Buffalo Conference on Researching Response to Literature and the Teaching of Literature, October 27-29, State University of New York at Buffalo.

_____. 1978. The Reader, the Text, the Poem: The Transactional Theory of the Literary Work. Carbondale, Ill.: Southern Illinois University Press.

_____. 1981. "Act I, Scene I: Enter the Reader." Literature in Performance: A Journal of Literary and Performing Act 2: 13-23.

Sapir, E. 1921. Language. New York: Harcourt Brace and World.

Sims, R. 1976. "Structural Levels." In Findings of Research in Miscue Analysis: Classroom Implications. Urbana, Ill.: ERIC Clearinghouse.

Slatoff, W. 1970. With Respect to Readers: Dimensions of Literary Response. Ithaca: Cornell University Press.

Smith, F. 1969. "The Use of Featural Dependency Across Letters in Visual Identification of Words." Journal of Verbal Learning and Verbal Behavior 8: 215-218.

_____. 1971. Understanding Reading: A Psycholinguistic Analysis of Reading. New York: Holt, Rinehart and Winston.

_____. 1973. Psycholinguistics and Reading. New York: Holt, Rinehart and Winston.

_____. 1975. Comprehension and Learning. New York: Holt, Rinehart and Winston.

Smith, M. G. 1978. A Comparison Between Oral Reading Miscues of Readers with Normal Intelligence and Educable Mentally Retarded Readers. Ph.D. dissertation, the University of Wisconsin, Madison.

Smith, S. 1979. "Retellings As Measures of Comprehension: A Perspective." In New Perspectives of Comprehension, J. Harste and R. Carey (eds.). Monographs in Teaching and Learning, School of Education, Indiana University, pp. 84-99.

Somers, A. B. 1972. Responses of Advanced and Average Readers in Grades Seven, Nine, and Eleven to Two dissimilar Short Stories. Ph.D. dissertation, Florida State University.

Squire, J. R. 1964. The Responses of Adolescents While Reading Four Short Stories. Urbana, Ill.: NCTE

Weber, R. M. 1968. "The Study of Oral Reading Errors: A Survey of the Literature." Reading Research Quarterly 4: 96-119.

Weiss, J. D. 1968. The Relative Effects upon High School Students of Inductive and Programmed Instruction in the Close Reading of Poetry. Ph.D. dissertation, New York University.

Wilson, J. R. 1966. Responses of College Freshmen to Three Novels. Urbana, Ill.: NCTE

APPENDIX A

READING MISCUE INVENTORY: (EVALUATION FORM)

READING MISCUE INVENTORY: EVALUATION

by Yetta Goodman and Carolyn Burke
and Margaret Lindberg

WORD LEVEL SUBSTITUTION IN CONTEXT: EVALUATION

Evaluation of the following questions indicates whether the student is making appropriate use of grammatical function and of the graphophonic cueing systems. Questions 1, 2, and 3 are answered for only word level substitution miscues. Under column headed Text list the word which the reader substituted. Answer the following questions for each of these pairs of words. If dialect is involved place a d next to the reader's substitution.

Q 1.	Graphic similarity:	How much do the two words look alike?
	high	TWO of their three parts are similar.
		Beginning and middle.
		Beginning and end.
		Middle and end.
	some	ONE of their three parts is similar.
		Beginning or general configuration.
		Middle.
		End.
	none	NONE of their three parts is similar.

Q 2.	Sound similarity:	How much do the two words sound alike?
	high	TWO of their three parts are similar.
		Beginning and middle.
		Beginning and end.
		Middle and end.
	some	ONE of their three parts is similar.
		Beginning or general configuration.
		Middle.
		End.
	none	NONE of their three parts is similar.
Q 3.	Grammatical Function:	Is the grammatical function of the reader's word the same as the grammatical function of the text word? (To help answer this question read the text sentence with the reader's miscue in it.)
	same	The reader's miscue is the same grammatical function as the text word.
	questionable	It is not possible to tell whether the grammatical function of the reader's miscue is the same or different from the grammatical function of the text.
	different	The reader's miscue is a different grammatical function than the text word.

LANGUAGE SENSE: EVALUATION

Evaluation of the following two questions indicates the degree to which the reader is concerned with producing acceptable language. Questions 4 and 5 are answered for every sentence which contains one or more miscues. To read for acceptability consider each sentence as the reader finally produced it. All corrected miscues or attempts at correction should be read as finally resolved by the reader. When there is no attempt at correction, the miscues should be read as produced. Miscues which are acceptable within the reader's dialect should be considered acceptable.

Number each sentence in the text and place the number for sentences containing miscues under the column headed Sentence Number, Next to this, in the column headed Number of Miscues, indicate the number of miscues contained in each of the sentences.

Q 4.	Syntactic Acceptability:	Is the sentence involving the miscue syntactically (grammatically) acceptable in the story?
	yes	When the sentence is read as finally produced by the reader it is syntactically acceptable in the story.

	no	When the sentence is read as finally produced by the reader it is not syntactically acceptable in the story.
Q 5.	Semantic Acceptability:	Is the sentence involving the miscues semantically (meaning) acceptable in the story?
	yes	When the sentence is read as finally produced by the reader it is semantically acceptable in the story.
	no	When the sentence is read finally produced by the reader it is not semantically acceptable in the story.

COMPREHENDING: EVALUATION

Evaluation of this question indicates the degree to which the reader changes the intended meaning of the author as he reads. Question 6 is answered for every sentence which contains one or more miscues. To determine the degree of change the sentence is read as the reader finally produced it. All corrected miscues or attempts at correction should be read as finally resolved by the reader. When there are no attempts at correction the miscue should be read as produced.

Q 6.	Meaning Change:	Is there a change in meaning involved in the sentence?
	no	When the sentence is read as finally produced by the reader there is no change in the intended meaning of the story.
	minimal	When the sentence is read as finally produced by the reader there is a change, inconsistency or loss to minor incidents, characters or sequences in the story.
	yes	When the sentence is read as finally produced by the reader there is change, inconsistency or loss to major incidents, characters or sequences in the story.

APPENDIX B

AN ENGLISH VERSION OF THE READING TEXT

Medicine

by Lǔ Syùn (Translated by George A. Kennedy)

1

It was in the early hours of an autumn morning, after the passing of the moon and before the coming of daylight. Only a sheet of blue-black sky remained, under which all lay asleep save the creatures of the night.

Old Hua Shūan sat up suddenly. Striking a match, he lighted a greasy oil lamp, the greenish glow from which filtered through the two rooms of the tea-shop.

"Little Shūan's dad!" came an old woman's voice, "Are you going now?" At the same time there was a spell of coughing in the small inner room.

"Hm!" Old Shūan grunted in reply as he buttoned up his clothing. He stretched out one hand. "Give it to me!"

Mother Hùa rummaged about beneath the pillow for a long time, finally bringing to light a parcel of dollars which she handed over to Old Shūan. He took it from her with trembling hands and thrust it into his pocket, giving it a pat to make sure it was there. Then he lit a paper lantern, extinguished the lamp, and walked into the inner room. There was a rustling noise followed by a succession of coughs. Old Shūan waited for it to quiet down, then spoke in a low voice, "Little Shuan! . . . Don't get up. . . . The shop? . . . . Your mother will manage all right."

There was no answer from his son, and thinking that he had dropped off quietly to sleep, Old Shūan stepped through the door and out on to the street. The streets were dark and deserted. Nothing was visible but the gray stretch of roadway and his two feet illuminated by the lantern following one behind the other. From time to time he met a few dogs, but not one of them made a sound. The air was much colder than it had been in the house. Old Shuan found it exhilarating. With the coming of this dawn, somehow, he was a youth again,

blessed with mystic insights, filled with life-imparting power. His stride lengthened and the road, as he walked, became clearer and the sky brighter.

Old Shūan's whole attention had been riveted on the road, when he started back suddenly as he saw ahead where it ended clearly at a cross street. He retraced a few steps and, finding a little shop still tightly shuttered, took shelter under the eaves and stood leaning up against the door. Some time passed and he realized that he was cold.

"Hey, an old fellow over there!"

"Seems cheerful enough . . . ."

Old Shūan started a second time as, staring ahead, he saw a number of people passing by in front of him. One of them turned his head to look at him. His figure was indistinct, but he had the manner of a long-starved wretch lighting upon food, his eyes glittering with greedy desire.

The lantern had gone out, Old Shūan noticed. He felt the pocket inside his clothing. It was still there, hard and firm. He raised his head and looked about him. Numbers of fantastic creatures were wandering about like devils in groups of twos or threes. He kept staring, but could discover nothing else that seemed strange.

It was not long before he saw several soldiers moving about, the great white circular design on the front and back of their clothing being visible even from a distance. Of those who passed nearer by he could make out in addition the dark red trimming on the uniforms.

There was a rush of trampling feet, and in a twinkling a large crowd had gone jostling by. The scattered groups of twos and threes formed suddenly into a mass, rolling forward like a tide. Reaching the street crossing, the crowd came to an abrupt halt and ranged itself in a semicircle. Old Shūan gazed in their direction but saw only a multitude of human backs. Necks were craned like those of so many ducks being pulled upwards in the clutch of invisible hands. After a period of deep silence, there seemed to come a

faint sound and then the crowd became agitated once more. With a deep rumble it streamed back again, past where Old Shūan was standing, sweeping him almost off his feet.

"Hey Old Shūan! Pass over the money with one hand and take your stuff in the other!"

In front of him stood a fellow dressed from head to foot in black and with eyes like two swords that bored into Old Shuan, shriveling him to half his usual size. One of the man's huge hands was stretched out toward him, while the other clutched a bright red roll of steamed bread from which the redness was still dripping drop by drop. Old Shuan fumbled hastily for his money and held it out tremblingly but could not bring himself to take the thing the other held.

"What are you scared of?" the man said impatiently, "Why don't you take it?"

As Old Shūan still held back, the fellow in black snatched up his lantern, ripped off the paper shade, and wrapping it around the bread, thrust the parcel in Old Shuan's hand. Then he snatched up the money, tried the feel of it, turned, and was gone. "The old fool . . ." he muttered.

"Who's the medicine for?" Old Shūan thought he heard someone questioning him but he did not answer. All his thought was concentrated on his package. It seemed as precious as the last of ten generations of only-begotten sons. All other thoughtswere subordinate to this. He must now transplant into his home the fresh life that his package held and reap its harvest of happiness.

The sun had risen. In front of him it lit up a broad street stretching straight to his house; behind him it touched the faded gilt characters on the broken signboard at the street crossing: "Site of the Ancient . . . Pavilion."

2

When Old Shūan arrived home he found the shop cleaned and set in order with its rows of smoothly glistening tea tables. There were no customers, only Little Shuan eating at one of the inner tables.

Great drops of sweat rolled down from his forehead and his lined coat clung to his spine where the shoulder blades stuck out like a raised number eight.* Old Shūan's face clouded over at sight of him. His wife came hastily from behind the cooking range and her lips trembled somewhat as she peered at him.

"Did you get it?"

"Yes."

They went together to the back of the cooking range. There was a moment's consultation; then Mother Hùa went out, to return shortly with an old lotus leaf which she laid on the table. Old Shūan unfolded the lantern shade and wrapped the scarlet bread roll up again in the lotus leaf. Little Shūan had finished his rice. His mother called hurriedly to him:

"Little Shuan! Sit still! Don't come over here!"

She was stirring up the fire in the oven. Old Shuan took the deep green parcel and the torn white shade splotched with red and placed them together on the coals. There was a dull red flare, and then the shop filled with a strange fragrance.

"That's a fine smell! What are you cooking?" Hunchback Sào-yĕh the Fifth had come in. He invariably spent the whole of every day in the tea shop, being the first to arrive as well as the last to leave. He had just come limping up to the table in the corner next to the street, but no one paid any attention to his question.

"Is it rice porridge?" Still no one answered him although Old Shūan hurried out and poured him some tea.

"Come in here, Little Shuan!"

Mother Hùa led him into the inner room in the middle of which she had placed a bench. When he was seated she handed him a plate on which was something round and very black. She said gently, "Eat this up . . . . You're going to get all well again."

Little Shuan picked up the black object and looked

* The Chinese character for "eight":

at it with inexpressible wonder as though he were holding his own life in his hands. He broke it open carefully. From within the charred shell came a cloud of white steam which drifted away to leave two halves of a bread roll made from white flour.

In a short time he had finished it but he could remember nothing of its taste. The empty plate was before him, and beside him were his father and mother, one on either side, with eyes fixed on him as though they expected to infuse something into his body and to withdraw something at the same time. This made his heart beat quicker. He clutched his chest and burst out in another fit of coughing.

"Sleep a little while . . . . You're going to be all right."

Little Shūan went coughing to bed as his mother directed. Mother Hùa waited for his breathing to become quieter before she gently covered him with the collection of patches that made his quilt.

3

There were a great many people sitting in the shop. Old Shūan was very busy carrying his great copper kettle about to fill up the tea-cups of his guests. His eyes were ringed with dark circle.

"Is there something the matter with you, Old Shūan? Are you sick?" asked a gray-bearded man.

"No."

"No? I thought from your smiles that you didn't look . . . ."

The gray-bearded man did not finish.

"He works too hard. Now if his son . . . ."

The Hunch-back's speech was interrupted by a sallow-faced man who burst into the shop wearing a dark gown thrown over his shoulders with the buttons all unfastened and held carelessly around his waist by a loose dark sash. As soon as he was through the door, he shouted out to Old Shuan:

"Has he eaten it? Is he better? Old Shūan, I've brought you luck! It's a good thing that I've a nose for news. . . ."

Old Shūan was all smiles as he listened, one hand holding the teakettle and the other lowered in a respectful gesture. All the people in the room listened respectfully, in fact. And Mother Hùa, with darkly ringed eyes, came smiling out to proffer a teacup and tea leaves, adding an olive as an extra delicacy. Old Shūan poured on the boiling water.

"This is a sure thing! This is quite exceptional. Think of it!" The sallow-skinned man kept up boisterously. "Brought home while warm and swallowed down still warm!"

"That's right!" Mother Hùa thanked him warmly. "If it hadn't been for your kindly interest, Uncle K'ang, how could we. . . ."

"Guaranteed, guaranteed! Taken hot like this--a roll of bread with human blood--guaranteed to cure any form of consumption!"

At the word "consumption" a change came over Mother Huà's face. She seemed displeased, but immediately put on a smile and walked away mumbling to herself. Uncle K'āng, however, had noted nothing. He continued to shout at the top of his voice until Little Shuan woke to keep him company with his coughing.

"To think," said the gray-bearded customer, "that your Little Shūan should have such a stroke of good fortune! Of course he will recover completely. No wonder you smile all day long, Old Shūan." Having spoken, he stepped over to Uncle K'āng and said in a low voice, "We have heard, Uncle K'āng, that the criminal who met his end this morning was some child in the Hsia household. Whose child was he really and what was it about?"

"Who was he? Why, the son of the widow Hsìa. The young scoundrel!" Uncle K'āng noted a general pricking up of ears and grew highly animated. His yellow skin blew itself out and his voice took up a higher pitch. "That little wretch didn't deserve to live. Well, that's all right. But there was nothing

in it for me this time. They even stripped his clothes off him and Red-eyed Ah Yì, the jailer, got it all. Uncle Shuan here was the luckiest; the next was Hsia's third son who got twenty-five snow-white ounces of silver to stick in his purse without having to spend a single cash."

Little Shūan had come slowly out from the little room clutching his chest with both hands and coughing continuously. He filled a bowl with cold rice from the range, poured hot water over it, and sat down to eat. Mother Hau followed him. "Do you feel better, Little Shuan?" she asked quietly. "Are you still as hungry as ever?"

Uncle K'āng glanced at Little Shuan. "Guaranteed! Cure absolutely guaranteed!" Then he turned back to his audience. "That third Hsìa is a foxy one all right. If he hadn't turned him in first, all his own property would have been confiscated and the whole family implicated. But look at him now! Silver!--That little fellow was absolutely unbelievable. Even in jail he tried to get his keeper to join the revolution!"

"Ai-ya! Imagine that!" A young fellow twenty or so spoke up angrily from the back row.

"You see, Red-eyed Ah Yì tried to find out from him what the story was, but the kid gave him a political lecture. He said the Great Ch'ing Empire by rights belongs to all of us. Think of that! Does that make any sense? Red-eye knew, of course, that he had only an old mother at home. He hadn't realized, however, that the child was too poor to be squeezed of the tiniest bribe. Red-eye was bursting with anger over that already, so when that kid with his politics scratched the head of a tiger, old Red-eye let him have a few cuffs for his trouble."

"Brother Yì has a good fist!" spoke up the hunchback gleefully from his corner. "I'll bet those two punches did the trick all right!"

"Nah, you couldn't frighten a worthless scoundrel like him. He kept saying 'What a pity, what a pity!'"

"Pity?" said the graybeard. "Who's to have pity for a creature like that?"

Uncle K'āng looked him up and down with infinite scorn. "You misunderstood me. What he meant apparently was that Ah Yì deserved pity."

The listeners suddenly dropped their eyes and a silence fell. Little Shūan had finished eating his rice. He was perspiring so freely that his head seemed to be steaming.

"Pity for Ah Yì! What rot! He must have been completely mad!" The graybeard blurted out his words in a burst of sudden clarity.

"Absolutely mad!" agreed a man of twenty, also suddenly clear about it.

Thereupon the customers in the shop began to liven up and chat and laugh again. Little Shuan, taking advantage of the commotion, coughed vigorously, but Uncle K'āng stepped over to him and patted him on the shoulder.

"Guaranteed! Don't cough this way, Little Shūan, I guarantee it!"

"He was mad!" said Hunchback Sào-yéh the Fifth nodding his head.

4

Outside the west gate and lying close to the foot of the city wall was a piece of land that had always been government property. Diagonally across it ran a narrow crooked path, which, starting as a shortcut trodden out by the shoes of passers-by, had ended by becoming a natural boundary. On the left of the road were burial mounds of such criminals as had been executed or had died from exposure in jail; on the right was a buying ground for paupers. Both sides were already crowded with rows and files of mounds like the ceremonial cakes at a rich man's birthday party.

It was unusually cold at the spring festival this year. The buds on the poplars and willows were scarcely half the size of a grain of rice. Not long after daybreak Mother Hua stood before a fresh grave on the right

hand side of the path. She set out four plates of food and a bowl of rice, wept a while, and burned sacrificial money. Then she sat mutely on the ground, apparently waiting for something, though she could not herself have told what it was she expected. A faint breeze ruffled her thin har, whiter by far than it had been the year before.

Along the path came another woman, also gray-haired, with ragged coat and skirt. She carried a round broken basket that had once been red lacquer and a string of sacrificial paper money. She had to rest every few steps. Suddenly she saw Mother Hua sitting on the gound watching her. She hesitated and an embarrassed flush spread over her pale thin face. Then, summoning her courage, she made her way over to a grave on the left-hand side and put down her basket.

This grave was in the same row as that of Little Shuan, separated only by the narrow path. Mother Hùa watched the woman set out the four dishes of food and the bowl of rice, saw her stand and weep and then ignite the paper money. "It will be a son," she was thinking to herself, "in that grave, too."

The old woman had been moving about to survey things when she gave a sudden start and, staggering backwards, stood staring in terror. Mother Hùa feared that the woman was going insane from grief, and she felt constrained to rise, cross the path, and speak to her.

"Lao Nǎi-nai," she said quietly, "don't take it so hard. Let's go back home."

The woman nodded, but her eyes remained in a fixed stare. "Look!" she stammered, "Look, what's that?"

Mother Hùa followed her pointing finger and her eyes fell on the grave in front of them. It was ugly enough, with patches of yellow dirt where the grass had not grown. But a closer look produced a shudder of amazement--for there,clearly encircling the rounded tip of the grave, was a wreath of red and white flowers.

Even to their age-dimmed eyes the flowers were quite distinct. There were not many of them; they were somewhat wilted; but they were arranged very

regularly in a perfect circle. Mother Hua took a hasty look at her son's grave and at the others, but she saw nothing beyond a few bluish wildflowers braving the cold here and there. She was possessed by a sudden feeling of emptiness and was reluctant to examine further. The old woman went nearer to the grave and regarded it carefully, muttering to herself.

"They have no roots. They don't seem to have grown of themselves. But who could have come here? . . . Children wouldn't play here. . . . Relatives stopped coming long ago. . . . What can have happened?" Suddenly she broke out in a sobbing cry. "Oh, my child! They all wronged you! And you can't forget it. Are you still grieving? And is this a sign from the spirit world you give me so that I will know?" Looking about her she saw a black crow sitting on a leafless tree. "I know now," she continued. "Oh, my child! They murdered you. They'll get their punishment some day, Heaven knows. Just close your eyes. . . . But if you are really here, if you are listening to me, give me a sign . . . make that crow fly on to your grave."

The breeze had died away. The blades of dry grass stood up stiffly like copper wire. The quivering thread of sound echoed more and more faintly on the air and was gone. All around was the stillness of death. The two stood in the withered grass gazing up at the black crow; and the crow, with head tucked in, sat on his branch as though he were cast in iron.

A long time passed. The visitors to the graves increased in number. Old and young passed in and out amongst the grave mounds.

Mother Hua felt relieved of a great burden and turned to go. "Come," she urged, "we had better go back."

The old woman sighed and listlessly gathered up the dishes of food. She hesitated still a moment, then walked slowly away. "What can it all mean?" she mumbled to herself.

They had gone not more than twenty or thirty steps when a loud caw sounded behind them. With a jerk, they turned their heads to look. The black crow spread his wings, gave a preliminary flap, and took flight like an arrow into the distance.

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