

# Promoting Noticing in EFL Classroom

Sumin Zhang

Foreign Languages Department, Zhengzhou Institute of Aeronautical Industrial Management, Zhengzhou, China  
Email: judylily06@163.com

**Abstract**—The notion of noticing and its role in SLA has gained increasing support. As an area of special interest and a common concern in EFL teaching process, the study of this will yield beneficial implications. The paper expounds its related terminology in order to shed more light on its concept, discusses the assumptions denying and advocating the role of noticing in SLA, and overviews the a few empirical studies. An attempt is also made in the paper to explore the theoretical justification underlying the role of noticing from the cognitive point of view as well as to better understand its pedagogical implications in language teaching process.

**Index Terms**—noticing, acquisition, implication

## I. INTRODUCTION

As has been widely accepted by psychologists and linguists, language learning is a cognitive process in which learners are actively involved, which is quite different from Behaviorism that denied some fundamental elements in the learning process, such as the mental process learners bring to the task of learning. The importance of the role of conscious and unconscious processes and the notion of interface in second language (L2) development has been the focus of much debate in cognitive psychology. Some researchers (Krashen, 1982) claimed that it plays no role and learned knowledge is completely separate from and cannot be converted into acquired knowledge, while many other researches (eg. Long, 1983; Fotos, 1993) concluded that conscious learning seems to contribute to successful L2 development and an interface between what is "learned" and what is "acquired" does exist. Due to unclear definition of consciousness, the researches on this respect seem more complicated.

The notion of noticing or consciousness and its role in SLA has gained increasing support on the basis of assumptions and intuition, as an area of special interest and a common concern in EFL teaching process, an attempt has been made in this paper to explore the theoretical justification underlying the role of noticing as well as to get a better understanding of its important pedagogical implications.

## II. DEFINITIONS OF NOTICING

In the literature of second language acquisition, many similar terms such as noticing, awareness, consciousness, attention etc, are used. Due to their interface, they are sometimes used interchangeably. Therefore, it is necessary to review some influential definitions given by scholars.

### A. Schmidt's Definition of Noticing

In Schmidt's view (1994), consciousness can be distinguished in different dimensions, such as awareness, intention and knowledge. However, In both common usage and theoretic treatment of the topic, consciousness is commonly equated with awareness (cited in Schmidt 1990). Schmidt (1990) further claims that awareness has different levels or degrees including noticing and understanding. Noticing, by which "stimuli are subjectively experienced," and which is defined as "availability for verbal report" (p.132), required focal attention. Understanding, which means we can "analyze", "compare", "reflect", "comprehend" (p.132) etc, is what we commonly refer to as thinking. Thus, understanding represents a deeper level of awareness than noticing which is limited to "elements of the surface structure of utterance of utterances in the input" instead of understanding rules (Schmidt, 2001, p.5). Schmidt's (1990) claim about the necessity of noticing does not refer to higher level understanding or awareness of language.

Schmidt (1990, 2001) attaches great importance to noticing and argues that noticing is necessary for learning and is a process of attending consciously to linguistic features in the input. Some scholars (eg. Sharwood-Smith, 1981; McLaughlin, 1987) also advocate that noticing a feature in the input is an essential first step in language processing whereas they differ from Schmidt in that they consider that noticing a feature in input may be a conscious or an unconscious process.

### B. Tomlin & Villa's Understanding on Noticing

In preference to a single global construct, Tomlin and Villa (1994) argue for the greater explanatory power of three theoretically and empirically distinguishable components of attention: alertness, orientation, and detection. alertness, which refers to the learners' readiness to dealing with the incoming stimuli or data; orientation, which means the direction of attentional resources to certain type of stimuli of data; detection referring to the "cognitive registration of

sensory stimuli", "the process that selects, or engages a particular and specific bit of information".

In their view, detection is most closely associated with Schmidt's concept of noticing, but differs from it in that such detection does not require awareness. "Awareness plays a potential role for detection, helping set up the circumstances for detection but it does not directly lead to detection itself" (Tomlin and Villa, 1993, p.14).

### C. *Robinson's Idea on Noticing*

Robinson (1995) gave a stricter definition of noticing, he compromised between these two mentioned above, claiming that noticing is what both detected by learners and further activated as a result of the allocation of attentional resources. That is, noticing means detection plus rehearsal. The concept of Rehearsal suggests that the learners must make some conscious effort to memorize the new forms they have noticed. It could be silently repeating a phrases or sentence, reading the sentences a few times, or doing anything else that help commit the linguistic features to short-term memory.

The discussion indicates the distinction between conscious 'learning' and subconscious 'acquisition' is overly too simplistic. It is clear that 'acquisition' intended by Krashen involves some degree of consciousness, for the optimal input  $i+1$ , the learners must notice the "gap".

In brief, this paper asserts the higher level of awareness, that is, the level of understanding linguistic rules or metalinguistic awareness, is not required, however, awareness at the level of noticing, that is, the learner's subjective registration of the stimulus event, is necessary for second language learning, especially for adult learners. Schmidt (2000) defines noticing as the correlate to what psychologists call 'attention'. So noticing and attention are used interchangeably in this paper.

## III. THE ROLE OF NOTICING IN SLA

### A. *Assumptions Denying the Role of Noticing in SLA*

Researchers who see no role for consciousness in language acquisition generally argue that the acquisition of language is qualitatively different from other kinds of learning, they have tended to draw more heavily on linguistic theory, particularly UG, than on theories from cognitive psychology, and arguments that SLA occurs without consciousness generally draw a clear distinction between acquisition and learning and claim that acquisition of linguistic competence occurs in the absence of awareness.

#### 1. **Krashen's Monitor Model**

Krashen (1981, 1994) makes a clear distinction between learning and acquisition. He defined acquisition as a subconscious process of language development much like the process by which children acquires their L1. Learning refers to a conscious knowledge of the rules of grammar. According to Krashen, there is no interface and no overlap between acquisition and learning. Acquisition occurs when learners are exposed to comprehensible input. If learners have access to an optimal amount of appropriate input, then acquisition should just happen naturally. Learning is only useful as a way of helping learners edit their speech when they have time to think about the grammar rules that they need to apply. Formal instruction, in Krashen's view, is unnecessary for acquisition. But in fact, second language learning clearly is a process depending on the learners' own style and strategies. A number of empirical research study shown that instruction in conscious rule learning can indeed aid in the attainment of successful communicative competence in a second language (Long, 1983,1988; Doughty, 1991; Buczowska and Weist 1991, cited in Brown, 2001).

#### 2. **Schwartz's Distinction Between Competence and Learned Linguistic Knowledge**

Similarly, Schwartz (1986, 1993) draws a distinction between linguistic competence, which is based on UG and learned linguistic knowledge (LLK), which is learned explicitly using general learning mechanisms. And he claimed that awareness is only useful for the acquisition of linguistic but not the acquisition of LLK; and explicit instruction and error correction have no role for linguistic competence, which can only be acquired through language acquisition device(LAD).

#### 3. **Paradis' Distinction Between Implicit and Explicit Knowledge**

Paradis (1994) also supports learning without awareness. In his view, only implicit linguistic competence can be used automatically, and the explicitly learned grammatical knowledge can only be used to check but not as part of automatic production process, and this metalinguistic knowledge cannot be eventually proceduralized linguistic competence. Developing linguistic competence means developing automaticity in the use of the language, and what becomes automatic is not what the learners focus their attention or are even aware of. To support his claims, Paradis drew evidence from neurolinguistics, which supposedly shows that different parts of the brain are responsible for the use of implicit linguistic competence and conscious grammatical knowledge of which learners are aware.

### B. *Assumptions Advocating the Role of Noticing*

Researchers who have support the role of awareness or noticing mainly come from the field of cognitive psychology. They regard language learning is not different from other types of learning. From a psychological point of view, noticing works as the medium between input and memory system. Some advocate(Schmidt, 1990; Ellis, 1999;Swain,1985, 1995;Long; 1981, 1983, 1985; McLaughlin, 1987) that there is no acquisition without awareness or

noticing. While other (Truscott 1998)) point out a weak version of noticing by suggesting that noticing is only necessary for the acquisition of metalinguistic knowledge.

### 1. Noticing Hypothesis

Noticing Hypothesis (Schmidt, 1990, 1994) acknowledges that noticing is a necessary and sufficient condition for subsequent acquisition. Without noticing, it is impossible for the conversion of input to intake, which he defines as "that part of the input that the learners notices" (Schmidt, 1990, p.139), and he argues that no matter a learner attends deliberately to a linguistic form in the input or it is noticed purely unintentionally, once it is noticed, it becomes intake. And he suggests that what is noticed can be any aspect of language: lexicon, grammatical form, pragmatics, etc (Schmidt, 1990). Furthermore, when there is a discrepancy between a TL form and an IT form, learners won't notice it until attention is drawn to it. It rules out the possibility of purely subliminal language learning; comprehensible input is a necessary but not sufficient condition for L2 development, which is certainly a heavy blow to Input Hypothesis and the Acculturation Model (Schumann, 1978), for both ignores the learner's effort to acquire target language and leave no room for formal teaching.

### 2. A Consensus Framework of the Cognitive Progress in SLA

In 1999, Ellis proposed a consensus model of the cognitive process in SLA where the role of noticing was given great importance. The cognitive approach attempts to investigate the cognitive progress, in other words, what a learner does with input.

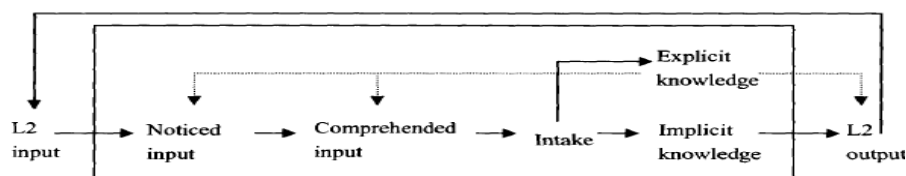


Figure 1 A framework for investigating L2 acquisition (Adapted from Ellis 1999: 349)

This theoretic framework, which diagrammatically explains the language learning from a cognitive perspective, is a development of Gass (1988). Gass (1988) asserts that noticing is the first stage of language acquisition. In this framework, the initial role is given to noticing. Noticed input is input that has been noticed in some way by the learners and functions as a primary device that prepares the input for further analysis. And if learners do not notice and comprehend the input, intake or form-meaning connections will not be created and input will have little use for acquisition. Similarly, Batstone takes about the importance of noticing as "the gateway to subsequent learning" (1994, p. 100).

### 3. Output Hypothesis

Based on her observation of the problems with the French immersion program in Toronto in the 1980s, which programs were set up to help children meet the bilingual requirement for civil position in Canada, Swain (1985, 1995) advances her Comprehensible Output Hypothesis, which is not intend to deny the significance of input in language learning but to show that output has its particular role to play. Both of them are of great importance to successful language learning.

In addition to the traditional viewpoint that output can enhance fluency, Swain also put forward other three functions. One of them is the noticing/triggering functions. Swain argues that language production may trigger learners' noticing of problems existing in their interlanguage. That is, output will enables learners to "notice a gap between what they want to say and what they can say, leading them to recognize what they do not know, or only know partially" (Swain 1995: 125). In other words, under some circumstances, the activity of producing the target language may prompt second language learners to recognize consciously some of their linguistic problems: it may bring to their attention something they need to discover about their second language (possibly directing their attention to relevant input). Only the output practice forces learners to move from semantic to syntactic processing, paying attention to means of expression and the use of the formal features that may not be semantically meaningful and may not be noticed by the learners. This point echoes the Noticing Hypothesis. This conscious recognition of their linguistic deficit will make learners see their need to work on the aspects of language that do not match the language norms.

This hypothesis has been confirmed in a study by Swain and Lapkin (1995), the result indicated that students did notice the mismatch between the target language and their interlanguage system, which further involves learners in a deep-level cognitive processing which helps them to consolidation of the existing knowledge or the acquisition of new knowledge.

### 4. The Interaction Hypothesis

Based on the Krashen's Input Hypothesis, Long (1983, 1985) proposed Interaction Hypothesis. Both hold that SLA depends on the availability of comprehensible input before the learner's internal processing mechanism can work, but differ in that Krashen believes that comprehensible input will happen by itself, Long holds that input is made comprehensible as a result of interaction modification, which is referred to as negotiated interaction. Negotiated interaction has been agreed to be one of the particularly useful ways to draw learners' attention or noticing to form. As

Gass and Varonis (1994) explained, negotiated interaction could “crucially focus the learner’s attention on the parts of the discourse that are problematic, either from a receptive or productive point of view” (299). Kuiken and Vedder (2002) have investigated the effect of interaction between ESL learners during a dictogloss task on the acquisition of the passive form. Although the quantitative analysis of their data could not demonstrate that recognition and frequency of use of the passive differ depending on the degree in which learners are encouraged to interact with each other, the qualitative analysis revealed that interaction often stimulated noticing.

### 5. Attention-Processing Model

The conceptualization of SLA in terms of conscious and subconscious is quite confusing, a sounder heuristic way for conceptualizing the language acquisition process was proposed by McLaughlin and his colleagues (McLaughlin, Rossman, and McLeod, 1982; McLaughlin 1987, 1990b, cited from Brown, 2001), which avoided any direct appeal to a consciousness continuum. Their model juxtaposes processing mechanism (controlled and automatic) and categories of attention to form four cells. Controlled processes are “capacity limited and temporary” and automatic processes are “relatively permanent” (McLaughlin et al. 1982:142, cited from Brown, 2001), and automatic processes are accomplished by processes of restructuring (McLeod and McLaughlin, 1986). Both ends of this continuum of processing can occur with either focal or peripheral attention on the task at hand, here, focal attention shouldn’t be equated with “conscious” attention and peripheral attention with “subconscious” attention, for both focal and peripheral attention can be quite conscious (Hulstijn 1990). Thus, L2 learning involves a movement from a controlled process with focal attention to an automatic process with peripheral attention. Attention is an indispensable factor in language learning.

## IV. EMPIRICAL RESEARCHES ON THE ROLE OF NOTICING

In brief, researchers have taken three approaches to assess the role of noticing.

One method is to construct conditions for noticing in instructional materials by highlighting particular linguistic features, that is to investigate the effect of noticing through input enhancement conditions (Sharwood Smith, 1993). Learners who are exposed to these materials are assumed to have noticed the target points. Doughty (1991) found that learners who used the materials with relative clauses highlighted in the texts outperformed another group receiving no highlighting when tested on their comprehension of the texts and their knowledge of relative clauses. Alanen (1992) investigated the effect of different conditions on noticing, namely: explicit teaching, input enhancement and control condition. But, the result showed there was no significant difference between enhanced input condition group and control group. Fotos (1993) postulated that both task and formal instruction were equally effective in promoting noticing.

The second method asks learners to retrospectively report what they had noticed during task completion. Researchers have attempted to assess the extent to which learners have noticed highlighted input by examining retrospective think-aloud. A study aiming at investigating effects of input enhancements of preterit and imperfect verb forms in Spanish found that 14 L2 adults receiving enhanced input made more reference to these forms during think-aloud on a subsequent production task than on learners who had not received input enhancement (Jourdenais, Ota, Stauffer, Boyson, & Doughty, 1995).

The third method is to infer noticing from observable interactions such as negotiation of meaning during task completion. Many studies have investigated noticing in oral discourse by observing learners’ conversational adjustments (Larsen-Freeman & Long, 1991), request for modified input (Ellis, 1995), and language related episodes (Swain, 1998). Researchers believe that conversational adjustments signal miscommunication which draws learners’ attention to the language during otherwise meaning-focused activity (e.g., Gass & Madden, 1985).

In none of these cases is noticing observed directly; each requires an inference. Schmidt refers to the input enhancement approach as an external approach to noticing, which is incomplete for the investigation of noticing. For the second approach, because the think-aloud was conducted after learners had received the input, thus this method requires a large inference to be made from learners’ retrospective reports to their noticing during task completion. The third approach is a more desirable way to investigate noticing, as Swain (1998,) argued that: “it seems essential in research to test what learners actually do, not what the research assumes instructions and task demands will lead learners to focus on.”

## V. THEORETICAL JUSTIFICATION FOR THE ROLE OF NOTICING

From a cognitive perspective, linguistic language has no difference in kind from other type of knowledge; language learning is viewed as the acquisition of a complex cognitive skill, to learn a language is to learn a skill. Information processing model holds that human learning is a course of information processing which involving human being’s limited capacity system and the multistory of memory system, naming short-term memory and long-term memory.

In the model given by Ellis, two stages are involved in the process of implicit knowledge. The first stage, in which input becomes intake, involves that learners must notice language features in the input, absorbing them into their long-term memories and comparing them to features produced as output. Kihlstrom (1984) proposed that consciousness and short-term memory are essentially the same; that language items must be processed in short-term memory as to be

stored in long-term memory; and that items not processed into short-term memory or not further encoded into long-term memory from short-term memory will be lost. Schmidt concludes, "if consciousness is indeed equivalent to the short term store, this amounts to a claim that storage without conscious awareness is impossible" (1990, p. 136). This second stage is not what we are concerned with here.

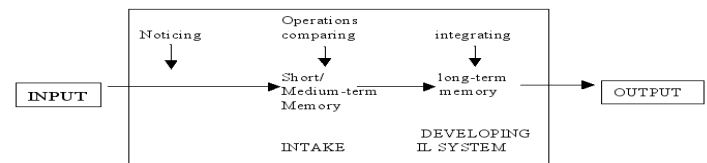


Figure 2. Ellis Model of the Process of Learning Implicit Knowledge  
(Adapted from Ellis 1997: 119)

## VI. PEDAGOGICAL IMPLICATIONS

There is no consensus agreement concerning the role of noticing in SLA due to the directly unobservable nature of noticing as well as that the level of noticing may be affected by variables including attention being directed elsewhere, the level of language ability of learners, the complexity of information being processed and the speed or audibility of presentation (Schmidt, 1993). But it has rich pedagogical implications for teaching, especially in China. The reasons are as follows:

First, second language learning in China generally takes place in classroom, where teachers play the dominant role and learners learning is largely influenced by the teaching practice, it is necessary for any language teacher to pursue effective ways to promote more 'input' into 'intake' by raising students consciousness, such as input enhancements techniques: input flood, textual enhancement, structured input activity, explicit teaching etc. (Wong, 2005). For explicit knowledge can facilitate the learners comparing what is present in the input with what is the learners' current interlanguage rule; and can make learners be more likely to notice these features in the natural input; as well as can as 'monitor' to improve the accuracy of output (Ellis, 1999).

Second, due to the advocate of communicative teaching method that gives prominence to learner's fluency, the general teaching practice that exclusively concerns the learners' use of language understates the importance of learners' analysis and understanding of the forms. In China, where students are expected to take part in all kinds of exams, there are many advantages by raising learner's habit of observation and noticing the forms.

Last but not the least, since there are many factors influencing noticing, such as instruction, perceptual salience, frequency, task demands (Schmidt, 1990, Skehan, 1998). Thus, not only teachers who try every effort to draw students' attention by various ways in class but also textbook compilers and people concerned should takes all those factors into consideration and provide teachers with good "hardware". The joint efforts will yield a more desirable result--cultivating more competent students.

## VII. CONCLUSION

Regardless of the different positions researchers may take regarding the issue of awareness, there is a general consensus along with support from SLA research that noticing or some form of attention to input is necessary for SLA. As for EFL, many empirical studies concerning role of noticing in foreign language teaching have been made abroad, especially focusing on the grammatical forms, while little have been done at home. Explicit instruction, which can facilitate learners' awareness of the surface features of a language and as the most common teaching practice in China, should be given due attention, more effort should be made to find out explicit instruction under which condition should benefit Chinese students best, thus to improve teaching effectiveness in China.

## REFERENCES

- [1] Brown, H. D. (2003). Principles of language learning and teaching. Beijing: Foreign Language Teaching and Research Press.
- [2] Ellis, R. (1999). The study of second language acquisition. Shanghai: Shanghai Foreign Education Press.
- [3] Fotos, S. (1993). Consciousness-raising and noticing through focus on form: grammar task performance versus formal instruction. *Applied Linguistics*, 4, 385-407.
- [4] Gass, S. (1988). Integrating research areas: a framework for second language studies. *Applied Linguistics*, 9, 198-217.
- [5] Kihlstrom, J. (1984). Conscious, subconscious, unconscious: a cognitive perspective. In K. Bowers & D. Meichenbaum (Eds.), *the unconscious reconsidered*. New York: Wiley, 149-211.
- [6] Kuiken, F. & Vedder, I. (2002). The effect of interaction in acquiring the grammar of a second language. *International Journal of Educational Research*, 37, 343-358.
- [7] Krashen, S. (1982). Principles and practice in second language acquisition. New York: Pergamon Press.
- [8] Larsen-Freeman, D., & Long, M. (1991). An introduction to second language acquisition research. London: Longman.
- [9] Long, M. (1983). Does second language instruction make a difference?. *TESOL Quarterly*, 17, 359-382.
- [10] McLaughlin, B. (1987). Theories of second language learning. Baltimore, MD: Edward Arnold.
- [11] Paradis, M. (1994). Neurolinguistic aspects of implicit and explicit memory: implications for bilingualism and SLA. In

- N.Ellis(Ed.), *Implicit and explicit learning of languages*. New York: Academic Press, 393-420.
- [12] Robinson, P. (1995). Attention, memory and the noticing hypothesis. *Language Learning*, 45, 283-331.
  - [13] Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11, 129-158.
  - [14] Schmidt, R. (1994). Deconstructing consciousness in search of useful definitions for applied linguistics. *AILA Review*, 11, 11-26.
  - [15] Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and second language instruction*. Cambridge: Cambridge University Press, 3-32.
  - [16] Sharwood-Smith, M. (1981). Consciousness-raising and the second language learner. *Applied Linguistics*, 2, 159-169.
  - [17] Skehan, P. (1998). A cognitive approach to language learning. Oxford: Oxford University Press.
  - [18] Swain, M. (1995). Three functions of output in second language learning. In G. Cook & B. Seidlhofer (ed.), *Principles and practice in applied linguistics*. Oxford: Oxford University Press, 125-144.
  - [19] Swain, M. & Lapkin, S. (1995). Problems in output and the cognitive process they generate: A step toward second language learning. *Applied Linguistics*, 16, 371-391.
  - [20] Swain, M. (1998). Focus on form through conscious reflection. In C. Doughty & J. Williams (Eds.), *Focus on form*. Cambridge: Cambridge University Press, 64-81.
  - [21] Tomlin, R., & Villa, V. (1993). Attention in cognitive science and SLA. Eugene: University of Oregon. Institute of Cognitive and Decision Sciences.
  - [22] Tomlin, R., & Villa, V. (1994). Attention in cognitive science and second language acquisition. *Studies in Second Language Acquisition*, 16, 183-203.
  - [23] Truscott, J. (1998). Noticing in second language acquisition: A critical review. *SLA Research*, 14, 103-135.
  - [24] Wong, W. (2005). *Input Enhancement: From Theory and Research to the Classroom*. Boston: McGraw-Hill.

**Sumin Zhang** was born in Luohe, China in 1978. She received her M.A. Degree in Applied Linguistics from Beijing International Studies University, China in 2007.

She is currently a lecturer in the Foreign Languages Department, Zhengzhou Institute of Aeronautical Industrial Management, Zhengzhou, China. Her research interests include second language acquisition and foreign language teaching.