THE USE OF METALANGUAGE AMONG SECOND LANGUAGE LEARNERS TO MEDIATE L2 GRAMMAR LEARNING

Haliza Harun, Norhana Abdullah, Nur Syuhada’ Ab. Wahab & Nurkhamimi Zainuddin
Faculty of Major Language Studies, Universiti Sains Islam Malaysia, Malaysia

Corresponding author: haliza@usim.edu.my

ABSTRACT

Purpose – This study investigated the use of metalanguage as a mediational tool in understanding targeted grammatical concepts from the perspective of the Sociocultural approach (SCT) in learning a second language (L2).

Methodology – The participants involved in this study were Malay undergraduates with low to intermediate proficiency in L2 English. The protocols of learners’ verbalisation during a Concept-Based Instruction (CBI) language task were analysed to explore how learners used metalanguage to mediate, facilitate and regulate their L2 learning. A microgenetic analysis was conducted to examine how metalanguage was used as a mediating tool by the learners in the actual L2 learning process. It involved an investigation of the language learning instances that occurred in their natural context. Analysis of the protocols was performed using ‘Languaging Units’ that were based on the ‘Languaging Types Framework’ proposed by Swain et al. (2009). Additionally, descriptive statistics were employed to measure the
frequency of the languaging units produced by learners in facilitating their L2 development.

**Findings** – Results revealed that through the Languaging Units identified, learners used the linguistic tool as a problem-solving tool to explore form-meaning relationships of the target concepts learnt. Findings corroborated the significant role of language, viewed from Vygotskian thought, in relation to mediating learners’ cognitive processes. The function of language in this context was twofold, first as a communicative tool, and second as a psychological tool to support learners’ cognitive and linguistic development in their L2 learning.

**Significance** – This study is significant to L2 researchers and practitioners as it provides insights into how learners make use of their L2 knowledge to optimally support their cognitive processes in gaining understanding of the target language. This, in fact, has long been a neglected issue in the field of L2 learning, as discussion on metalanguage or a learner’s metalinguistic knowledge is more often associated with presenting a learner with the explicit input of grammar rules in promoting his/her L2 proficiency.

**Keywords:** metalanguage, grammar, Sociocultural theory, metalinguistic knowledge, Vygotsky
THE USE OF METALANGUAGE AMONG SECOND LANGUAGE LEARNERS TO MEDIATE L2 GRAMMAR LEARNING

Haliza Harun, Norhana Abdullah, Nur Syuhada’ Ab. Wahab & Nurkhamimi Zainuddin
Faculty of Major Language Studies, Universiti Sains Islam
Malaysia, Malaysia

Corresponding author: haliza@usim.edu.my

ABSTRACT

Purpose – This study investigated the use of metalanguage as a mediational tool in understanding targeted grammatical concepts from the perspective of the Sociocultural approach (SCT) in learning a second language (L2).

Methodology – The participants involved in this study were Malay undergraduates with low to intermediate proficiency in L2 English. The protocols of learners’ verbalisation during a Concept-Based Instruction (CBI) language task were analysed to explore how learners used metalanguage to mediate, facilitate and regulate their L2 learning. A microgenetic analysis was conducted to examine how metalanguage was used as a mediating tool by the learners in the actual L2 learning process. It involved an investigation of the language learning instances that occurred in their natural context. Analysis of the protocols was performed using ‘Languaging Units’ that were based on the ‘Languaging Types Framework’ proposed by Swain et al. (2009). Additionally, descriptive statistics were employed to measure the frequency of the languaging units produced by learners in facilitating their L2 development.

Findings – Results revealed that through the Languaging Units identified, learners used the linguistic tool as a problem-solving tool to explore form-meaning relationships of the target concepts learnt. Findings corroborated the significant role of language, viewed from Vygotskian thought, in relation to mediating learners’ cognitive processes. The function of language in this context was twofold,
first as a communicative tool, and second as a psychological tool to support learners’ cognitive and linguistic development in their L2 learning.

**Significance** – This study is significant to L2 researchers and practitioners as it provides insights into how learners make use of their L2 knowledge to optimally support their cognitive processes in gaining understanding of the target language. This, in fact, has long been a neglected issue in the field of L2 learning, as discussion on metalanguage or a learner’s metalinguistic knowledge is more often associated with presenting a learner with the explicit input of grammar rules in promoting his/her L2 proficiency.

**Keywords:** metalanguage, grammar, Sociocultural theory, metalinguistic knowledge, Vygotsky

**INTRODUCTION**

Discussion regarding grammar instruction and second language (L2) teaching and learning context has long focused on whether learners should be presented with either explicit or implicit knowledge (N. Ellis, 2005; Nassaji & Fotos, 2011) in the attempt to find an effective solution to language learning problems. While implicit knowledge is conceived as “intuitive and entails a type of linguistic knowledge” that a learner subconsciously learned (N. Ellis, 1994, p.212), explicit knowledge, also known as metalinguistic knowledge (MLK), is generally perceived as “a declarative knowledge that can be brought into awareness and that is potentially available for verbal report” (Anderson, 2005, p.427). Accordingly, such knowledge entails a knowledge that can be “held consciously, learnable and verbalizable” (R. Ellis, 2006, p. 95) and encompasses knowledge of “what a language in general consists of and /or the roles that it plays in human life” (R. Ellis, 2004, p.229).

Within the framework of Sociocultural-theory (SCT) in L2 learning, an explicit knowledge is deemed as a learning instrument or tool for learners to employ in their attempt to gain regulation in language learning situations that demand high use of the linguistic skills of the target language (Lantolf, 2000). Based on this theoretical view, explicit knowledge might become evident through the speech
deployed by learners as they strive to make sense of the language learnt when faced with any language task that is considered to be difficult. This view also corroborates with the notion that such knowledge can commonly be retrieved and obtained by means of controlled processing that learners face when they encounter some linguistic difficulties in using the L2 (R. Ellis, 2006, p. 95). As R. Ellis (2004, p.239) for instance highlights, this type of behaviour becomes evident when L2 learners are demanded to provide ‘grammaticality’ justifications or reasons, while engaging in think-aloud activities, or during collaborative problem-solving tasks. Subsequently, when such grammatical evidence could not be successfully provided by the learners, due to insufficient confidence to make an intuitive judgement towards the identified linguistic items, they might resolve to access declarative information to facilitate them in coping with the task.

Framed within the theory of mediation in Vygotskian thinking, this study explored how metalanguage is used as a regulatory tool in understanding and mediating the targeted grammatical concepts, namely the tense–aspect concept of past time in the English language system. Drawing on learners’ verbalisation protocols whilst completing their language task based on a Concept-Based Instruction (CBI) approach, this study investigated how the learners made use of their metalanguage to mediate, facilitate and develop their L2 learning. CBI is a pedagogical approach predicated on Vygotskian SCT-mediation theory which maintains that learning a second language involves not only learning new forms but also taking control of the functionality of the L2 learnt. Essentially, the foundational principles of the CBI approach (Lapkin et al., 2008) are as follows:

1. The centre of an instruction encompasses a coherent and theoretical conceptual unit.
2. Didactic models are constructed to materialise the concept and act as mediational tools for L2 learners.
3. Concepts learnt are to be verbalised and are the core of the instructional unit.

However, as this study aimed to gain insights on how learners made use of the language to enhance their thinking process in facilitating their L2 development, emphasis was given to the third principle of
CBI. In this instance, an investigation on learners’ metalanguage that was manifested through their verbalisation activities was conducted to ascertain its role and values in promoting L2 learning.

This study is significant as it provides a window to understanding how learners make use of their L2 knowledge to optimally support their cognitive processes in understanding the target language. This in fact, has long been a neglected issue in the field of L2 learning, as more often than not, discussions on metalanguage or a learner’s metalinguistic knowledge (MLK) is often associated with presenting a learner with explicit input of grammar rules to promote learners’ L2 proficiency.

To this end, the question addressed in this study was: How is metalanguage used by L2 learners as a regulatory tool to appropriate their L2 learning?

**LITERATURE REVIEW**

**Metalanguage and Metalinguistic Knowledge**

According to Roehr & Gánem-Gutiérrez (2009b) a learner’s second language (L2) proficiency is viewed as the learner’s language ability, which also includes language knowledge (i.e., metalinguistic knowledge) and strategic competence. Subsequently, the combination of these two types of knowledge enables the learner to use the language to ‘create and interpret discourse’ in his/her attempt to comprehend and negotiate the intended meanings (Bachman & Palmer, 1996).

In this study, metalanguage is operationalised as “language used to talk about language” (McArthur, 1992, p.652). It is also termed as the explicit knowledge that one brings into conscious awareness and that one articulates (Hulstijn, 2005; Roehr, 2006). In this instance, it “induces learners to reflect about the language,” which is also known as metalinguistic function (Fortune, 2005, p.23). In comparison, metalinguistic knowledge (MLK) renders explicit knowledge of the L2 held by the learners and encompasses the “syntactic, morphological, lexical, phonological and pragmatic features of the target language” (Roehr & Gánem-Gutiérrez, 2009a, p.166). However, as metalinguistic knowledge also includes the
learners’ general understanding of the language itself, it also consists of learner’s ability to reflect on the language, or better referred to as its’ metalanguage (M.Ellis, 2016, p.145).

The crucial role of grammatical competence in the learning of a target language became significant following the extensive studies conducted by Swain and colleagues (Lapkin et al., 1991) on French immersion programmes in the early 1980s. These studies found that despite ample opportunities for exposure to meaningful content, learners were not able to fully acquire aspects of the target language available in the input provided. Hence, the findings have led Swain and colleagues to suggest the importance of grammatical forms for learners to develop higher levels of accuracy in their L2. Since then, there has been a growing number of studies that have affirmed the substantial correlations between metalinguistic knowledge and L2 proficiency (R. Ellis, 2006; Nassaji & Fotos, 2011; Norris & Ortega, 2001; Roehr, 2008, 2014).

In a study of metalanguage conducted by Fortune (2005), advanced learners of different L2 English language proficiencies were engaged in a series of four dictogloss form-focused collaborative writing tasks. The aim was to identify the relationships of the employment of metalanguage and the learners’ capabilities to sustain their attention to the forms in the attempt to co-construct the knowledge of the target language. The learners’ dyadic interactions were recorded as they collaboratively negotiated meanings to complete the writing tasks. Analysis of the protocols were conducted using the language-related episode (LRE) Framework. The LRE refers to “any part of a dialogue where the students talked about the language that they are producing, question their language use, or correct themselves or others” (Swain & Lapkin, 1995). Three commonly employed types of metalinguistic terms were recognised and listed. Findings indicate that advanced learners employed 50% more metalanguage in comparison to their intermediate proficiency counterparts. Additionally, the study also documented evidence of the facilitative role of metalanguage in focusing learners’ attention to the type of form to be employed in their writing tasks. Learners were also found to frequently focus on some of the language points only once. However, they constantly maintained their focus on the choice of form and would review and re-engage with a form for more than once. Further findings revealed that these strategies were
used in their attempt to consolidate the existing knowledge or to co-construct knowledge of the language during their writing process (M. Ellis, 2016, p.150).

In contrast, Storch’s (2008) investigation on metalanguage was conducted to identify the impact of learners’ metatalk in an assigned text reconstruction task. Data were gathered over the 2-week period, with the learners having to complete text construction in pairs (week 1) and individually (week 2). Protocols of learners’ metatalk were also analysed using Swain and Lapkin’s (1995, 2001) LRE. The participants consisted of 22 students (11 dyads) of intermediate English proficiency that were undergoing an ESL class. Findings showed that learners’ use of metatalk was confined to a range of grammatical and lexical items of the target language during their text reconstruction task. However, it was also documented that the nature of their metatalk ranged from elaborated to limited engagement. The study revealed a significant finding as it highlighted that elaborated engagement was facilitative to learning and helped the learners to consolidate their existing metalinguistic knowledge to successfully performing the text construction assigned.

Additionally, Swain et al.’s (2009) study on the use of metalanguage embedded in learners’ languaging activities during various form-focused language tasks assigned, is particularly relevant to this investigation. The study was conducted to determine the relationship between ‘languaging’ and the achievement of deeper understanding of target language concepts. In the study, languaging was termed as “the process of making meaning and shaping knowledge and new experience through language” (Swain, 2006, p. 98). Learners’ languaging protocols were coded into concept-bound languaging, such as paraphrasing or making inferences, that learners employed during the task and in reference to the conceptual units (i.e., grammar rules) when justifying their answers. Findings from the quantitative and qualitative analysis conducted on 10 intermediate-French learners’ languaging protocols revealed that the embedded metalanguage manifested in their languaging activities helped the learners to achieve higher post-tests scores in their understanding of the concepts of voice – active, passive and middle in French. Learners also exhibited in-depth understanding of the metalinguistic terms and showed coherent understanding of the intended concepts following their languaging activities. More interestingly, the
findings also documented significant positive effects of languaging, in which learners with higher frequency of variability and quality in their languaging activity were found to score better in both their intermediate and delayed post-tests than their counterparts. The findings reported in this investigation are significant as they suggest the importance of the role and value of metalanguage in facilitating learners’ internalization of the target concepts.

In essence, findings from the above empirical studies are among the many studies in the field of second language acquisition that highlight the important role of explicit knowledge embedded in learners’ metalanguage in supporting their overall language acquisition. More importantly, these studies also provide concrete evidence of the positive effects of metalanguage in facilitating L2 learners’ explicit knowledge, as well as in improving their accuracy and appropriateness in the use of the language.

**Mediation and L2 Metalinguistic Knowledge**

Sociocultural theory (SCT) asserts that mediation exists in all forms of human activity. Vygotsky (1978) proposed that the concept of mediation is central to comprehending how physical and mental tools are used (Fauziah et al., 2006) in the attempt to gain appropriation of our actions or behaviours and thinking (i.e., regulation) (Lantolf, 2000). In the context of L2 learning, this notion holds that in regulating language learning processes, language is used as a mediating tool for learners to direct, plan and observe their cognitive activities. Language, in this instance, is not merely a communication tool in social interaction but also a cognitive tool to facilitate and enhance learners’ understanding in gaining control over their L2 learning tasks.

Several studies conducted within SCT and the field of L2 learning have identified that explicit knowledge or knowledge about the language can also potentially become mediational means to support learners’ L2 learning endeavours (Gánem-Gutiérrez & Roehr, 2011; Lapkin et al., 2008; Swain et al., 2009; Neguerela & Lantolf, 2006). A case in point is a study of metalanguage use deployed by nine L1 (first language) English learners in learning L2 Spanish (Gánem-Gutiérrez & Roehr, 2011, p.297). The study found that learners not
only used their metalanguage to enable them to explore the structure-meaning relationships of the L2 but also to utilise the metalanguage as a means to overcome language difficulties experienced during their language task performance. In this case, the metalanguage, that was manifested through the interrelated use of learners’ L1, was deployed to access and gather the required linguistic information as they searched for the correct answers for the language task. Additionally, the metalanguage was also used in a referential role to guide these learners and facilitate them in concretizing their mental processing (Gánem-Gutiérrez & Roehr, 2011, p.314).

It is noteworthy to highlight that although instructions to L2 learning within the SCT-view are found to align with the mainstream view regarding the significant role of explicit knowledge in facilitating L2 development, there are specific features of this knowledge which are distinct. At the heart of SCT, the quality of explicit rules must also be taken into account to ascertain the maximum value of the particular knowledge in developing the intended L2 improvement (Negueruela & Lantolf, 2006, p.80). This is because, SCT views that the fundamental task in L2 learning should focus more in promoting learners’ understanding through the meaning made available by the explicit grammar rules, rather than merely focusing on gaining in-depth understanding of the metalinguistic features of the target linguistic. Subsequently, given that language activity is closely interrelated with cognition, L2 language learning consists of learners learning and gaining control of the new forms and structure, and internalising the newly acquired concepts whilst simultaneously attempting to reorganise the existing concepts that they have held of the target language (Negueruela & Lantolf, 2006, p.81). The following section discusses how learners’ metalanguage was explored to ascertain its use in helping learners regulate their L2 learning when faced with cognitively-challenging linguistics tasks.

**METHODOLOGY**

**Participants**

The present study investigated how metalanguage is articulated by L2 learners as regulatory tools in overcoming language difficulties
collaboratively during a language task performance. The participants involved comprised two pairs of dyads of L1 (first language) Malay undergraduates undergoing an English language course at a local university. Generally, they had taken English as an L2 subject for an average of 12 years. During the data collection, the participants were undergoing the first semester of their undergraduate programme at the university. Their L2 English level of proficiency varied from basic (Band 1) to low-intermediate (Band 2), as outlined by the Malaysian University English test (MUET), a prerequisite language proficiency test for admission into Malaysian public universities (Siong, 2004). Subsequently, they were required to attend an English language foundation course at the university with the aim of improving their accuracy and fluency as well as enhancing the language skills required at tertiary level.

**Research Instruments**

**CBI Task**

The CBI language task consisted of learning the concept of English past time, namely simple past, past continuous and present perfect tenses. These tenses were selected as they were found to be among the more difficult grammatical concepts for most Malaysian learners (Maros et al., 2007; Stapa et al., 2010; Yahya et al., 2012). These studies concluded that the difficulties faced by Malaysian learners resulted from their inability to make distinctions between the tense-aspect marking that exist in both the Malay and English language system.

For the CBI task, the concepts of tense and aspect of the English language system presented in the explanatory slides were designed using a grammar model drawn from the cognitive linguistics framework (Radden & Dirven, 2007). Additionally, in this framework, emphasis is placed on the meaning of the linguistic items, which in this case also emanated from the fundamental principles of concepts to be presented in the CBI approach. The grammatical concepts of English past time were presented in MS PowerPoint slides (i.e., explanatory cards) as they allowed for the manipulation of animations, pictures and videos to provide a clear explanation of the concepts in question. To this end, the explanatory cards consisted of 17 MS PowerPoint slides, that were used to deliver the content of the target concept in order to help learners
construct the relevant semantic understanding as coherently and as completely as possible. Figure 1 exemplifies the explanatory slides used in the CBI task.

**SIMPLE PAST (+ed)**

Simple past is used to:

1. Describe a past event [E] that is complete. The event occurred at a definite or specific time in the past.
   
   Anne **baked** [E] a cake **last week**

2. Describe a past event that is complete. The event described is distant and remote from the time of speech
   
   He **repaired** [E] his car **two years ago**.
   It is now not working again

*Figure 1- Explanatory Slide*

**Verbalisation Protocols**

The verbalisation protocols consisted of learners explaining their understanding to their partners as they worked collaboratively through the slides. The purpose of this verbalisation activity was to provide learners with the opportunity to externalise their understanding of the concepts presented in each explanatory slide. The production of speech performed during this activity was aimed at helping learners’ internalisation of the L2 (Lantolf, 2011, p.38). Subsequently, learners were required to perform a self-explaining/other-explaining act to their partner or group member in the attempt to support their L2 understanding. The theory underlying the verbalisation method was that by verbalising the concepts out loud, the verbalised concepts were not only open to conscious inspection but would also be available for revision when needed, to help the learners to internalise the target learned concept (Negueruela, 2008, p.212). Additionally, the transcription system for the verbalisation protocols was adapted from conventions in Ohta (2001) and Mackay and Gass (2005) (see Appendix 1). Excerpt 1 exemplifies the verbalisation activity that took place in the study.
Syah: event One
Anna: “Anne lived with her parents for two years” number two (?)
   “Anne was living with her parents when I meet, met her” three (.)
   “Anne has lived on her own for ten years” the first event shows that he knows that this Anne (.)
   has lived with her parents for that whole ten years and now she is not living with
   them anymore (. )she has moved her things out from the house ((laugh))
Syah: ((laugh)) she’s living in her own house then (?) ((laugh))
Anna: OK number two(.) “was living” for example, her friend one
day, went to her neighbour’s house and he got to know that Anne
   was still living with her parents (?) but he didn’t know how
   long she has been living with them =
Syah: he didn’t know, it’s just describing something, that’s happening,
   she was living there, in the past (.)
Syah: this number three (. )it’s definite that she lived there for ten
   years=
Anna: so now she not living there anymore (. ) “has lived”
Syah: “°Anne has lived on her own for ten years°”
Anna: “Anne has lived on her own for ten years” (. ) if she was still
   living there then how do we know how long it has been right (?)
   (. )at this present moment (?)
Syah: at the present moment, she does not
Anna: ah (. ) she does not (?) ((laugh)) Our analysis, is it the same with
   the diagram here (?)((thumping sound)) look here (. )
   the speech time here (. ) she was still living (. )her speech time
   is over there, see(?) she was living there so the time line here is
   showing that she has lived there for ten years (. )isn’t that correct
   (?) ((laugh)) (. )
Syah: ((laugh)) (. )

Excerpt 1 – Verbalisation Activity

**Research Procedure**

**Data Collection Procedure**

It is noteworthy to highlight that the production of language, or
verbalisation activities performed in this study was crucial in
developing learners’ L2 acquisition. By analysing the learners’
verbalisation protocols, in-depth insights could be gained on how
the metalanguage was employed other than describing about the
L2. Central to this perspective is the issue of the mediating tool –
how metalanguage that is embedded in the learners’ verbalisations represents the overt thinking process that facilitates and enhances their cognitive ability to enable their L2 development (Swain & Lapkin, 1998, p.321).

To ascertain the role and value of metalanguage in promoting learners’ L2 understanding, verbal protocols were audio recorded as learners collaboratively worked on the CBI language task. A digital recorder was placed next to the laptop before the start of the session. The learners were asked to turn on the digital recorder themselves and say their names before starting the task. The researcher was present in the room during all the recordings; however, no interaction took place between the learners and the researcher once the learners started working on the tasks assigned.

In the verbalisation activity, the dyads (Alya & Elsa and Anna & Syah) were required to overtly say their thoughts out loud regarding their understanding of the tense-aspect of past time concepts presented to them in the explanatory slides (via the MS PowerPoint). No time restriction was imposed during the verbalisation activities; thus the dyads worked through the slides at their own pace. Additionally, the dyads were allowed to use their first language (Malay) along with the English language during the verbalisation activity. This was to ensure that they were able to express themselves clearly while describing and analysing the target grammar concepts presented on the explanatory slides. The average time taken by the dyads working on the CBI materials was about 56 minutes.

Analytical Procedure

The protocols were transcribed verbatim to identify how metalanguage was employed as a mediational tool by learners to make sense of, and hence construct knowledge of the linguistic concept in question. In particular, the protocols were categorised and coded following Swain et al.’s ‘Languaging types framework’ (2009) (see also Harun et al., 2014). This framework consists of ‘Languaging Unit(s)’ (LUs), also referred to as ‘learners’ talk referring to a conceptual unit’ (Swain et al., 2009, p.121). Learners’ use of metalanguage whilst they worked on the CBI language task
was coded and categorised under the following 5 concept-bound languaging units (LUs):

a) **Paraphrasing:** Repetition of the conceptual unit

b) **Inference-Integration:** Cross-reference of information the learners overtly made between the old and new pieces of information presented in the explanatory slides. This type of verbalisation also implied evidence of learning as the new piece of information was used by the learner to ‘think about’ the target concept in question.

c) **Inference-Elaboration:** Appropriation of the piece of information learnt that was presented in the slides. This act included learners incorporating it with several other pieces of old information that existed in the learner’s prior knowledge. This act also indicated evidence of retaining the information.

d) **Inference-Hypothesis formation:** Forming of hypothesis based on the concepts learnt.

e) **Analysing:** Application of the newly gained knowledge to a sentence / example given encompassing that performed during the evaluation of the structural pattern of the sentence.

Each instance of the verbalised explanation produced by each learner as he/she responded to the explanatory text presented on each slide was counted as one ‘languaging unit’ (Swain et al., 2009, p.11). In addition, the series of ‘languaging unit’ entailed one ‘languaging sequence’ (Knouzi et al., 2010, p.31). Subsequently, analysis of the full sets of ‘languaging units’ in the data then helped to provide the role and value of the metalanguage as the learners attempted to “consolidate their existing knowledge” or even to generate their new linguistic knowledge (Swain & Lapkin, 1995, p.374).

The data consisting of different types of Languaging Units were quantified to allow the researcher to assess the degree of the cognitive process that took place with respect to the learners’ attempt to gain conceptual understanding of the grammar concepts in question. Hence, descriptive statistics via SPSS were used to measure frequency of the metalanguage employed by learners in facilitating their L2 development. This was followed by a qualitative analysis from the transcribed protocols, to provide access to the interaction
as it took place in the L2 learning sessions. For this purpose, a microgenetic analysis or the “study of the origin and history” of a particular event (Gánem-Gutiérrez, 2008) was employed to examine the change in the language development as it occurred. In this case, the microgenetic analysis helped to ascertain how the metalanguage was used as a mediating tool during the learners’ actual L2 learning process.

To exemplify the procedure, below is an analysis and coding procedures of the languaging units/languaging sequence of a protocol by Alya & Elsa as they overtly explained their understanding (Excerpt 2) in response to the grammatical concept presented

<table>
<thead>
<tr>
<th>Language Units in a Languaging Sequence</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elsa: //“SUMMARY” (.).”Viewing frames, summary“(.) “Maximal viewing frame“(.) ”The bus went from city A to city B”(.). “The non-progressive (’went’) signals that in our mind we see the whole route of the bus journey from city A to city B and includes“(.) “The beginning point of the bus route from City A as well as (.).”the ending point of the bus route in City B can be seen clearly“(.) “Thus the non-progressive’ verb –went reflects the perception of a maximal viewing frame of a scene of the bus route from city A to City B “(.). //</td>
<td>Reading (not coded)</td>
</tr>
<tr>
<td>Alya://°° “non-progressive form”°(.)”non-progressive°°” “non-progressive°°”//</td>
<td>Reading (not coded)</td>
</tr>
<tr>
<td>Alya: //°”Not progressive °”//</td>
<td>Rereading</td>
</tr>
<tr>
<td>Elsa: //°° the non-progressive’ verb –went°°” (.) reflects the perception of a maximal viewing frame of a scene of the bus route °°” (.) mm OK (..)//</td>
<td>Rereading</td>
</tr>
<tr>
<td>Alya: “Restricted viewing frame”(.). “The bus was going from city A to city B”(.).”The use of ‘progressive’(‘was going’) signals that in our mind we see only part of the scene of the bus route from city A to City B”(.). “The beginning point of the bus route from City A and the ending point of the bus route in City B cannot be seen clearly as the speaker is focusing in the progress of the event” (.).”It indicates a minimal view of the bus route, thus the progressive form – ‘was going’, reflects a restricted viewing frame of the scene “(.).</td>
<td></td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Languaging Units in a Languaging Sequence</th>
<th>Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alya: it’s not clear here ((laugh))//</td>
<td>Self-assessment</td>
</tr>
<tr>
<td>Elsa: //not clear ((laugh)) //</td>
<td>Self-assessment</td>
</tr>
<tr>
<td>Alya: // from this two viewing frames (.) it’s the whole route and the event is in the past (.) that is ‘past tense’ (.) but if it’s restricted, the past event is partly seen in our mind (.) the speaker then will describe it as restricted because it is seen as in progress (.) But here it is described as in progress right (?) in progress (.) the event is in progress and not complete (.) if the other one, it’s is already completed (.) so if here it’s ‘was going’, then it’s still not complete because it’s in progress (.) but if we use ‘past tense’ like in ‘went’, we indicate to others that the event described is complete and has occurred in the past (.) it’s already done(.) Oh(.) OK (?)</td>
<td></td>
</tr>
</tbody>
</table>

Elsa: OK

Each segment within [///] constitutes one languaging unit

*Excerpt 2 – Languaging Units in a verbalisation Activity*

**RESULTS AND DISCUSSION**

The aim of this study was to gain insights on how learners made use of metalanguage as a regulatory tool to mediate and enhance their thinking process in facilitating their L2 development. Generally, metalanguage referred to how learners used their general understanding of the language to describe a language.

To assess the degree of cognitive process involved, in which metalanguage was employed to reflect on the understanding of the grammar concepts in question, data consisting of different types of Languaging Unit, were quantified. Descriptive statistics were used to measure the frequency of metalanguage use by the learners in facilitating their L2 development. Figure 2 presents the types and distribution of languaging units (LUs) produced by the 2 dyads while working on the CBI language task. Overall, both dyads produced 203 languaging units consisting of analysing, paraphrasing, integrating, elaborating and making hypothesis regarding the grammar concepts presented in the explanatory slides.
Specifically, the *Paraphrasing* type of LUs (43%) was the most frequently produced by the dyads. These were followed by *Analysis* type of LUs (29%) and *Inference-Integration* type of LUs (24%). The type of LUs least deployed by the dyads as they attempted to solve the L2 linguistic tasks were *Inference-Hypothesis formation* and *Inference-Elaboration*, both at 2% respectively. Findings reported in Figure 2 indicate that the learners seemed to be engaged in the use of paraphrasing or the act of repeating overtly the conceptual unit in question. However, evidence that they were also actively involved in “cognitive complex on-task talk” (Knouzi et al., 2010, p. 30) that focused on attempts to understand the target conceptual unit was also prevalent, and can be clearly seen in the greater percentage of *Analysis* and *Integration* type of LUs.

The wide range of the types of languaging units employed by the learners through their verbalisation activities also shows the breadth and depth of the learners’ explanation in reflecting about the target language. The data also implies a level of sophistication in learners’ explanation or metalanguage articulated in their attempt to establish the form-meaning relationships associated with the grammar concepts. Although Paraphrasing was the most frequent type of

Language unit deployed by the learners, the act of repeating the conceptual unit as it is reflected in the explanatory slide indicates the deep cognitive process that the learners were engaged in during their verbalisation activity. In this instance, the use of paraphrase in their metalanguage acted as a cognitive tool to sustain their focus on the crucial information relevant to the tasks, such as to frame the target form and isolate the problematic language item from its context. Additionally, the manifestation of Analysis and Integration Languaging Units in the learners’ metalanguage also indicated sophisticated reasoning patterns that learners employed in expounding their metalinguistic knowledge during the verbalisation activity. Accordingly, the employment of various type of languaging units revealed how the articulated metalanguage helped to support learners’ conceptual understandings as well as how it helped them to manage the task at hand (Gánem-Gutiérrez, 2008, 2009; Gánem-Gutiérrez & Harun, 2011). The results also corroborate with studies conducted by Swain and colleagues (2008, 2009, 2010), in which talking about the language allowed the learners to “articulate and transform their thinking into an artificial form” (Swain & Deters, 2007, p.822), and which subsequently made them “available for scrutiny” (Swain, 2000, p.104). The findings reported in this study are in line with the those documented by Knouzi et al. (2010, p.45). Both the studies showed that learners employed different types of languaging units to help them to make connections between the different pieces of knowledge available, hence helping their thoughts become more organised. Moreover, learners’ focus was also found to have shifted from exclusively form-focused reflection to an emerging semantic-focused reflection of the grammar concepts in question. Hence the findings in this study support the claims made in the literature about the crucial role of metalanguage as a form used to mediate solutions to complex problems and tasks (DiCamilla & Anton, 1998; Knouzi et al, 2010, Negueruela, 2008; Suzuki & Itagaki, 2009; Swain et al, 2009).

However, in order to gain precise insights into how metalanguage is employed by the learners to mediate their emerging understanding of the grammar concepts in question, a microgenetic analysis was next employed. Specifically, this involved analysing the process of development that occurred as it unfolded during the interaction. The
analysis of the languaging units helped the researcher to ascertain how metalanguage was employed as a tool during the actual learning process to assist the learners in structuring and organising their thoughts, and ultimately achieve their intended L2 development.

To further illustrate how the learners used the metalanguage as a tool to regulate their L2 learning while attempting to accomplish the linguistic task assigned, the following excerpts reflect how their understanding came to being during the CBI collaborative verbalisation session. For this purpose, learners’ verbalisations were analysed as they were making sense of the conceptual units on the present perfect, simple past and past continuous tenses found in the English language system.

**Paraphrasing**

The paraphrasing act identified in the dyads’ verbalisation activity came in the form of repetition of the conceptual unit, and which simultaneously also reflected the learners’ strategic behaviour to promote their understanding.

For instance, in Excerpt 3 (LU7), the learner, Alya, employed the paraphrasing LU to make sense of the grammar concept - ‘was living’ and ‘has lived’. She initially deployed the language by paraphrasing the concept that she had understood from the explanatory slide before integrating her understanding of the particular concept with the one found in the diagram on the explanatory slide.

**Excerpt 3 - Paraphrasing**

For instance, in Excerpt 3 (LU7), the learner, Alya, employed the paraphrasing LU to make sense of the grammar concept - ‘was living’ and ‘has lived’. She initially deployed the language by paraphrasing the concept that she had understood from the explanatory slide before integrating her understanding of the particular concept with the one found in the diagram on the explanatory slide.

**Inference-Integration:**

This verbalisation act consists of the learners using information presented in the previous cards in the attempt to understand the structure of the given sentence. In this case, the learners tried
to cogitate or reflect upon the specific concept in question by integrating the new piece of information with the information that they previously encountered on the earlier explanatory slides.

LU8 “Anne has lived on her own for ten years”(.) she has been living by herself for the past ten years (.). The diagram shows in the past and it extends until the present moment but (.). but ‘has lived’, ‘has lived’, ‘has lived’ on her own’(.) at this present moment she is still living on her own (.). in the diagram, the ending of the time line of the event extends until the present moment (.). ah-huh, that is right

Integration

LU9 OK(.) the event in the second and third sentence is viewed from a restricted viewing frame (.). and the first sentence is viewed from a maximal viewing frame, like the previous slides(.). OK (..) that’s right

Integration

Excerpt 4 - Inference Integration

Excerpt 4 illustrates how the learner, Alya, initially deployed the language to paraphrase what she had understood from the given sentence – ‘Anne has lived on her own for ten years’. This is followed by integrating her understanding of the present perfect concept (‘has lived’) with the given diagram in the explanatory card. The integration attempts were evident when she tried to make the connection between the current information presented on the current card to fit the pieces of information found in the previous explanatory cards. This was clearly illustrated as she tried to frame the different past time concepts in English – ‘lived’ and ‘has lived’ (LU8), followed by her newly acquired understanding of the concept of viewing frames that were presented in the previous explanatory slides (LU9).

Inference-Elaboration:

In this type of LU, the learners showed evidence of retaining the information regarding the grammar concept that were previously presented. This was successfully performed by appropriating the information through incorporating the particular grammar concept to existing prior knowledge in their cognitive system. This act also
involved the learners making a contrastive analysis of the structure of the given sentences.

LU9  If I look at this line (.) the line is extended until the present moment (.) ‘has lived’ (.) Anne has lived by herself for ten years (.) but why (?) she’s still living although the event of her living there started at one point in the past (.) **so of course it’s in the past, but the duration of that event ‘living’ extends until the present moment (.)**  

**Analysing**

LU10  So, what I can understand here is that the different verbs in the sentences here, like ‘lived’ and ‘was living’ (.) give different meaning especially if the event is completed or not, or in progress, and also include the boundaries (.) **that different meaning can also be viewed by the different boundaries indicated in the frames (..)**

**Elaboration**

*Excerpt 5 - Inference-Elaboration*

Excerpt 5 demonstrates how the learner, Syah, continued to verbalise the cognitive conflict that she faced in tackling the grammar concept of ‘has lived’ (LU9). The use of marker ‘so’ prefacing her elaboration (LU10) indicated her effort to reconcile and retain what she had learned in the previous cards, like ‘viewing frames’ and to incorporate it with her new knowledge in the current slide. Hence, her elaboration of the concept was beyond what was stated in the explanatory slide. This was clearly manifested through her attempts to make comparisons of the relevant verb forms, boundaries and viewing frames (LU10).

**Inference-Hypothesis formation**

In this type of LU, the learners attempted to form a hypothesis based on the knowledge that they had gained or understood.

In excerpt 6, Syah again attempted to validate her understanding of the target grammar concept in question – ‘present perfect – has lived’ through the clues found on the slide (Knouzi et al., 2010, p.40). This was also done by looking at other possible meanings that could comparatively help her to understand the target concept. The progression of this type of LU was followed by her talking through in-depth about the concept as she tried to integrate the information presented in the previous slides encountered (LU12) on ‘viewing
frames’, and the different concepts of tense-aspect found in English past time – i.e., the concept of past tense and the past progressive.

**LU11** for example, *if I am viewing an action that is in the past but the event is linked to the speech time, or present moment then the verb form to be used is the ‘present perfect’ (.) other viewing frames will use other forms.*

**LU12** What I can understand from this slide is that, it’s explaining the ideas from the previous slides that there are only two viewing frames, restricted and maximal(.). One showing the event in progress and one showing the event that is already completed (.). I use past tense when it’s maximal and progressive when it’s restricted (.). How I see the events also depends on the boundaries, whether it’s in the box or outside the box (.). But all the events here are those that occurred in the past (.).

**Excerpt 6 - Inference-Hypothesis Formation**

**Analysing**

This type of LU involved the learners applying their newly acquired knowledge to a specific sentence/example given in the explanatory slides. This includes a detailed examination of the structure/grammar concept as the basis for interpretation of the target tense-aspect concept of past time English.

**LU6** but we don’t know if she’s still living there at the present moment (?) look at this diagram, restricted view (..) where are we (?) there, we are (…) speech time (..) so how do I explain this (.) wait (.) wait (.) in progress (.) so it’s not complete yet so it’s restricted view (.) the endpoint is unknown (.) even now

**LU7** ah-huh (.) *what is this dotted line(?) meaning that it’s not complete yet(?) ((laugh)) so at this present moment (.)

**LU8** so, it was only during the time we met her (.) previously, she was living when we met her (..)

**Excerpt 7 - Analysing**
Evidence of leaners using their metalinguistic knowledge to analyse the grammar concept in question is also shown in Excerpt 7. In this case, Elsa attempted to gain a complete understanding of the past continuous verb (‘was living’) by regulating her thoughts through several means – integrating the piece of information gained from the explanatory slides regarding her understanding of the speech time concept and the time of occurrence of the event (LU6), followed by an analysis of her understanding regarding the semantic aspect of the continuous verb form to illustrate an event or action as being in progress (LU7). Consequently, her strategic behaviour (LU6 and LU7) helped her to become conscious of the semantic property of the continuous verb form (i.e., ‘was living’) as well as to rationalise the reason behind its use (i.e., to indicate a progress of an action at a given time in the past) that further helped her to reach an accurate understanding of the target concept successfully (LU8).

The findings of this study corroborate those documented in other studies conducted within the Sociocultural framework (Swain & colleagues 2008, 2009, 2010, 2011; Negueruela, 2008; Negueruela & Lantolf, 2007). Specifically, analysis of the different types of LUs identified in the metalanguage articulated by the learners suggests that it can act as an effective regulatory linguistic tool for learners to achieve a better understanding of the target language in question.

It is important to note that this study was framed within Sociocultural-theory, which views the use of language as being “a critical device for mediating cognitive development”, (Anton & DiCamilla, 1998, p.235), the key task in L2 learning is not so much about mastering the metalinguistic aspects of the linguistic feature (i.e., grammatical concept); rather it centres more on helping learners to understand the meaning potential made available by the grammatical concept and to further provide assistance on how they can “manipulate concepts to serve their communicative needs” (Negueruela, 2008, p.211). Hence, learners’ understanding of the linguistic knowledge is not only based on “knowing the metalinguistic information”, but also on “constructing and understanding of the information that has a direct influence on written and oral communicative development” (Salaberry & Lafford, 2006, p.14).
CONCLUSION

The role of metalanguage manifested through learners’ verbalisation is regarded as a crucial tool for them to “intentionally organise and control their mental processes during the performance of cognitively complex tasks, and discover meanings and connections” (Knouzi et al., 2010, p.24). In essence, the findings of this study are consistent with others that have reported the significant role of explicit knowledge in promoting L2 learning (Fortune, 2005, Negueruela, 2008, Storch, 2008, Swain, 2008, 2009, 2010). An important finding is that instruction consisting of explicit rule-presentation followed by communicative practice can guide the learners to focus on specific features in the input and draw their attention to the gap that exists between their knowledge and the input (Long, 1991).

In the case of metalanguage deployed by learners and manifested through the use of LUs, the study findings have established the important role that metalanguage plays in mediating and facilitating learners to extensively understand L2 grammar concepts. Specifically, metalanguage is used as an effective reasoning behaviour by the learners, to focus their attention on a particular linguistic concept in their attempt to make sense of it. This is done by: i) integrating the newly acquired metalinguistic knowledge gained in the current explanatory slides with the ones found in previous slides, ii) deploying paraphrasing and analysing strategies to frame the new concept learnt in order to fit or reconcile it with previous information of concepts encountered, and iii) making a hypothesis and elaboration pertaining to the metalinguistic knowledge gained.

It is noteworthy to highlight that much research is still needed on the pedagogical applications of metalanguage in language instruction. However, by analysing the actual nature of metalanguage manifested in the verbalisation protocols, this study has established the crucial role that metalanguage plays as an effective learning strategy for learners to develop their L2 learning ability.

ACKNOWLEDGEMENT

This work was supported by Universiti Sains Islam Malaysia [Grant Number: PPP/GP/PPKPK/ FPBU/30/13515].
REFERENCES


APPENDIX 1

Transcription conventions

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>[</td>
<td>Indicates overlap with portion in the next turn that is bracketed</td>
</tr>
<tr>
<td>[</td>
<td>Indicates overlap with portion in the next turn that is similarly bracketed (used when the single bracket is used in the previous line and or turn so that they will be no confusion regarding what brackets correspond to.</td>
</tr>
<tr>
<td>?</td>
<td>Rising intonation</td>
</tr>
<tr>
<td>((</td>
<td>Comments enclosed in double parentheses</td>
</tr>
<tr>
<td>.</td>
<td>Brief Pause</td>
</tr>
<tr>
<td>(...)</td>
<td>Longer pause</td>
</tr>
<tr>
<td>:</td>
<td>Elongation of a syllable</td>
</tr>
<tr>
<td>o</td>
<td>Reduced volume – soft voice</td>
</tr>
<tr>
<td>o o</td>
<td>Reduced volume - whispered</td>
</tr>
<tr>
<td>CAP</td>
<td>Emphasis/ stress</td>
</tr>
<tr>
<td>“ “</td>
<td>Reading aloud</td>
</tr>
<tr>
<td>=</td>
<td>Latching / Linked or continuing utterance (when one starts speaking immediately another has finished)</td>
</tr>
<tr>
<td>Italics</td>
<td>Translation into English</td>
</tr>
<tr>
<td>→</td>
<td>Lines to be discussed in the text</td>
</tr>
</tbody>
</table>