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ABSTRACT

This paper is the fourth in a series of studies focusing on the problems that Israeli students encounter in reading technical texts in English. This study deals with non-native students' understanding of what they read and on how their understanding compares with that of natives. Also being tested is a method for investigating students' understanding of texts. The theory of cohesion developed by Halliday and Hasan provided the researchers with a useful tool for analyzing the target text and for generating a series of questions. These questions were asked of a small number of native and non-native readers of English. It was found that cohesive factors distinguished non-native from native readers but it was not established which of these factors was most important in the reading process. It is suggested that collecting introspective information from non-native informants about how they answer comprehension questions could be helpful in understanding second-language reading. (Author/NCR)

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Reading History in English: Discourse Analysis and
the Experience of Native and Non-Native Readers

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Introduction

Non-native speakers of English around the world frequently are faced with the need to read specialized English-language materials as part of their university course work. Some students read native-language summaries of the English texts (perhaps to their detriment) or find native-language books covering roughly the same or lower-level material. Other students do not read at all, but rather concentrate on taking verbatim lecture notes.

Various groups of researchers and teachers have been increasingly concerned about both motivating non-native students to read material in the discipline areas in the original English version, and improving the students' comprehension of what they read. Perhaps new insights into helping non-natives read such materials might enhance the students' motivation to read in English.

The concern for research in English for Specialized Purposes (ESP) is not new (see, for example, an annotated bibliography by Selinker, Trimble, & Huckin, 1972). However, there have been some recent insights in the field which warrant further investigation. Selinker & Trimble (1974, pp. 81-82) for example, reported on their detailed research into the use of articles and verb tense in ESP, an avenue of research they embarked on because it seemed most crucial to the needs of engineering students. Generally, they found that student difficulties in ESP were not merely a result of technical vocabulary. In fact, they found that non-technical words in technical writing would sometimes give students more difficulty than technical ones--e.g., adverbial phrases, conjunctions, or words used in anaphoric reference. They attributed much of the difficulty in reading comprehension to the structure of the writing.

They also found that use of articles and verb tenses in ESP texts reflected rhetorical or organizational decisions made by the author about the piece of prose. In other words, the choice of definite or indefinite article might reflect the amount of generalization the author wished to presuppose, and choice of tenses would be based on rhetorical discourse rules. These devices were often not apparent as such to the non-native reader. Conventional EFL training, however, might not provide the students with the appropriate set of rules and

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guidelines for interpreting such article or tense use. The same investigators also showed how non-explicit definitions and classification schemes could cause problems for non-native readers (Selinker, Todd-Trimble, & Trimble, 1976). "Causing problems" for the non-native often means simply lack of information or awareness of the function of the rhetorical devices.

Halliday & Hasan (1976) have developed a theory of cohesion which can also be used to study the problems of a non-native reader. They consider that language is structured in a way that although the meaning of a set of words may be known, the passage is not interpretable without using information from earlier or later in the text or information from outside the text. For example, the sentence This hypothesis was not proven includes the demonstrative reference item this. The sentence cannot be interpreted without some further information signalled by this. Exophora (reference outside language itself) also directs the reader or hearer to use some further information. For example, a person hearing Bring the chair over here, must use information about the location of the speaker in order to interpret the sentence. The question concerning non-native readers is how well they can follow and understand such patterning in the target language.

Background to the Study

In the fall of 1975, researchers at the Hebrew University of Jerusalem started investigating the reading of English-language texts in the discipline subjects, under the direction of Larry Selinker. The research effort began with the consideration of texts both from the viewpoint of the native English-speaking professor in the specialized field and from that of the teacher of English as a foreign language (Selinker, 1976).

This current study is the fourth in a series of studies focusing on the Israeli student faced with reading texts in English in his field of study. The first study investigated a bio-chemistry student's experience reading a survey article on genetics. The second study looked at the experiences of two biology students reading textbook material on genetics. The third study considered the experience of an economics-international relations student's reading an analysis of the voting process (see Cohen, Glasman, Rosenbaum, Ferrara, & Fine, 1978). This fourth study deals with three South East Asian history students' experiences reading the introduction to a basic history text in the field.

Purpose of the Study

This study investigates some of the problems of advanced non-natives in reading English subject matter. Our focus was on their understanding of meaning, and how their understanding compared with that of natives. We were also testing a method for investigating students' understanding of texts.

In addition, this fourth study represents an effort by the researchers to respond to a practical request by the head of East Asian studies to inform him on how well his first-year students could handle English text material.

Procedures

Subjects

For this study of reading technical English, two groups of subjects were used. One group, the target group of non-native speakers of English, consisted of three first-year undergraduate students of East Asian history at the Hebrew University of Jerusalem. Two of the students, hereafter referred to as Avram and Hanan, were in their mid twenties, and one, Yoel, was about forty years old. Yoel had taken an intensive summer course in English, exempting him from further instruction, and had received training in reading technical material and summarizing it in Hebrew. Avram and Hanan received matriculation (bagrut) scores of 8 out of 10 in English. Avram was exempted from English study on the basis of a psychometric test administered by the university, and Hanan was taking a class at the advanced level (two-hours a week).

The second group of subjects was a control group of five English speakers. It consisted of four American students in Jewish Studies for a year in Israel, ranging in age from twenty-two to thirty-three, and an East Asian history student who was born in Israel but had lived in the United States from the age of eight until her mid-twenties. She was considered a native speaker of English for the purpose of this study.

Instrumentation

Both the native and non-native speakers of English were given a test passage to read and then asked questions about it. The test passage was from an introductory textbook on East Asian history, East Asia: The Great Tradition (Houghton-Mifflin, 1960) by Edwin O. Reischauer and John K. Fairbank (pp. 3-19). This passage was assigned to the students by the head of East Asian studies.

Three levels of questions were asked of the native and non-native speakers of English (see Appendix I). The same questions were asked of both sets of subjects. The levels of questions (termed "macro," "micro," and "vocabulary") were each based on a specific rationale. Macro questions were not directed at the student's understanding of a specific sentence but rather required some integration or generalization from specific sentences in order to answer. These questions paralleled the natural task students are faced with in reading technical material. They must understand and show their understanding of what a

passage is about. The intention was to ask these macro questions solely in Hebrew to the speakers of Hebrew, but some English paraphrasing was also used.

Micro questions were directed at specific sentences or parts of sentences and were asked of both groups in English. These questions were based on the theory of cohesion in English developed by Halliday & Hasan (1976). Cohesion is a relational concept which specifies how links are set up within a text and the way meaning in the text is interpreted. Halliday & Hasan outline many categories, but only the five main types of cohesion are discussed here. The different types of cohesion require different skills of the reader in interpreting a text. The issue, thus, is whether non-native speakers of English can exploit these relations within a text, as they must, to understand the material they are reading.

Anaphoric reference, the first type of cohesion, sets up a link to some earlier language based on recurrent meaning. For example in She's shy and That is what I mean, the words she and that are uninterpretable without the reader retrieving some meaning from some earlier language. The reader is given a search direction to find the relevant passage.

Substitution and ellipsis are two further types of cohesion which are related to each other. Substitution is a relation between linguistic forms and like reference is a search command to find some earlier essential information. For example in the sentences Do we have paper clips? No, do you want one? one is a nominal substitute for paper clip and requires the reader to find some earlier nominal that provides the information for interpreting this second sentence. Ellipsis is a similar kind of relation in the text, but omits an explicit place holder like one. In the sentences Do you have your racket? No, I only have his, the nominal racket is omitted from the second sentence. In contrast to substitution, ellipsis is a relational device which does not provide an explicit example of the grammatical element to be found.

A fourth type of cohesion, conjunction, is not a search instruction to the reader to find some information, but is an instruction to interpret the language which follows the conjunctive items in a given way with respect to what precedes. For example, the temporal conjunctive item next links the two following sentences and directs the reader to interpret the semantic content of the second sentence as being temporally after the first: John went home. Next he had dinner. Other sub-types of conjunction are additive (e.g. and) and adversative (e.g. although).

Lexical cohesion is the fifth type of cohesion proposed by Halliday and Hasan. Lexical cohesion is the cohesive effect attained by the selection of vocabulary, specifically by reiteration and

collocation. Again there is no search command to find earlier information but a continuity of linguistic forms and/or distributions of forms. Each of the five types of cohesion thus require the reader to use different skills to interpret the text being read.

The micro questions were formed to determine if the readers can use the cohesive system of English to understand a text. Thus the questions focus on cohesive items which either require earlier information or which define a particular kind of relation between stretches of language. Questions can be reliably, but not unfailingly, asked to determine if the reader has been able to find the earlier information or interpret a later section of language as it relates to an earlier stretch. There is a possibility that some readers can answer such questions out of a general knowledge of the passage. However, for readers having difficulty, the cohesive system provides (in a well written text) at least sufficient guides for interpreting the passage.

An analysis of cohesion in the target passage and questions derived from such an analysis can indicate whether subjects (especially non-native readers) can follow and make use of the cohesive structure of English. To formulate the issue differently: is this, or perhaps any, theory of cohesion a useful tool for studying problems of reading a second language?

Another set of questions dealt with vocabulary. The issue here is how much of the difficulty of non-native readers is in the vocabulary itself. In the current study the researchers estimated which vocabulary items would be difficult and selected fourteen of those considered to be more central to understanding the text. It was only at this level of analysis that the questions were designed to test individual lexical items, in context.

Data Collection

All the subjects were asked to read the first sixteen pages of the textbook (pp. 3-19), which serve as a general introduction to the subject. The Hebrew speakers read a photocopied version placed in a departmental library. They reported that it took them two to three hours to read. The English speakers were given the photocopied pages at the time of the interview and were asked to tell the investigator when they had finished reading. The native speakers took about thirty minutes. Both sets of subjects had a copy of the material in hand during the interviews and both sets of subjects looked at the texts they had in front of them.

The three non-native speakers were interviewed together as a group. With the subjects' permission the session (held in November, 1977) was tape-recorded. Interviewing the non-native speakers together was intended to create a non-threatening atmosphere. The students were not to feel that they were being "tested." One drawback to this

approach was that we did not necessarily obtain data from each student on each question. The native speakers of English were interviewed individually. Their answers were written down verbatim--a procedure which was possible since most of the answers were short.

Data Analysis

The tape-recorded session with the non-native speakers of English was played back immediately after the interviews to check the quality of the recording and to establish the identity of the speakers. The tape-recording was played again at the data analysis stage to note specific answers to particular questions. The answers of the non-native speakers were then compared to the answers of the English-speaking control group and to the answers expected by the researchers themselves.

Findings and Discussion

The answers to the macro and micro questions from both sets of subjects were classified as falling into one of three categories: (1) caused problems for the non-natives but not for the natives, (2) caused problems for at least one native but not for the non-natives, and (3) caused no problems for either group. These categories will be detailed below, followed by a discussion of methodological problems with the macro and micro questions, and a report on the investigation of vocabulary knowledge.

1. Problems for Non-Natives Only

The first category were those questions that caused problems for the non-natives and did not cause problems for natives. Four of these questions were at the macro level, that is, they did not demand knowledge of specific items but required some integration of material. We will discuss each of these macro questions in turn because each seems to reflect different issues.

The first passage that the subjects were asked to read in the interview session consisted of three paragraphs. The students were then asked to focus on the third paragraph (see Appendix II, passage A) and were asked a series of questions. For example, one of the macro questions was, "How does this paragraph or section fit with the outline?" The expected answer was that there are a lot of gaps and that this paragraph talks about one of them. The natives answered this question easily. They were always on the topic. All their answers dealt with gaps and how gaps are important for understanding economic advancement. The non-natives thrashed about. They did not mention gaps. Hanan spoke about "contacts." Avram mentioned three sections in a general way, and Yoel spoke generally about a comparison between East and West without mentioning the economic gap.

This macro question was testing an ability to integrate material across paragraphs. The natives were able to do this whereas the non-natives did not perceive as clearly how the three paragraphs inter-related.

A second macro question difficult for non-natives but not for natives also referred to the third paragraph of the first passage. Students were directed to the paragraph and asked, "What is the general comparison?" The expected answer was: the material standard of living. The natives again answered this question quickly and very easily, whereas the non-natives had difficulty. Hanan spoke of relations within East Asia itself, Yoel spoke of relations between the East and West, but did not mention economic or material standards. Even though in this example, the required integration of material was within one paragraph, all the same, the non-natives had difficulty, as in the previous example of integration at the paragraph level.

The next two macro questions exemplifying this difference between native and non-native, referred to the second passage that the students were tested on (see Appendix, passage B). The first question asked, "What is the authors' approach?" The expected answer was simply "an historical approach." The natives got it straight away, giving a short, succinct answer. Hanan gave what might be called a "buckshot" response, namely, one in which the student mentions many things in the apparent hope that one will be correct. The following is his actual response transcribed from the tape:

The authors' approach is that if we want to understand the situation of East Asia today coming from the past, tradition, the culture and history and the great role in what we see in East Asia today. It's effects very much the culture of East Asia today. But not only we must see so. No. We must see so because it was also very important to the East Asians themselves. They always thought what the future--what we would say about them, about their tradition.

Yoel did mention an historical factor ("perspective of historical things"), but Avram like Hanan did not mention anything historical. He gave an answer based on a more specific point in the text: "How to see East Asians as they see themselves." In this case, there were several types of clues to direct the reader to the pertinent answer. There was a subheading in the text, "The Approach to East Asia through its History." There the topic sentence was: "The historical approach seems to us the best for a number of reasons." Also, the remainder of the target paragraph and subsequent paragraphs also dealt with the historical approach. The non-native readers seem to understand the point of the question but were not able to pin-point the specific answer.

The final macro question in this category was, "Why do the authors favor the historical approach?" The investigators thought that there were three reasons: (1) the peoples of East Asia see themselves in historical perspective, (2) cultural achievements are best studied historically, and (3) one can understand the present only in terms of the past. The natives got these three reasons and also reanalyzed the first reason into three separate reasons, which were "seeing selves in historical perspective," "seeing future judgement in historical terms," and "heritage." The non-natives did not mention reasons (2) and (3) above at all. Avram spoke of "heritage" and Yoel spoke about consciousness of historical judgement. The non-natives, unlike the natives, thus did not organize the material that they had read when that organization stretched across different paragraphs.

Some questions on the micro level were easy for native speakers to answer but were difficult for the non-native speakers. To test understanding of the comparative cohesion of "nowhere sharper," both sets of subjects were asked: "How similar are Americans and Asians?" The words "nowhere...sharper" indicate a comparison of great differences. The reader must understand this nature of the comparison and interpret the difference between the two groups as large. The answer expected was that these two peoples are very different and that there is the greatest possible contrast between them. Whereas the native speakers found the question easy to answer, the non-natives had difficulty. For example, Hanan gave an incorrect answer possibly because he was focusing on the question rather than on the material in the text. He responded that "there are things which are similar." However, in answering a probe question, he corrected himself and said that a contrast was being made and that the peoples are not similar. In this example, even a within-sentence cohesive link gave difficulty for the non-natives. The task was to understand a comparison between two parts of a sentence. This task was not initially accomplished by these non-natives and, as the example shows, led to an incorrect interpretation.

Intrasentence difficulties for non-native speakers arose in another location in the test passage. The adjunctival group "In part because of accidents of history and geography" is fronted. Readers must, however, interpret the group functionally as adverbial. The subjects were asked: "Why does the West have a better balance between population and natural resources?" The expected answer was: "(in part) because of accidents of history and geography."

As with the last example, the natives had no difficulty and generally gave the answer directly from the text ("accidents of history and geography"). The non-natives, however, had difficulties. Avram apparently guessed and said that it was "because they understand the existing conditions." Hanan also answered incorrectly by mentioning "economic plane." In response to a very specific probe, Avram gave the correct answer. This example shows again that even when a link in meaning must be made within one sentence non-native speakers may have difficulty.

The preceding two examples indicate that distance of cohesive links or of a tie in meaning is not necessarily the factor which causes non-native speakers difficulty. Rather, the type of cohesive or meaning tie is important. It is also clear that non-native speakers can be assisted by probe questions. It is possible that these probe questions are merely a signal to the subjects that their initial answer was not correct. Nevertheless, such feedback to the non-native reader seems important in correcting misinterpretations of the text.

2. Problems for the Natives Only

The findings also included one question on the macro and one on the micro level that natives did not answer correctly but that non-natives did. The macro question (referring to passage B) was, "Why is the study divided into two volumes?" The expected answer was, to separate off the period of isolation of the East from the period of contact with the West. The natives either could not answer the question at all or gave too general an answer, while the non-natives answered correctly. The question was classified as a macro question in that it required paragraph-level integration, and several paragraphs gave the clues to the answer. It appears that the natives were passing over specific details which they mistakenly considered unimportant. The non-natives assigned all material equal value, which may not be a successful reading strategy in general, but which proved successful in these instances.

The micro question (referring to passage B) was, "What do the authors think should be studied historically?" The expected answer was: "Aesthetic, intellectual, and institutional achievements." A non-native informant provided the exact answer, and another non-native got the answer after a probe. The natives gave wrong answers, even after some probes. One mentioned East Asia, another mentioned "East Asia in a period of isolation" and mentioned other influences as well. This question was to check the understanding of the anaphoric reference item these. The item sets up a link to the previous sentences where the answer, "aesthetic, intellectual, and institutional achievements" is given. It seems again that the native readers were reacting in broader terms and not following the cohesive link at the local level.

3. No Problems for Natives or Non-Natives

Only one question, at the macro level, proved to cause no difficulty for either set of informants. The question (referring to passage A) asked, "What does paragraph 3 talk about?" The expected answer was: the gap between East and West. Two of the three non-natives said "gap" and the natives answered correctly and also provided extra information. The question was checking for understanding of the idea of the paragraph and for an awareness of its relation to earlier information about East and West.

In fact, all the macro and micro questions were designed to distinguish maximally native readers from non-native readers. The findings suggested that this task was mainly accomplished. This one question, however, did not yield differences between the two groups. It is quite possible that the answering of the question did not actually require integration of material. The non-native readers were able to simply identify and use the word "gap," the second word in the first sentence, without further analysis. It would be useful to obtain introspective feedback from non-native readers about what techniques they employ in answering such a question.

There were no cases of macro or micro questions which were difficult for both native and non-native speakers, a finding which is consistent with our intentions of maximally distinguishing the two groups of informants.

4. Methodological Problems

In carrying out this study, we found that some of our questions and questioning procedures themselves produced ambiguous or inconclusive results. For the sake of future investigations, it would appear useful to discuss some of these problem areas.

For example, a question at the macro level was phrased differently for the two groups of informants. The natives were asked (with regard to passage A) the original question, "What are the two kinds of gaps mentioned in paragraphs 2 and 3?" while the non-natives were asked an abridged version, "What is the gap mentioned in paragraph 2?" Because of this discrepancy in the questioning, the answers from the two groups were not comparable. We did not realize this discrepancy until listening to the tape. In the context of the interview with the non-natives and their answer to an earlier question, the full question referring to both paragraphs 2 and 3 seemed redundant and thus was abridged to refer only to the second paragraph. On the one hand, the interview technique (rather than a written test) was used to build a certain amount of flexibility and naturalness in the study, but on the other hand, we found that even in an interview it is important to follow a protocol exactly when seeking comparable data from two different groups.

Two of the text questions on the micro level seemed to be formulated improperly. The item "also" ("The gap between East and West has also been widened by a growing discrepancy in material standards of living") is a conjunctive cohesive link. It signals to the reader that the reason which follows is in addition to some prior reason. To test the informants' understanding of this link, they were asked, when focusing on the passage "What has led to the widening gap between East and West?" It was expected that they would mention the "great upsurge of national consciousness and patriotic pride" and the resulting "critical attitude," which were given as reasons in the preceding paragraph. Both sets of subjects had difficulty making the link to the

information in the earlier paragraph. The non-natives mentioned the economic gap between East and West and the balance of population and resources. The native speakers included some remarks about "national consciousness" but also mentioned the different standards of living of East and West. The native speakers may be using the item "also" to check for further information in a way that the non-natives do not. However, a more carefully formulated test question would be needed to confirm this suggestion.

To test whether the subjects used a demonstrative reference signal, a question was asked about "This economic gap." This is a demonstrative reference item which refers the reader to the earlier information: "the economic plane which seems unattainable." The question asked of the subjects was: "What affects/causes [both words were used] the differences in attitudes and ways of East and West?" The expected answer was some mention of the economic gap. Again, both native and non-native readers had difficulty answering the question. The natives mentioned "cultural and economic patterns," "the cultural gap" and "national consciousness." The non-natives also gave a number of different responses but did mention an economic gap when asked further probe questions. The question, it would seem, was not formulated accurately. The difficulty was perhaps in creating a question in language too different from the target text.

5. Vocabulary Problems

Of the fourteen "central" vocabulary items tested with the non-native speakers, i.e., those words considered to be central to the meaning of the text, half were in fact found to give difficulty to at least one of the non-native informants. In passage A, these were: 'discrepancy,' '(economic) plane.' In passage B, these were: 'heritage,' 'genetically,' 'hybrid,' 'futile,' and 'perceive.' The items that at least one non-native student knew were: 'animosity,' 'unattainable,' 'favorable balance,' and 'heightens' (passage A); 'aspects,' 'upheavals,' and 'millenium' (passage B).

The findings show that in fact the non-native informants did not know the meanings of some key words, even though they had used a bilingual dictionary in preparing the text. It would appear that these difficulties with vocabulary did interfere with their understanding of the passages. For this reason, it would not be fair to minimize the importance of vocabulary in reading texts of this nature. On the other hand, our study also points up a number of areas which cause difficulty beyond vocabulary problems.

In asking macro and micro questions of the non-native informants, we also obtained some information about why vocabulary items might cause comprehension problems. One was simply the misreading of words. Hanan, for example, read "economic plane" as "economic plan" (in passage A), thus distorting the meaning of the sentence as a whole. Another problem

was that of using a bilingual dictionary to understand a term that is being used metaphorically in the text. For example, Hanan reported looking up the word "gap" (in passage A) and still not understanding it. In his pocket dictionary, he found two Hebrew equivalents, pritsa 'crack' and nakik 'crevice,' both of which refer to geological gaps rather than to a conceptual difference. There appears to be some value in conducting systematic miscue analysis, in order to find out which words are being read incorrectly and the effects that this has on comprehension. Teachers often have students read aloud but infrequently analyze their miscues in oral reading (i.e., in terms of substitution--as above, deletion, addition, and transposition). It would also be useful to look at ways in which the more successful readers use literal dictionary entries to understand figurative language including a metaphor such as "economic gap."

Conclusion

We examined a number of types of problems in reading, including cohesion, grammatical factors, and vocabulary. It is difficult, if not impossible, to operationally separate these aspects. However, we feel that insights along these lines can be useful in the construction of both teacher-training and teaching materials. There are, in addition, other levels of meaning that could be studied in second language learning. Candlin, Kirkwood & Moore (1978) propose a system of rational, propositional, contextual and pragmatic levels of meaning. Our micro level of cohesion would be included in the contextual level, but does not preclude the study of the other levels. The investigation indicated that native speakers and non-native speakers have different kinds of misunderstandings, based on the way they follow the cohesive system. Part of the task in further research is to study what natives of the target language do in reading their own language. In this paper we have begun to look at how native readers of English approach a history text. We have not, however, dealt with the question of how our non-native informants would read a history text in Hebrew.

Our emphasis on both the macro and micro levels of analysis was meant to parallel the natural tasks of reading for understanding and reporting what has been read. The micro questions seemed to differentiate native from non-native readers. However, further study is needed to isolate which aspects of cohesion are causing difficulty for the readers. Some possibilities are: (1) the distance of the cohesive links, (2) the type of cohesion (e.g., comparative conjunction, reference), (3) the use of cohesion coupled with syntactic structure (e.g., is it more difficult to interpret a cohesive item if it is embedded?), or perhaps memory as a factor in these variables.

We encountered some methodological problems in our investigation. Certain questions seemed to be formulated improperly. Solving methodological problems would result in a more accurate instrument. In understanding the comprehension of non-natives it would also be helpful to

investigate the way in which probe questions help the non-native to understand the text. Furthermore, collecting introspective information from non-native informants about how they arrive at their answers to comprehension questions could help in studying second language reading.

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APPENDIX I

Passage A

Macro questions and expected answers

1. What does paragraph three talk about?
A: the gap between East and West
2. How does this paragraph or section fit in with the outline?
A: there are many gaps and this paragraph is about one of them
3. What is the general comparison?
A: a comparison of the material standards of living
4. What are the two kinds of gaps mentioned in paragraphs two and three?
A: a culture gap, a material gap

Cohesive items targeted, micro questions and expected answers

1. Also
(Conjunction,
additive) Q: What has led to the widening gap
between East and West?
A: an upsurge of national consciousness
and patriotic pride in Asia (which has
led to a more critical attitude and
animosity towards the West)
2. nowhere...sharper
(Reference,
comparative) Q: How similar are Americans and
Asians?
A: they show the sharpest contrast between
peoples
3. we, they
(Reference,
exophoric/
personal) Q: Which people have the better balance
between population and natural
resources?
A: we, Americans, the West
- because
(Conjunction,
causal) Q: Why does the West have a better balance
between population and natural resources?
A: accidents of history and geography
4. this (economic gap)
(Reference,
demonstra-
tive) Q: What effects (causes) the attitudes
and ways of life of East and West?
A: the economic gap
Q: What is the effect of the economic gap?
A: perpetuates (heightens) differences

Passage B

Macro questions and expected answers

1. What is the authors' approach?
A: historical
2. Why is the study divided into two volumes?
A: one volume is about the period of isolation and one volume is about the period after contact with the West
3. Why do the authors favour the historical approach?
A: 1. the Asians see themselves in an historical perspective
2. cultural achievements are best studied historically
3. the present can be understood only in terms of the past

Cohesive items targeted, micro questions and expected answers

1. number of reasons Q: Why is the historical approach used?
(Cataphora, i.e., A: 1. the people of East Asia see themselves in an historical perspective (and we should see them as they see themselves).
reference forward)
2. also for a clear understanding of the subject/interested in the achievements during the period of semi-isolation/ which should be studied genetically as they evolve/which should be studied separately from hybrid, contemporary cultures
(Conjunction, additive)
3. finally to comprehend East Asia today
(Conjunction, temporal)
2. themselves Q: What is the particular way people of East Asia are different?
(Reference, personal) A: more than others they see themselves in an historical perspective
3. which is requisite Q: What is needed for an understanding of East Asia?
(Reference, demonstrative) A: to see the people of East Asia as they see themselves

4. these cultural...best
(Reference, demonstrative)
Q: What do the authors think should be studied historically?
A: aesthetic, intellectual and institutional achievements
5. finally
(Conjunction, temporal)
Q: What does "finally" refer to?
A: a reason for using the historical approach
6. only
(Reference, comparative)
Q: What is the importance of looking at the past to understand the present?
A: it is the only way to understand the present and see the direction of motion
7. present turmoil
(Reference, exophoric)
Q: What is the effect of the interaction of old and new forces?
A: the present turmoil
8. two major phases
(Cataphora)
Q: How do the authors divide the history of East Asia?
A: 1. evolution in relative isolation
2. under the impact of modern Western civilization

APPENDIX II

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PASSAGE A (p. 6)

Until recent times we and the East Asians lived virtually in different worlds. Even within Asia the contacts between China and the Hindu civilization of India and the Islamic civilization of West Asia and North Africa were not great. Languages, social customs, ethical values and historical traditions varied greatly between East Asia, India, the Islamic world and the West.

Rapidly growing contacts during the past century among all these areas have tended to lessen the cultural gap, but other factors have widened the gulf between us and the non-Western world. There has been a great upsurge of national consciousness and patriotic pride among the masses of people in the countries of Asia. A more critical attitude and sometimes animosity toward the West have been the natural result, and rapid changes in relations between the West and Asia have inevitably followed.

The gap between East and West has also been widened by a growing discrepancy in material standards of living. Nowhere is the contrast sharper than between Americans and the people of Asia. In part because of accidents of history and geography, we enjoy a far more favorable balance between population and natural resources than do they. As a result we live on an economic plane that appears unattainable by them under existing conditions. This economic gap perpetuates and sometimes heightens the difference between our respective attitudes and ways of life.

PASSAGE B (pp. 7-8)

The Approach to East Asia Through its History. The historical approach seems to us the best for a number of reasons. One is that the peoples of East Asia, more than those of the rest of the world, see themselves in historical perspective. They are strongly aware of their heritage from the past and also conscious of the historical judgment of the future. To approach them through their history is to look at them as they see themselves, which is the first requisite for understanding.

The historical approach is also necessary for a clear understanding of the major aspects of our subject. We are interested first in the distinctive aesthetic, intellectual and institutional achievements of the people of East Asia during their long period of semi-isolation from the rest of the world. These cultural achievements can best be

studied genetically as they evolved. They should be looked at separately from the rapidly changing, hybrid cultures of the contemporary East Asian countries.

A clear understanding of the traditional cultures of these countries, finally, is essential to any comprehension of what is happening in East Asia today. The past is the unseen hand that molds the present; it would be futile to describe a situation of flux in static terms. Only as we look at the long flow of East Asian history can we understand what is happening there now and perceive the direction of motion, which is often more important than the momentary situation itself.

The essence of the present turmoil in East Asia is the interaction between new forces, many of which were derived from the West, and traditional habits and modes of thinking. Our story divides naturally into two major phases: the evolution of traditional East Asian civilization in relative isolation over three thousand years, and the upheavals and modernization of that civilization in recent times under the impact of the modern Western world. This is the reason for dividing the history into two volumes under separate titles.

NOTE: - - - - - our emphasis