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Verbal Reports as a Method for Investigating Noticing and Awareness in Second Language Learning

Ahmed Omran Jassim (M.A)

University of KirkukCollege of Basic EducationDepartment of English

ahmedomran@uokirkuk.edu.iq

التقارير اللفظية كأداة منهجية لدراسة الملاحظة والادراك في تعلم اللغة الثانية

م. احمد عمران جاسم

جامعة كركوك / كلية التربية الاساسية / قسم اللغة الانكليزية

Abstract

This study examines verbal reports as a methodological tool for investigating *noticing* and *awareness* in second language (L2) learning. It begins by defining noticing as the conscious registration of linguistic input and awareness as the subjective experience of cognitive content, highlighting their critical roles in transforming input into intake. The paper then defines verbal report formats—concurrent and retrospective protocols—as methods for accessing learners' explicit knowledge and metalinguistic processing. Advantages of verbal reports include their ability to capture real-time cognitive processes and reduce memory-related data loss. However, challenges such as reactivity, participants' verbal limitations, and issues of validity (e.g., nonveridicality) are acknowledged. To address these limitations, strategies such as clear instructions, participant training, and controlled testing conditions are proposed. The study concludes that verbal report protocols, when carefully designed, provide valuable insights into the relationship between noticing, awareness, and L2 acquisition.**Keywords:** second language acquisition, noticing, awareness, verbal report, think-aloud protocol, concurrent protocol, retrospective protocol, language learning researches

المستخلص

تتناول هذه الدراسة التقارير اللفظية كأداة منهجية لدراسة الملاحظة والوعي في تعلم اللغة الثانية. تبدأ الدراسة بتعريف الملاحظة على أنها التسجيل الواعي للمدخلات اللغوية، والوعي على أنه التجربة الذاتية للمحتوى المعرفي، مع تسليط الضوء على دورهما الحاسم في تحويل المدخلات إلى استيعاب. ثم تُعرّف الدراسة صيغ التقارير اللفظية – البروتوكولات المتزامنة والرجعية – كطرق للوصول إلى المعرفة الصريحة للمتعلمين والمعالجة اللغوية. تشمل مزايا التقارير اللفظية قدرتها على التقاط العمليات المعرفية في الوقت الفعلي وتقليل فقدان البيانات المتعلقة بالذاكرة. ومع ذلك، تُسلّم الدراسة بوجود تحديات مثل التفاعلية، والقيود اللفظية للمشاركين، ومشكلات الصلاحية (مثل عدم الصدق). ولمعالجة هذه القيود، تُقترح استراتيجيات مثل التعليمات الواضحة، وتدريب المشاركين، وظروف اختبار مُحكمة. وتخلص الدراسة إلى أن بروتوكولات التقارير اللفظية، عند تصميمها بعناية، تُقدم رؤى قيّمة حول العلاقة بين الملاحظة والوعي واكتساب اللغة الثانية.**الكلمات المفتاحية:** اكتساب اللغة الثانية، الملاحظة، الوعي، التقرير اللفظي، بروتوكول التفكير بصوت عالٍ، البروتوكول المتزامن، البروتوكول الرجعي، أبحاث تعلم اللغة

Introduction

Language , to give it a simple definition, is a communicating system that individuals use in their everyday discourse to deliver messages (Abdullah and Hussein: 2015) . Another sufficient definition of language is cited in (Abdullah and Hussein : 2013) they refer to it as a process that people use in acquiring or learning their native language or any other foreign language(s) . This study aims to discuss verbal reports as a method for investigating noticing and awareness in L2 learning, it will be divided into five parts. In the first part I will present a definition for the concepts noticing and awareness and what is the importance of these concepts in second language learning. in part two, definition and forms of verbal report formats will be discussed with examples for the two forms. The third part will discuss the advantages and disadvantages of verbal report forms

when they have used as research methods for studying noticing and awareness. In part four, I will present some suggestions for researchers to overcome the disadvantages or weaknesses. Part five will be a conclusion summarising the main points that discussed in this paper followed by references.

1. Definitions and Importance of Noticing and Awareness

1.1 What Noticing is

Schmidt (1990) defines noticing as a term which used to denote to private experience, even though in terms of operation noticing can be defined as availability for verbal report, subject to specific. But lack of verbal report can not be considered as proof to show that noticing is failure unless the verbal report has been collected either concurrently or immediately after the experience. In addition there are conscious experiences which inherently might be difficult to describe. For instance, we might be able to notice that a person has a regional dialect but being unable to describe it phonetically, or noticing differences among three wines without having the ability to describe these differences. Moreover, it can be said that noticing is the sense basically in which we usually say that "we are aware of something, but does not exhaust the possibilities." (p.132). Thus, without noticing there is no learning.Tomlin and Villa (1994:p.185) discuss that the learners of any particular aspect in second language must first of all notice these aspects. " noticing requires of the learner a conscious apprehension and awareness of input, must explicitly excludes the possibility of subconscious noticing." In addition, Schmidt (1993) connects noticing to subjective experience. As a result, noticing seems to involve awareness. Also as Schmidt (1994:p.179) mentions that noticing denotes to "registration [detection] of the occurrence of a stimulus event in conscious awareness and subsequent storage in long term memory…" thus noticing= detection+ awareness, which can be simplified to equation noticing = awareness.

1.2 What Awareness is

Al-Hejin (2005) defines awareness as a subjective experience of a cognitive content or stimulation for individual. Awareness is indicates to learners' knowledge which is usually associated with explicit learning versus implicit, since learner might or might not be aware that he/she have acquired a new structure aspect. For instance child in general seems to unaware of the complex syntactic rules that he/she acquire. there are three levels of awareness: perception, noticing, and understanding. According to Allport (1988) there are three criteria should be met to decide that the individual is being aware. Firstly, person should show a cognitive change which because of the experience. Secondly, individual should report that he or she was aware of the experience. Thirdly, individual must have the ability to describe the subjective experience.

Tomlin and Villa (1994) clarify that the difference between awareness and attention is can be said that awareness is not attention but awareness does require attention , while attention does not require awareness.

Moreover, Bolitho et al (2003:p251) define language awareness as "a mental attribute which develops through paying motivated attention to language in use," and by which learners become able to gain insights into how do languages work. Also it is a pedagogic method which is aiming to help learners to acquire such insights.

1.3 Noticing and Awareness are Important for L2 Learning

Noticing has its role in second language acquisition and some studies that dealt with this subject are recent . Researches have suggested that two types of noticing are essential conditions for acquisition. Thornbury (1997):

i) Learner should attend to linguistic features of the input that he/she is exposed to without these features input is not becoming intake.

ii) Learner should 'notice the gap', which means he/she make a comparison between current state of his/her developing linguistic system and the target language system.According to Ellis (1995:p.90) for learners noticing is needed when 'their own output is the same as the input as well as when it is different'. Noticing processes have the key role in second language acquisition, facilitate the process by which explicit knowledge is becoming implicit knowledge. In short term, there is no acquisition without noticing. In addition, Schmidt (1990:P.129) proposes what so-called the '*Noticing Hypothesis*', in which he says that "noticing is the necessary and sufficient condition for converting input into intake". It seems that noticing facilitates and promotes the learning process.

Bolitho et al (2003:p253) discuss that awareness provides an affective engagement, and this affect presents values, reasons, motivation for learning. According to neuroscientists, this process of recognizing patterns and constituency is on of the essential functions of the brain. "The cognitive emphasis of language awareness makes justifiable use of the inherent noticing-analysis-integration capability of language users." Increasing awareness in the explicit learning seems to function in a complementary way, and reinforces the vital role implicit awareness emerging from language experience. Schmidt(1995) cited in Al-Hejin (2005) claims that there is a strong relationship between awareness and learning. Results of experiments suggested that participants who displayed

evidence of awareness their performance is better on the post-exposure tasks than participants who categorized as unaware.

2. **Definition of Verbal Report Formats that Have Been Used to Investigate Noticing and Awareness in L2 Learners**

2.1 **What Verbal Report Format is**

Ellis (2004:p.262) states that Verbal report format is methodological device which used for reaching at measures of explicit knowledge, in other word it is a way to obtain a measure of the metalanguage of learners. It is a "way of investigating both whether learners are drawing on a conscious representation of L2 knowledge and the extent of their metalanguage". There are many types of tasks which have been used to elicit verbal reports. In verbal reports, learners might be asked to do an explanation task , in which they are given sentences and they need to identify the correct or the incorrect use of specific features in grammar (usually italicized). Video or audio tape recorded might be used to collect verbal protocols.

Mackey (2000:p.13) show that verbal protocols can be defined as the data one gets "by asking individuals to vocalize what is going through their minds as they are solving a problem or performing a task" . Furthermore, . According to Ericsson and Simon (1993: 220- 222), cited in Swain (2006) the verbalization "is a direct encoding of the heeded thought and reflects its structure". The data tell us "what information [individuals] are attending to while performing their tasks, and by revealing this information, can provide an orderly picture of the exact way in which the tasks are being performed: the strategies employed, the inferences drawn from information,…". Sasaki (2003) argues that verbal report protocols have been used as a technique to obtain information about cognitive processes, basically it assumes that information which is stored in learner's 'short term memory' (STM) is ready for retrieving by verbal reports. It has been considered that verbal report protocols directly represent the cognitive processes of the participant.

2.2 Forms of Verbal Reports

Camps (2003) mentions that there are two kinds of verbal report; the first one is concurrent protocols. Camps claims that this form more reliable by many research on the role of attention in L2 acquisition. the second one retrospective protocols which is basically performed directly after completing the task. Similarly, (Ericsson & Simon, 1987) cited in Sasaki (2003) discuss that in concurrent verbal reports, participant verbalize the ideas which arise in his/her mind as he/she is completing a task, whereas, in retrospective protocols participant reports ideas immediately after the completion of the task. Camps claims that both of these two forms are direct verbalization of cognitive processes. Accordingly, verbal reports can be divided into three different levels; the first one is verbalization or so-called talking –aloud, "the participants verbalize the information that is already encoded verbally in their STM." (p.3) , information does not need to be re-encoded for the verbal reports. The second level, verbalization or thinking-aloud, the not-linguistic information need to be re-encoded into code because the information that originally stored in STM of participants is not in a verbal code. The third level is verbalization involves introspective reports, in this level the participants explain, look for reasons, theorize, or interpret their response. Roehr (2006) discusses that process-oriented studies have drawn on the two concurrent and retrospective reports. However, "concurrent think-aloud protocols concurrent think-aloud protocols are recorded with little or no researcher interference, retrospective stimulated recall protocols rely on greater researcher mediation."(p.182) the lack of the interference by researcher leads to direct access to the learners' thoughts processes.

2.3 Examples for Verbal Report Forms Rosa and O'Neill (1999) in their study they used multiple-choice jigsaw puzzles with five different treatment groups to use Spanish conditional sentences, they show that participants whose protocols showed levels of awareness at level of understanding obtained results better than learners who awareness classified as noticing level or no awareness at all. Leow (1997) provided Another example, in which, participants where learners performed think-aloud protocols during doing a crossword puzzle including irregular forms of the Spanish preterit. He found that the learners who indicated a higher awareness of the target forms in their protocols are better in the later recognition and production of these forms. Moreover, Robinson (1991) collected concurrent think-aloud protocols from twelve female Japanese native speakers as their plan how to fill out written discourse completion forms using refusals. Participants are asked not think aloud during they were writing just before they began and whenever they paused to plan what to write. Robinson interviewed each participant after the task immediately, the discussion is based on tape recording of the think-aloud protocol. He found that combining concurrent and retrospective reports develops the informative value of verbal reports.

3. The Strengths and Weaknesses of these Verbal Report Formats as Research Methods for Studying Noticing and Awareness Young (2005) argues that the think-aloud approach is particularly useful in unveiling new or rising phenomena, rather than testing or confirming what is already known. One of the main advantages in the usage of concurrent think-aloud is that it decrease problems associated with memory failure that might be occurred during waiting to gather verbal data at the conclusion of the task. However, using video-stimulated recall to gain retrospective data becomes widely utilised, there is a limitation in the ability of participants to remember what they were thinking at previous point in time. In addition , "given the use of think-aloud data stems from having a learner engaged in a 'real' activity they produce more reliable results than if asked to report on a hypothetical situation" (p.22) . the point is that engagement of the learners in a task in which they become engrossed. This would provide the researcher with the ongoing thought processes toward that ending point. Furthermore, using peer-interactions and/or student-teacher interactions would makes sure producing an abundance of verbal. The think –aloud method ensures precise focus is directed to learner's thoughts, which is beneficial in both reducing distractions from a learners sequence of thoughts and helps the researcher to obtain data that most purposeful for the targets of their research. It is supposed that during think-aloud operation, when a learner is immersed in the given task, completing this activity will take precedence hence limiting the cognitive 'space' for learner to formalise wanted thoughts rather than his/her immediate processes. In addition, while the discussion and interviews in progress , issues might be emerged by a researcher's inadvertent influence on learner's responses to questions and comments. However, it is normal for the researcher to present during gathering the data of think-aloud, it is possible for the participant to engage in task individually, and this will eliminate the problem. additionally, Young agrees with what suggested by Ericsson and Simon (1993), they explain that concurrent verbal protocols provide a "dramatic increase in the amount of behaviour that can be observed when a subject is performing a task while thinking aloud compared to the same subject working under silent conditions" (p.8). observational data are widely used in qualitative research studies which a researcher rely on. However those researcher did not use the think-aloud approach, the way when they interpreted the data is relying on observations alone compared with the interpretation when the voice of learner is added. In this case, the video observational data seemed to propose a student's off-task behaviour and limited attendance to the activity at hand. Significantly, the participant prove a deep thinking and high order level of attention more than was noticeable from the video data in isolation Young (2005 On the other hand, some of weaknesses can be found with think-loud data which called limitations including issues of reactivity, verbal abilities of participant, and data validity. Reactivity includes three basic effects when the participant is asked to think aloud. Firstly, whether the participant able to think and attend to an activity at the same time. Secondly, the effects of talking aloud through a task which usually take part silently. Thirdly, "the effect of drawing a participant's attention to the cognitive processes underlying the task being undertaken".(ibid:p.24). Moreover, as one's short-memory capacity is limited to talk and attend at the same time, therefore the ability for some learners to work during a task and talk simultaneously might be reduced. the problem related to verbalising and hearing one's voice during a task normally undertaken in silent. Young discusses that participant's verbal abilities weakness is related to variety of participant in their ability to show helpful think-aloud data. In parallel to this issue, participants' abilities to express thought processes. Alternatively, those learners who are less in ability to think about their own thinking will be less in ability to report on it, and consequently the think-aloud data might underestimate their knowledge and abilities. Another problem is concerning to gaining depth in the data produced, Branch (2000) comments on the issue of incomplete in think-aloud. She found that some participants produced their think-alouds very briefly or very procedurally. Young also refers to validity as another issue concern with think-aloud data, it raises a question whether the information given by think aloud data correctly represents thinking. Similarly, Brinkman (1992) mentions that reactivity arises if the cognitive processes are changed by the simple requirement to verbalize them concurrently or retrospectively. For instance, there are many ways to do an activity, so it might be that verbalization has the effect that the normal way is changed to another way which is described more easily. Furthermore, Brinkman discusses the second weakness by asking the question whether the verbal reports are valid or not? So when verbal reports lacks validity, they do not catch the cognitive processes that really going on, regardless the question whether the processing is reactive or not. In addition, Russo et al (1989) and Bowles and Leow (2005) discuss that invalidity of verbal reports can have at least two forms: the first one is reactivity and the second is nonveridcality. A reactive verbal protocol found when verbalization alters the primary process, and that might change the outcome of this process. Protocol is

Nonveridical when the underlying primary process is not reflected accurately by protocol. Nonveridcality involves errors of omission (such as excluding some thought during reporting) and errors of commission (such as reporting mental thoughts which did not exist). "Although omission is consequential, fabricated intrusions are usually more serious, because these data enter into the protocol's analysis as if they were veridical."(ibid:p.760). according to Conral et al (1999) verbal reports are less valuable and might mislead in some situations, such as when participants are not aware of information that outlines into their answer. If respondents are not aware of how they answer a question, consequently, they cannot report any thing; if the information that comes in their mind is not relevant to the response process, the reports would be unreliable validity. Ellis (2004) claims that verbal reports in themselves do not measure learners' metalingual knowledge accurately, as there is no guaranteed way determines whether an explanation reflects aptitude for grammatical analysis.

4. Suggestions for Overcoming the Identified Methodological Weaknesses Young (2005) suggests that in order to overcome the effect of reactivity weaknesses, the researcher must ensure the learner is aware who will be listening and for what reason. In addition, giving time for the learner to practice thinking aloud can be helpful. Additionally, to minimise the this issue, the researcher should let the task to be ended privately if the learner has demonstrated competence in continuous verbalisation.

Also, Brinkman (1992) believes that there are some procedures to recover the weaknesses mentioned above, these procedures including instructions, train, and condition of testing. Instruction should be clear and proper in order to gain accurate data and avoid reactivity and invalidity of data. Also, training can make the participant familiar with the task, so their response will be more accurate.

5. Conclusion This assignment has discussed verbal reports as a method for investigating noticing and awareness in L2 learning. It has presented definitions for noticing and awareness with mentioning to their importance in L2 learning, it has found that without noticing there is no learning. also there are three levels of awareness: perception, noticing, and understanding. Moreover, verbal report formats have been defined, and their forms which are concurrent protocols and retrospective protocols have been presented with examples. In addition, the advantages and disadvantages of these verbal report formats as research methods for studying noticing and awareness have been explained. Furthermore, in this assignment, suggestions to minimise the weakness of reactivity and validity and provide a high level of accuracy have been discussed.

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