

VERBAL REPORTS OF PROFICIENT READERS IN COPING WITH UNFAMILIAR WORDS

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Abstract: The present study reports the actual strategy use of good readers when they face hindrance in the form of unfamiliar words. Eight undergraduates majoring in English at Surabaya State University performed think-aloud while reading two texts to find out how they coped with such difficulties. The verbal protocol indicated that half of the participants mainly relied on a bilingual (English-Indonesian) dictionary to attack unfamiliar words, and only one of them preferred to use a monolingual (English-English) one. Two of them employed context cues to infer the meaning of the words, while one participant combined the use of context cues *and* a monolingual dictionary as the major strategy. All but one of the participants skipped some of lexical items whose meaning was unknown to them, especially when these words did not have a key contribution to the meaning of the whole text.

Keywords: reading comprehension, unfamiliar words, verbal reports, proficient readers.

The importance of reading proficiency in academic setting at university level has gathered momentum for the last few decades. It has been widely recognized that scholastic success in many disciplines depends largely upon learners' reading skills, making them one of the essential, determining factors in predicting learners' achievement. Despite its critical role, sufficient reading ability to fulfil the rigorous demand of university study is often lacking among the freshmen (Simpson & Rush, 2003).

In Indonesia the challenges confronting the undergraduate students who learn English as a foreign language (EFL) seems to transcend those of their monolingual counterparts in English-speaking countries. Anecdotal and personal reports from the undergraduates indicate that encountering unfamiliar words still becomes one of the significant obstacles in reading comprehension, probably due to the insufficient vocabulary knowledge. Nurweni and Read (1999) estimated the Indonesian freshmen's vocabulary size as merely 1226 words, which were much below the expected one of 4000 words. Such a lexical problem deserves considerable attention from educators because it has been a widely com-

mon understanding nowadays that the difficulty levels of vocabulary substantially affect the readability of reading texts and—sequentially—comprehension (Nation, 2001; Alderson, 2000a; Coady, 1993; Stoller & Grabe, 1993; Williams & Dallas, 1984) and abundant research has also provided empirical support to this (Calvo et al, 2003; Martino & Hoffman, 2002; Lotto & de Groot, 1998; Kusumarasdyati, 1992).

By informally interviewing these students to probe further their preferred solution to the vocabulary difficulties, I found that most of them usually resort to a dictionary to get the most appropriate meaning. As a matter of fact, in addition to dictionary use, there are some other vocabulary strategies they can employ, such as inferring the meaning of the unfamiliar words from surrounding context in the reading materials. However, a study I conducted in an Indonesian university (Kusumarasdyati, 1996; Kusumarasdyati, 2004) demonstrated a significant lack of the EFL undergraduates' ability in the intelligent guessing. Given 40 unfamiliar English words presented in context-rich reading passages, in average they failed to deduce the meaning of 50.15% of

these words. They seemed hardly aware that pluralistic strategies—apart from seeking meaning in a dictionary—did exist to help them in coping with the unfamiliar lexical units.

The present study was a follow-up to this earlier research in that it explored further all of the possible lexical processing strategies that appealed to the EFL readers at university level, and not confined to context cues only. While previously the research lacked depth to a certain extent because it was approached quantitatively with a large number of participants and used a test and a questionnaire as the research instruments, this follow-up inquiry was designed as a quantitative-qualitative (mixed method) study with a smaller number of participants to ensure profound investigation of the lexical processing strategies by means of introspection. These two inquiries were expected to complement each other so that I could gain a more holistic overview of strategy use on the part of the learners with respect to unfamiliar words in reading passages.

This paper begins by reviewing the existing model of lexical processing strategies, then it reports the strategies that undergraduates actually used in an Indonesian context. Pedagogical implications of the findings are discussed to conclude the paper.

Coady (1993) emphasizes the importance of vocabulary building as an integral part of reading, viewing it as a strategic skill that is necessary to be included in reading instruction. Through the teaching of reading, vocabulary knowledge can be acquired gradually and incrementally in a myriad of contexts through repeated exposures (Stoller & Grabe, 1993), and this may lead to the incidental learning of lexical items which provides at least three benefits, namely, richer sense of the words' use and meaning due to the context, efficiency that can be achieved by simultaneous twofold learning (reading and vocabulary), and the more individualized and learner-based nature of the acquisition (Huckin & Coady, 1999).

While attempting to acquire vocabulary by reading a number of passages, the learners definitely often find lexical items the meaning of which is unknown to them. To overcome this lexical challenge, they perform a series of deliberate, conscious problem-solving actions called strategies (Wenden & Rubin, 1987; Paris et al, 1983). Various types of lexical processing strategies have been identified up to the present. Goodman (1996), for instance, approaches this issue from the linguistic point of view. He divides language into three levels: graphophonics, lexico-grammar and meaning/pragmatics. Con-

sequently, the cues at these linguistic levels—graphophonic, syntactic and semantic—are available to assist the readers in making sense of the text and attacking the unknown words. As the name suggests, graphophonic cues involve relating the letters (graphemes) and sound (phones), and usually take the form of sounding out words. Syntactic cues entail the use of grammar and sentence structure to deduce the meaning of a particular unfamiliar word, whereas semantic cues means making use of the meaning of the words surrounding it.

Fraser (1999) proposes a different categorization of vocabulary strategies: inference (which is an overarching concept for syntactic and semantic cues), dictionary use, and skipping of words. In her study she finds that participants prefer inference most as the strategy to overcome unfamiliar words, followed by consulting a dictionary, and then ignoring the words as the least. The pattern of strategy use is also observed, and it turns out that the subjects make use of context to guess the meaning of the words initially, then either resort to dictionary for the synonym or definition of the words or skip them. However, in terms the effectiveness of the strategies in overcoming unfamiliar words, dictionary seems to outperform inference as full comprehension of word meaning follows from 78% of efforts to consult a dictionary but only 52% of inference.

Pressley and Afflerbach (1995), based on 37 studies conducted by different researchers using verbal protocols as the method, compile a comprehensive list of strategies that a reader may employ while reading texts, and therefore demonstrate that reading comprehension is highly strategic. Among these reading strategies, they specifically mention the ones that a reader applies when finding words they do not know the meaning of. They argue that when stumbling onto an unfamiliar word or phrase the reader generally makes a decision about the significance of the lexical item to the comprehension of the whole passage. Little or no significance of knowing its meaning will lead to ignorance and s/he will proceed to read the rest of the passage; however, if this word or phrase turns out to play a major role in the meaning of the text s/he will make a necessary attempt to figure out its meaning. This lexical item then receives greater attention, and the reader either uses a dictionary to select the relevant meaning there or applies various types of context clues in order to attack the unfamiliar word or phrase, resulting in a possible meaning. This meaning is evaluated further for the conformity to the meaning of the entire passage: failure to construct

the appropriate meaning can induce another attempt or desistance on the part of the reader.

The above strategies mainly relate to the cognitive aspect of reading. In addition to the cognitive strategies, there are other strategies which are associated with reading as a social event because they require the reader to establish social communication with external sources. These strategies include discussion with peers and seeking explanations or clarifications from the authority—a teacher or an English native speaker—in order to assist the construction of word meaning (Harmon, 1998a; Harmon, 1998b; Harmon, 2002; Griffiths, 2003). In the present study, however, the inclusion of such strategies was not feasible as verbal protocol was used as the instrument to collect the data, so the strategies were confined to the cognitive-based ones employed by the learners in independent reading: grapho-phonetic clues, context clues, dictionary, and ignorance (skipping).

METHOD

The study was approached from both the quantitative and qualitative paradigms. The quantitative method was essential to find out the total number of unknown words encountered in reading a particular text and the frequency of use of each vocabulary strategy. In addition to this numerical description, richer account in the form of words was obtained by adopting the qualitative method. This latter method enabled more depth in the analysis, eliciting how learners used each lexical processing strategy and the reasons for selecting a particular strategy instead of another.

The subjects of the study were 8 students of English at Surabaya State University in Indonesia. Four proficient students attending “Reading 1” class and four proficient ones attending “Reading 4” (which was the last of a series of reading courses in the university) volunteered as participants, and each of them received a pseudonym. These students scored the highest in the reading section of English DIALLANG Test, and therefore could be considered as having high level of proficiency in reading comprehension.

The methods used to collect the data from the above participants were concurrent think-aloud and retrospective interview. In data collection I had these participants read a narrative text (“Wild Swans”) and an expository text (“Pitying Animals”) and recorded it on audio tapes. While reading these texts aloud, they verbalized the strategies they employed in coping with the unfamiliar words they encountered there.

In addition to the audio taping, written field notes were also used to record the details of the strategies for the triangulation purposes.

Immediately after the concurrent think aloud, an audio-taped retrospective interview was conducted in order to confirm the use of the vocabulary strategies and to elicit the reasons for using them. The data on the tapes were then transcribed to enable further analysis. The analysis involved coding the data and mapping it against the existing strategies. After that, the whole data were summarized in order to discover the patterns of strategy use among the participants and find out the reasons for this use.

RESULTS

The results of the analysis indicated that all of the aforementioned four vocabulary strategies were used by the participants of the study. Whenever encountering unfamiliar words, they took the surrounding context into account, consulted a monolingual dictionary, looked up the meaning in a bilingual dictionary, or skipped the words. Each participant, however, was unique in that none of them demonstrated exactly the same pattern of vocabulary strategy use. This will be examined in the next sections.

Bilingual Dictionary

Of eight participants, four—Cassie, Didin, Marigold and Handy—mainly relied on a bilingual (English-Indonesian) dictionary to attack the unfamiliar words, as presented in Table 1.

Although a monolingual (English-English) dictionary is available, they preferred the bilingual one. Cassie, for example, almost always consulted the bilingual dictionary in word attack. She identified 100 words as unfamiliar, and consulted the dictionary *only* for 94 words. While for the 3 words, she used context cues, and for the other three she combined the use of dictionary and context cues or skipping. Similarly, Marigold encountered 23 unknown words in the two passages, and consulted the bilingual dictionary *only* for 18 words. For the rest, she combined the bilingual dictionary and a monolingual dictionary or skipping. Such a pattern of strategy use is very similar to the one employed by Didin, who found 31 words she did not know the meaning of. Finally, Handy used a variety of strategies more than the other three. Out of 27 words he dealt with, only 10 were overcome by consulting a bilingual dictionary.

Table 1. Subjects Using Bilingual Dictionary as the Major Vocabulary Strategy

Subjects	Vocabulary Strategies										Total no of words
	BD	BD-CC	BD-MD	BD-MD-CC	BD-SK	BD-MD-SK	CC	CC-BD	MD-SK	BD-SK-CC	
Cassie	94	1	-	-	2	-	3	-	-	-	100
Didin	27	-	-	-	2	1	-	-	-	1	31
Marigold	18	-	-	-	3	1	-	-	1	-	23
Handy	10	1	1	1	1	1	6	6	-	-	27

Note: BD = bilingual dictionary; MD = monolingual dictionary; CC = context cues; SK = skipping

Table 2. Subjects Using Context Cues as the Major Vocabulary Strategy

Subjects	Vocabulary Strategies										Total no of words
	CC	CC-MD	MD-CC	MD	MD-SK	SK-CC	GR-MD-CC	GR-CC	GR-CC-MD	GR-CC-MD-SK	
Sesilia	2	8	-	5	2	-	1	-	1	1	20
Andrew	3	2	1	3	2	-	-	1	-	-	12
Yulia	8	-	-	-	-	1	-	-	-	-	9

Note: GR = graphophonic cue

Context Cues

Context cues were also a useful strategy to get the meaning of the unfamiliar words. Three participants used context cues most of the time when the unfamiliar words impeded their attempt in comprehending the texts (Table2).

Andrew, Yulia, and Sesilia tended to perform intelligent guess of the word meaning first before using any other strategies. Yulia found 9 unfamiliar words in the two passages and she always tried to infer the meaning from the context. She reread the surrounding sentences of a particular word she did not know the meaning of in order to pick up the cues that might be helpful in figuring out the meaning of this word. Likewise, Andrew and Sesilia made good use of the context, but they employed many other vocabulary strategies also. Contrary to Yulia who consistently stuck to context cues every

time an unfamiliar word hindered her, Andrew and Sesilia occasionally turned to a monolingual dictionary or graphophonic cues. Interestingly, however, *none* of the participants who relied heavily on context cues selected a bilingual dictionary as an option in solving the lexical problem.

Monolingual Dictionary

Only one participant, Star, used a monolingual dictionary as the main vocabulary strategy. Of 33 unfamiliar words she attended to, 13 were attacked by means of a monolingual dictionary (Table 3).

She also consulted a bilingual dictionary, but only to look up the meaning of 7 words. Occasionally, when having difficulties in fitting one of the meanings into the context in the passage, she turned to the bilingual one, hoping that the translated meaning was less problematic.

Table 3. Subject Using Monolingual Dictionary as the Major Vocabulary Strategy

Subject	Vocabulary Strategies									Total no of words
	MD	MD-BD	MD-BD-SK	CC	CC-MD	CC-BD	CC-MD-BD	BD	BD-SK	
Star	13	3	2	4	1	1	1	7	1	33

Skipping

In addition to consulting a dictionary and contextual guessing, the participants occasionally ignored certain words although they were unfamiliar with the meaning of these words. All but one participant did skip some of the unfamiliar words they read in the two passages (Table 4).

Table 4. The Number of Unknown Words Skipped by the Subjects

Subjects	Skipped words	Subjects	Skipped words
Yulia	43	Handy	20
Marigold	34	Didin	19
Andrew	31	Star	11
Sesilia	25	Cassie	0

The narrative passage entitled “Wild Swans” consisted of 813 words, whereas the expository one entitled “Pitying Animals” comprised 344 words. This means the participants read a total of 1,157 words in these two passages. However, the number of the unfamiliar words ignored by each participant varied, ranging from 0 (Cassie) to 43 (Yulia). Only Cassie attended to all of the unknown lexical items and never skipped any. The rest skipped relatively a few lexical items they did not know the meaning of, that is, less than 50 items out of 1,157.

DISCUSSION

The preference of most subjects to consult the dictionary in word attack in the present study deserved special attention. Generally in first language reading educators strongly recommend their students to infer the meaning as the primary strategy and use the dictionary as the last resort, but this study indicated that the same suggestion might not work with an equal degree of effectiveness in second language context. It has been mentioned that the majority of the research participants turned to the dictionary when having lexical difficulties during reading; yet, they could still be good readers. The rest of this section examines the reasons for using the dictionary as well as the other lexical processing strategies (context cues and skipping), which could explain how they dealt with the problems at word level effectively and, further, why they could be successful readers.

The participants reported that the reason for major reliance on the bilingual dictionary was the ease of understanding what the word actually meant.

For them it was more “convenient” to learn the meaning of English words by finding the equivalent one in their native language. They admitted they did not need to “translate” the meaning from English to Indonesian if they looked it up in a bilingual dictionary. This reflected the way they comprehended English texts: they translated the printed words in English into their native language, Indonesian. It was especially apparent in one of the participants, Cassie. She read the texts in chunks of ideas, usually a phrase or a sentence. Immediately after reading each chunk, she translated it into her mother tongue, for instance:

Cassie: [At dusk] menjelang malam [*the flight of the wild swans. The flight.*] Penerbangan. Masak penerbangan? [*The flight of the wild swans.*] Flight. (0.4) The flight penerbangan (0.4) terbangnya. Berarti the flight terbangnya, menjelang malam terbangnya angsa-angsa liar [*was a sight*] adalah pemandangan [*not to be missed*] yang tidak dapat ditinggalkan, dilewatkan.

In the above excerpt from the transcription of the verbal protocol with the text “Wild Swans”, she obviously divided the sentence “At dusk the flight of the wild swans was a sight not to be missed” into several phrases: *at dusk, the flight, of the wild swans, was a sight, not to be missed*. After reading each chunk, she translated it into Indonesian. This demonstrated that she adopted the bottom-up fashion of comprehension, i.e. retrieving word by word to make up a phrase, phrase by phrase to make up a sentence, and so on. The bilingual dictionary, consequently, boosted the translation process in her attempt to comprehend the passage.

By contrast, one of the participants, Star, opted the use of the monolingual dictionary. She mainly depended on the English-English dictionary because—according to her—she did not need to “think” about the same concept twice in the native and target languages respectively. This fact could prove that she, unlike her peers who preferred a bilingual dictionary as the major vocabulary strategy, actually processed the written input entirely in the target language (English). She did not see any need to translate the concepts she absorbed from the text; instead, she invariably “thought” in English, and if obstructed by the lexical items there she definitely needed assistance in the same language from the monolingual dictionary. In addition, she mentioned about the more comprehensive entries and the more lucid definitions as the reasons for consulting a monolingual dictionary instead of the bilingual one.

Likewise, the three participants who mainly performed intelligent guesses to tackle the vocabu-

lary problem seemed to make good use of the target language during cognitive processing. However, instead of seeking help immediately from the external resource in the form of a monolingual dictionary, they tried to exploit the context available inside the passage. If the passage was rich of cues that hinted the meaning of a particular unknown word, they would take advantage of these cues. In the cases where the cues were less sufficient to lead the participants to the appropriate meaning and they were not convinced of it, they sought help from a monolingual dictionary to confirm the accuracy of the inferred meaning and never turned to the bilingual one, as demonstrated in Table 2. This tendency indicated that cognitive processing during reading was conducted in the target language. It can be deduced that—similar to Star, the participant who consulted the monolingual dictionary most of the time—these three participants who relied on context cues decoded the English words and further processed this written input also in English. Their mother tongue had little or no role in this task.

Regardless of the language used during comprehension, all of the participants (except Cassie) ignored some of the unknown words. They skipped these words for various reasons, which supported the ones proposed by Pressley and Afflerbach (1995). For one thing, the participants skipped certain unknown words because these words were deemed having very little contribution to the meaning of the whole texts. They admitted they could still grasp what the texts were about without expending effort on attacking these words. Second, they may have considered the unknown words important and therefore paid more attention to these words; however, they read on to the next sentences and later forgot about the words. Third, they had attempted to guess the meaning of the words from the context, but after generating the candidate meaning(s) they did not think the meaning(s) as acceptable and decided to skip the unknown words. Apart from these three, the present study yielded a finding of two more reasons for ignoring such words. The first one was failure to get the most appropriate meaning in the dictionary. If the participants could not fit the meanings supplied in the dictionary to the context in the passage, usually they gave up and did not continue their efforts on finding the meaning of the unfamiliar words. Another reason for skipping the words was misreading them. For instance, one of the participants read the word *confided* as *confined*, and she did not bother paying special attention to the word *confided* be-

cause she thought she had known the meaning of the word *confined*. The participants admitted that misreading some words did not affect their comprehension of the whole passage and they could still construct the appropriate meaning from the passage. This fact suggested that top-down processing operated at this particular stage of their comprehension, where they mainly made an effort to get the gist of the whole passage rather than paying equal attention to each word in the passage (bottom-up).

CONCLUSION AND SUGGESTION

Conclusion

This study attempted to explore the use of vocabulary strategies among undergraduates in Indonesia to enable identifying the patterns of their strategy use and the reasons for using them. The results demonstrated consistency to the previous research with respect to the types of vocabulary strategies they deployed: monolingual and bilingual dictionaries, context cues and skipping. However, it appeared to be quite problematic—if not impossible—to determine a uniform pattern of strategy use. Each subject had his or her preference of strategy to be employed when tackling the unfamiliar words, although they were equally good in comprehending English texts, as estimated by the results of the DIALANG test. This study, therefore, supported the view that each reader was relatively complex (Ivey, 1999). Each was unique in terms of the patterns of vocabulary strategy use, favouring one strategy over another because it was the most effective one in overcoming the unfamiliar words.

Suggestion

This finding brings some implications for the teaching of reading at university level. First, it is essential that vocabulary strategies be inserted in the syllabus of reading courses in the university, especially in Indonesia. This responds to the anecdotal and personal reports from the undergraduates mentioned earlier in the initial part of the paper. Hardly knowing how to cope with the unfamiliar words, they require some instructions on this issue. Explicit instructions are expected to assist them in gaining higher level of proficiency in reading. Second, it might be misleading to consider all of the learners uniformly alike and therefore all of them can use the same vocabulary strategy with an equal degree of effectiveness. Rather, a particular vocabulary strategy may work best for a learner, but

another learner might achieve the same level of success in getting meaning by means of a completely different strategy. It is suggested, consequen-

tly, that learners are encouraged to practice different types of vocabulary strategies to find out which the most suitable for them is.

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