INCIDENTAL VOCABULARY ACQUISITION AND FOREIGN LANGUAGE VOCABULARY TEACHING

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Abstract
In recent years, the research of incidental vocabulary learning takes the cognitive processing approach to explore lexical development and has become a hot issue in the field of second language vocabulary acquisition. In terms of its origin, the concept was greatly influenced by and develops from linguistics and cognitive psychology of the 1970s and 1980s. The present paper reviews and analyzes the recent results of the research on incidental vocabulary acquisition. Some implications for L2 vocabulary teaching are also discussed.

Key words
incidental vocabulary acquisition, cognitive processing, vocabulary teaching

1 Introduction
In recent years, the study of SLVA has become an increasingly interesting topic of discussion for researchers. Second Language Vocabulary Acquisition has been published reporting diverse research on this issue from the perspectives of applied linguistics and psycholinguistics etc. One intensive direction of research takes the cognitive processing approach to explore lexical development. Based on psychological views, the researchers have emphasized the way learners processed the material and stressed the importance of noticing or attention in incidental learning. They held the view that elaboration on features of new words promoted their retention. This means that the more attention that is paid to the formal and semantic aspects of words and the richer the association that are made with existing knowledge, the higher are the chances that the new information will be retained. Some of them, Joe 1998, and Swanborn Glopper 2002, maintained that incidental learning could result from task or purpose demands which caused learners to focus on specific features of input which were crucial for learning. They held that in different tasks for vocabulary acquisition the more mental effort a person invested in processing the word, the more likely he would remember and recall the word deep processing of new words enhances the memory than shallow one.

2 The Meaning of the Concept
What is the meaning of incidental vocabulary learning? A concept of cognitive psychology Gass observed that there were no always agreed upon or overtly stated definitions of incidental vocabulary learning which weakened the notion itself. She also pointed out the problems in the assumptions made by many authors concerning the term "incidental" and how these wrong assumptions might affect their conclusions. She emphasized the importance of having a clear understanding of these terms themselves, the individual words of incidental vocabulary learning, particularly in the field of linguistics. So an agreement will have to be reached about what is to be included and what is to be
excluded under the term" incidental"

Laure and Hulstijn 2001 p10 distinguished two types of incidental vocabulary learning: one is used in the experimental literature and with the strictly methodological meaning the other has been given a more general educational meaning In incidental vocabulary learning of the first type learners are typically required to perform a task involving the processing of some information referring to vocabulary in incidental vocabulary learning and do not intend to commit this information to memory They are not told in advance that they will be tested afterwards on their recall of that information In contrast, in intentional learning situation learners intend to commit the processed information to memory and they are told in advance that their recall will be tested afterwards The second type of the incidental learning in more general and educational situation refers to the learning without an intent to learn when the learners subjective is to do something else Thus in this more general definition no mention is being made of the presence or absence of a forewarning of an upcoming retention test after the in formation processing task It is the by product of the main cognitive activity reading Wesche and Paribakht 1999 176 also contrasted the two types of incidental learning with broader or narrower meaning respectively

Most of the papers in the special collection of Incidental L2 Vocabulary Acquisition, edited by Wesche and Paribakht 1999, have taken incidental as something that is learned without the object of that learning being the specific focus of attention in a classroom context what is incidental learning is a by product of classroom focus which is also the most quoted example in second language and foreign language pedagogy Krashen 1989 In Wesche and Paribakht 1999 176 incidental vocabulary refers to the process in which learners focus on comprehending meaning of reading and listening contexts rather on the explicit goal of learning new words and acquire vocabulary only as a by product while intentional vocabulary learning means the focal attention of vocabulary learning Incidental vocabulary is learnt as a by product of another activity such as reading or communication without the learners conscious decision for intention to learn the words

Coady 1997 proposed that in incidental learning most words were learned gradually through repeated exposures in various discourse contexts Gass 1999 319 thinks that it is a gradual and incremental requiring repeated exposure to the same words in various collocations and in various situations because exposure to a word in a variety of contexts is extremely important to understanding the knowledge of the word meaning

3 How Did It Come

The concept of incidental learning was greatly influenced by the top down naturalistic and communicative approaches of the 1970s and 1980s Skmen 1997 237 In the 1970s contemporary linguistics and cognitive psychology emphasized the active nature of language acquisition and language use which led to help create the psycholinguistic approach top down model It was assumed that human beings learned and comprehended language not only through perceiving but also through their own internal structuring of linguistic messages This top down view of human cognition stressed the active contribution of perceivers who reshaped external stimuli via their own self generated input such as their individual models of the world Haynes 1993 47

The top down model affected all modes of language including reading and it regarded reading as a complex information processing skill Readers were described as active samplers of text who combined text context with their knowledge about writing language and the world in general in order to read more efficiently Students were encouraged to practice a variety of subskills and strategies such as prediction and anticipation in order to comprehend successfully Considerable evidence was presented to show that vocabulary learning was a complex process and an integral part of students reading abilities A great deal of attention was paid to guessing the meaning of unknown words through the use of contextual clues instead of presenting meanings of isolated words As Goodman 1967 cited in Coady 1993 8 described reading was regarded as a psycholinguistic guessing game

Communicative approaches in the 1970s did not give priority to vocabulary study Coady 1993 Their primary concern was in the appropriate use of language varieties notions and functions as
well as an emphasis on language as discourse. The L2 acquisition was only treated as a phenomenon similar to L1 acquisition. Since L1 vocabulary development seems to occur naturally, it was believed that vocabulary would take care of itself in L2 acquisition.

“Natural approaches” in the 1980s also took their cues from the seemingly effortless nature of L1 language development. Coady 1993[1] it is estimated that in L1 context students increase their vocabulary by 3,000 words a year and achieve a vocabulary of 40,000 words by the end of high school. Nagy & Herman 1985 cited in Coady 1993[2] A significant proportion of all these words is attributed to so-called natural learning. Thus, “natural approaches” proposed that ESL/EFL teaching should copy L1 learning conditions and let learners acquire language skills naturally.


4 The Importance of Incidental Vocabulary Learning

More study can be found to report the importance of incidental learning in vocabulary acquisition. In the past, the proposition that most vocabulary is learned incidentally has appealed to the default argument that learning from context is the only way to account for most vocabulary acquisition. Paribakht & Wesche 1999[9] 1997[10] Nagy and Anderson 1984[11] cited in Nation 1990[12] and Coady 1988[13] concluded that even the most ruthlessly systematic direct vocabulary instruction could not account for a significant proportion of all the words children actually learn nor cover more than a modest proportion of the words they will encounter in school reading materials. Huckin and Coady 1999[14] 182[15] pointed out that although “incidental learning” was not the target of the main cognitive activity reading, most scholars seem to agree that except for the first few thousand most common words, vocabulary learning predominantly occurs through extensive reading, with the learner guessing at the meaning of unknown words. In other words, teachers should teach beginners at least the basic 3,000 word families, making their forms and common meanings become automatically known; that is, they become sight vocabulary so that they can indeed acquire vocabulary incidentally through extensive reading. Coady 1997[16] 235[17]

The results of many empirical studies support the assumption of importance of incidental vocabulary learning. Liu and Nation 1984[18] cited in Nation 1990[19] and Coady 1988[20] 103[21] 04[22] found that the high proficiency learners guessed between 85 percent and 100 percent of the unknown low frequency words. Milton and Meara 1995[23] cited in Nagy 1997[24] 76[25] estimated that advanced students could learn words at an annual rate close to 2,000 in a second language setting. A substantial proportion of this growth is possible from incidental learning. Elley’s survey 1991[26] cited in Nagy 1997[27] 76[28] of “book flood” studies, the essential element of such studies is increasing the availability of books to the students. It showed that L2 learners tended to benefit more from increase in volume of reading than do L1 learners because they encountered unfamiliar words at a greater rate than L1 learners. The study suggested that language learning was for the most part incidental and it relied on intrinsic motivation primarily through the use of interesting, well-illustrated books.

5 The Problems of Incidental Vocabulary Learning

The research results showed that incidental vocabulary learning was not always sufficient and efficient enough in vocabulary acquisition and the effect was not as great as expected. Then researchers Horst & Cobb & Meara 1998[29] and Watanabe 1997[30] suggested that the power of incidental acquisition might have been overestimated.

Potential problems of it can be summed up into several points. First, it is likely to be a slow process and may slow down the reading process, especially for low-level learners. Skimen 1997[31] 238[32]
Second there are many lexical items such as words with a deceptive morphological structure idioms words with multiple meanings false cognates and synforms morphologically or phonologically similar words that often misguide the learners and lead to their errors. Misrecognition causes readers to short-circuit the contextual guessing process. That is if readers think they recognize a word form they would simply access the standard meaning for that form and not look to the context for confirmation. Thus word form recognition plays a crucial role even before contextual guessing.

Third It is haphazard and impairs guessing or hampering the interpretation of reading because reading tasks need precise interpretation. Huckin Coady 1999 189 As a result readers are slow and labored in word recognition. When this happens their short memory is so taxed that they cannot take full advantage of context.

Fourth guessing is effective only when the context is well understood and almost all of the surrounding words in the text are known which requires good textual clues and substantial prior vocabulary knowledge on the part of the learner. So the readers may decide to ignore the words or can not infer a word from context. Huckin Coady 1999 189 Haynes 1993 warned us that although ESL readers are good guessers when the context contains immediate clues insufficient context global clues or a student's lack of vocabulary knowledge may increase the difficulty of guessing.

Fifth incidental learning is not effective in the acquisition of multiword lexical items. Huckin Coady 1999 189 In their study Arnould and Savignon 1997 found that experienced nonnative English teachers in France could match the native undergraduates in rare words 39 24 vs 36 65 in vocabulary test means but not in complex lexical units 29 85 vs 36 68 in vocabulary test means because of the lack of interaction with them and reduced attention to them. They concluded that incidental learning of lexical phrases was not sufficient in foreign language environments.

Sixth the nonrecurrence of new words a single encounter of words can not guarantee the acquisition of the vocabulary. Huckin Coady 1999 185 This can be accounted for by the fact that unlike native speakers L2 learners have very few opportunities to be exposed to the unknown words repeatedly apart from the high frequency words. As a result they can not pick up the features of the words incrementally to form the solid lexical knowledge in their mental lexicon. For the L2 learners especially the intermediate and advanced ones they should learn a large vocabulary in a short period of time. There is no enough time to copy the incidental L1 word acquisition process.

Last but most importantly it does not necessarily result in long term retention acquisition. S knen 1997 238 Krashen Input Hypothesis 1989 has been questioned by many scholars who assume that comprehensible input does not necessarily lead to acquisition. Ellis 1995 411 Huckin Coady 1999 183 Mondria and De Boer 1991 found that correctly guessing a word did not lead to an improved retention after a learning stage as compared with guessing a word incorrectly for some words retention was even worse. That is to say there is an inverse relation between guessability and retainability.

To sum up although incidental vocabulary learning plays an important role in vocabulary learning it cannot solve all word acquisition and substitute intentional learning.

6 How to Promote Incidental Vocabulary Learning

Researchers have suggested some ways to solve the problems and promote vocabulary gains in incidental vocabulary learning.

First the research showed that besides incidental vocabulary learning from reading context oral context also plays an important role in L2 lexical development. The first several thousand word families in a language which cover the most of the words in oral interaction and roughly 84 of words in written texts tend to be learned first in naturalistic context largely from oral input. Wesche Paribakht 1999 177 Ellis 1995 called for more research about vocabulary acquisition from oral input in four areas the intrinsic properties of L2 words the nature of the input the role of interaction and individual learner factors. Wode 1999 identified that the students in an immersion program in Germany possibly acquired some words from their teachers in oral input incidentally rather than from the textbook or from other kinds.

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of teaching materials.

Second, the use of dictionary can also promote incidental vocabulary learning. Grabe and Stoller (1997) described a successful case study of learning by a highly motivated learner who used the bilingual dictionary to study vocabulary both intentionally as well as incidentally. The result of Luppescu and Day (1993) showed that during reading the students who used a dictionary scored significantly better in a vocabulary test than the students who did not use a dictionary; the means of scores were 1.92 vs 1.90.

Other approaches that teachers can adopt to help enhance the incidental vocabulary of the learners include teaching explicit guessing strategies to the learners modifying the textual input and designing context-based exercises etc.

6.1 Expert Skills of Guessing from Context

Explicit guessing strategies should be taught to learners. Chern (1993) classified four contextual word-solving strategies: namely, the identification of four kinds of cues in reading context: parallelism, those with grammatical relationship and semantic similarity between words; sentence-bound cues, forward cues; those following the word to be guessed, and backward cues. She insisted that students should be encouraged to make use of the available clues to infer meanings of unknown words instead of resorting to dictionaries immediately.

6.2 Text Modifications

Incidental vocabulary learning can be improved with text modifications. Teachers may adapt the reading materials to make some difficult words rich enough with cues so that students can more easily guess the words in the context. Since repeated exposures to the words are necessary to acquire new words, 5-6 times according to Nation (1990) teachers may also modify the learning texts by making the unknown words have more frequent appearances in the context. Laufer (1997) suggested that a minimum of 95% text coverage know at least 95% words in the text would result in successful guessing of unknown words in the text. Hence the texts can be altered suitably into not too easy or too difficult ones to cater to the needs of students.

6.3 Glosses


In Lomicka’s research (1998), twelve college students enrolled in a French course were instructed to think aloud during the reading of text on the computer screen. The participants read the text under one of three conditions: full glossing, limited glossing, or no glossing. In addition, a tracker was set up in the software to record the amount and type of glosses and length of time that each was consulted. The raw data clearly indicated that computerized reading with full glossing might promote a deeper level of text comprehension. Laufer and Shmueil (1997) cited in Segler (2001) found that glosses in L1 Hebrew led to better retention than L2 English glosses. As for textual glosses, there is a choice of single-choice or multiple-choice glossing.

6.4 Text-based Tasks

Incidental learning of vocabulary can be enhanced through text-based tasks. Huckin and Coady (1999) and Paribakht and Wesche (1997) designed enhancement activities of incidental learning involving text-based exercises of selective attention, recognition, manipulation, interpretation, and production. As a result of this, the students would gain in their knowledge of target words in reading texts both through reading plus vocabulary enhancement activities and reading alone but gains from the former was greater if the same amount of time devoted to the two treatments had been given. The students in reading plus
group increased their scores of content words significantly from 46 to 66 while those in reading only group increased scores significantly from 48 to 60.

Swann and Glopper [2002] found that proportions of words learned incidentally while reading ranged from 06 for free reading to 08 when reading for text comprehension to 10 when reading to learn about the topic.

7 Conclusion

To sum up we should supplement incidental acquisition by a range of other vocabulary learning techniques that promote deeper processing of input. However, explicit vocabulary learning especially that of the most frequent words can not be neglected. Nation [1992 cited in Coady 1993] did not agree that we should leave all vocabulary acquisition to incidental contact in context. The direct teaching of vocabulary as well as some explicit learning strategies such as morphological knowledge of learning key word method and mnemonic devices can be used in L2 vocabulary learning especially for low and intermediate level L2 readers. But according to Schmidt and Robinson 2003 in this aspect we still need to have the incidental approach because it helps to recycle the words that are already partially learned, perhaps from explicit teaching. Without this consolidation the words initially learned through explicit teaching may be forgotten and the effort wasted. We need to have a lot of reading just to recycle and consolidate the partially learned words left alone to be introduced to new ones. Therefore it is absolutely necessary to adopt a mixed approach to vocabulary learning in ESL.

References


Ellis [R.] 1995 Modified oral input and the acquisition of word meaning Applied Linguistics 16 [403] 411


Joe [A.] 1998 What effects do text based tasks promoting generation have on incidental vocabulary


