MEANING MAKERS AT WORK: HOW DO ABOVE AVERAGE AND AVERAGE STUDENTS MAKE SENSE OF ENGLISH AND *BAHASA* LITERARY TEXTS?

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Abstract

This study seeks to explore the relationship between eight types of comprehension questions and eight types of coded discourse units which are based on the eight sub-skills of Lunzer and Gardner (1979). In general each reasoning strategy used by selected above average and average readers in response to each test item is interpreted and categorized as one of the eight sub-skills. Currently, no similar reading research has been done in this area. The findings of this table suggest that both the above average and average readers' reasoning strategies, in all the L1 and L2 texts, reflect the usage of all the various Discourse Types (DTs) with the exception of DT 6 (M) and DT 7 (S) which are under utilized by both groups of readers (see rows 6 and 7 in Table 25).

The good readers' responses seem to be more specific and focus on every single question type itself. The higher context-specific FSI scores of the good readers, as seen diagonally, reflect the regulatory power of the readers in monitoring their comprehension. It also suggests that the comprehension discourse strategies of the readers are more active in their attempts to reason out their understanding of the questions. This may suggest that the good readers' mastery of the content of the texts make them rely less on the DT Forming Judgment (J). These findings seem to indicate that the above average readers evidence a greater reflection on every QT (except on QT

(J)) than the average readers. Quantitatively, the above average readers are found to be different in their reflections of their reasoning strategies from the average readers. The reasoning processes of the above average readers are much more focused on each QT than those of the average readers. This shows that the good readers were able to activate their reasoning processes within the sphere of each of the QTs individually, relying less on other skills. This phenomenon strongly suggests that instruction in improving poor readers' comprehension monitoring strategies should teach this unique strategy of the good readers. In other words, reading teachers should improve the average and poor readers' awareness and knowledge in comprehension strategies because logically, an increase in awareness of strategic knowledge may improve pupils' performances on reading comprehension tasks. Whether such differences, as seen by the patterns of the Factor Specificity Index (FSIs), qualitatively reflect better and more effective reasoning strategies by the above average readers than by the average readers may need further investigation.

Key Words: *reading strategy, monitoring strategy, comprehension strategy*

Introduction

This paper is set in the context of the acknowledged debate, highlighted by the work of Lunzer and Gardner (1979), concerning the theoretical issue as to whether reading comprehension is a unitary competence or whether it consists of identifiable discrete subskills built in a hierarchical manner. As Lunzer and Gardner (1979) and many studies later demonstrate, the subskills are not hierarchical in nature. This paper describes a study that expanded on the work of Lunzer and Gardner (1979) as to the underlying strategies used by second language learners in responding to English texts. It describes how the learners select, comprehend, and integrate information in their efforts to comprehend these texts in the context of eight reading comprehension subskills. The subskills, which are in the form of comprehension questions, and as defined by Lunzer and Gardner (1979) are:

• **Word meaning (*W*):**

Recognizing the meaning of a word in isolation.

• **Words in context *(WIC)* :**

Deriving the appropriate meaning of an ambiguous word from the context

in which it appears.

• **Literal comprehension (*L*):**

Finding the answers to questions when these can be obtained directly by reference

to a phrase or a sentence in the text.

• **Drawing inferences from single strings (*ISS*):**

A *string* is an uninterrupted sequence of words, usually a phrase or a short sentence. Questions in this category require the reader to draw an inference from such a sequence as opposed to deriving its literal meaning.

• **Drawing inferences from multiple strings (*IMS*):**

These tasks are similar to *ISS*, except that the necessary information for

making the inference cannot be found by reference to one phrase but must be

deduced from a comparison of two or more facts appearing in different parts of

the text.

• **Interpretation of metaphor (*M*):**

These questions require the reader to show an understanding or appreciation

of meanings that are given indirectly by the use of metaphor.

• **Finding salient or main ideas (*S*):**

The ability to isolate the key points of a passage.

• **Forming judgement (*J*):**

The ability to offer an intelligent interpretation of ideas contained in the text or

implied by them in the light of his/her own knowledge of related matters.

Purpose

The study was centered on two broad aims:

Firstly, it was aimed at determining whether the eight subskills or question types (QTs) are useful in differentiating between good and average readers in terms of their comprehension answering strategies. To do this, the researcher analyzed and coded the verbalized comprehension answering strategies of the readers, gathered from all of the QTs, into discourse units (in this case, 7842 discourse units were critically interpreted and coded into one or more of the eight discourse types (DTs). Thus, the strategies verbalised on each QT were coded as either belonging to one or more of the DTs. The accumulated occurrences of the discourse types for all of the QTs were averaged, and formed the Factor Specificity Index (FSI) (See *Definition of Terms*).

Secondly, it was aimed at investigating the comprehension answering strategies of the good and average readers in responding to L1 and L2 comprehension test passages and questions. By comparing the patterns in the distribution of the L1 and L2 discourse units, insights into the nature of the comprehension strategies employed by the readers could be gained.

With this view in mind the study forwarded a basic hypothesis that there is a difference between the average and the good readers in term of the distribution of the discourse units related to the language of the comprehension test passages and the language of the tested questions.

Definition of Terms

The following terms are used throughout this paper.

Average Students

They were selected in consultation with their class teachers, the school supervisor, the head teacher and their language teachers. The mid-year language test scores of the subjects were between 50 and 70. The monthly test scores for English were also used as one of the tools to select the students. Their verbal communication ability is good.

Good Students

The same selection criteria were applied, except that their mid-year language test scores were between 80 and 100. They had very good oral and written ability.

Discourse Unit (comprehension answering strategies)

In a restricted sense, the term is used to simply mean the *comprehension strategies* of the readers in responding to the comprehension questions. The verbal inputs from the readers for each comprehension question were critically examined and coded into one or more of the eight discourse types. In this study 4243 discourse units were interpreted according to the eight discourse types. Each discourse unit, which normally found consists of one complete meaningful sentence or utterance, is thought to represent an embedded comprehension strategy.

Discourse Types (DT)

Each comprehension answering strategy was rigorously coded to fit into one or more of the eight discourse types. The eight discourse types are *word meaning in isolation (W), words in context (WIC), literal comprehension (L), drawing inferences from a single string (ISS), drawing inferences from multiple strings (IMS), interpretation of metaphor (M), finding salient or main ideas (S),* and *forming judgements (J).*

Question Types (QTs)

The eight comprehension subskills are also known as Question Types.

Factor Specificity Index (FSI)

An FSI is the proportion of the number of times each factor occurs for each Question Type (QT) and Discourse Type (DT). The index is expressed in terms of the percentage of occurrence of each QT and DT. For example, as shown in Table 1, an FSI score of .38 is an average percentage score of all the FSI scores which had been calculated separately for each of the eight students.

<u>Design of the Study</u>

In the beginning, a total of 8 good and 8 average readers were interviewed. However, due to time constraints, only 16 out of a total of 64 different interviews were transcribed and translated into English language and later coded as one of the eight specified discourse units. It was necessary to translate the interviews from Malay to English because the taped verbal responses were conducted in Bahasa. The translated interviews were taken from 4 good and 4 average readers. In order to find the inter-rater reliability of the coded discourse units, the transcribed data were chosen at random and coded by three co-raters. This was calculated by summing up the number of agreements among the co-raters, and dividing the total by the number of discourse units coded by the co-raters before multiplying the answer by 100. In this case it was .88, and considered to be highly reliable.

Hypothetically, it was assumed that by analysing the verbal discourse units using the eight categories of subskills, the data will highlight some kind of relationship in terms of the distribution of the discourse units between the eight categories of question types and the eight discourse types. It was also predicted that there would be a difference between the good and the average readers not only in terms of the patterns of the discourse units but more importantly, in terms of the distribution of the discourse units in L1 and L2 comprehension tests.

Choosing the Research Method

The nature of this study was to understand the "how" and "why" aspects of the students' chosen and written answers to the comprehension tests. For these reasons, in this research inquiry, a case study approach was considered the most relevant research strategy. Yin (1994) suggests that a case study is appropriate when a 'how' or 'why' question is being asked about a contemporary set of events over which the investigator has little or no control.

The process of understanding how and why the students selected or wrote a particular answer to every comprehension question asked is a challenging and time-consuming task. In the context of this study, the students were directly interviewed after completing each comprehension test. This immediate interview strategy was considered the most appropriate method since it was assumed that the reasoning process(es) for answering each question would be fresh in their minds. During each interviewing session the authors were very cautious in asking questions as to why they had chosen or written a particular answer on the grounds that any improper questioning might help or lead the students to the answers. It was thought that leading or unintentionally guiding the students to the answers would not yield original responses.

In any case, during the face-to-face interviews, the authors adopted a flexible and adaptable questioning strategy to determine the comprehension answering strategies of the students. The interviewing methods, styles and tactics of this study were based on several techniques (Yin, 1994; Robson, 1993; Cohen and Manion 1989). It was also anticipated that during any interviewing session the students' non-verbal cues could be observed, which would further inform the study.

Although the interviewing sessions were time-consuming, the authors managed to maintain a friendly atmosphere. This was vital to the aim that in each session each student

would provide as much information as possible. In any case, the style of the face-to-face interview was semi-structured: the author read the questions from the tests but would adjust the order of the questioning to match the context of the interviewing session (Robson, 1993). It is acknowledged that an in-depth face-to-face single case interview would not yield adequate data and thus may not be compelling or robust enough to be regarded as a good study. Due to the nature of the above hypothetical construct, a multiple-case design was deemed to be of paramount importance if the study is to produce compelling and robust findings (Yin, 1994). To be more specific, in an attempt to produce valid results, the interview procedures were repeated or replicated for all the chosen students.

Selecting the Schools and the Students

Three secondary school headteachers were willing to allow the interviews to be conducted. It must be emphasized that the yardstick for choosing the schools for the interviews was not the academic standing of the schools. Rather, it was the availability and the willingness of the schools to allow the research to be conducted, and should not be regarded as trying to show that one school is academically better than the other. What was important was the proper timing of the interviews and the willingness of the students to spend their schooling hours on the tests and the interviews, since each student had to spend between 6 to 8 hours of their schooling hours in reading, answering and verbalizing the comprehension answering strategies for the four selected comprehension texts and tests.

The Design of the Interviews

The following table outlines the 64 interviews conducted in the three selected schools.

Table 1: The Plan of the Interviews.

	Boy/Girl	Coding Reference	Adventurous Texts		Biographical Texts	
			Ali	Si Pintar	Ahmed Idris	Maimunah
Good Readers						
	Girl 1	J. J.	E	M	E*	M*
	Girl 2	M. M. A.	E	M	M	E
	Girl 3	A. M. A.	E	M	E	M
	Girl 4	Z. F. M. Z.	E*	M*	M	E
	Boy 1	A. F. S.	M	E	M	E
	Boy 2	A. H.	M	E	E*	M*
	Boy 3	R. R.	M*	E*	M	E
	Boy 4	I. S.	M	E	E	M
Average Readers						
	Girl 1	A. Z.	E	M	E*	M*
	Girl 2	N. A. M.	E	M	M	E
	Girl 3	E. M.	E	M	E	M
	Girl 4	L. M.	E*	M*	M	E
	Boy 1	M .F. J.	M*	E*	M	E
	Boy 2	M. F. S.	M	E	E*	M*
	Boy 3	A. D.	M	E	M	E
	Boy 4	E. S. R.	M	E	E	M

Note: 'M' stands for Malay texts and tests and 'E' for English texts and tests. The asterisks denote the interviews chosen for the data analysis.

Analysis

The analysis of the data was generally divided into two main tasks:

a) The Wilcoxon Matched-Pairs Signed-RanksTest for two related samples. This test was used to find the size of the difference between the two sets of related scores. The good and the average students' scores from the L1 and L2 codings were ranked and summed with the same sign.

b) Finding and analyzing the Factor Specificity Index (FSI) for all codings regardless of language, sex, ability, and text-type variables. An FSI is the proportion of the number of times each factor occurs for each Question Type (QT) and Discourse Type (DT).

The index is expressed in terms of the percentage of occurrence for each QT and DT. An FSI score is calculated in the following way:

(i)   First, by referring to Table 25, the FSI score for QT *(WIC)* and DT *(W)* is .24. Each student's responses that was coded as belonging to the DT *(W)* was added up and divided by the total of all the coded discourses. This gives the student's mean percentage for the DT. The same procedure was followed for all students. The FSI score of .24 means that when responding to the QTs *(WIC),* 24% of all the coded discourse units for that QT were judged as belonging to DT *(W).*

(ii)   Second, all the mean scores for all eight students for the said DT were added together. This gives a total mean score.

(iii)   Finally, the total mean score of all the students was divided by the number of the students. The resulting score is called the FSI. Thus, the FSI of .24 is an average percentage score of all the FSI calculated separately for each of the eight students.

Table 25: Proportions of Discourse Units in Students' Commentaries on Answers Separated in terms of Reading Ability for both L1 and L2 Tests(16 Interviews = 7842 Discourse Units)

Qs. Type (QT)		W	WIC	L	ISS	IMS	M	S	J	Total
		Discourse Type (DT)	
W	G	.29	.33	.07	.13	.17	.00	.00	.01	1.0
	A	28	.26	.05	.08	.14	.00	.00	.13	.94
WIC	G	.24	.36	.05	.11	.07	.00	.00	.16	.99
	A	.29	22	.04	.06	.11	.00	.00	.24	.96
L	G	.04	.00*	.55	.21	.06	.00	.00	.13	.99
	A	.06	.04*	39	.15	.08	.00	.00	.20	.92
ISS	G	.04	.05	.10	.63	.04	.00	.00	.13	.99
	A	.05	.01	.19	41	.14	.00	.00	.18	.98
IMS	G	.01	.00	.19	.10	.39	.00	.00	.31	1.0
	A	.02	.00	.11	.13	33	.00	.00	.39	.98
M	G	.05	.02	.09	.26	.13	.29*	.00	.15	.99
	A	.08	.05	.09	.27	.11	.10*	.00	.24	.94
S	G	.01*	.01	.04	.09	.50	.00	.20	.16	1.0
	A	.05*	.00	.05	.08	.47	.00	.03	.25	.93
J	G	.00	.00	.01	.02	.22*	.00	.00	.75	1.0
	A	.02	.00	.01	.03	.14*	.00	.00	.80	1.0

Note: G: Goodstudents

A: Average students

* P <.05 (Mann-Whitney U Wilcoxon Rank Sum W Test)

Looking at Table 25, the proportions of the discourse units in terms of reading ability for the good and the average readers represent unique patterns of response in the two groups. Again, reading the table diagonally (top-left tobottom-right), the FSI scores for the average readers are strikingly less than forthe good readers except in Question Type Forming Judgements (J). This single exception implies that the poorer readers need support for their answers and this is manifested by a heavy reliance on their world knowledge or Forming Judgements (J) IST, significantly more than the good readers, in making sense of their understanding of the test questions. This situation is further supported by the consistently higher FSI scores of the average readers than the good readers in column 8 (see the FSI figures in the vertical rectangular-shaped drawing in column 8 in Table 25); the scores are pointing in the same direction, from Question Type Word Meaning (W) (13%) to Question Type Forming Judgements (J) (80%), in terms of a heavy reliance on the Forming Judgements (J) skill.

The significant difference between the good and average FSI scores, taken diagonally (top-left to bottom-right) and calculated using the Wilcoxon Matched- Pairs Signed-Rank Test, is high: a two-tailed probability of . 0251. Thus, the diagonal FSI differences between the good and the average students are almost unlikely due to chance alone: the diagonal FSI scores of the good readers are constantly different than the FSI scores of the average readers. The two-tailed or nondirectional hypothesis is used simply because the direction of the FSI scores differences is not predicted.

A similar pattern of slightly higher FSI scores for the average readers than for the good readers is demonstrated in column 1 as observed from Question Type Words in Context (WIC) (29%) to Question Type Forming Judgements (J) (2%). Looking from the top of column l (DT 1) and downwards the average readers appear to reflect more on the (W) questions than the good readers. Clearly, any assumption that there is no difference in terms of the FSI patterns between the good and the average readers is not well founded and is disproved by the above data.

What is being suggested in this chapter is that it is possible to use the discourse data to draw conclusions about the reasoning processes which occur when a reader takes a comprehension test, and what is argued is that it is in the difference between discourse types for different groups, or in different language contexts, that the stronger evidence for different reasoning processes may be found. The FSI of the DT and QT supported this argument.

In comparing the reasoning strategies used by each of the groups, significant differences were observed between the good and the average readers. Evidence of this can be found in the way the good and the average readers employed the discourse types. Both groups used a flexible approach and a variety of reasoning strategies but the good readers showed more applications of most of the discourse types, as seen diagonally (top-left to bottom-right) from the table, than the average readers. Although the average readers used similar reasoning strategies and in one particular case show a higher concentration

Of FSI scores (. 80, as seen in Question Type Forming Judgements (J) on DiscourseType Forming Judgements (J)), they tend to activate Discourse Types less frequently than the good readers for each Question Type. It is also clear that the good readers appear to be able to focus or activate their reasoning more often on each Question Type with less reliance on other Discourse Types than the average readers. This phenomenon may hold true in a wider sense if the study is focused on the differences between good and poor readers. Again the FSI figures, as seen diagonally in the table, prove the hypothesis. With the average readers what emerges is the fact that the average readers show a heavy reliance on the Discourse Type Forming Judgements (J) throughout the table (see the DT (J) column). In a sense, the average readers tend to reflect more than the good readers on the Forming Judgements (J) Discourse Type. This is a type of compensatory behaviour used by the average readers in reasoning out their answers. The good readers rely less on DT (J) than the average readers.

Whether such consistently heavy application of the Forming Judgements (J) Discourse Type by the average readers throughout the interviews is proper and efficient in reasoning out the answers is subject to further study. Another point to consider in comparing the differences between the two groups is the quality of the reasoning (i. e., being either right or wrong in their responses) in the process of making sense of their answers. This has not been a central focus in the present study, but it is important to acknowledge that it is a worthwhile issue for greater attention.

Looking closely into QT Word Meaning (W), the good readers reflect slightly more than the average readers on Words in Context (WIC) (33%), Literal Comprehension (L) (7%), Drawing Inferences from Single Strings (ISS) (13%) and Drawing Inferences from Multiple Strings (IMS) (17%). The corresponding FSI scores for the average readers are (WIC) 26%, (L) 5%, (ISS) 8% and (IMS) 14%. Clearly, in the QT Word Meaning (W), there is a difference between the good and the average readers in terms of using the context of the texts in facilitating their understanding and the difference is notable in the DI' Forming Judgements (J) where the average readers use this DT 12% more than the good readers. Whether this heavy reliance on DT (J) is effective or appropriate in monitoring the average readers' comprehension is open to further investigation.

According to Stanovich's (1980, p. 63) interactive-compensatory model, '... the poor reader who has deficient word analysis skills might possibly show a greater reliance on contextual factors. In fact, several studies have shown this to be the case'. Although this study does not look into the patterns of the DTs of poor readers, the evidence from the data shows that both the good and the average readers interact with other skills in making sense of their answers. The various distributions of the FSI scores for QT Word Meaning (W) for all the good and average readers indicate that a pattern of 'compensation' does emerge but whether the compensatory acts are indications of a deficit in Word Meaning skills is not known.

Stanovich's (1980, p. 36) compensatory hypothesis stressed that '... a process at any level can compensate for deficiencies at any other level. ' In this case, the 'higher-level' DTs, except for DT 6 and DT 7, are fully utilised by both groups of readers. Although the FSIs of DT 1 for QT 1 do not discriminate as to which group is poorer or weaker in the Word Meaning (W) skill, the indices do indicate a greater reliance on other neighbouring skills that could provide extra sources of information. What is clear is the fact that when responding to QT 1,both groups of readers draw heavily on other skills particularly the (IV), (ISS) and (IMS) skills and most interesting is the fact that the good readers utilise the rest of the subskills more than the average readers, except for DT (J). This is not to suggest that utilising more of the skills will lead to a greater precision or efficiency in the answers but what is clear is that the good readers, who are thought to be good comprehenders, display the usage of such interactive skills.

Thus, there is a possibility that the deficit in the lower-order skill (1V) triggers the above average and average readers to reflect more on the higher-order skills such as (ISS), (IMS) and (J). This assumption may not be true because the term 'deficit' is not the priority of this study. But what is clear is that the FSIs reflect an active interaction of almost all the skills. This may suggest that the interactive behaviour of the skills is not compatible with either the top-down or bottom-up reading models per se. As an example, the following verbal protocols illustrate the interactive phenomenon:

Student Code   :   Z. F. M. Z.

Text   :   Ali

Language of Text   :   English

543. E   OK. Next page. Number 22. Two of the following which..

544. S: `... most likely things for Ali... '..

545. E   After Ali had reached the, had been saved by the dolphin, he reached the beach right? Probably two actions from the following that he most probably would do. The most likely things he would do. First, he ran to the village looking for help, second searching for his father. Why?

546. S: I chose `run to the village for help', at that time he had reached, right? Haa, so he what, immediately looking for help, wanting to search for his father, his father is considered dead in that sea..

547. E   Aaa?

548. S: So, he had to find the village so that, what, the people can take a boat and go out looking for it, right? Helping to find it.

549. E.   Aaa. `Look around for his father'?

550. S: Aaa there are, aaa two possibilities; he run to the village or look around for his father.

551. E: Aha?

552. S: Because usually when a child, any child, when he had arrived and he knew that his father is still there..

553. E   Aha?

554. S: He's supposed to, it's like still to look around for his father, who knows, probably his father was drifting?

555. E   Yeah, yeah. All right. If that the case, then what if he `dry

himself in the sun'?

556. S: Oh, no!

557. E   Why not?

558. S: He himself is stupid, `dry himself in the sun. '

559. E.   It is stupid?

560. S: When there's something happening over there like that, he..

561. E   There is something (which) is much more important, right?

562. S: Haa.

563. E.   To save someone's life. That's what you are trying to say?

564. S: Aha.

565. E   Why not just to `try to find a policeman'?

566. S: `Try to find a policeman' is try to find, not.

567. E.   Ha.

568. S: It's like you don't know where is the policeman, maybe it's as

            because when it's in the village..

569. E: In the island, right?

570. S: Aa. This village, right? With all the inhabitants, he knows all

            the people with this policeman, OK.. policeman, right? One

            policeman, and he's going to..

571. E: Haa?

572. S: Where would he go? If it were me, I would go (to find help) to..

573. E: We go to the people (because they are many), right?

574. S: Haa. Why should `... try to find... ', still go and `... try to find... ', if

couldn't find it?

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575. E: Yeah. All right. Very good. Aa `search the beach for wreckage'?

576. S: No.

577. E: Why not?

578. S: Aa I don't think so.

579. E: It is pointless, right?

580. S: Mm. It cannot be `go to sleep. '

581. E: `Go to sleep', it can't be too?

582. S: Can't. No.

583. E: Why not? He's already tired?

584. S: `Go to sleep'! I mean he's already wet..

585. E: Aa?

586. S: That after landing safely on the beach, wanted to go to the

beach for a sleep?

587. E: Mm?

588. S: I mean it's really stupid.

589. E: Stupid? Or what we say that, what's the malay saying? If by

doing that? He's giving priority..

590. S: To himself.

591. E: Aaa selfish, right?

592. S: Haa.

593. E: Aaa `look for the shark'?

594. S: Just now in the middle of the sea people wanted to run away

from shark, why want to `look for the shark' when the shark is

already gone and you still want to find the shark. We had saved

ourselves and we want to find another trouble, what for?

595. E: Why should we [look for trouble]?

596. S: Aa [look for trouble]?

From the above verbal interactions, the student displayed acute awareness in reasoning out the choices of the answers. Each chosen answer was scrutinized by using prior knowledge, educated guesses and inferring the information from the text. The interplay of all the information gained helped the student to choose the answers that were thought to be appropriate.

In responding to all the standardised comprehension questions, all the readers applied complex yet interactive reasoning strategies as shown by the discussed identifiable patterns. The findings from Table 25 suggest that the good and the average readers use or activate various Discourse Types for comprehension answering strategies. The various quantified Discourse Types suggest that each group activates different patterns of reasoning processes as shown by the loading of the discourse units. The general differences of the FSI scores between the good and average readers are influenced by the QT to be answered. There are several pictures that emerge from the different patterns between the good and the average readers. They are:

1. Above average readers:

The data from the good readers suggest that there is a stronger relationship between the Question Types and Discourse Types than the average readers. The verbal reasoning responses of the good readers are highly focused on the QTs and this is proven by the higher FSI scores of the good readers' Dl's than the average readers (see the diagonal FSI figures). The good readers' responses seem to be more specific and focus on every single question type itself. The higher context-specific FSI scores of the good readers, as seen diagonally, reflect the regulatory power of the readers in monitoring their comprehension. It also suggests that the comprehension discourse strategies of the readers are more active in their attempts to reason out their understanding of the questions. This may suggest that the good readers' mastery of the content of the texts make them rely less on the DT Forming Judgement (J). These findings seem to indicate that the above average readers evidence a greater reflection on every QT (except on QT (J)) than the average readers. Whether such higher DT scores along the diagonal line reflects better or more successful comprehension than that of the average readers is not the focus of this study. But it can be inferred that the good readers are better than the poorer readers in monitoring their comprehension strategies (Dole et al., 1991).

2. Average readers:

In direct contrast, the data from the average readers suggest that there is a weaker relationship between the Question Types and Discourse Types, with the exception of the average readers' greater reliance on the Forming Judgments (J) Discourse Type than the good readers'. This greater reliance on the DT (J) may suggest that the average readers rely much more on the interplay of prior knowledge and the contents of the passages. Although this is not to say that such a strategy is a 'failing' type of strategy, it shows a kind of regulatory or monitoring strategy the readers have to adopt in making sense of the QT. Although the average readers use similar types of reasoning strategies, they are found to apply them considerably less than the above average readers in six Dl's, the exceptions being DT (J) and DT (W). Once there is a

weaker relationship between the DT and QT along the diagonal line, the average readers are found to utilize other DTs for each of the QTs.

The findings of this table suggest that both the above average and average readers' reasoning strategies, in all the L1 and L2 tests, reflect the usage of all the various DTs with the exception of DT 6 (M) and DT 7 (S) which are under utilised by both groups of readers (see rows 6 and 7 in Table 25). Quantitatively, the above average readers are found to be different in their reflections of their reasoning strategies from the average readers. Whether such differences, as seen by the patterns of the FSIs, qualitatively reflect better and more effective reasoning strategies by the above average readers than by the average readers, may need further investigation.

To summarize, in the light of the above discussions, several important conclusions can be drawn from Table 25. First, by referring to the hypothetical construct of this study that there is a difference between the average and the good readers in terms of the distribution of the discourse units related to the language of the comprehension test passages and the language of the questions., the evidence discussed seems to suggest that there are marked differences between the good and the average readers in terms of the distribution of the discourse unit (FSI) in both the L1 and L2 comprehension texts and tests. In other words, both in the Bahasa and in the English comprehension tests, the above average readers consistently show higher FSI scores in almost all specific QTs than the average readers. The gap in the FSI scores between the two groups of readers becomes more apparent in the L2 tests: the good readers consistently reflect higher FSI figures than the average readers except in the (J) skill.

Second, in a similar manner to the Ll tests, the good readers' responses or DTs in L2 (as shown by higher FSI figures than the average readers) were very much focused on the QT. This may suggest that, for each QT, the good readers reflected less information from the 'neighbouring' DTs and this phenomenon could suggest that the good readers are able to gear their answers specifically to the need and context of the questions. This higher-focus-phenomenon does not mean that the average readers are

more able to spread their reasoning capabilities to all the other DTs than the good readers. It suggests that the good readers have less need to do so.

Third, since the reasoning strategies of the above average readers are repeatedly very much more 'bonded' to each QT than those of the average readers, this 'preferred-and-most-often-used' phenomenon reflects a kind of efficient reasoning strategy. In contrast, the average readers showed a less 'bonded' approach and a greater variability in reliance on the other DTs particularly in the consistent use of the (J) DT. It is not known whether the less 'bonded' patterns of the average readers reflect a kind of less efficient answering strategy.

Finally, the diagonal results from Table 25 suggest that in both the LI and L2 tests, the good and average readers use the same comprehension answering strategies, but the good readers are more consistently focused or bonded to each QT than the average readers.

Important Conclusions Drawn from Table 25.

There are two main points which must be stressed. First of all, the FSI scores of the good readers in the L1 and L2 tests on DTs (WIC), (L), (ISS), (IMS) and (M) are concentrated on the diagonal more than those of the average readers. The second point is that the FSI scores of the good readers in L2 on DTs (WIC), (L) and (ISS) are lower than in L1. The fact is that in the L2 tests even the good readers are behaving more like average readers. This can be seen from the DTs (WIC) (29%), (L) (42%) and (S) (21%): in all these three skills the good readers go beyond the diagonal. What we are seeing from the diagonal FSI score patterns is an interactive-compensatory comprehension process. This is parallel with Stanovich's (1980) idea of the interactive-compensatory word recognition process. According to Stanovich (1980) good readers are far better at automatic context-free word recognition than poor readers. Poor readers need to use larger contextual facilitation than do good readers in word recognition. In the case of reading comprehension answering strategies, a parallel pattern as in Stanovich's (1980) emerged from the diagonal FSI scores in Table 28: the good readers can get the

information they need for comprehension from the 'local' or corresponding DT area , the average readers need to go more 'broadly' into uc (J) in making sense of the questions. This' broad reliance' is shown by the high FSI scores in DT (J) (80%) in both languages. In both the LI and L2 tests, the average readers used wider contextual facilitation for QT (W) than the good readers. This is shown by the high FSI scores on DT (J): 13% in Ll and 13% in L2. This means that the processing capacity of the average readers that is free for comprehension is affected. In a different manner, when responding to the same DT (W), the good readers shown almost no reliance on DT (J): 0% in LI and 3% in L2.

So, the good readers have more processing capacity left for comprehension processes. It is interesting to add that in looking into the different diagonal FSI scores in LI and L2 tests, in the L2 tests every reader is behaving more like an average reader: even the good readers need to go beyond the 'local' DT in the search for meaning (see DTs (W), (WIC) and (L) in the L2 diagonal scores).

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