Concept Based Instruction for Enhancing Understanding and Use of English Tense and Aspect Markers by Algerian Learners of L2 English

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Abstract

This study reports on an investigation of the potential of Concept-Based Instruction (CBI) for enhancing EFL learners' understanding of the concept of tense/aspect in English and their use of associated forms; past simple, past continuous and present perfect. CBI was compared to a traditional grammar presentation model based on PPP. Two intact classrooms (total N = 45 participants) Arabic native speakers from an Algerian University participated in the study. The study also reports on the role of verbalization as a key component of CBI and compared individual versus dyad-based verbalization. Finally, the study reports on the participants' attitudes towards the two different types of pedagogical intervention. Drawing on a pre-post-delayed post-test research design as well as qualitative analysis of verbalization, the study revealed the effectiveness of the CBI model -over traditional instruction- for improving the participants' understanding of the concept of tense/aspect as well as their use of the three target forms. The qualitative analysis revealed interesting insights into the way the participants used language to enhance their metalinguistic understanding; interestingly, no difference was found regarding verbalization mode with both individual and dyad-based modes appearing to be equally useful as mediational tools to facilitate understanding of the target concept. The study also revealed that participants appeared to have more positive attitudes towards the traditional treatment than CBI even though the latter provided better results.

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Dedication

To the woman who carried me in her womb for nine months, has taken care of me all my life, has always been there and has loved me, to my mom “Ouarda”: thank you for my life.

To the memory of my mother-in-law “Souad”: thank you for Zakaria.

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Introduction

1.1 Background of the study

Being a fundamental aspect of language, grammar has always received considerable attention from teachers and researchers. The role grammar plays in language classrooms has been subject to debate since the early Grammar Translation Method (GTM). At the time of GTM, teaching languages meant teaching grammar and translation. Students were expected to learn an endless list of grammar rules and vocabulary, and their translations (Richards & Rodgers, 1986). Consequently, the learning process turned to be a tedious and disliked experience. GTM received harsh criticism due to its dependence on memorization of grammar rules and lack of communicative activities (Richards & Rodgers, 1986).

Since then, a number of approaches and methods have emerged seeking for the best way to teach languages. Some of these new approaches have promoted learners' communicative and speaking skills. Thus, prompting questions about the value of grammar in language classrooms. Some approaches such as, the Direct Method, advocated a total rejection of the explicit presentation of the grammar rules, whereas, others such as the Audiolingual Method called for an inductive form of grammar presentation (Richards & Rodgers, 1986). In the early 1980's, the domain of language teaching had seen a revolution with the appearance of the communicative language teaching (CLT) (Richards & Rodgers, 1986). CLT has served as an umbrella term for a number of pedagogical approaches such as Natural Approach, and Task-Based Instruction, to name only few (Negueruela, 2003). These CLT inspired approaches have placed emphasis on meaning based interaction (Negueruela, 2003).

One of the issues with most of these approaches is that they "lack a theory of language that is able to explain communication in a more meaning-based conceptual fashion" (Negueruela, 2003, p.144). According to Negueruela and Lantolf (2006), research into grammar teaching should focus on the quality of the grammatical knowledge presented to learners along with its

functionality. In this way, learners can appropriate the grammatical knowledge and hopefully become able to access it when they need to use the language. To this end, and based on the work of Gal'perin (1989, 1992), Negueruela (2003) and others have proposed that the grammatical knowledge should be organized around concepts as a minimal unit of instruction rather than discrete grammar rules, materialization of these conceptual units through didactic models (SCOBA), and verbalization of these concept-based explanations in order to foster understanding and internalization of the target concepts (see Section 2.3.4).

Negueruela and Lantolf's point of view has been influenced by Vygotsky's sociocultural theory (SCT) (Negueruela & Lantolf, 2006). Rooted on the work of Vygotsky, SCT is based on the idea that human consciousness develops "through the dialectical unity of our biologically endowed brain and 'auxiliary stimuli' appropriated during participation in social practices". The appropriation of these auxiliary stimuli, which are humanly created artifacts, to regulate one's or other behaviour, is known as mediation, that is a fundamental notion in Vygotsky's theory (Lantolf & Thorne, 2007) (see Chapter 2).

Mediation, according to Lantolf and Thorne (2006), is defined as "the process through which humans deploy culturally constructed artifacts, concepts, and activities to regulate (i.e. gain voluntary control over and transform) the material world or their own and each other's social and mental activity" (p.79). In other words, humans do not interact directly with their environment but rather they use physical tools such as pen, computer, calculator, etc. and/or symbolic tools such as numeracy, logic, rationality, language, etc. These culturally constructed artifacts provide humans with the ability to control, regulate, and change themselves and the world around them. Language, according to Vygotsky, is the most powerful mediational tool that humans use to regulate themselves and others (Lantolf & Poehner, 2014) (see Chapter 2).

The social environment plays an important role in SCT since it is considered as a source of development (Lantolf & Poehner, 2014). Lantolf and Thorne (2007) suggested that

"developmental processes take place through participation in cultural, linguistic, and historically formed settings such as family life and peer group interaction, and in institutional contexts like schooling" (p. 197). Vygotsky (1994) proposed that humans do not just adapt to the changes in the circumstances of their social environment but these changes shape their psychology. As evidence, Vygotsky and his colleague Luria conducted an experiment in the areas of Uzbekistan and Kirghizia and they found that formal schooling would result in 'the transition from situational to taxonomic conceptual thinking' (Luria, as cited in Lantolf & Peohner, 2014, p.28). In SCT what matters is the relationship that exists between the individual and the environment not the environment as such (Lantolf & Poehner, 2014).

Vygotsky's work and thinking formed a basis of what Gal'perin (1989) called stepwise formation of mental actions (Arievitch & Haenen, 2005; Haenen, 2001; Lantolf & Poehner, 2014), also referred to as Systemic Theoretical Instruction (STI) and/or Concept Based Instruction (CBI) (Lantolf & Poehner, 2014). Gal'perin proposed a pedagogical model that consisted of three general stages and two substages (Lantolf & Poehner, 2014). At first, the model followed fixed sequential procedures not subject to any change (Haenen, 2001). Negueruela (2003) argued that the application of the idealized form of Gal'perin's model might be challenging due to the dynamics of the classroom, time constraints, the curricula, etc. Therefore, recent SCT researchers have adapted the model while respecting the principles upon which the model was developed by Gal'perin (see Section 2.3).

As mentioned above, SCT rejects the structural views that see language as a formal abstract system acquired through separate mechanisms and distinct from its social environment (Mitchell & Myles, 2004). SCT aligns itself with meaning based and usage based theories, where language is defined through its interactive functions rather than its formal system (Lantolf & Poehner, 2014). It, thus, relies on a Cognitive Grammar (CG) view of language to provide a detailed account of the language as a system (Lantolf & Poehner, 2014). Lantolf &

Poehner (2014) suggested that a number of principles that underline the Cognitive Grammar view of language correspond with what has been advocated by SCT (see Chapter 3).

1.2 Statement of the problem

Situated in North Africa, Algeria is known for its cultural and linguistic diversity. The Algerian linguistic situation is described as very rich and very complex at the same time (Rezig, 2011). Today a number of languages are spoken in Algeria such as Algerian dialect (Derja), Berber, French, English, etc. However, the two main spoken languages in the country are: The Algerian Dialect (Derja) and Berber (Belmihoub, 2018). The former is an unwritten variety of Arabic, spoken by the majority of Algerians. It consists of a mixture of Arabic and French words. The Algerian dialect in turn has a number of other varieties that are more or less similar (Belmihoub, 2018). Hence, not the same dialect is spoken in the whole country. Berber consists of a number of different varieties: Chaoui, Kabyle, Mozabite and Tuerag (Belmihoub, 2018). Berber speakers can code switch between French, Algerian dialect and Berber (Belmihoub, 2018). Berber language, however, is considered as an official language in Algeria in addition to Modern Standard Arabic (MSA). The latter is only taught and used in schools and for administrative purposes.

In addition to the above mentioned languages, French is considered as a second language. It is the result of more than a century and a half of French colonialism (1830-1962). Due to its historical relation with the colonizer, “French language has lost much of its ground in the sociocultural and educational environments of the country” (Miliani, 2001, p.13). Heads are turning today to English as “ a magic solution” to all possible problems, economical, technological and educational ones (Miliani, 2001, p. 13). Since independence (1962), the Algerian government has put a number of policies to promote the teaching of English as a foreign language in schools and universities. The number of students enrolled in English departments at the level of Algerian universities increases every year (Belmihoub, 2018). Hence,

Algerian young people are becoming more and more motivated to learn English. Nevertheless, according to Rezig (2011), Algerian level of English proficiency is still weak. It ought to be mentioned that, studies about the Algerian linguistic situation, including the teaching and learning of English, are still in their infancy and the field suffers from a lack of scientific publications.

As most of the English departments in Algeria, the Department of English Language and Literature (DELL) at the University of Constantine 1 opens its doors each year to a number of students who want to major in English. Since the Algerian government follows an Anglo-Saxon higher education system referred to as LMD (Licence, Master, and Doctorate) (Rezig, 2011), students enrolled in the DELL will have to study three years to obtain a Licence (Bachelor) degree, two years for a Master's degree, and three to four years, sometimes more, for a doctorate (PhD) degree. English is used as the language of instruction at the DELL and learners are required to study a number of courses such as grammar, oral expression, written expression, English literature, etc.

I enrolled at the DELL on 2011 after passing my BAC (see Section 4.3.1). I remember back then I was enthusiastic to study English and full of hope to become an English teacher after five years of studies. I really enjoyed most courses except for grammar. As a student there, I used to study grammar twice a week, each session lasted approximately 1h 30 minutes. Grammar classes followed a traditional way of grammar teaching. Teachers usually started the lessons by writing on the board a number of examples and highlighting the grammar point that we were supposed to deal with during the lesson. The teacher then spent some time explaining the target grammatical point and after that he/she started dictating the rules. At the end of the session, we used to spend some time practising what we learnt during the session. Most practice was in form of fill-in the gaps exercises.

As a preparation for the exams, we were supposed to learn endless lists of grammatical rules and spend a considerable amount of time practising the grammar points that we addressed during the semester. By the end of the semester, students' grammar was generally assessed using a form of filling the gap exercises and a written production exercise

Based on my own experience as a student at the DELL, many students including myself had difficulties in learning and using the English grammar rules studied during the grammar lessons, especially English tenses. Although, we used to spend a lot of time learning the grammar rules and practising them, most of us were unable to use them outside the classroom. For example, when faced with real life communication, I was unable to decide on the right tense to use. Additionally, even if we were able to pass the test at the end of each semester, after a little time all the grammar learnt would be forgotten. Moreover, I used to find the grammar classes tiresome and useless. However, deep down I was convinced that grammar was important and I always thought there should be other ways to present grammar to learners that might be more interesting, helpful and easier to remember and use.

Therefore, in an effort to help Algerian learners better understand aspectual distinctions associated with the past tense morphology as well as to be able to use accurately three target forms (simple past, past continuous and present perfect), this study investigated the potential of CBI as a teaching approach aimed at enhancing FL learning at University level.

1.3 Research Questions and Aim of the Study

This study thus addressed the following research questions:

RQ1- What is the immediate and longer term (three weeks) effect of CBI on improving Algerian learners':

(a) understanding of the concept of tense/aspect in L2 English and;

(b) accurate use of the target forms (past simple, past continuous and present perfect)?

RQ2- Is CBI more effective than traditional instruction (TI) for improving Algerian learners':

(a) understanding of the concept of tense/ aspect in L2 English and;

(b) accurate use of the target forms (past simple, past continuous and present perfect)?

RQ3- Which type of verbalization, individual or dyad-based, leads to higher levels of improvement in learners'

(a) understanding of the concept of tense/ aspect in L2 English and;

(b) accurate use of the target forms (past simple, past continuous and present perfect)?

RQ4- What are the participants' attitudes towards the pedagogical intervention they received (either CBI or TI)?

In order to answer these research questions, the study was conducted during the first semester of the academic year 2018/2019 at the Department of English Language and Literature (DELL), University of Constantine 1, Algeria. The study included two intact classrooms. The participants were second year students enrolled in the English Language Bachelors program and all of them consented to take part in the study (see Appendix A). Both groups were taught by the researcher for the whole semester (4 months). The same data collection procedures were followed for both groups. The data collection was conducted throughout six sessions of 1h 30min each (see Chapter 4).

To cover all the facets of the study a number of research tools were used (see Chapter 4) for details:

1- Personal Background Questionnaire (PBQ) to collect data about the participants' language learning experience, and to gather information about their English level proficiency.
2- Pre/post Metalinguistic test (MLK) to assess learners' understanding of the concept of tense/aspect.
3- Pre/post Language Use test (LUT) to assess learners' use of the three target forms dealt with in the study (past simple, past continuous and present perfect).
4- Verbalization audio recordings to trace back learners' developmental paths.
5- Concept- Based Questionnaire and Traditional Instruction Questionnaire to gather data about learners' attitudes towards the treatments they received.
6- Details regarding the design of CBI and TI materials used in the study and their exercises are also included in Chapter 4.

1.4 Structure of the work

The thesis consists of seven chapters. The first chapter introduces the work by providing a general overview about grammar teaching and sociocultural theory (SCT), information about the Algerian educational system and stating the problem of the study. It also includes the research questions. The introduction ends with a brief summary of the content of the dissertation. The second chapter is divided into three main sections. Section one defines SCT main tenets and the CBI model. The second section discusses the role of practice in promoting learners' use of an L2. The last section of the chapter deals with an area of SLA that has been neglected by researchers that is learners' attitudes towards grammar instruction. The third chapter is divided into three sections as well. Section one describes the relationship that exists between SCT and Cognitive Linguistic (CL). Section two provides a description of tense/aspect in English, and the last section of the chapter describes tense and aspect in Arabic. The fourth chapter describes the methodology and the procedures used to gather data, and the procedures used to organize,

code and analyse the data gathered through the different research tools used in the study. Chapter five presents the results of the study and Chapter six discusses these results. The last chapter, chapter seven, concludes the dissertation by discussing the implications of the study, some of its limitations, and looks at future directions for research in the field.

Chapter 2: Literature Review (Part I)

2.1 Introduction

The present chapter is divided into four sections. Section one explores Sociocultural Theory main tenets. Section two presents the core concept of the present work; that is, Concept Based Instruction (CBI), also referred to as Systemic Theoretical Instruction (STI), developed by Gal'perin (1989). The CBI model will be defined and key concepts will be introduced. Section three discusses the role of practice in development of learners' understanding and use of a language. Practice forms a core concept in SLA, nonetheless, the field has not yet been well explored and results are still inconclusive. Thus, the role of practice will be looked at from a SCT perspective as well. Finally, the last section will explore another area which still requires attention; that is, learners' attitudes towards grammar instruction.

2.2 Sociocultural Theory

Sociocultural Theory (SCT) found its origin on the work of the Russian psychologist Lev Vygotsky during the 1920's and 1930's. Vygotsky and his colleagues started to work on a socio-historical approach, Sociocultural Theory, to understand the human thinking and how it differs from other living creatures. Vygotsky's research program objectives were (a) to highlight the centrality of the social environment in developing the mental functioning of human beings by proposing a key concept, *mediation,* that connects the private to the social, and (b) to find a solution to the gap that exists between theory and practice by proposing a unified model within which theory and practice are in a dialectical relationships, *praxis* (Lantolf & Thorne, 2007; Lantolf & Peohner, 2014; Lantolf, Thorne, & Poehner, 2015; Negueruela-Azarola & García, 2016). Mediation and praxis, according to Gánem-Gutiérrez (2013), are the "two core concepts underlying current conceptualisation and application of Vygotskian theory to L2 learning" (p. 130).

2.2.1 Mediation.

The concept of mediation was conceived as a reaction to what was known in the 20th century as a "crisis in psychology" (Lantolf & Thorne, 2007). Human development was studied following two directions: (a) a natural science approach to research (e.g. Behaviourism) that focused on the study of elementary, or biologically endowed, mental processes, such as involuntary memory and attention. These processes are automatic and shared with other species, especially primates (Lantolf & Thorne, 2007). The natural science approach drew on description as a methodological tool to describe human behaviour in the social environment (Negueruela-Azarola & García, 2016); (b) a humanistic approach that focused only on higher mental processes such as voluntary memory and attention, problem-solving, etc. using introspection as a research tool to understand human development (Lantolf & Thorne, 2007; Negueruela-Azarola & García, 2016).

As a response to the "crisis in psychology", Vygotsky (1987) proposed a new way of thinking about development by which the human being was not seen any more as only social or only private. Vygotsky connected the social and the private through *mediation*. The human brain is equipped with biological processes that he called "lower mental processes". These processes are shared with all other species. They are automatic and intuitive. What makes humans unique is their ability to control those intuitive processes by appropriating stimuli from the participation in the social environment and using them as psychological tools to regulate their mental functioning (Lantolf & Poehner, 2014; Lantolf et al., 2015). In other words, humans do not interact directly with their environment but rather they use physical tools such as pen, computer, calculator, etc. and/or symbolic tools such as numeracy, logic, rationality, language, etc. These culturally constructed artifacts provide humans with the ability to control, regulate, and change themselves and the world around them. Mediation is thus defined by Lantolf and Thorne as "the process through which humans deploy culturally constructed artifacts, concepts,

and activities to regulate (i.e. gain voluntary control over and transform) the material world or their own and each other's social and mental activity" (2006, p.79).

Humans use physical tools, such as a shovel to dig a hole, to change the world around them. These physical artifacts give more power to humans than their endowed natural abilities, i.e. using their hands. Physical tools are an outwardly stimuli used to change the external world (Lantolf & Thorne, 2007). Unlike physical tools, symbolic tools such as diagrams, music, art, etc. are inwardly directed mediators. They serve as auxiliary means to control and reorganize the brain's biological abilities. Symbolic mediation provide humans with the ability to control their intuitive processes and enable them with the ability to plan and look for alternatives on the mental plane before acting (Lantolf et al., 2015). For example, a human being is able to inhibit its natural ability of digging a hole using its hands, and think about using a shovel instead; whereas, a dog cannot (Lantolf & Thorne, 2007). Language, for Vygotsky, is the most powerful symbolic tool that humans use to regulate others and themselves, i.e. to be self-regulated (Lantolf & Peohner, 2014).

2.2.1.1 Regulation.

The process of self-regulation according to Vygotsky consists of three stages (Lantolf et al., 2015). The first step is object regulation. Object regulation can be best illustrated by the relationship of a parent to a child where a parent uses objects such as toys, colours, any concrete object to teach a child counting for example. The child behaviour is regulated using an object, the toy (Lantolf & Thorne, 2007). The second stage is other regulation where the behaviour of a child or even an adult is supported by another person (Lantolf & Thorne, 2007). As in a classroom where a teacher provides any form of support, explicit and/or implicit to direct and assist the learners behaviour. Other regulation is best demonstrated through the concept of the zone of proximal development (ZPD) (see below) (Lantolf & Thorne, 2007; Lantolf et al., 2015). The last step in the process of regulation is self-regulation where the person, adult or

child, is able to act or accomplish an activity with less or no support, material or human, at all (Lantolf & Thorne, 2007). In other words, the action is performed entirely inside the brain with no need for an external support. At this stage, the action can be said to have been internalized.

2.2.1.2 Internalization.

Internalization is "the process through which cultural artifacts, such as language, take on a psychological function" (Lantolf & Thorne, 2007, p. 203). It is, thus, the personal significance that individuals give to meanings appropriated from the social plane (Lantolf & Peohner, 2014). Meaning, according to Vygotsky (1986, p. 245), "is stable and corresponds to what is found in a dictionary" and sense "emerges when conventional meanings are brought into concrete practical activity" to pursue a personal goal. In other words, the meaning of the same concept may be used and interpreted differently by individuals in society, i.e. sense (Negueruela, 2003). Hence, from this perspective, meaning is social and sense is psychological (Lantolf & Peohner, 2014).

Therefore, higher mental processes such as planning and categorizing, cognitive resources that the individual can rely on to perform a task, are social in origin and function, and through internalization they become private (Vygotsky (1981), as cited in Lantolf et al., 2015), According to Lantolf & Poehner (2014), internalization connects what was at first social (interpersonal) to what becomes cognitive (intrapersonal). The process of internalization is a transformative process where the individual appropriates cultural artifacts that emerge from interpersonal communication, reshapes them and provides them with a personal sense that corresponds to the individual's needs (Lantolf & Poehner, 2014).

2.2.2 Praxis.

Praxis is defined as "*the dialectic unity of consciousness (theory/knowledge) and action that results in the creation of an object*" (Lantolf, 2008, p.13) (italics in the original). Vygotsky rejects the distinction between theory and practice (Lantolf, 2008). For Vygotsky, "theory

provides foundations for practice" (Gánem-Gutiérrez, 2013) and practice tests the theory (Lantolf, 2008). In education, praxis embodies the link between classroom instruction and practical activities (Lantolf, 2008).

As it has been mentioned in this chapter, the social environment plays an important role in developing higher mental processes. Vygotsky argued that the learning environment affects the learning process (Lantolf, 2008). Vygotsky, according to Lantolf (2008), "considered education to be a specific form of cultural activity that had important and unique developmental consequences" (p. 16). School, thus, forms an important constituent of the social environment that mediates higher forms of human thinking (Lantolf & Peohner, 2014). He suggested that the knowledge introduced in the school context is different from the knowledge that humans (children) acquire in their pre-school years (Lantolf & Poehner, 2014). In the school context humans behaviour is mediated by scientific concepts, whereas in the pre-school context humans behaviour is mediated by everyday/ spontaneous concepts (Karpov, 2018).

2.3.2.1 Scientific and everyday concepts.

The difference between Vygotsky's scientific (theoretical/academic) concepts and spontaneous (everyday) concepts has been highlighted in many publications such as Garcia, 2018; Karpov, 2018; Lantolf, 2011; Lantolf & Poehner, 2014; Negueruela, 2003; Swain, Kinnear, & Steinman, 2011. According to Vygotsky (1987), spontaneous (everyday) concepts are: (a) *Empirical*: They relate to concrete world experience such as everyday face-to-face interaction and observation of the world using the human senses. They develop during spontaneous social interaction; (b) *Situated*: They are context bound. They lack transferability; (c) *Unsystematic*: They cannot be used in relation with other concepts; (d) *Unconsciously Acquired* (implicitly acquired); and (e) they are usually *Superficial* and *Incomplete*.

In contrast, scientific concepts are: (a) *Abstract*; (b) *Context independent*: They can be recontextualized and transferred from one context to another; (c) *Systematic*: They are learnt

according to a certain system; (e) *Consciously Acquired*: They can be consciously manipulated by learners. According to Negueruela (2003) and Swain et al. (2011), consciousness is the most important characteristic of scientific concepts; (d) and scientific concepts usually encode complex notions that "reveal … the essential qualities of an entity or a process" (Lantolf & Poehner, 2014, p 61).

To better illustrate the difference between everyday concepts and scientific concept, consider the term 'uncle'. Children usually learn the concept of uncle by refer to the name of their uncles, example: Uncle Henry (Lantolf, 2008). 'Uncle Henry' represents the child's everyday concept. The scientific concept of uncle is a male sibling of the child's parents (Lantolf, 2008). The scientific definition of uncle encompasses all possible uncles. It can be recontextualized and transfer to another context.

When reviewing Vygotsky's work, Swain and her colleagues suggested that Vygotsky did not value one concept over the other nor did he suggest replacing one concept by another. Vygotsky (1987), however, claimed that both concepts have strengths and weaknesses. On the one hand, the empirical nature of spontaneous concepts make them easy to use (automatic); nevertheless, they are not flexible since they are context bound (Lantolf, 2008). On the other hand, the abstractness and context independent nature of scientific concepts make them malleable and transferable (Garcia, 2018), nonetheless, difficult to use since they lack personal experience (Lantolf, 2008). In this respect, scientific concepts are "detached from reality" and they are considered as mere "verbalism" (Vygotsky, 1987, p. 217). For scientific concepts to be used, they need to be linked to practical activity where spontaneous concepts dominate, i.e. praxis.

Although Vygotsky did not provide a concrete pedagogical model that represented the principles of praxis, praxis formed a basis of Gal'perin's (1967, 1979) model (see section below). When applied into language classrooms, praxis provided new insights into research and,

teaching and learning. Praxis called for the importance of properly organized concept- based instruction. Pedagogical intervention based on praxis views learning as a dynamic process where learners develop conceptual understanding through language mediation. Learning is not seen as a fix process where knowledge moves from teachers to learners but rather as a transformative process where learners have the opportunity to think about and form their own understanding of a concept. Learners need to engage in conceptual reflective tasks that help make sense of their communicative choices (Negueruela-Azarola & García, 2016).

2.3.2.2 The Zone of Proximal Development (ZPD).

According to Negueruela-Azarola and García (2016), SCT inspired approaches to L2 teaching must be based on mindful conceptual engagement where there is focus on the development of communicative abilities and at the same time the development of new ways of thinking where learners would be able to reflect on their communication. The Zone of Proximal Development (ZPD) is one of those concepts that embodies such principles for L2 teaching and learning.

The ZPD is one of Vygotsky's best known concepts. The ZPD is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). The ZPD refers to the distance between what the individual can do independently and what he/she can do with the help of a more knowledgeable person (Gánem-Gutiérrez, 2016). Evidence of development in the ZPD cannot be derived from traditional tasks where single snapshots of learners' performance are observed but rather from a longitudinal cultural historical perspective or what Vygotsky called the *genetic* method. From a Vygotskian view, what matters in development is the process not just the product (Gánem-Gutiérrez, 2016).

Development in the ZPD arises through the dialogical interaction either with another person or by talking to the self (Lantolf & Thorne, 2007). Through the notion of the ZPD, Vygotsky suggested that social interaction forms the basis for cognitive development. In other words, in the ZPD learners interact with teachers, peers and/or more knowledgeable persons to help them perform or understand a task. Therefore, social interaction is seen as a potentially powerful mediational tool to regulate the learners performance (Lantolf & Thorne, 2007). Moreover, the ZPD does not take the actual performance of the learners as an index of development, but rather, learners' development is assessed by the frequency and the quality of the mediational tools (Gánem-Gutiérrez, 2013). In other words, as long as learners decrease their reliance on mediation, e.g., through objects or teachers' assistance, they are said to develop, they are on their way towards independent performance, they are on their way towards self-regulation (Lantolf et al., 2015).

2.3 Concept Based Instruction

Although Vygotsky's work remained unfinished, it formed the basis for what Gal'perin (1989) called stepwise formation of mental actions (Arievitch & Haenen, 2005; Haenen, 2001; Lantolf & Poehner, 2014), at times referred to in the literature as Systemic Theoretical Instruction (STI) and/or Concept Based Instruction (CBI). By extending on the work of Vygotsky, Piotr Gal'perin (1989, 1991) developed a theory of developmental education (Lantolf & Poehner, 2014) that compromises three general stages and two subphases (Arievitch & Haenen, 2005; Haenen, 2000; Lantolf & Poehner, 2014). In the original model, Gal'perin put forward that the model followed a fixed sequential procedure not subject to any change (Haenen, 2001). However, recent researchers interested in the works of Vygotsky and Gal'perin have proposed more flexible applications and interpretations of the model (see Negueruela, 2003). In what follows, I will outline the various stages of the model which, eventually, informed this study.

2.3.1 Stage one: orientation in CBI.

One of the cornerstones of Gal'perin's model of stepwise formation of mental actions is *orientation*. According to Gal'perin, learners' first step into the learning task is through an extensive phase of orientation (Haenen, 2001). This orientation phase must be guided by an external medium (Kabanova, 1985). It must allow for the generalization of ability into other domains (Talyzina, 1981). Lantolf and Thorne (2006) explained that, orientation "determines what and how something is going to be done" (p.304). Therefore, the aim behind orientation is to provide all the necessary information to guide the learners' performance (Haenen, 2001). A deficit into the orientation phase would lead to poor and unsuccessful learning (Arievitch & Stetsenko, 2000).

2.3.1.1 Orienting Basis of an Action.

Haenen (2001) stated that Gal'perin introduced two sets of terms to explain his notion of orientation. The first term is *an orienting basis of an action* (OBA) "to refer to the whole set of orienting elements by which the learner is guided along the execution of an action" (p. 162). Kabanova (1985) defined the OBA as "a system of conditions, indicators and orientors which are necessary for carrying out the action" (p.5). The OBA is something that learners already have at their disposal that does not ensure the correct execution of an action. In other words, the OBA refers to learners' actual level of learning. Kabanova (1985) pointed out that the key into successful learning process is through a preliminary determination of learners' OBA that is affected by the type of instruction used in the classroom. Therefore, Gal'perin distinguished three types of OBA depending on the types of instruction learners receive: incomplete and empirical orientation basis, complete and empirical orientation basis, and complete and systemic orientation basis.

Incomplete and empirical orientation basis is the outcome of what Arievitch and Stetsenko (2000) named "Traditional Instruction" (p.74). This type of instruction provides learners with

only one part of the necessary conditions and tools for correct orientation (Arievitch & Stetsenko, 2000). The basic rules and regularities of an action remain hidden and unknown to the learners (Arievitch & Stetsenko, 2000; Kabanova, 1985). Learners are not provided with a holistic picture of the concept right away from the beginning and the concept is presented in separate themes (Arievitch & Stetsenko, 2000; Kabanova, 1985). Therefore, the quality of the learners' actions is negatively affected. The outcome of the learning process is unstable, poor and limited to the task, i.e. cannot be generalized (Arievitch & Stetsenko, 2000; Kabanova, 1985).

In complete and empirical orientation basis learners are provided with the whole system from the beginning. They have at their disposal all the conditions and rules that are necessary for the adequate performance of the action. These conditions are organized and presented in an orienting chart that is used as a mediational tool to help learners solve a set of tasks and problems (Arievitch & Stetsenko, 2000). Kabanova (1985) put forward that in this type of instruction "the orientation base is complete and imparted in a ready form for each separate theme" (p.6), i.e., this type of instruction provides learners with a complete orientation base. However, the outcome of this type of instruction remains task-related since it does not rely on theoretical concept (Arievitch & Stetsenko, 2000).

Complete and systemic orientation basis is the product of what Arievitch and Stetsenko (2000) named as Systemic Theoretical Instruction (STI)/ Concept Based Instruction (CBI), i.e. Gal'perin's stepwise formation of mental actions theory. The essence of this instruction is to provide learners with "a theoretical (conceptually based) generalization" that orients their performance in the subject of study as well as in other domains (Arievitch & Stetsenko, 2000; Kabanova, 1985). Learners are provided with a general method that involves a theoretical analysis of objects and events in various domains. It is a student centred, exploratory based instruction (Arievitch & Stetsenko, 2000). It involves an extensive use of charts, maps and

graphic models that are used as the orienting basis of the action from the beginning of the instruction (Arievitch & Stetsenko, 2000; Kabanova, 1985). CBI, thus, aims at providing learners with an appropriate and complete orienting basis of an action (OBA) (Lantolf & Thorne, 2006).

2.3.1.2 Scheme of a Complete Orienting Basis of an Action.

In CBI, theoretical concepts are presented in a form of scheme of a complete orienting basis of an action (SCOBA). They serve as an external medium to appropriately orient learners. Hence, SCOBA is the second term introduced by Gal'perin in his notion of orientation. It is an external, concrete materialization of the concept to be internalized (Lantolf & Thorne, 2006). SCOBAs are representations of the systematic conceptual knowledge that guide learners' performance in a task but can also be deployed to a broader array of problem solving activities (Lantolf & Thorne, 2006). Presented to the learners as didactic models, the SCOBAs are used to promote understanding not memorization (Lantolf & Poehner, 2014). Haenen (2001) pointed out that the content of these 'operational thinking schemes' is relatively easy to adopt and learn since they are presented in a clear didactic model.

The difference between an OBA and a SCOBA can be summarized as follows: a SCOBA is always constant; does not change since it is an external artifact, whereas, an OBA changes gradually during the learning process since it demonstrates the learners' development (Haenen, 2001). An OBA represents the learners' previous knowledge or their actual proficiency level, whereas, the SCOBA represents the desired and intended form of the OBA that directs learning (Haenen, 2001).

The SCOBA, according to Gal'perin (1989), includes six components: the intended outcome, objects, means of the action, and the necessary steps and conditions of the action put together into an orienting chart. The orienting chart provides the complete course and sequence of an action; "information about the execution of an action" (Arievitch & Haenen, 2013, p.160).

Therefore, many researchers argue that SCOBAs design can be a challenging task (Harun, 2013; Lantolf & Poehner, 2014; Negueruela, 2003)

Working with the orienting charts, i.e. SCOBAs, means that the action is executed at the material level (Arievitch & Stetsenko, 2000; Haenen, 2001). *Materialization* is the initial step in Gal'perin's model. It can be performed by "actual hands-on manipulation" of objects or their representations, such as the use of physical objects to help children solve arithmetic tasks (Arievitch & Stetsenko, 2000; Haenen, 2001). However, when the action is far more complex to be materialized in physical objects, the use of charts, maps and visual representations might be more appropriate (Haenen, 2001).

The importance of materialization in CBI draws on Vygotsky's sociocultural theory as outlined above. Vygotsky considered that "the source of mental action resides in the sociocultural world" (Lantolf & Thorne, 2006, p.305). Thus, humans' higher mental functions are mediated by physical and psychological tools appropriated from their social environment (see Section 2.2.1 above). The use of material aids (charts, graphs, maps, etc) that represent the structural, procedural, functional and content properties of the studied object, according to Gal'perin, fosters development (Karpova, 1977). When designing these charts two aspects might be taken into account: the quality of the charts (theoretical or empirical) and the manner of presentation (prefabricated or exploratory).

With regard to the quality of the orienting charts, Negueruela and Lantolf (2006) suggested that good orienting charts must be informative and generalizable, in the sense that they raise learners' consciousness about the resources that are available to them to achieve their intended goals across all contexts. Additionally, they must allow learners to communicate their intentions in the actual performance (Negueruela & Lantolf, 2006). With regard to the manner of presentation, SCOBAs can be ready- made, directly implemented to different tasks (Carpay, 1974), or, they can be constructed by the learners under the instructor's supervision. According

to Gal'perin, the active construction of knowledge is essential in promoting learners' deep understanding (Negueruela, 2003).

2.3.2 Stage two: verbalisation in CBI.

When the action is sufficiently learnt using the material support, "it is necessary to tear [it] away from its previous material support" (Gal'perin, 1969, p. 257) and to 'elevate' it to the verbal level (Arievitch & Haenen, 2013; Haenen, 2001; Lantolf & Thorne, 2006). The shift from the material support to the external speech is considered as a step forward in the process of internalization (Lantolf & Poehner, 2014). Lantolf and Thorne (2006) stated that at a later stage of the learning process, learners would rely on their symbolic verbal support to perform an action. They will no longer need the material support (e.g. SCOBAs) to mediate their activities. Their orienting basis of an action would be "more condensed and abbreviated" than it was when the action was performed at the material level. Verbalisation is, therefore, important since it helps the transition of the action from the material world to the mental plane (Haenen, 2001; Lantolf & Poehner, 2014).

Verbalisation is executed at two levels, the first level is what Haenen (2001) described as 'Communicated Thinking'. The second level is described as 'Dialogical Thinking' (Arievitch & Haenen, 2013).

2.3.2.1 Communicated thinking.

Communicated thinking is defined as the learners' ability to explain linguistically their understanding of the concept to others (Arievitch & Haenen, 2013). At this stage, learners need to communicate their thinking to another person. In other words, they externalize their thoughts. According to Arievitch & Haenen (2013), the action at this level is not yet mentally executed, i.e. it is not yet internalized, even if it does no longer depend on materialization. The action is still performed at the social level (Arievitch & Haenen, 2013; Haenen, 2001).

Gal'perin presented two arguments for the necessity of communicated thinking. Firstly, when the action is torn away from the material support it becomes theoretical (Arievitch & Haenen, 2013; Haenen, 2001). Learners at this stage are able to recontextualize their understanding of the concept beyond the activities performed in the classroom. Therefore, the action is generalized (Lantolf & Thorne, 2006). Secondly, the speech produced by learners at the level of overt speech meets the requirements of social communication since learners have to make themselves understood to others using the target language (Arievitch & Haenen, 2013; Haenen, 2001).

2.3.2.2 Dialogical thinking.

The second level is the dialogical thinking or "private speech" (Ohta, 2001). At this stage, there is a shift from explaining concepts to others, to explaining them to oneself. This shift, according to Gal'perin (1969) leads to the transformation of the overt speech structure into an audible image of the word in the brain. This 'audible image' is said to be stronger and more stable than the perceptual image and cannot develop until it passes through the stage of overt speech (Arievitch & Haenen, 2013; Haenen, 2001). Dialogical thinking, also referred to as 'speech minus sounds' or covert speech, still meets the requirements of communication since "speech is still the carrier of the action and its objects" (Haenen, 2001, p.164). Haenen (2001) stated that at this level of covert speech, the action develops to become more and more automatic and abbreviated, i.e. as private speech (Centeno-Cortes & Jimenez Jimenez, 2004).

Ohta (2001) suggested that private speech is distinguished by its self-addressed form and function. Private speech takes on an abbreviated form where not all the information is conveyed explicitly and words do not need to be fully pronounced (Centeno-Cortes & Jimenez Jimenez, 2004). According to Centeno-Cortes & Jimenez Jimenez (2004), in private speech phonology and morphosyntactic features are abbreviated, and grammatical subjects may not be explicitly uttered. Nonetheless, private speech is a comprehensible speech due to its semantic

richness(Centeno-Cortes & Jimenez Jimenez, 2004). Vygotsky suggested that private speech is full of *sense* in a way that can be difficult, if not impossible for another person to understanding it (Centeno-Cortes & Jimenez Jimenez, 2004)(see Section 2.2.1.2). In the context of CBI research, dialogic thinking tends to be operationalised either by instructing participants to verbalize, explain or describe their thoughts about a subject matter (Gánem-Gutiérrez, 2009; Harun, 2013; Negueruela, 2003; Swain, Lapkin, Knouzi, Suzuki, & Brooks, 2009 among others), or by simply trying to capture their verbalized thinking when it appears spontaneously in the course of an activity(Centeno-Cortes & Jimenez Jimenez, 2004 among others).

3.3.2.3 Languaging.

Influenced by Vygotsky's theory of mind, Swain and her colleagues considered languaging as a form of verbalization used to "mediate the solution(s) to complex problems and tasks" (Swain et al., 2009, p.5). Languaging is, therefore, defined as "the process of making meaning and shaping knowledge and experience through language"(Swain & Watanabe, 2012, p,89). It is considered to have an impact on the process of learning and as being part of learning itself. It is a way of objectifying language, making it visible and available for manipulation by the learners (Swain, 2005).

Swain distinguished between: (a) collaborative dialogue, communicated thinking (Haenen, 2001), and (b) private speech, dialogic thinking (see above). The former refers to intercommunication where there is peer-peer interaction. Hence, it is the process in which learners interact with each other using language, i.e. communicate their thoughts, to solve a linguistic problem or to co-construct language or knowledge about language (Swain, 2000; Swain, Brooks, & Tocalli-Beller, 2002; Swain & Watanabe, 2013). The latter refers to intra-communication when a person speaks aloud or whispers to themselves, for example (Swain & Watanabe, 2013).

2.3.3 Stage three: mental action.

The last phase in Gal'perin's theory is inner speech. According to Ohta (2001), private speech is the precursor of inner speech. Private speech develops from social interaction where learners pick up phrases and sentences and manipulate them in order to use them as cognitive tools. When the action is sufficiently learnt, private speech becomes more and more abbreviated and telescoped until it transforms into a "higher form of speech for the self", i.e. inner speech (Lantolf & Peohner, 2014, p.67). At this stage all the operations are executed mentally, quickly and without errors. According to Haenen (2001) when the action is transformed into the mental plane, it becomes a chain of images and concepts that the individuals can draw on in order to orient their behaviours. Hence, the action becomes a "pure" thought (Haenen, 2001, p.164).

Learners, at this stage, are able to give quick and creative answers free from errors (Haenen, 2001). They can adapt to different situations and contexts. They can anticipate and modify their behaviours to fit in the situations they are in (Lantolf & Poehner, 2014, p.67). Thus, learners can predict the effects of their own and/or others' actions and adjust their behaviours as required (Haenen, 2001). According to Haenen (2001), at this stage teachers' focus will be on the outcome of the action and learners will be able to provide the right answer as soon as the right information is presented. The mental action, therefore, serves an orienting function (Haenen, 2001) that learners can rely on in order to regulate their behaviour. The action, at this stage, has been internalized and has become "a pervasive and profound part of the higher psychological processes" (Vygotsky, 1978, p.126).

2.3.4 Concept Based Instruction applications.

According to Arievitch & Stetsenko (2000), the CBI model has been applied to various domains such as: mathematics, physics, language, and history. Many researchers have been interested in applying CBI principles into language classroom. This section, therefore, outlines some of CBI applications into language learning and teaching.

Kabanova (1985) applied CBI principles to train Russian learners the construction of sentences in German. The SCOBA used in Kabanova's classroom was exploratory. Learners constructed their own SCOBA after they had been asked to analyse and compare a series of sentences in Russian and German (Kabanova, 1985). According to Kabanova (1985) Russian learners were able to construct sentences in German after a training of 2 to 2.5 academic hours. At the end of the study, Kabanova noticed that learners used the SCOBA as an orienting basis to construct sentences in English and French. Therefore, they transferred their conceptual knowledge of sentence construction in German to construct sentences in other languages (Kabanova, 1985).

Negueruela (2003) was among the first who provided "a well-articulated" sequence of the implementation of CBI in the classroom (García, 2017). Negueruela's CBI application followed three main steps: (a) instruction was organized around concepts as minimal pedagogical unit rather than discrete grammar rules, (b) materialization of these conceptual units through didactic models (SCOBA), and (c) verbalization of these concept-based explanations in order to foster understanding and internalization of the target concepts (2003). Negueruela's work (e.g., 2003) represents the basis upon which various subsequent studies have been conducted.

Negueruela's study (2003) included 12 English learners of Spanish as a second language. He relied on the grammatical explanation provided by Bull (1965) to materialize the concepts of tense/aspect and mood in Spanish. The design of the SCOBA, according to Negueruela (2003) formed an intellectual challenge. Furthermore, to help the participants acquire the

different structures dealt with in the study, Negueruela (2003), relied on the Gategno's (1972) cuisinaire rods.

Verbalization was assigned as homework where learners had plenty of time to explain to themselves the concept of tense/aspect and mood in Spanish. Participants recorded themselves while verbalizing. The analysis revealed that verbalization helped the participants enhance their conceptual understanding of the target concepts. Nonetheless, the data collected also revealed instances where learners struggled to improve their understanding (Negueruela, 2003; Negueruela & Lantolf, 2006).

In his study, Negueruela (2003) also focused on the use of L1 during verbalization. Negueruela and Lantolf (2006) argued that by prohibiting the use of L1, the learning process itself can be inhibited. Learners' first language forms the basis of reasoning and self-regulation. Therefore, it would be difficult to promote their understanding of the new language as well as its use as a meditational tool without referring to L1. Negueruela and Lantolf (2006) added that the use of L1 can be essential during dialogic thinking, however, should be avoided during collaborative dialogue (Negueruela & Lantolf, 2006).

As previously mentioned, Swain and her colleagues have investigated the effect of languaging on the process of L2 learning. They have conducted various studies based on CBI (Lapkin, Swain, & Knouzi, 2008; Swain et al., 2009, among others). For example, Swain and her colleagues (2009) adapted the CBI model to teach L2 French passive voice to university students. The concept of the passive voice was materialized using 36 explanatory cards, including two diagrams. The cards were presented one by one and participants were asked to explain the content of each card to themselves.

Subsequently, Swain and her colleagues explored the quality and quantity of the participants' languaging (2008, 2009). Data collected was analysed using Languaging Units (LUs) (see Chapter four). The findings suggested that the participants who languaged more and in a more

balanced way enhanced their conceptual understanding of the concept of passive voice in French as compared to the ones who did not. Therefore, the researchers concluded that, the quantity and the quality of languaging affects the participants' understanding of the grammatical concept.

More recent studies have applied the CBI model using technology, for instance (Gánem-Gutiérrez, (2016); Gánem-Gutiérrez & Harun, 2011). Harun (2013) investigated the role of verbalization in promoting learners' understanding of the concept of tense/ aspect in English and use of the past simple, the past continuous, and the present perfect. She compared individual and collaborative verbalization. The study included 32 Malay learners of English, 10 participants engaged in collaborative verbalization and 12 participants verbalized individually. Her SCOBA was developed and presented using MS PowerPoint. The content was adapted from Cognitive Linguistics' (CL) descriptions of the concept of tense/aspect in English. Harun (2013) explained that the use of technology in language classrooms may be attractive to learners and at the same time it can help make the explanations clearer.

Harun's (2013) study revealed that all the participants were able to enhance their understanding of the concept of tense/aspect using CBI material. However, the participants who verbalized individually performed better than the participants who verbalized collaboratively. Individual verbalizers produced more LUs than collaborative verbalizers. Harun (2013) suggested that individual verbalizers made more effort to externalize their thoughts as compared to collaborative verbalizers who relied on the leadership of their partners. The study also revealed that participants in both groups were unable to develop their actual use of the past simple, the past continuous and the present perfect probably, she argues, due to lack of practice during the intervention.

Framed within a Sociocultural Theory perspective to language learning, in the present study, the application of the CBI model followed Negueruela's (2003) in that: (a) instruction

was organized around the concept of tense/aspect in English, (b) the concept of tense/aspect in English was materialized using didactic models such as diagrams, pictures, and text. The materialization of the target concept was adapted from Cognitive Linguistics (e.g. Langacker, 1991; Radden & Dirven, 2007) (see Chapter 3); and finally, (c) the participants were asked to verbalize these concept-based explanations in order to foster their understanding and internalize the target concepts (For more information about CBI application in the study see Chapter 4).

In their studies, both Harun (2013) and Negueruela (2003) noticed that learners were unable to enhance their use of the target concepts. The researchers argued that the lack of practice during the interventions might have influenced learners' use of the language. Their argument was further supported by a recent study conducted by Negrete Cetina (2019). Therefore, practice appears to be an important component in the learning process. The next section is devoted to the discussion of the role of practice in language classroom.

2.4 Practice

According to Thompson (2018) few studies to date have investigated the role of practice in the language classroom now and their results have been inconclusive (DeKeyser, 2007, 2015; Ellis, 2009; VanPatten, 2015). Research relating to practice has been centred on the relationship between explicit knowledge and implicit knowledge. Researchers' views, thus, have been divided between supporters of practice in language classrooms (DeKeyser, 1998, 2007, 2015) and opponents of practice (R. Ellis, 2002, 2009) and those who see practice as part of the output (DeKeyser, 1998, 2007, 2015) and those who place it as part of the input (VanPatten, 2015; Wong, 2004). Due to their importance in practice, definitions of explicit knowledge and implicit knowledge will be first presented before going further in the discussion of the role of practice in SLA.

2.4.1 Explicit and implicit knowledge.

According to R. Ellis (2004), explicit knowledge is defined as "knowledge about language and about the uses to which language can be put" (p. 229). Explicit knowledge is the conscious learning of various aspects of language including grammar; therefore, it is declarative. Declarative knowledge is often inaccurate and not clear. However, it can be developed through the accumulation of declarative facts about language and through refining the existing knowledge by making it more precise and accurate. Explicit knowledge can be verbalized (Roehr-Brackin, 2018) with or without the use of metalanguage. It is accessible through controlled processing when communication breaks down (N. C. Ellis, 2005; R. Ellis, 2004, 2006). Explicit knowledge cannot be defined without reference to implicit knowledge. Implicit knowledge is an intuitive type of knowledge that can be accessed unconsciously in an easy and rapid way (R. Ellis, 2004). It has been argued that implicit knowledge can be made available through automatic processing. It is evident in learners' communication but cannot be talked about. Competence in L2 relies on implicit knowledge (R. Ellis, 2004, 2006).

The relationship between explicit and implicit knowledge has been a subject of debate in SLA research. Among the issues addressed within this debate is whether or not explicit knowledge can be converted into implicit knowledge since L2 competence relies on the latter (DeKeyser, 2007, 2015; R. Ellis, 2004; Lantolf & Poehner, 2014). The debate about the relationship between explicit and implicit knowledge has led researchers to take three different positions: non-interface position, strong interface position and weak interface position.

The non-interface position has its origins in the work of Krashen (1981) who distinguished between implicit knowledge (acquisition) and explicit knowledge (learning). Krashen argued that explicit and implicit knowledge are independent knowledge. Explicit knowledge cannot be converted into implicit knowledge. He added that spontaneous communication relies on implicitly acquired knowledge and what has been learned explicitly

can only be used as a monitor or editor of performance in case communication breaks down. The strong interface position is supported by DeKeyser (1998). DeKeyser (1998) proposed that explicitly presented declarative knowledge can be proceduralized through extensive appropriate practice. It can be accessed automatically. He later explained his view in light of the Skill acquisition Theory (SAT) (Discussed in the next section). The weak interface position proposes that implicit and explicit knowledge are two distinct types of knowledge, but explicit knowledge can contribute indirectly to implicit knowledge by highlighting the differences that may exist between learners' current linguistic knowledge and the input they are exposed to (Roehr-Brackin, 2018).

2.4.2 Skill Acquisition Theory.

DeKeyser (2007, p. 1) defined practice as "specific activities in the second language, engaged in systematically, deliberately, with the goal of developing knowledge of and skills in the second language". DeKeyser (1998, 2007, 2015) explained the role of practice in SLA with regard to Skill Acquisition Theory (SAT) (Anderson et al., 2004). SAT proposes that any skill can be learnt through three steps: (a) presentation of the declarative knowledge, (b) proceduralization through fast and effortless practice, and (c) automaticity through extensive practice (Anderson et al., 2004; DeKeyser, 2015).

In order to acquire a skill, declarative knowledge must be first presented. The transmission of the declarative knowledge can be through observation for example when observing a trainer performing a physical routine, or knowledge can be passed through verbal instruction or both (DeKeyser, 2015). After that, initial practice must be performed to incorporate the declarative information into *behavioural routines*. Hence, the declarative knowledge is transformed into a procedural skill (DeKeyser, 2015). Proceduralization occurs through fast and effortless practice since the relevant declarative knowledge is immediately accessible for execution (DeKeyser, 2007, 2015). At this stage, the knowledge has not been

fully acquired yet. According to DeKeyser (2015), a large amount of practice may lead to the gradual automatization of that knowledge. Hence, the skill is performed with a fast speed and a minimum error rate. The decrease of error through intensive practice is known as the power law of practice (Anderson et al., 2004; DeKeyser, 2007, 2015).

In relation to the interface issue (see Section above), DeKeyser (2007), distinguished between automatized procedural knowledge and implicit knowledge. Implicit knowledge requires unconsciousness; whereas, automatized procedural knowledge requires consciousness. Thus, declarative knowledge cannot be transferred into implicit knowledge. The issue of transfer can also be noticed in the effect of practice on skill acquisition. The effect of practice, according to DeKeyser, is "quite specific with minimal transfer between the tasks" (2007, p.2). Hence, a practice designed to reinforce reading, for example, cannot reinforce writing, and what can be learnt in a classroom context might not be transferred to real world interaction.

DeKeyser (2007) advocated that what can be applied to the acquisition of a skill can also be applied in the acquisition of a language. Therefore, he associated the SAT model with the PPP (Presentation, Practice, and Production) model for grammar presentation.

2.4.3 Presentation Practice Production.

The first P in the PPP model involves the explicit presentation of the grammatical structure in a form of a short text or story, no more than two sentences. The aim behind presentation is to help the learners perceive the target grammatical structure (Ur, 1988). The grammatical structures are then isolated in order to focus on the rules that govern them. After that comes the second P, Practice. Learners need to practice what they have learnt. A series of grammar exercises are needed to cover all the facets of the target structures. The exercises moves from controlled practice to a free production in a communicative activity and here comes the third P, Production (Ur, 1988).

Paulston (1971) sequenced the types of drills from the more controlled to the freer ones. She distinguished between mechanical, meaningful, and communicative drills (MMC). Mechanical drills are strictly controlled exercises that require one correct way of responding. Learners can answer to these types of drills without even being able to understand their contents. Meaningful drills consist of exercises that require more than one way to answer and need a structural and a semantic understanding of the content of the drills. Communicative drills consist of the production of the target language in order to exchange information about the real world. Therefore, learners can produce new structures that they have not yet dealt with (Paulston, 1971).

DeKeyser (2007) considered that the Presentation stage corresponds to the presentation of the declarative knowledge in the SAT; Practice through mechanical and meaningful drills corresponds to the proceduralization, and communicative Production corresponds to automatization in the SAT. Nonetheless, automatization can go beyond the communicative drills of the PPP model. Hence, the PPP model, according to Dekeyser, may lead to a better acquisition of the target language. Thompson (2018) argued that an ideal application of the PPP model might be challenging due to a number of variables such as learners and teachers' motivation, proficiency level, cognitive and affective factors, and most importantly time constraint. In most instances, a single lesson might not be enough to include the three Ps of the PPP model. Hence, there is not enough time for knowledge to be automatized.

Being sceptical about the role of practice in SLA, R. Ellis (2002) advocated that the role of practice can be limited to promoting learners' pronunciation as well as remembering lexical materials. Practice can also help extrovert learners to enjoy a language classroom. Following Pienemann's teachability hypothesis, R. Ellis (2002) argued that practice cannot be useful until it meets learners' developmental stages. Furthermore, the aim behind practice is to develop the correct use of the target language with no focus on meaning (R. Ellis, 2009) referring to

mechanical and meaningful exercises. R. Ellis (2009), however, declared that language acquisition can be best achieved through task where there is focus on meaning, and language is not seen as an end goal but rather as a means of achieving goals. He has not prioritised task over exercise, though, nor did he deem practice with no value in the language classroom (R. Ellis, 2009).

The way grammatical knowledge is presented in the PPP model has also received many criticism from the advocates of the Sociocultural Theory (Harun, 2013; Lantolf & Poehner, 2014; Negueruela, 2003; among others). From SCT perspective, relying on discrete grammatical rules may not lead to the acquisition of the grammatical concepts (Negueruela, 2003). Traditional grammar presentation is usually simplistic, incomplete and misleading (Negueruela, 2003). Grammar presentation, from SCT point of view, should be based on concepts materialized through didactic models, and mediated by verbalization to promote deep understanding.

Despite the above criticism, the PPP model is still widely used by many teachers and textbook designers. It ought to be mentioned that the Traditional Instruction (TI) implemented in the present study was adapted from the PPP model (Ur, 1988). However, due to time constraints, participants in the study did not have the opportunity for free production. Therefore, the last P was not included (see Chapter 4).

All in all, the role of practice in enhancing learners' use of language has been doubted by many researchers due to the poor results obtained from the traditional grammar practice. By focusing only on forms, PPP overlooked the role of meaning in a language. Traditional practice has led learners to fail to use L2 outside of the classroom, and even those learners who might be considered as proficient users fail to explain and justify their uses of the language. The role of practice, therefore, cannot be reduced to training learners to provide only the correct grammatical forms without an adequate understanding of meaning and form relationships.

The role of practice in language classrooms cannot be underestimated; however, emphasis should be put on the quality of the practice presented to learners. Grammar exercises should be designed in a way to help learners make a connection between the grammatical structures they use and the meanings they denote. Learners should be helped to properly understand their grammatical choices. They need to be aware of subtleties in language so that they can transfer their classroom practice to meaningful communication outside the classroom context as well. Practice should prepare learners to use their L2 in real contexts where they need to understand others, make themselves understood, improvise and use alternatives. Practice, thus, can be based on CBI principles as an alternative where learners can think about form and meaning through their conceptual understanding.

2.5 Learners' Attitudes towards Grammar Instruction

Learners come to the classroom with pre-exiting expectations and beliefs about how languages should be taught. These beliefs might influence their experiences in the classroom as well as their performance (Horwitz, 1988; Volkan & Dollar, 2011). A mismatch between learners' attitudes, teachers' attitudes, and classroom practices might affect learners' motivation, teachers credibility, and the learning process as a whole (Horwitz, 1988; Savignon & Wang, 2003; Schulz, 2001). Whereas, a number of researchers have been interested in teachers' attitudes (Savignon & Wang, 2003), few studies have investigated learners' beliefs (see, Schulz, 2001), and fewer still, learners beliefs about grammar instruction (see, Loewen et al., 2009). Nevertheless, learners' beliefs and attitudes are believed to play an important role in the learning process (Horwitz, 1988; Loewen et al., 2009; Savignon & Wang, 2003; Volkan & Dollar, 2011).

One of the first studies concerned with learners' beliefs was conducted by Horwitz (1988), also known as the BALLI study "The Beliefs About Language Learning Inventory". Horwitz was interested in investigating learners' beliefs about language learning in general. He developed a questionnaire of 34 items that assessed learners' opinions about the nature of

language learning, the difficulty of language learning, their aptitudes toward foreign language, their learning and communication strategies, and their motivation and expectations. Horwitz found out that learners came to the classroom with "a definite preconceived notions" (p. 293) about their language learning and teaching process. These beliefs did not necessarily match with their teachers' perceptions and beliefs. Furthermore, when asked about the role of grammar, learners endorsed the importance of learning grammatical rules in language classrooms as well as the importance of traditional practice. The majority of the participants agreed that "learning a foreign language is mostly a matter of learning a lot of grammar rules" (p. 288) and that "it is important to repeat and practice a lot" and "it is important to practice in the language laboratory" (p. 289). Horwitz explained that these beliefs might be the outcome of past instructional practices, learners' lack of knowledge and experience, and the influence of their teachers' beliefs. He added that these beliefs might be susceptible to individual differences, age, settings, background, among other factors. Nonetheless, he advised teachers to not ignore their learners' beliefs by trying to modify those that impede their learning and support those that improve it.

Schulz (2001) conducted another study to address the effect of cultural differences on Colombian foreign language learners and teachers' perceptions about language learning. Results of his study were compared to another study he conducted in 1996 with US language learners and teachers. Schultz found considerable differences within and between cultures. The results of his study indicated differences between US teachers and learners as a group and Colombian teachers and learners as a group. Colombian teachers and learners tend to incline more toward traditional grammar teaching than their US counterpart. The study also indicated differences among US and Colombian teachers as a group and US and Colombian learners as a group. Learners in both cultures tend to value grammar more than teachers. Additionally, learners in both groups favoured real life practice than traditional practice. Schulz (2001)

explained that these attitudes might have been conceived due to past instructional practices, commonly believed ideas passed from one generation to another, and/or personal past experiences that resulted in a successful learning outcomes. Similarly to Horwitz (1988), Schulz (2001) asserted that learners' beliefs and attitudes must not be overlooked and that learners' beliefs and/or teachings practices should be modified to avoid discrepancies.

Recent studies indicate that learners prefer communicative grammar instruction over traditional grammar approaches. Savignon and Wang (2003) compared learners' attitudes and beliefs toward a form-focused classroom practices and meaning-based classroom practices. Participants in the study were Taiwanese senior and junior high school students' learners of English as a second language. The results of their study indicated that there was a discrepancy between learners' beliefs and attitudes, and the current classroom practices. Participants favoured meaning-based practices than focus on form practices. According to Savignon and Wang (2003), negative attitudes toward focus on form were stronger between those students who started learning English (L2) earlier in their life. Hence, those participants with a long language learning experiences. Savignon and Wang (2003) added that the age at which learners first started learning English had an impact on their attitudes towards form focus instruction.

Another study conducted by Loewen et al., (2009) investigates learners of ESL and FL beliefs and attitudes towards grammar instruction and error correction. Loewen et al., (2009) included participants from different backgrounds and learners of different target languages. The results of the study indicated that participants had various beliefs and attitudes towards grammar and error correction. Most of the participants valued the role of grammar in language learning but differently. One of the most important findings of the study was the difference found between FL and ESL learners' beliefs and attitudes. FL learners tended to favour grammar instruction more than ESL learners. Loewen et al. (2009) advocated that ESL learners' negative

attitudes toward grammar might be attributed to the amount of current and past language learning instruction. The same idea was proposed by Savignon and Wang (2003). Negative attitudes might be also due to their L1, the way languages were taught in their home countries, and to the social environment. Loewen et al. (2009) explained that generally ESL learners ask for more communicative classroom because they had an opportunity to practice their language outside since they were living in an English speaking country, whereas, FL learners had less opportunities to practice their TL therefore they placed less value on communication.

In SCT research, Gánem-Gutiérrez, (2016) conducted a study where she assessed learners' attitudes towards CBI treatment. The participants in the study were six English native speakers and learners of Spanish as a second language. Gánem-Gutiérrez (2016) used a post-trial questionnaire that consisted of only five, five-point Likert scale, questions and a comment space. The questions addressed five main aspects of the CBI treatment they received: (a) helpfulness of the session, (b) time, (c) ease of understanding, (d) value of session, and (e) interest for the approach. The results of the study revealed that the participants thought that CBI treatment helped them understand the concept of tense/aspect in Spanish. They were satisfied with the session and the time allocated for the treatment. They were also satisfied with the CBI treatment since they thought it was interesting. However, they found the CBI materials used in the study challenging as reflected by the low score given to 'ease of understanding'.

Research into learners' beliefs and attitudes indicates that learners enter the classrooms with a number of expectations about how languages should be learnt. Learners' expectations vary from one learner to another and from one context to another. Learners' beliefs and attitudes are influenced by their past and current language learning experience, individual differences, social context, their needs and goals, and teachers' attitudes, among other factors. Nonetheless, research has shown that learners generally value grammar in their learning process.

Furthermore, these beliefs might change over the course of time. According to Horwitz (1988), learners might develop new beliefs at the end of their language learning experience. All in all, learners' attitudes must not be overlooked although they should be treated cautiously.

2.6 Conclusion

As it has been noted throughout this chapter, Vygotsky's focus was on the role of the social environment in developing human cognition. The social environment mediates human behaviour by providing physical and psychological tools. Humans generally appropriate these tools and give them a *sense*. The process of appropriating socially rooted tools is known as internalization that is a long life process necessary for development. Rooted in the work of Vygotsky, concept based instruction (CBI) is a relatively new language teaching and learning approach. It takes learners a step beyond the unsystematic presentation of grammatical rules. CBI aims at providing learners with generalized principles to help them understand the essence of their use of a particular linguistic structure. The idea is that, through concepts, materialization, verbalization and practice, learners would be supported in their understanding of the language choices at their disposal and why those choices matter for communication.

Chapter 3: Literature Review (Part II)

3.1 Introduction

Being a pivotal concept in the grammar of any language, tense / aspect have received extensive attention in the field of language acquisition. This chapter has been specifically devoted to exploring these two grammatical concepts in both English and Arabic given the context of this study. The first section of the chapter focuses on Cognitive Grammar, also referred to as "space grammar". Cognitive Grammar will be defined and linked to SCT and CBI. The second section specifically describes tense/ aspect in English from the Cognitive Grammar perspective. It also includes a description of the three tense/ aspect markers dealt with in the study, i.e. past simple, past progressive, and present perfect. The last section of this chapter gives an account of the Arabic tense/ aspect system, and highlights the difference between the Arabic tense/ aspect system and its English counterpart.

3.2 Cognitive Grammar

As it has been highlighted throughout chapter two, SCT sees language as the most powerful mediational tool that humans possess. It is a socially rooted tool that mediates the internalization process. Through internalization, humans appropriate socially constructed artifacts, reshape them and give them a personal sense. Therefore, the social and the psychological aspects of cognition are in a way connected (Lantolf & Poehner, 2014). Along the same line, SCT considers the process of learning as a socially rooted process where learners' behaviours are first regulated by objects and then by more knowledgeable persons to arrive at the private level (Lantolf & Poehner, 2014). Learning a language is not seen as different from learning any other complex skill. Therefore, the same general learning mechanisms used in the learning of any skill are useable in the learning of a language (Lantolf & Poehner, 2014). These principles form the basis for the pedagogical model described above, Concept Based Instruction.

Historically SCT has been seen as failing to provide a detailed account of the nature of language as a system or to align itself, at least explicitly, with existing linguistic theories (Mitchell & Myles, 2013). Recently, however, Lantolf and Poehner (2014) noted that SCT has always aligned itself with meaning based and usage based theories, where language is defined through its communicative and interactive functions rather than its formal system. Hence, SCT rejects the structural view that sees language as a formal abstract system acquired through separate mechanisms and distinct from its social environment (Mitchell & Myles, 2004). SCT, thus, goes in favour of a Cognitive Grammar (CG) view of language (Lantolf & Poehner, 2014). According to Lantolf and Poehner (2014), a number of principles that underline the Cognitive Grammar view of the language correspond with what has been advocated by SCT. So, what is Cognitive Grammar and what makes it suitable for SCT?

Cognitive Grammar theory came as a reaction to the traditional linguistic view that sees language as: (a) a self-contained abstract system generated by an innate cognitive device distinct from the social environment (Langacker, 2008), and (b) that grammar of the language is purely a formal system distinct from other components of the language, i.e. meaning and lexicon (Langacker, 1986, 2008). According to Langacker (1986), it is of no value to analyse grammatical structures without reference to their semantic value. Langacker made an analogous relationship with the process of writing dictionaries where it would be impossible to construct a dictionary without mentioning the meanings of its lexical items.

CG takes a functional perspective of language rather than a formal one. Functional language theories claim that linguistic knowledge is shaped by language use, and the grammar of the language is used to express the indefinite number of meanings that emerge from communicative needs (Mitchell & Myles, 2004). Taking these principles as a foundation, CG claims that language is a symbolic system where grammar cannot be separated from meaning (Langacker, 1986, 2008). In CG, meaning is equated with conceptualization (Langacker, 1986),

i.e. the variety of meanings elaborated during communicative interactions are grounded in humans' conceptualization of their realities. Therefore, grammar is inherently a symbolic system responsible for the structuring and the organization of human conceptual contents expressed through language (Langacker, 1986, 2008). In addition to conceptualization which is considered an integral part of cognition, the linguistic system also relies on other cognitive processes such as, categorization, chunking, memory, etc., thus, language cannot be studied separately from general cognitive processes (Langacker, 1986, 2008).

Langacker's view about language cannot be fully described in the present paper. Therefore, I will limit myself to introduce the main tenets of CG that are of interest to the present work.

Langacker (1986, 2008) suggested that the linguistic system can be summarized by means of three main components, a phonological structure, a semantic structure, and a symbolic relationship that links them. He explained that any lexical item has a phonological shape that is symbolically linked to its semantic content, and vice versa. For example, the lexical item *skunk* is symbolic because it has a phonological shape that refers symbolically to its concept (Langacker, 1986). During language production, these symbolic units are combined to form complex expressions.

Additionally, Langacker (1986) did not totally reject the notion of constituency advocated by the generative grammar view of language. However, Langacker argued that describing language through deep and surface structures might cause more ambiguity and difficulty to understand the open-ended meanings derived from language. He, therefore, argued that sentences such as (a) *Bill sent a walrus to Joyce* and (b) *Bill sent Joyce a walrus* are not synonymous and they do not represent two different surface structures of the same deep structure but rather they are alternate ways of presenting the target situation. In sentence (a) the preposition *to* highlights or profiles the path followed by the walrus, however, in sentence (b)

the absence of the preposition *to*, and the juxtaposition of Joyce and walrus profile the possessive relationship between them. Therefore, the structuring of the linguistic units depend on what aspects of the situation the speaker wants to foreground for the interlocutor (Langacker, 1986).

CG makes extensive use of diagrams and schemas to explain linguistic structures (Langacker, 2008). According to Langacker (2008), the use of visual models in CG emerges from the growing scientific recognition of their importance to theory and research. Therefore, diagrams and schemas in CG are used sometimes as an aid to help make a point and other times to explain more difficult linguistic concepts (Langacker, 2008). These diagrams lend themselves to discovery, i.e. they are heuristic diagrams. They present the information with a "level of precision and explicitness sufficient for most purposes" (Langacker, 2008, p. 10). For our purposes, explaining linguistic concepts through visual models suits CBI principles of materialization of concepts through didactic models (Lantolf & Poehner, 2014). Hence, CG seems to be a useful and promising approach to language within the context of SCT in general and CBI, more specifically.

The next section provides an account of tense/ aspect in English from a CG perspective. It ought to be mentioned that CBI materials developed in the study were adapted from a number of Cognitive Grammar and Cognitive Linguistics books such as (Langacker, 1991, 2000, 2008; Radden & Dirven, 2007; Reif, 2010) (see Chapter 4).

3.3 Tense in English

According to Langacker (1991), an appropriate understanding of the concept of tense in English cannot be provided only through its formal properties without referring to modality. He added, defining tense as "location in time relative to the ground" (p. 241) might be an oversimplification of the concept of tense. Langacker (1991, 2008), thus, defined tense through his epistemic model (Figure 1 below) where he distinguished between tense and modality, and

by taking into account the semantic functions underlying them. It ought to be highlighted that the focus of the present work is on tense/aspect not modality. Therefore, I will limit myself to exploring the two former concepts only. For a full account of modality see (Langacker, 1991, 2008).

Langacker (1991, 2000) explained that in order to form a coherent conception of the world, a conceptualizer (speaker) distinguishes between real and unreal situations (see Figure 1 below). The real situations are part of the conceptualizer's known reality, i.e. conceived reality. The unreal situations are those situations that the conceptualizer does not know about or does not consider as part of her/his reality, i.e. potential reality. The conceived reality (RC) is specific to a conceptualizer, in other words, as a human being we cannot know everything about the world and its evolution, each one of us has its own understanding.

In the epistemic model, (Langacker, 1991, 2008), the conceived reality is represented by a growing cylinder (see Figure 1 below) since it is an "ever-evolving entity" (p. 240). The face of the cylinder represents the conceptualizer's immediate reality, the now moment. The conceptualizer usually takes its immediate reality as a ground to access the different realities that surround her/him. Therefore, situations prior to the conceptualizer's immediate reality are referred to as non-immediate past reality, and situations subsequent to the immediate conceived reality are part of the potential reality. Langacker suggested that sometimes within the potential reality certain paths are highly predictable "Within the potential reality, certain paths seem especially likely to be followed: its momentum is such that we can project RC as evolving along these lines unless something unforeseen should happen to defect it from this course" (Langacker, 2008, p. 307); in this case the reality described is known as projected future reality (see Figure 1 below).

Langacker (1991, 2008) suggested that, during communicative interactions, the conceptualizer's conceived reality is expressed by the absence of a modal; whereas, the

potential reality is expressed by the presence of a modal. In the presence of a modal, the conceptualizer sees the target situation as part of her/his unknown reality. In the absence of the modal, the conceptualizer sees the target situation as part of her/his known reality. Therefore, the presence vs the absence of a modal indicates the epistemic knowledge of the conceptualizer. Additionally, the presence of the tense marker –ed indicates that the target situation is distal from the immediate reality, and its absence indicates that the target situation coincides or is proximal to the immediate reality. Thus, the presence vs absence of the past tense markers indicates the time interval in which the target situation is located in relation to the immediate reality (the ground). Therefore, tense in English indicates (a) the conceptualizer's epistemic knowledge (reality), and (b) the location of those real situations in relation to the conceptualizer's immediate reality (distal vs proximal) (Langacker, 1991, 2008).

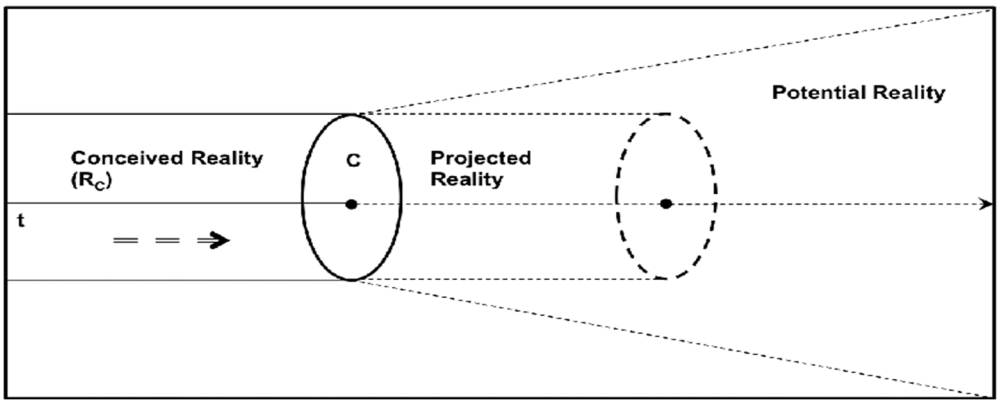


Figure 1. Langacker' s (2008) epistemic model

Along the same lines, Radden and Dirven (2007) suggested that when trying to locate a situation in time, the speaker (conceptualizer) uses her/his immediate reality, what they called speech time (S), as a base to locate the target situation, what they called the event time (E). The base space according to Radden and Dirven (2007), includes the participants in the interaction, the space and time of the interaction, and the contextual circumstances. Radden and Dirven (2007) explained that, the speaker can locate the event time in relation to the speech time or to a reference time (R).

When the speaker occupies a viewpoint in the base space, the situations described are located in relation to the speech time. These situations allow the speaker to refer to three time spheres: the present, the past and the future (Radden & Dirven, 2007). These three time spheres are usually expressed by simple tenses, such as the present tense, the past tense and the future tense (Radden & Dirven, 2007). According to Radden and Dirven (2007), these three times spheres are deictic times because they relate to the speech time. Therefore, situations located simultaneously with the moment of speaking, are expressed grammatically using the present tense, situations located prior to the moment of speaking are expressed using the past tense, and situations located posterior to the moment of speaking are expressed using the future tense. Figure 2 below depicts Radden and Dirven's (2007) deictic times.

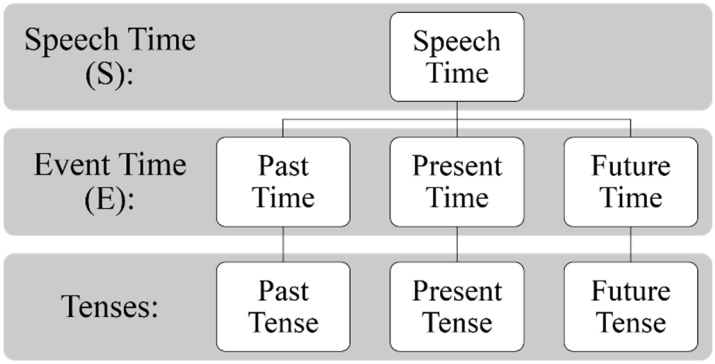
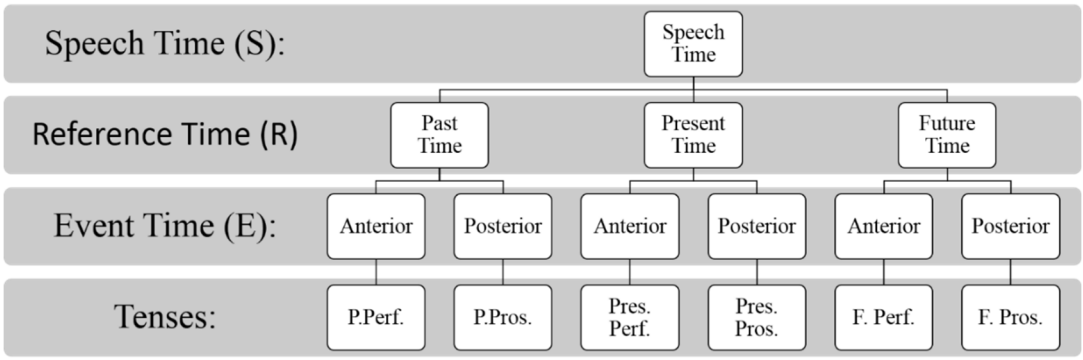


Figure 2. Simple tenses (adapted from Radden & Dirven, 2007)

According to Radden and Dirven (2007), these three time spheres (deictic times) can serve as a reference point for the speaker to locate other situations. The speaker, thus, shifts his viewpoint to one of the three time spheres stated above to locate the new situation. The speaker can either look backward or forward from these reference points. Therefore, situations located prior or posterior to a reference time are expressed using complex tenses: situations located prior to a reference time are expressed using the perfect; present perfect, past perfect, and future perfect, and situations located posterior to a reference time are expressed using *be going to*

(Radden & Dirven, 2007). **Error! Reference source not found.** depicts Radden & Dirven's



(2007) complex tenses.

Figure 3. Complex tenses (adapted from Radden & Dirven, 2007, p, 205)

3.4 Aspect in English

English distinguishes between two types of aspect: (a) lexical aspect relative to the internal temporal structure of the situation, and (b) grammatical aspect relative to the way the speaker views a situation and it is signalled grammatically by the presence or absence of -ing (Langacker, 1991; Radden & Dirven, 2007).

3.4.1 Lexical aspect.

English encompasses two types of situations (verbs): perfective and imperfective, also described as events and states (Langacker, 1991; Radden & Dirven, 2007). Events, according to Radden and Dirven (2007, p. 177) are dynamic situations. They involve internal changes, hence they are "internally heterogeneous and comprise many successive sub-events". Events have temporal boundaries. They have a starting point and an end point. States, however, are the opposite. They are internally homogenous. They do not involve internal changes; they are static. States do not have temporal boundaries. They are unbounded situations that last for an indefinite time (Radden & Dirven, 2007).

Event **State**

Figure 4. Schemas of events and states (adapted from Langacker, 1991; Radden & Dirven, 2007)

depicts the schemas of events and states in English.

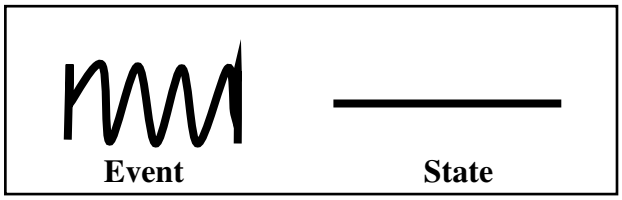
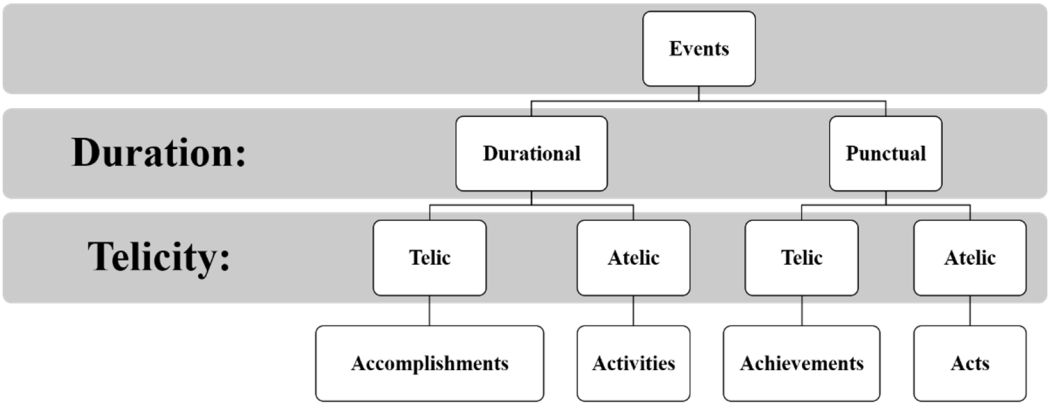


Figure 4. Schemas of events and states (adapted from Langacker, 1991; Radden & Dirven, 2007)

Events can be further divided into four types: accomplishments, activities, achievements, and acts (Radden & Dirven, 2007). The distinction between these four events types depends on their duration and telicity (Radden & Dirven, 2007). Duration refers to the length of the situation. Certain situations take a certain length in time to be performed, i.e. durational. However, others do not. They are punctual or brief situations (Radden & Dirven, 2007). Telicity



refers to “the inherently conclusive and definitive end point of an event” (p. 179). Certain situations have a conclusive and definitive end point; when they reach it, they are considered as completed, finished situations. These situation are telic situations (Radden & Dirven, 2007). Other situations do not have an inherently conclusive end point; they do not finish, they can only be stopped. These are atelic situations (Radden & Dirven, 2007). Figure 5 illustrates the types of events as explained by Radden & Dirven (2007).

Figure 5. Types of events (adapted from Radden & Dirven, 2007)

Accomplishments: they are bounded durational events. They take a certain time to reach their end point (Radden & Dirven, 2007). The focus of accomplishments events is on their end point. Example: *Ann changed the nappy* (Radden & Dirven, 2007). The action of changing a nappy is durational; it takes time to change the baby’s nappy. It has an inherent end point which is a baby wearing a new nappy (Radden & Dirven, 2007).

Activities: they are durational atelic events (Radden & Dirven, 2007). They describe situations that do not have an inherent end point (Radden & Dirven, 2007). They do not describe actions that can reach an end point and finish but rather they need to be stopped (Radden & Dirven, 2007). Example: *Ann cuddled the baby*. The action is durational since cuddling can last for a certain period of time (Radden & Dirven, 2007). Nonetheless, it never finishes until it is stopped by someone or by Ann herself. So, the action does not have a conclusive end point (Radden & Dirven, 2007).

Achievements: they are bounded brief situations (Radden & Dirven, 2007). Achievements encompass a series of culminating phases before reaching their end point (Radden & Dirven, 2007). The focus of achievement events is on their punctual termination, end point (Radden & Dirven, 2007). Example: *the baby fell asleep*. The action of falling asleep is durational and encompasses a series of culminating phases before reaching the end point that is sleeping (Radden & Dirven, 2007). The culminating phases that preceded sleeping might be

the baby stopping crying, quietening down, closing his eyes, etc. until he fell asleep (Radden & Dirven, 2007). The focus of achievements, however, is not on these phases but rather on the last phase of the event that is sleeping (Radden & Dirven, 2007).

Acts: they are punctual atelic situations (Radden & Dirven, 2007). They do not encompass culminating phases that precede their end, they just start and end (Radden & Dirven, 2007). They are momentary situation. Example: *the baby burped*. The act of burping is instantaneous. It might be difficult to distinguish its starting point and end point (Radden & Dirven, 2007).

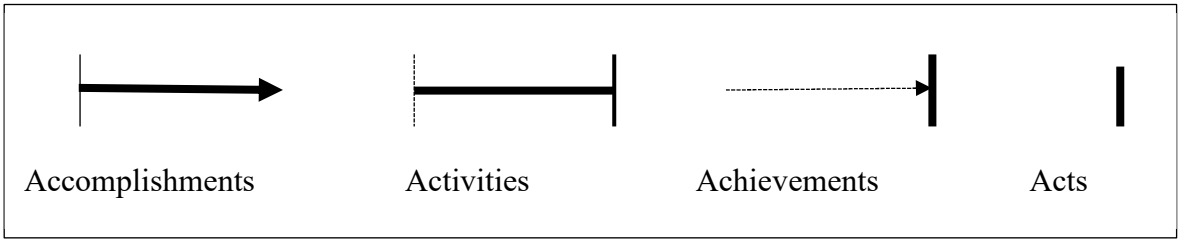


Figure 6. Schemas of types of events (adapted from Radden & Dirven, 2007)

Figure *6* demonstrates the schemas of the types of events as described by Radden and Dirven (2007). The bolded arrow in accomplishments indicates the focus on the duration and the sub-phases that lead to the endpoint, the bolded line. Activities are represented by a bolded line with a light line at the end which indicates the focus on the duration of the event and not it endpoint. The dotted arrow in achievements represents the culminating sub-phases that precede the endpoint, bolded line at the end of the arrow. Acts are represented by a bolded line due to their shortness.

3.4.2 Grammatical aspect.

Grammatical aspect refers to "the grammatical form used by the speaker in taking a particular view of the situation" (Radden & Dirven, 2007, p. 175). English distinguishes between two types of aspect: progressive aspect expressed by V-ing, and non-progressive aspect expressed by the absence of the -ing (Langacker, 1991, 2000; Radden & Dirven, 2007). The presence vs the absence of the -ing depends on the way the speaker sees the situation. In the presence of the -ing, the speaker sees the situation with a restricted viewing frame (Langacker, 1991; Radden & Dirven, 2007). The situation is viewed internally and in its progression (Langacker, 1991; Radden & Dirven, 2007). The -ing involves a close look to the situation (Langacker, 1991; Radden & Dirven, 2007). The boundaries of the situation are thus excluded. In the absence of the -ing, non-progressive aspect, the speaker sees the situation with a maximal viewing frame (Langacker, 1991; Radden & Dirven, 2007). The situation is viewed in its entirety, the boundaries of the situation are included (Langacker, 1991; Radden & Dirven, 2007). The absence of -ing involves an external look at the situation that permits the speaker to view the situation as a whole (Langacker, 1991; Radden & Dirven, 2007).

In order to explain the difference between restricted viewing frame and maximal viewing frame, Langacker (2000) made an analogy to a speaker looking at a cow. During the maximal viewing, the speaker is positioned in a distant position from the cow. The speaker can see the cow as a whole, its head, legs, body, tail, etc. During the restricted viewing frame, the speaker approaches the cow, and from this new position, she/he can see only a part from its hide. All the other parts of the cow are excluded. The speaker's view is restricted to a small part of the cow hide.

According to Radden and Dirven (2007), the non-progressive aspect can be used with both, events and states, see examples below:

(a) Ann changed the nappy. (accomplishment)

(b) Ann cuddled the baby. (activity)

(c) The baby fell asleep. (achievement)

(d) The baby burped. (act)

(e) Ann hopes to see her baby soon. (state)

Examples (a), (b), (c), and (d) are events viewed with a maximal viewing. In (a), the process of changing the nappy is viewed as a whole. All the cumulating sub-phases are taken into account, such as removing the nappy, cleaning the baby, getting a new nappy, etc. until reaching the final state which is a baby with a new nappy (Radden & Dirven, 2007). Example (e) describes a static situation. As stated above the state has no boundaries. When viewed with a maximal viewing frame, the state is also seen in its entirety (Radden & Dirven, 2007). The maximal viewing frame does not alter the inherent temporal structures.

The progressive aspect can also be used with events and states (Radden & Dirven, 2007), see examples below:

(a) Ann was changing the nappy. (accomplishment)

(b) Ann was cuddling the baby. (activity)

(c) The baby was falling asleep. (achievement)

(d) The baby was burping. (act)

(e) Ann was hoping to see her baby. (state)

The presence of -ing in examples (a), (b), (c), (d), and (e) indicates that the speaker is viewing the situations with a restricted viewing frame. The situations expresses in (a), (b) and (c) are durational events. They take time to be performed and at the same time they encompass series of culminating sub-phases preceding their end point (Radden & Dirven, 2007). Therefore, they can be looked at internally (Langacker, 1991; Radden & Dirven, 2007). The -ing excludes the boundaries of these events and highlights only one part of their culminating sub-phases (Radden & Dirven, 2007). The events are seen in their progressions (Radden & Dirven, 2007).

The -ing, however, in examples (d) and (e) does not indicate the same meaning. The situation expressed in (d) is punctual. Punctual events leave no room for an internal look and exclusion of the boundaries (Radden & Dirven, 2007). The -ing in this case denotes a repetitive act (Langacker, 1991; Radden & Dirven, 2007). The baby in (d) is repeating the act of burping (Radden & Dirven, 2007). The situation expressed in (e) is a state. Static situations do not have boundaries (Langacker, 1991; Radden & Dirven, 2007). Therefore, the -ing imposes boundaries on states rather than exclude them (Radden & Dirven, 2007). The state, thus, becomes temporary (Radden & Dirven, 2007). In (e), Ann's hope will end as soon as she will see her baby (Radden & Dirven, 2007).

3.5 Non-progressive Aspect in the Past Simple Tense

According to Radden and Dirven (2007), the past simple describes situations that happened in the past time. As stated above, the past time is a deictic time prior to the moment of speaking. When describing a situation in the past, the speaker takes the present time as vintage point to locate a past situation. The past tense according to Radden and Dirven (2007) has three main properties: (a) when using the past tense the speaker's focus is not on its immediate reality, but rather on events that happened prior to his/her immediate reality. (b) The past tense indicates detachment from the present. There is a time distance between situations described in the past, and the present. Past situations, thus, are distal from the speaker's immediate reality (Langacker, 1991). And, (c) similarly to Langacker (1991), Radden and Dirven (2007) suggested that situations described in the past are part of the speaker's known reality. They are definite situations. Example:

He *worked* for General Motors for 25 years.

The use of the past tense in the above sentence exemplifies the three properties of the past tense. The presence of the -ed indicates that: (a) the speaker's focus is on a past time situation. She/he shifted her/his viewpoint from the present to the past (Radden & Dirven, 2007).

(b) The situation (working for General Motors) is exclusive of the present (detached from the present), it is interpreted as being over. Nothing in the sentence indicates the present state of the person described in the sentence (Radden & Dirven, 2007). And (c), the situation described is part of the speaker's known reality since she/he spent 25 years working for General Motors.

Radden and Dirven (2007) explained that the simple past is usually used with bounded events. When located in the past, bounded events express situations that started and ended in the past. This, according to Radden and Dirven (2007), leaves a space in time for other situations to happen forming a series of events with a sequential order. This succession of bounded events in the past is commonly used in narration. Example:

He **went (E1)** to his house. He **opened (E2)** the door and **entered (E3)** without no one noticing him. He **took (E4)** the stairs leading to his bedroom…

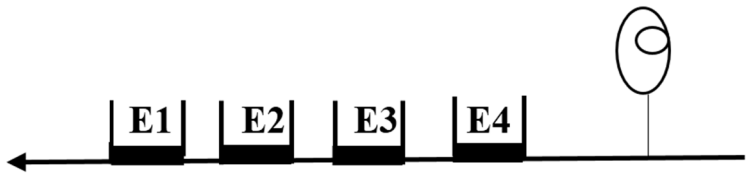


Figure 7. A series of bounded events in the past time (adapted from Radden & Dirven, 2007, p.219)

E1
E2
E3
E4

Figure 7 illustrates the sequential order of the events expressed in the example above. E1, E2, and E3 are accomplishments with clear boundaries. The events are organized following a logical order. The speaker needs first to go to a house, to open the door and then enter. The use of the past tense reflects the sequential occurrence of the events there is no need to make it explicit.

Nonetheless, the simple past can also be used with unbounded situations such as state and activities (Langacker, 1991), example:

He *knew* it.

The example above denotes a stable situation that continues through time. The presence of the past tense denotes detachments from the present. The absence of the -ing indicates that the situation is viewed with a maximal viewing frame. Therefore, the overall process is located prior to the moment of speaking (Langacker, 1991).

3.6 Progressive Aspect in the Past Simple Tense

When used in the past, the progressive aspect provides background for other bounded events to occur, especially when it is used with activities and states (Radden & Dirven, 2007). The unboundedness and duration of activities and states make them perfect for providing background for other situations to happen (Radden & Dirven, 2007). Example:

I *was living* in Anchorage during the Good Friday earthquake when the earthquake *started*.

The example above describes a temporary state, *living,* that provides a background for another bounded event to occur *started*. During that period where the speaker was living in Anchorage an earthquake hit the place (Radden & Dirven, 2007).

Unlike the non-progressive simple past tense, the progressive cannot indicate sequential order of events (Radden & Dirven, 2007). Progressive situation in the past can only occur simultaneously (Radden & Dirven, 2007). Due to their unboundedness, it might be difficult to say when one situation ended and when the second started (Radden & Dirven, 2007). Example:

(a) We *were having* port and *listening* to music.

(b) We *had* port and *listened* to music.

The use of the progressive in (a) indicates that the action of having port and listening to music happened at the same time (Radden & Dirven, 2007). In (b), however, the non-

progressive indicates a sequential order. Therefore, they had port and when they finished they listened to music (Radden & Dirven, 2007).

3.7 Perfect

The term perfect comes from the Latin *perfectus* which means finished or completed (Radden & Dirven, 2007). Traditionally, the perfect was not considered as an aspectual category since it does not describe the internal constituency of a situation (Comrie, 1976). Comrie (1976) stated that the perfect is an aspect with a different sense from the other aspectual categories. The perfect relates "some states to a preceding situation" (p.52). It relates two time points, "the state resulting from a prior situation" and "the time of that prior situation" (p.52). The focus of the perfect is not on the exact time at which the situation happened but rather on its relevance (Comrie, 1976). The lack of agreement about the nature of the perfect can also be noticed between CG's researchers.

As stated in Section 3.3, Radden and Dirven (2007) considered the perfect as a complex tense that describes an anterior situation to a reference time. The perfect involves a backward (retrospective) looking from a reference point. The reference point can be located in the present in the case of the present perfect, in the past in the case of the past perfect, and in the future in the case of the future perfect.

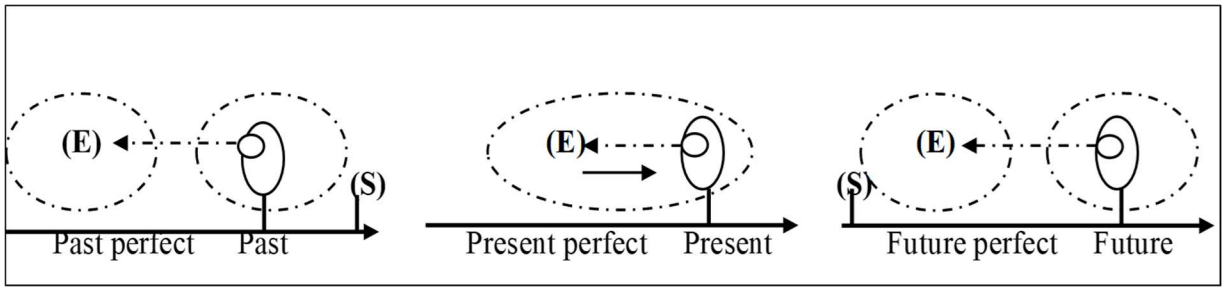


Figure 8 illustrates the speaker's backward looking to an anterior event from a reference point adapted from Radden & Dirven (2007, p.205).

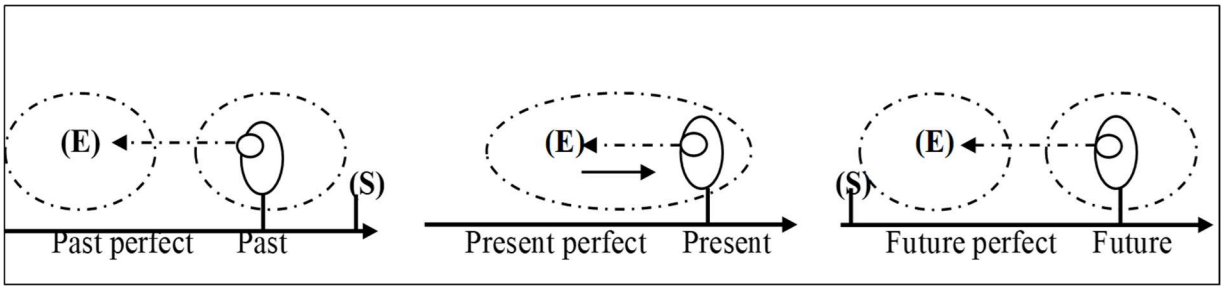


Figure 8. Anterior times expressed by the perfect

The perfect expresses the same conceptual configurations in the three situations. A backward-looking from a reference point to an event, represented by the speaker's position of the head and the dotted arrow. An event happening prior to deictic reference time, past, present, and future. The present perfect represents a special configuration where the reference point corresponds with the event. Hence, it indicates a present relevance of a past happening situation (The solid arrow in Figure 8). Examples:

Our train *has* just *left*.

The present perfect in the example above indicates that the effect of the past situation *the leaving of the train* has a present relevance; the absence of the train in the station at the moment (Radden & Dirven, 2007).

Radden and Dirven (2007) argued for the non-aspectual nature of the perfect. They suggested that the past perfect and the future perfect are two complex tenses since they locate a situation prior to a reference point. They considered the present perfect, however, as having both temporal and aspectual meanings. It is temporal because it locates an event prior to another point in time, and it is aspectual because it is part of the overall situation.

Reif (2010), as Comrie (1971) stated above, considered the perfect as an aspect with a different sense from the other aspectual categories. She argued that the category of aspect in English should include two other subcategories: (a) the viewing scope, i.e. the grammatical aspect expressed by the progressive and non-progressive, and (b) the viewing direction where

the speaker decides to look backward or forward from a point in time. She indicated that the perfect should be included in the latter.

Reif (2010) added that during interaction, the speaker needs to decide between three dichotomies: (a) the distance of the event from the speech time (proximal vs distal), (b) the viewing scope with which the speaker views the situation (progressive vs non-progressive, and (c) the viewing direction with which the speaker accesses the situation (retrospective vs non-retrospective). She also suggested that the term perfect might be misleading. The perfect does not always indicate a sense of completeness, especially when it concerns the present perfect. She proposed that the perfect should be replaced by retrospective instead; the present retrospective and the past retrospective. She, however, agreed with Radden and Dirven's (2007) schematic configurations of the prefect explained above.

3.7.1 Present perfect (retrospective).

According to Radden and Dirven (2007), the present perfect has three main properties: (a) the focus on the present time is due to the correspondence of the reference point with the speech time. Therefore, the anterior event is of potential relevance to the reference point which is situated in the moment of speaking. (b) Current relevance that is the reason for looking back at an event in the first instance. And (c) indefiniteness; since the focus is on the current relevance of the event, its exact time of occurrence is overlooked. Radden and Dirven (2007) added that, the auxiliary *have* in the present perfect is a temporal structure used to ground situations in the present. The past participle is an atemporal structure that cannot ground a situation in itself. Hence, the combination *have + past participle* indicates the grounding of the past participle in the present.

The three main properties of the present perfect stated above define four main uses of the present perfect: resultative perfect, inferential perfect, recent perfect, and continuative perfect (Radden & Dirven, 2007).

3.7.2 Resultative perfect.

The resultative perfect or the perfect of result, (Comrie, 1976), is usually expressed by accomplishment and achievement events (Radden & Dirven, 2007). Both, accomplishments and achievements, denote a completed action with a definite end-point (Radden & Dirven, 2007). When looking back at such events from a reference point located in the present, the focus will be on their completeness and end point i.e., their results (Radden & Dirven, 2007). Example:

Grandpa *has repaired* his tractor

In the above example, the speaker's focus is on the result of the action. The reparation of the tractor started and ended at a time in the past. The result of the reparation is valid at the moment of speaking; therefore, the grandpa can use his tractor. The outcome of the reparation is not explicitly indicated by the present perfect but rather it is inferred (Radden & Dirven, 2007).

3.7.3 Experiential perfect (inferential).

The experiential perfect or inferential perfect is usually expressed by bounded atelic events such as activities, acts, and states (Radden & Dirven, 2007). Bounded atelic events and states do not have an end point, therefore, when they are looked at retrospectively, they do not indicate a specific result (Radden & Dirven, 2007). As a result, the speaker needs to infer their current relevant outcome (Radden & Dirven, 2007). Example:

Ann *has cuddled* the baby.

Since atelic events and states do not have a specific starting and end point, they usually do not occur with specific time adjuncts, otherwise their meanings change (Radden & Dirven, 2007). Example:

I *have started* my new job.

I *started* my new job *last month*.

The addition of the time adjunct *last month* in the second example changed the meaning of the sentence, hence, the use of the past simple tense (Radden & Dirven, 2007).

I *have lived* in Baghdad.

I *have lived* in Baghdad *since* the Gulf War.

The absence of *since* in the first example indicates that the speaker does not live anymore in Baghdad (temporary state) (Radden & Dirven, 2007). However, in the second example *since* indicates that the speaker still lives there, i.e. continuative perfect (see below) (Radden & Dirven, 2007).

3.7.4 Recent perfect.

The perfect of recent past or the recent perfect is "a special type of anterior atelic situation" (Radden & Dirven, 2007, p.215). It indicates a recent past situation that is relevant to the present, it is usually expressed by the time adverb *recently* and it's near synonyms *just*, *already*, *now*, *so far*, *up to now*, etc. (Radden & Dirven, 2007). The recent perfect is also expressed by adjuncts that includes the speech time and the anterior situation at the same time such as *this morning* (Radden & Dirven, 2007). Example:

I've *just* talked to my lawyer.

I'*ve talked* to my lawyer *this morning*.

In the second sentence, the time adjunct *this morning* includes both the time of the anterior situation and the speech time. Additionally, the demonstrative pronoun *this* indicates the proximity of the situation to the present (Radden & Dirven, 2007).

3.7.5 Continuative perfect.

The continuative perfect or the perfect of persistent situation is usually expressed by a state and a time adjuncts such as *since Valentine' Day*, *for five years*, that indicates the continuation of the state in the present (Radden & Dirven, 2007). The absence of the time adjuncts changes the meaning of the continuative perfect into inferential perfect (see Section 3.7.3). Unlike the

pervious meanings of the present perfect, the continuative perfect does not signal an anterior situation to the speech time but rather it is the initial phase of the situation that it is anterior to its later phase (Radden & Dirven, 2007). Example:

We *have been engaged since* Valentine's Day.

The presence of *since* in the example above indicates a persistent state from Valentine's Day till the present moment (Radden & Dirven, 2007).

3.8 Arabic Tense/ Aspect

Linguists interested in describing the Arabic language system agreed that the verb in Arabic can take two forms: (a) the Perfect *al-Maadhi* الماضي ,and (b) the Imperfect *al-Modhaari'* المضارع (Bahloul, 2008; Klopfenstein, 2017; Mazyad, 1999; Ryding, 2014, among others). Similarly to the perfect in English, there is a general disagreement about whether to consider them as tenses or aspects or a combination of the two (Fassi Fehri, 1993).

Traditionally, the Arabic Perfect and Imperfect were considered as tenses. The Perfect indicated situations that occurred in the past; whereas, the Imperfect, the non-past, indicated situations that occurred either in the present or the future (Bahloul, 2008; Fassi Fehri, 1993). Recently, Bahloul (2008) demonstrated that a number of researchers adopted the tense view , he cited (Benmamoun, 2000; Wightwick and Gaafar, 1998). Bahloul (2008) added that current Arabic grammar handbooks also share the same view. Fassi Fehri (1993), however, pointed out that western semiticists and philologists disagreed with the tense view and considered the Arabic Perfect and Imperfect as aspects. The Perfect refers to completed, finished actions and the Imperfect refers to incomplete, unfinished actions. Hence, their opposition indicates the degree of the realization of an action in time not its location (Cohen, 1924 as cited in Bahloul, 2008). According to Bahloul (2008), two other views have also emerged from this debate: one of them considered the Perfect and Imperfect as a combination of tense and aspect (e.g. Comrie, 1976), and the other one rejected their affiliation to the traditional tense/aspect categories (e.g.

Kurylowicz, 1973). This disagreement has prevented linguists from providing an adequate, generalized description of the Arabic temporal system (Fassi Fehri, 1993).

3.8.1 Arabic Perfect.

According to Bahloul (2008), Modern Standard Arabic (MSA) counts two Perfect forms: (a) the simple form that is represented by the bare verb, and (b) the compound form represented by the particle *qad* followed by the Perfect (For more information about the Arabic morphological system see (Appendix L)), examples:

(1) a- *kataba* "He wrote"

b- *qad kataba* "He has written"

Bahloul's (2008) description of the different uses of both the Arabic Perfect and Imperfect was based on what he called variant and invariant properties. Variant properties are the different temporal relations that the Perfect can refer to. The Perfect can be used to refer to past actions, present actions, gnomic actions and future actions. The invariant properties of the Perfect are the common properties shared by all of the variants.

The Perfect, according to Bahloul (2008), can be used to refer to:

3.8.1.1 Past time reference.

The Perfect in Arabic denotes any action that is prior to the moment of enunciation, i.e. the moment of speaking (Bahloul, 2008). Examples adapted from Mazyad (1999).

(2) a- *katab-a* *rissalatan*
Wrote a letter

He wrote a letter.

b- *kataba* *rissalatan* *amsi*
Wrote a letter yesterday

He wrote a letter yesterday.

The Perfect can be used with or without temporal adverbs (2a) and (2b). It is used in narration and in scholarly journals to outline previous research and results. Additionally, the Arabic Perfect does not signal remoteness in time. All events or actions prior to the moment of speaking, regardless of how distant they are, are represented by the Perfect form. The Perfect is used as the counter part of the simple past and the past perfect in English. Within Reichenbachen's SER framework (Speech time, Event time, and Reference time), the Perfect conforms to two representations: E, R_S and E_R_S (Bahloul, 2008). Example adapted from Bahloul (2008).

(3) *ṣarraħa* *safiiru* *al-braaziil* *bi-ʔanna*
Announce ambassador Brazil that

al-buldaana *qaddamat* *ʔakϴara* *mimmaa*
countries present more than

yanbaʁii
must

"The ambassador of Brazil **announced** that the countries **gave/had given** more than they should…"

Example (3) indicates that the Perfect in Arabic can sometimes be translated to the English past perfect.

3.8.1.2 Present time reference.

Bahloul (2008) noticed that in some instances the Perfect can refer to the present time but not to the past. Example:

(4) a- ʔuriidu-ka ʔan taʕtaniya bi- ʔixwati-ka hal **fahim**-ta?
want you that care of-brothers-your Q. understand you?

"I would like you to take care of your brothers, do you understand?"

b- naʕam, **fahim**-tu
yes, understand

"yes, I do/understand/ I've understood."

Example (4) represents a conversation between a mother and her son. In (4a) the mother asked her son if he understood her instructions up to her last word which coincides with the moment of speaking. The son (4b) responded to his mother using the Perfect even if he might be still processing his mother's instruction. Bahloul (2008) suggested that example (4) is an illustration of instances where the Perfect has a present time interpretation. He added that in similar circumstances, English and French would use the present tense, example:

(5) a- I would like you to take care of your brother, do you understand?

b- Yes, I do.

(6) a- Je voudrais que tu prennes soin de tes frères, tu comprends?

b- Oui, je comprends.

Bahloul (2008) argued that following Reichenbachen's framework the E, R and S can be said to occur simultaneously (E, R, S).

3.8.1.3 Future time reference.

The Perfect can have a future interpretation under three conditions: (a) hypothetical and conditional contexts with *ʔin* "if" and *ʔiðaa* "if, when"; (b) with the adverbial particle *maa* "as long as"; and c) in good wishes (Bahloul, 2008). Example adapted from Bahloul (2008).

(7) *ʔin* ***daras-ta*** ***nažaħ-ta***
If study- you succeed- you

"If you study, you will succeed."

Example (7) represents an Arabic conditional sentence with *ʔin daras-ta* "If you study" as the if-clause and *nažaħ-ta* "you will succeed" as the main clause. The Perfect in *ʔin daras-ta* "If you study" indicates the condition that if occurred "now", i.e. in the present time, the proposition in the main clause *nažaħ-ta* "you will succeed" can be realized. Hence, the Perfect *nažaħ-ta* has a future interpretation. Notice that in both clauses, Arabic uses the Perfect to indicate the present and the future time. English uses the present tense and the future tense, however.

(10) *sa-ʔaškuru* *la-ka* *fađla-ka* *maa* ***ħayiit-u***
will-thank to-you kindness-your as long as live

"I will be thankful to you for your kindness as long as I live."

Bahloul (2008) suggested that the future interpretation of ***ħayiit-u*** "I (will) live" can be deduced from *sa-ʔaškuru* "I will be thankful" and from the adverbial particle *maa* "as long as".

(11) **ħafiđa**-ka allaahu
Protect-you God

"May God protect you!"

The Perfect is used in good wishes in Arabic, unlike English that uses the modal verb *may*. The future interpretation again can be inferred from the context.

3.8.1.4 Gnomic interpretation.

By gnomic interpretation Bahloul (2008) meant an atemporal/ timeless interpretation that is valid anywhere and anytime such as proverbs. Bahloul (2008) stated that the Perfect appears as the unmarked case in Arabic since most of proverbs in Arabic make use of the Perfect, unlike English and French which rely on the present tense in such cases. Example:

(12) *man* *žadda* *wažada* *wa* *man* *zaraʕa* *ħaṣada*
whoever strive find and whoever cultivate harvest

"Whoever works hard succeeds, and whoever cultivates harvests."

Example (12) is a well-known proverbs that most educators in the Arab world use to encourage their students to work hard.

3.8.1.5 The particle qad + Perfect.

Bahloul (2008) advocated that the particle *qad* in Arabic is an intriguing grammatical concept that has not been widely studied. Grammarians and scholars who have been interested in the particle *qad* disagree about its function. The particle *qad* can take another form *la-qad*. Although Bahloul (2008) devoted a whole chapter to the discussion of *qad*, I will only tackle the main points that I assume relevant to the present work (see Bahloul, 2008).

Bahloul (2008) hypothesized that *qad* has an assertive function. It is used most of the time in emphatic contexts. The use of *qad* in such contexts can be assumed to be similar to the function of the English present perfect where current relevance is denoted. The particle *qad* establishes a relation between an anterior and completed "dimensionalized" event and the present context. Example:

(13) *la-qad* *ʔkmal-tu* *qiraaʕata-hu*
LA-QAD finish reading

"I have finished reading it."

Bahloul (2008) highlighted that some scholars, however, equalized the use of *qad* in Arabic to that of the past perfect in English. See the translation of example (14) below.

(14) ***kuntu*** *qad* *badaʔtu* *ʔqraʔu*
Be QAD started reading

"I had started reading."

Mazyad (1999) considered *qad* as a particle that may indicate emphasis or approximation of the past to the present. He distinguished between ***qad+ Perfect*** and ***kaana+ qad+ Perfect***. The former refers to recent past whereas the later indicates remote past. See example (15) below:

(15) a- ***qad*** ***katabat*** *hindun* *risaalatan*
QAD wrote Hind letter

"Hind has written a letter."

b- ***kaanaa*** ***qad*** ***katabaa*** *risaalatan* *ʕi'ndama* *wassala* *zaydun*
KAANA QAD wrote letter when arrived Zaid

"They had (already) written the letter when Zaid arrived."

Bahloul (2008) suggested that all the above variants of the Perfect share two main properties, what he called invariant properties of the Perfect: "anteriority" and

"dimentionalization". By anteriority, he meant that the Perfect expresses events that are: (a) anterior to the moment of speaking (T_0) referring to a pure past action. In this case, it can be equated with the English past simple. (b) Anterior to a reference time (R), such as the situations expressed by the particles *kaana* or *qad*. In this case it can be equated with the English present perfect and/ or past perfect. Dimentionalization refers to the wholeness of the events. Events denoted by the Perfect are considered as completed events. They are evaluated in their entirety not in their progressivity. The temporal adverb *amsi* "yesterday" in (4b) indicates that the event is visualized in its entirety not in its continuity.

3.8.2 Arabic Imperfect.

Most of the time, the Arabic Imperfect is considered as the opposite of the Perfect. While the latter refers to past events, the former is interpreted as referring to present and future events (Bahloul, 2008; Klopfenstein, 2017; Mazyad, 1999). Similarly to the Perfect, Bahloul (2008) categorized the interpretations of the Imperfect into: variants and invariants. Variant interpretations denote present, past, future and gnomic actions.

3.8.2.1 Present time reference.

In its description of the Imperfect, Bahloul (2008) focused on two main properties: *identification* and *actualization*. The Imperfect is used to describe situations that are simultaneous with the moment of speaking, i.e. present time. Hence, there is an identification between the moment of speaking and the moment of the event. Additionally, the Imperfect is used to actualize the predicative relation. See example (16) below:

(16) a- maaðaa **tafʕalu** yaa nabil?
What do Voc.Part Nabil?

"Nabil, what **are** you **doing**?"

b- ***ʔataħaddaϴu*** *maʕa* *sadiiq-ii*
Talk with friend-my

"I **am talking** with my friend."

c- ***taðaʕu*** *al-laħma* *ϴumma* ***taðaʕu*** *al-xuðara*

put meat then put vegetables

"You **put** the meat, then you **put** the vegetables…"

The Imperfect in (16a) has a value of identification since it equates the moment of enunciation with that of the event. Hence, the sense of progressivity and unboundedness. In his answer (16b), Nabil actualized the predicative relation by answering that he is "talking to his friend". Bahloul (2008) suggested that the validation of the predicative relation is detached from any point of view, i.e. it is not related neither to the moment of speaking nor to a reference point.

The Imperfect is also used in contexts where there is a live description of what is going on, such as in the case where a reporter describes a football game or a TV show that presents a cooking program (16c). The focus in (16c) is not on the temporal interpretation of the event whether it is simultaneous or not to the moment of speaking but rather the focus is on the occurrence of the event, performatives.

3.8.2.2 Gnomic reference.

The notion of validation of the predicative relation is clearly indicated in situations where the Imperfect is used to describe general truth and proverbs. Such situations are described as being timeless or atemporal. Thereby, there is a sense of detachment from the moment of speaking again. Example:

(17) a- *waaħid* *wa* *waaħid* ***yusaawii*** *ʔiϴnaani*
One plus one equals two

"One plus one equals two."

b- *al-ħaqqu* ***yaʕluu*** *wa* *laa* ***yuʕlaa*** *ʕalay-hi*
the-truth rise and not rise above-it

"The truth **prevails** and nothing overcomes it."

3.8.2.3 Future time reference.

The future interpretation of the Imperfect has been largely discussed by Bahloul (2008), however, I will only focus on points that are of interest to the present work.

Even though futurity is marked in Arabic by the modal *sawfa* and *sa* "will and 'll", the Imperfect is used as well. The future interpretation of the Imperfect relies mostly on the presence of temporal adverbs. Hence, it relies mostly on the context. Unlike the other variants of the Imperfect that stress the certainty of the events, the futurity interpretation belongs to the domain of the non-certainty. The future interpretation of (18) below, draws on the presence of the temporal *next October*. Example:

(18) *wa* *(Ø)yabdaʔu* *al-barlamaanu* *baħΘa-haa* *fii ʔuktuubar*
And start the-parliament discussing in October

"The parliament **(will) start** examining it next October…"

3.8.2.4 Past time reference.

Past time interpretation of the Imperfect is generally noticed in academic discourse where writers report events that happened in the past and still have validity in the present. The past interpretation of the Imperfect relies on context. Therefore, the Imperfect construction is highly contextual when expressing pastness and futurity. Similarly, English and French use the present tense to report such events. Example:

(19) a- *al-qalaqu* ***yaʕuudu*** *ʔilaa* *ʔažwaaʔi* *al-ʔiqtissadi …*
The-anxiety return to spheres the-economy

"Anxiety about the economy **came back**…"

b- En avion, il **rentre** dans le salon pour voir sa belle. (Tunis Hebdo September 28, 1992, p.10)

c- Delegates **approve** dues increase. (New York Times May 17, 1993, p.2)

3.8.2.5 kaana + Imperfect construction.

The construction *kaana*+ Imperfect equals "used to" and/or "was-V-ing" the past continuous. *kaana* "the past of to be" signals the temporality of the event. The auxiliary *kaana* anchors the event in the past. The Imperfect, however, signals the unboundedness of the event, i.e. its progressivity. The compound verb *kaana* + Imperfect denotes the same features of any compound verbal construction where the auxiliary anchors the event in time and the verbal form is timeless or lacks temporality. This phenomenon is noticed in both English and French (Bahloul, 2008). Example:

(20) *kaana* *yalʕabu*
Be play

"He was playing."

Bahloul (2008) concluded that unlike the Perfect, the search for invariant properties within the variants of the Imperfect can be difficult. The Imperfect can be considered as the opposite of the Perfect only in its basic meaning where the latter refers to present time interpretation and the former denotes past time reference. Hence, the Perfect expresses anteriority and dimensionalization and the Imperfect expresses simultaneity and unboundedness. Additionally, the Imperfect can have closer or nearly similar properties as the Perfect when it describes past and gnomic events.

All in all, the analysis of the English tense/aspect system and the Arabic tense/aspect system suggests that Arabic uses three different grammatical structures to express the English simple past tense, past continuous and present perfect. The Perfective is used as the equivalent of the simple past tense in English. The complex composition *kaana*+ Imperfect is the English equivalent of the past progressive. The complex composition *qad*+ Perfect is the English equivalent of the present perfect. Hence, the grammatical structures of both languages indicate a one to one corresponds between the two systems with regard to the three tense markers stated

above. However, when analysing these two systems from a CG point of view, differences might be noticed.

By looking at the Arabic tense/aspect system from Reif's (2010) perspective (the three dichotomies stated in Section 3.7), it can be inferred that: (a) the Arabic tense/aspect system signals proximity by adding a prefix to the bare verb (Imperfective); whereas, it signals distance with a zero marker (Perfective). Note that, suffixes in the Arabic verbs indicate gender and person agreement (see Appendix L for inflection in Arabic). (b) Arabic signals progressivity by adding a prefix to the bare verb (Imperfective); whereas, it signals distance with a zero marker (Perfective). Therefore, in a communicative interaction, the Arabic native speaker uses only one grammatical structure to locate a situation in time and to reflect her/his point of view; whereas, an English native speaker uses two grammatical structures to express the above mentioned categories.

From CG perspective, different grammatical structures indicate different conceptualizations in the mind of the speaker and vice versa. Hence, Arabic uses two different grammatical structures to signal anterior situations to the past and the present. The complex composition *qad*+ Perfective is the equivalent of the present perfect. The particle *qad* relates an anterior situation to the present time. *qad*, thus, is the equivalent of the auxiliary *have* in the English present perfect. With regard to the anterior situations to the past, Arabic uses the complex composition *kaan* + *qad* + Perfective. Unlike English where the time of the reference point is indicated by the tense of the auxiliary *have* (*had* in the case of the past perfect), the Arabic adds the auxiliary *kaan* to *qad* to relate anterior situation to the past. Therefore, these different grammatical structures reflect the different conceptualizations an Arabic native speaker and an English native speaker have when expressing anterior situations, which can be a potential source of difficulty for L2 learners of either language.

The different conceptualizations that Arabic native speakers and English native speakers have when looking at situations and/or locating them in time can presumably affect the way they learn these languages. As a result, learners should be helped to become aware of these differences in order to form appropriate conceptualizations that fit with the target language. Instruction, thus, should provide learners with adequate and relevant explanations of these concepts to help them improve their understanding. This, I propose in this thesis, can be achieved through Concept Based Instruction.

3.9 Conclusion

This chapter explored the Cognitive Grammar (CG) view about language. This theoretical perspective assumes that a grammatical description of a linguistic system cannot be adequately achieved without reference to meaning. Meanings emerge from humans' conceptualization of the world that surround them, i.e. their social environments. These conceptualizations differ from one person to another and they are reflected in the way they use language. Grammar, hence, is concerned with providing a scaffold to these different conceptualizations. CG rejects the idea of an innate device responsible for language acquisition but rather opts for a range of cognitive processes used in the acquisition of any skill. Language cannot be studied in isolation from its social context where communicative functions shape language forms.

To sum up the literature review chapters, CBI model has been shown to be an effective tool in helping learners improve their conceptual understanding (see Negueruela, 2003, among others). The quality of the grammatical knowledge presented to learners, i.e. SCOBA and verbalization appear to be a powerful tool on improving learners' cognition and thinking. However, to date few studies have incorporated the whole CBI cycle focuseding primarilyon the role of verbalization as a mediational tool (Swain, et al, 2009 among others). Furthermore

and to the best of my knowledge only one has compared individual and dyadic verbalization (see Harun, 2013). Methodologically speaking, most CBI research has been qualitatively oriented with a small number of participants. Finally, learners' conceptual development has been studied following the genetic method (Gánem-Gutiérrez & Roehr, 2011 among others), which valuable as it is for looking at learning at the micro-level, has less to say about the potential generalisation of findings.

Another point made in this literature review relates to the aim behind promoting learners' conceptual development as helping learners select the appropriate grammatical form to convey the different meanings they want to express. Thus, CBI aims at helping learners make form-meaning connections. Although, studies have shown that the CBI model can help learners improve their conceptual understanding, a lot is still unknown with regard to the language use. To date, most applications of the model show limited results with regards to the role of practice on improving learners' use of the language very likely because of the lack of practice activities in most of these designs (Harun, 2013; Negrete Cetina, 2019, among others).

A final, yet very important aspect which has been neglected is the affective dimension (section 2.5). There is, therefore, a considerable gap in the literature addressing learners' attitudes towards the type of language instruction received. The two most influential studies were the ones conducted by Horwitz (1988) and Schulz (2001).

This project was thus designed to address those gaps by: (a) implementing the CBI model within an intact classroom, (b) comparing CBI to PPP (TI), (c) assessing and comparing the effects of CBI and TI on the longer term using and including delayed post-testing, (d) assessing the role of practice as part of the model, (e) assessing the role of verbalization as a mediational tool while comparing individual to dyadic verbalization, and (e) by exploring learners' attitudes towards their respective treatment.

Chapter 4: Methodology

4.1 Introduction

The present chapter outlines the methodology and the procedure followed to collect and analyse the data. The chapter starts by outlining the rational of the study. It then describes the context, the participants, the methods and instruments believed to best support our inquiry. Finally, the last section of the chapter provides a description of the analytical procedure applied to data.

4.2 Rationale of the Study

Rooted in the work of Vygotsky (1987), Sociocultural theory (SCT) highlights the role of mediation in developing humans' higher forms of mental activity. Mediation can be through physical tools such as computer, hammer, etc., and psychological tools such as chart, figures, language. Language is considered as the most powerful psychological tool humans use to mediate their behaviour (see Section 2.2). To this end, the present study was conceived and implemented within the Sociocultural perspective to language learning which highlights social interaction as the outset of learning and development, and the co-construction of knowledge through physical and psychological tools. Based on previous studies (Harun (2013); Negueruela (2003); Swain, et al (2009) and others), the present study aims at comparing two pedagogical models; that is, CBI and TI, for improving Algerian learners' understanding of the concept of tense/aspect and use of past simple, past continuous, and present perfect. The following questions provide foundations for the study:

RQ1- What is the immediate and longer term (three weeks) effect of CBI on improving Algerian learners':

(a) understanding of the concept of tense/aspect in L2 English and;

(b) accurate use of the target forms (past simple, past continuous and present perfect)?

RQ2- Is CBI more effective than traditional instruction (TI) for improving Algerian learners':

(c) understanding of the concept of tense/ aspect in L2 English and;

(d) accurate use of the target forms (past simple, past continuous and present perfect)?

RQ3- Which type of verbalization, individual or dyad-based, leads to higher levels of improvement in learners'

(a) understanding of the concept of tense and aspect in L2 English and;

(b) accurate use the target forms (past simple, past continuous and present perfect)?

RQ4- What are the participants' attitudes towards the pedagogical intervention they received (either CBI or TI)?

In order to address the research questions stated above a quasi-experimental design was implemented with two intact classrooms. Quasi-experimental designs are best used in educational settings where the researcher sees no need for rigid and strict control of variables as it happens in laboratory conditions (Gray, 2009). Importantly, its aim is to assess phenomena in real-world conditions .This methodological paradigm is, therefore, particularly suited to Vygotskian thought (see Section 2.2.2 and also Van Lier, 2000). In this study, the quasi-experimental design was used to assess and compare the effectiveness (or otherwise) of two pedagogical interventions (CBI and TI) in real classroom conditions. Two intact classrooms from the Department of English Language and Literature at the University of Constantine 1, Algeria were selected. One class received intervention based on the CBI model and the other class received intervention based on a traditional model of grammar presentation

(see below). The intervention (CBI and TI) took place under similar conditions to what usually happens in their language classrooms.

The effectiveness (or otherwise) of CBI and TI treatments was assessed using a pre-post-test procedures. A variety of teaching materials and activities were developed based on CBI and TI. The development of teaching materials constituted an intellectual challenge and form part of what is presented in this chapter as well as in the appendices. Furthermore, a variety of research tools were developed and used to collect the data. The data collected was analysed quantitatively and qualitatively. The quantitative data was collected using Metalinguistic knowledge tests (MLK test), Language use test (LUT), and two questionnaires. The data was coded and analysed using the Statistical Package for Social Sciences (SPSS). Based on a Vygotskian perspective that promotes the importance of verbalization through which the conceptual development process can be traced back, the participants were audio recorded while dealing with CBI materials. The recordings were transcribed and analysed using Swain et al.'s (2009) Languaging Units coding scheme (see below).

4.3 Context of the Study

The study was conducted during the first semester of the academic year 2018/2019 at the Department of English Language and Literature (DELL), University of Constantine 1, Algeria. The study included two intact classrooms. The participants were second year students enrolled in the English Language Bachelors Program and all of them consented to take part in the study (see Appendix A). Both groups were taught by the researcher for the whole semester (4 months). In order to gain access to the participants, I was assigned as grammar and methodology teacher at the DELL. The same data collection procedures were followed for both groups. The data collection was conducted throughout six sessions of 1h 30min (see Section 4.7 below).

The level of proficiency of the participants was determined based on the entrance requirements of the DELL. The DELL accepts applicants who hold the Baccalauréat d'Enseignement Secondaire (Secondary School Certificate), also referred to as the BAC exam with a minimum oval score of 10/20, equivalent to a score of D in the UK A level and a minimum English score of 12/20,equivalent to C in the UK a level. Priority is usually given to the applicants who hold a BAC certificate in Foreign Languages, and Arabic Literature and Philosophy. The speaking proficiency of the applicants is not assessed; hence, there is no oral examination. The entrance score requirements may change from one year to another. More explanation is provided in the following sections.

4.3.1 Baccalauréat d'Enseignement Secondaire (BAC).

The BAC is a national examination in Algeria. It is a fundamental university entrance requirement at grades from 10/20, equivalent to 3rd class honours classification in the UK and C degree (2.0 on the GPA scale). The BAC exam can be taken within the following streams: Mathematics, Natural Sciences, Technology, Management and Economics, Arabic Literature and Philosophy, and Foreign Languages. The teaching of languages, Arabic (L1), French (L2) and English (FL), is compulsory. However, the focus and the time devoted to each of them may differ from one stream to another. For example languages are overlooked within scientific streams such as Mathematics, Natural Science and Technology as compared to Foreign Languages, and Arabic Literature and Philosophy. In addition to French and English, students within the Foreign Languages stream may also have to study Spanish, German or Italian.

4.3.2 English test.

English test in the BAC exam consists of two parts: a) part one: reading comprehension. Participants have first to read and to understand a text in English and answer a number of related questions. Then, they are assessed on their grammar and vocabulary skills where they need for example to use the passive, conditional, find synonyms and antonyms, etc. b) Part two: written

production. Participants can either write an essay on a specific topic or summarize the text in part one. The English test is paper-based.

4.3.3 Department of English Language and Literature (DELL).

Students accepted at the DELL will have to study English for 3 years to graduate with a Licence the equivalent of a Bachelor degree. During their 3 years of Licence, students need to attend 10 to 12 compulsory courses, such as Oral Expression, Written Expression, Grammar, English Literature, etc. All courses are taught in English. Grammar is a compulsory course taught during the first and second year of the Licence Degree. Students study grammar twice a week, one hour and half per session. The students' grammar is assessed by a grammar exam at the end of each semester. Most of the time, exams are in a form of fill-in-the-gaps exercises and/or written production.

4.4 Participants

The study involved two intact classrooms of second year students of English at the DELL at Constantine 1 University. Participants consented to take part in the study (see Appendix A). No reward was given to the participants. The study followed a quasi-experimental design with intact groups since they were assigned to the researcher by the University; one group was designated as the CBI group and the other group as the TI group. The TI group consisted of 20 participants (N=20), 17 females and 3 males. The CBI group consisted of 25 participants (N=25) and was further divided into two subgroups: (a) individuals: 8 females and 1 male (n=9) and (b) dyads: 13 females and 3 males (n=16). See sections below for more explanation.

In order to collect data about the participants' personal information and languages experience, a Personal Background Questionnaire (PBQ) was administered (see Section 4.6.1 below). The participants were all in the first semester of their second year as students of English at the DELL. They were Arabic (L1) native speakers learning English as a foreign language

(FL), seven years of compulsory English instruction. In addition to English, they all spoke French as a second language (L2), 10 years of compulsory instruction as well. None of the participants had ever prepared or taken any international English test such as the IELTS or the TOEFL.

4.4.1 CBI group.

As was mentioned above, participants in the CBI group were divided into two subgroups, 9 students working individually and 16 working in dyads. The aim behind such a division was to explore the role of verbalization as a mediational tool in promoting the participants' understanding of the concept of tense/ aspect and in using accurately the target forms by comparing individual verbalization to dyads verbalization. The average age of the participants was (*Mdn*=20, range:19-38)). Most of the participants held a BAC certificate in Natural Sciences (n= 12), nine participants hold a BAC certificate in Foreign Languages (n= 9), two participants in Mathematics (n =2) and two participants in Arabic Literature and Philosophy (n= 2).

Participants had an average score of 12.5 in their BAC exam (SD= .82), with a mean score of 15.36 in the English examination (SD= 2.40). They are considered as intermediate to upper intermediate leaners of English. Four participants received English training out of the school settings for a few months (M= 7.75, SD= 10.99). In addition to French and English, some participants studied other languages such as Spanish, German, Italian, and Turkish.

In order to ensure confidentiality and anonymity, codes were used instead of the participants' real names throughout this thesis. The following codes were used to identify the participants (a) Participants Experimental group Single (PES), and (b) Participants Experimental group Dyad (PED).

4.4.2 TI group.

The TI group consisted of 20 participants (N=20), 17 females and three males. Their average age was *Mdn*=19.5 (range: 19-21). Most of the participants in the TI group hold a BAC certificate in Foreign Languages (N= 15) and five participants held a BAC certificate in Natural Sciences. The participants' level of proficiency also ranged from intermediate to upper intermediate. Their English examination average score was M= 14.26 and their overall average score in the BAC exam was (M= 12.27). In addition to 7 years of compulsory English instruction, three participants had English training out of school (8 to 24 months). Half of the TI group participants studied Italian, four participants studied Spanish and one participants studied German. The participants in the TI group were identified as Participant Control (PC) plus a number instead of their real names to ensure anonymity and confidentiality.

4.5 Teacher-researcher

The teacher-researcher was a novice foreign language teacher and an Arabic native speaker. In order to conduct the study I was assigned as a grammar and a research methodology teacher at the DELL. It was my first experience as a teacher at the University. I was excited to teach there and at the same time I was challenged to integrate the lessons based on the contrasting models (CBI and TI)into the grammar and methodology classes. Nonetheless, every effort was made to be as objective as possible by not aligning myself to one approach over the other. Teaching grammar based on such contrasting pedagogical models was not an easy feat for me, but it was indeed a formative experience.

Interestingly, I found that teaching within the TI model presented more challenges than teaching using the CBI model. The implementation of the TI materials was demanding even if the participants were familiar with this type of instruction. It seemed to me that the the participants in the TI group were too relaxed and rather passive. I felt that they were just waiting for me to dictate the rules, for example.By contrast, although the participants in the

CBI group seemed to be a little bit challenged by the novel procedure especially at the beginning of the intervention. Despite this, they appeared more interactive and enthusiastic about CBI.

However, my self-awareness at being a teacher-researcher made me strive for impartiality and objectivity and I made every effort to make both classes as comparable as possible but for the pedagogical treatment itself. I made every effort to integrate the lessons based on either the CBI model or the TI model as relevant to the students' experience as possible and in as natural way as possible. All along the data collection procedure, the needs of the students and their grammar and methodology curriculum were the focus of the teaching endeavour. During all sessions, I tried to preserve my participants' focus on both grammar and methodology without overwhelming them. Being a teacher-researcher was challenging and demanding but exciting at the same time.

4.6 Data Collection Tools

4.6.1 Personal background questionnaire (PBQ).

The PBQ was adapted from Harun (2013). It underwent some changes to make it fit the context of the study. The PBQ was a paper-based questionnaire that consisted of thirteen (13) questions (see Appendix B). It was checked by the research supervisor and then revised and piloted with four participants at the DELL before being administered to the participants in the main study. The PBQ was administered at the beginning of the treatment (see section 4.7 below). The aim behind using the personal background questionnaire was (1) to collect data about the participants' languages learning experience, and (2) to gather information about their English level proficiency. The questionnaire was administered to all the participants in the study.

4.6.2 Treatment materials.

The following sections provide details about the materials and practice tasks developed for the study. I will first describe the materials which were used as input and content for the explanations of the target concepts and features (tense and aspect, simple past, past progressive and present prefect) for the CBI group (SCOBA) and its respective tasks. I will then provide an account of the materials of the TI group and its accompanying practice tasks.

4.6.2.1 Pilot study.

When developing the materials, particular attention was given to ensure that both groups (CBI and TI) received comparable input and treatment, albeit delivered through contrasting materials and tasks. Furthermore, all the materials designed for the study were piloted before being used in the main study. According to Gass and Mackey (2007), a pilot study is a small scale trial of the materials, methods and procedures followed in the main study that helps to uncover the problems that the researcher may be faced with during the main data collection and become familiar with the context of the study.

The pilot study was conducted in April 2018, six months before the data collection for the main study started, at the DELL, University of Constantine 1 Algeria. The treatment materials were piloted with four first year students of English (N=4) through six sessions of 1h 30 min each. According to Cohen et al. (2011, p. 492) piloting can be done with a small group of participants. The piloting group should provide feedback on a) "the clarity of the items, instructions and layout", b) "ambiguities or difficulties of wording", c) "readability level and language problems" and d) the time allocated for the tests/tasks. The choice of the participants was based on the grammar curriculum at the DELL; since during that period of the year first year students were expected to deal with tenses.

The pilot study allowed the researcher to notice some issues such as:

1. The lack of equipment at the DELL which led to the adjustment of all the treatments materials to meet the needs of the DELL (see Sections below).
2. The change of the population: the main study was conducted with second year students of English instead of first year. This change was based on the advice of some lecturers at the DELL since according to them the content of this research fitted more with the grammar curriculum of the second year.

4.6.2.2 CBI treatment.

CBI treatment was based on Galperin's model. Participants were first presented with the Scheme of a Complete Orienting Basis of an Action (SCOBA). The SCOBA is the materialized form of the concept of tense/aspect, the didactic model used in the study that orients and guides the learners' performance (see Chapter 2). The SCOBA developed in the study drew on cognitive grammar (CG) (see Chapter 3). According to Lantolf and Poehner (2014), cognitive linguistics draws on two aspects that are of paramount importance for STI/CBI: a) CL foregrounds meaning over form; language patterns are motivated by meaning, b) linguistic concepts are explained through diagrams, schemata and visual concepts. A number of CG books and CBI studies were consulted to design the treatment materials (Gánem-Gutiérrez, 2016; Gánem-Gutiérrez & Harun, 2011; Harun, 2013; Langacker, 1991, 2000, 2008; Niemeier & Reif, 2008; Radden & Dirven, 2007). Figure 9 below exemplifies the materialization of the concept of progressive and non-progressive aspect adapted from Radden & Dirven (2007).

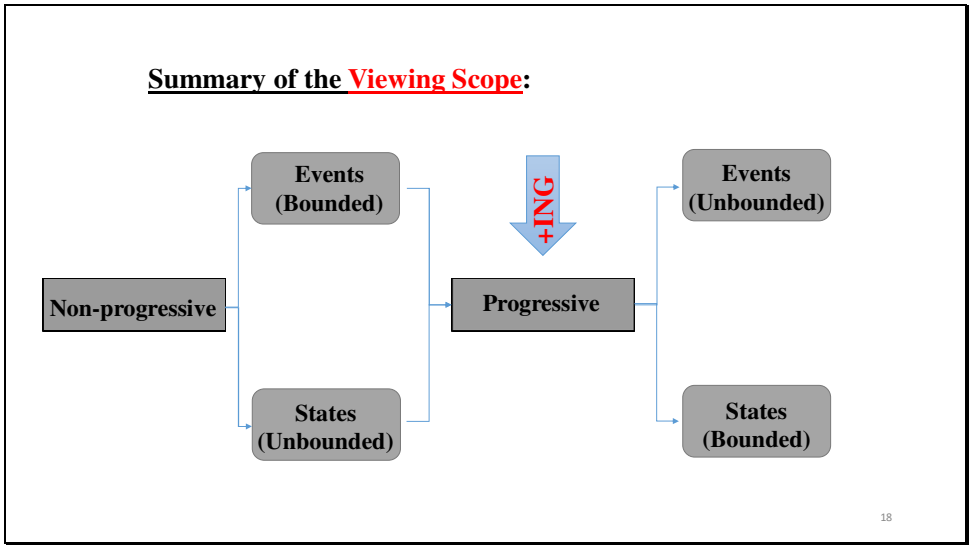


Figure 9. Cross-wise aspectual contrast adapted from Radden & Dirven (2007)

The design and development of the SCOBA was demanding and represented an intellectual challenge for the researcher. It was designed in conjunction with the thesis supervisor. It took months of careful preparation, revisions and piloting. The SCOBA, therefore, underwent a series of corrections by the supervisor before being piloted in Algeria at the DELL. The SCOBA was first in a form of a Power-Point presentation that consisted of fifty (50) explanatory slides. The slides contained concept maps, diagrams, images, tables and explanations. The piloting phase was very useful for the study. The researcher realized that the lack of equipment at the DELL may be a hindrance in the use of the Power-Point slides. In order to overcome the drawbacks of the pilot study, the Power-Point slides were replaced by paper-based cards with the same content, a procedure used by (Swain et al., 2009).The cards contained information about types of situations, tense, aspect and the target forms the simple past, the past continuous and the present perfect (see Appendix E).

4.6.2.3 Audio recording: Verbalization.

From a SCT perspective, verbalization is considered as a mediational tool that facilitates development and learning of knowledge as well as the tracing back of such learning. According to Gal' perin (1969), when the action is sufficiently learnt using the material support, "it is necessary to tear [it] away from its previous material support" and 'elevate' it to the verbal level

(Arievitch & Haenen, 2013; Haenen, 2001; Lantolf & Thorne, 2006). Speech imbues human with the capacity of organizing and gaining control over their mental functioning (Lantolf & Thorne, 2006). Swain et al (2009) shed light on the importance of languaging in the learning process. They explained that languaging has a two way function, it transforms the inner speech to "external knowing" and at the same time it transforms this "external knowing into an internal cognitive activity" (p.1). Following the CBI model, the participants were asked to verbalize their thinking related to the SCOBA cards used in the study. Their verbalization while dealing with the CBI cards was audio recorded. The aim behind audio-recording the verbalization phase was to evaluate its effect on enhancing the participants' understanding of the concepts of tense and aspect.

The study incorporated the two types of verbalization; communicated verbalization and dialogical verbalization (see Chapter 2). Following the CBI model, participants in the CBI group were asked to verbalize their thinking individually or in dyads when manipulating the SCOBA cards. During the treatment, the participants recorded themselves while dealing with the cards and during exercise three (see Section 4.6.2.4.3).

According to Negueruela (2003), the application of the idealized form of Gal'perin's model might be challenging due to the dynamics of the classroom, time constraint, the curricula, etc. He stated that focus should be put on the principles behind the theory not necessarily on the model as such. Hence, relying on Negueruela (2003) and on the application of CBI model by Harun (2013) and, to explore the value of individual versus dyadic verbalization, the CBI group was divided into two subgroups, individuals and dyads. Therefore, and as mentioned above, participants in the CBI group were divided into two subgroups, seven participants (N=7) verbalized individually and 16 participants (N=16) worked in pairs/dyads. Thus, arrangements also provided data to gain insights into the characteristics and potential benefits (or otherwise)

of the two different types of verbalisation found in the literature (e.g. Gánem-Gutiérrez & Harun, 2011; Lantolf & Poehner, 2014; Lapkin, Swain, & Knouzi, 2008, among others).

4.6.2.4 CBI practice.

According to Negueruela-Azarola and García (2016), SCT- inspired pedagogical approaches must help the learners engage in "reflective conceptual tasks where they are pushed to discover and find contradictions between their communicative choices and how they make sense of them" (p. 301). Hence, in order to help the participants practise what they learned from the SCOBA and to help them develop the use of the target forms, five exercises were developed. Some of these exercises were adapted and inspired from Gánem-Gutiérrez (2016), and others were designed by the researcher.

Participants of both CBI subgroups, dyads and individuals, were asked to do five classroom exercises. Feedback was also provided by the researcher at the end of the practice session (see Section 4.7).

4.6.2.4.1 Exercise one.

Exercise one consisted of ten statements. The participants were asked to state whether the sentences were correct or incorrect and to supply correction for the incorrect sentences. The exercise contained seven incorrect sentences that needed correction and only three correct sentences. The aim behind the exercise was to assess the participants' understanding of the information presented in the SCOBA (see Appendix E2).

4.6.2.4.2 Exercise two.

Exercise two was adapted from Gánem-Gutiérrez (2016). In this exercise, participants were asked to match each sentence with the diagrams that best reflected its meaning. The exercise consisted of seven sentences and five diagrams. The instruction indicated that there might be an odd sentence with no diagram and one sentence that matched more than one diagram (see Appendix E2).

4.6.2.4.3 Exercise three.

Exercise three consisted of a script taken from Thompson & Martinet (1986, p.52). The conversation was between Ann and Jack who had not seen each other for ages. Ann and Jack used a number of verbs in the past simple, the past continuous and the present perfect. The verbs in the conversation were bolded so that the students could notice them. Participants were asked to explain why Ann and Jack were using these tenses. The participants' explanation was audio recorded (see Appendix E2).

4.6.2.4.4 Exercise four.

Exercise four consisted of five sentences. The participants were asked to identify: (a) the type of the verb, (b) the aspect, and (c) the tense used. The answers to the first sentence were already provided as an example. The aim behind the exercise was to assess the participants' understanding of lexical aspect, grammatical aspect and tense.

4.6.2.4.5 Exercise five.

Exercise five consisted of five sentences with verbs between brackets (see Appendix E2). The participants were asked to provide the correct form of the verbs based on a description provided. The description contained information about tense, aspect, viewing perspective, etc. The participants were familiar with the terminology used in the description since it had been used in the CBI treatment. The first sentence was done as an example.

4.6.2.5 TI treatment.

The Traditional Instruction treatment (TI) was based on the procedures normally used at DELL and the content drew on popular English grammar books such as Longman English Grammar (1988); Oxford Guide to English Grammar (1994); Teacher's Grammar of English (2008); English Grammar in Use (1994); A Practical English Grammar (1986). The TI treatment followed a rule-based approach. The target forms were presented as discrete items. Thereby, the

treatment contained four lessons. Table 1 below provides information about the TI treatment (See also Appendix F1, F2, F3, and F4).

Table 1

TI treatment

Lessons	Lesson plan
Lesson one: verb Lesson two: past simple Lesson three: past continuous Lesson four: present perfect	Step 1: Examples Step 2: Rules Step 3: Practice

As with the CBI materials, the TI materials underwent a series of revisions, corrections, and piloting. The lessons were corrected by the supervisor and then piloted in Algeria at the DELL with one female participant. As it has been mentioned above, the piloting phase provided the researcher with many insights and helped her revise and adjust the material developed. TI materials were first in a form of Power-Point presentation but for practical reasons, e.g., lack of

Past simple

Examples

1- I ***loved*** her then.
2- I ***ran*** three miles yesterday.
3- They ***built*** that house a long time ago.
4- We ***reached*** the summit just before noon.
5- Last night we ***ate*** dinner in that Italian restaurant you like so much.

Rules

1- The simple past tense is represented by ***–ed*** inflection on regular verbs and by other ***changes*** in the case of irregular verbs.
2- The simple past expresses an action ***prior to*** the time of speaking.
3- The simple past tense frequently occurs with expressions that indicate ***a specific point in time*** when the action was carried out, such as ***yesterday, a week ago, last Monday, at four o'clock, in the morning, on Tuesday*** and so on.
4- The simple past can be used with ***state verbs***.
5- Since state verbs have an unlimited duration, the presence of a time adverb such as ***then*** with stative, leaves open the possibility that the ***state still exist*** (Example 1).
6- When two complete actions follow each other, we use the past simple:
Tim ***got up*** when the doorbell ***rang***.

7- The simple past is usually used for ***narration***. (*Once upon a time a Princess **went** into a wood and **sat down** by a stream).*

equipment, they were subsequently changed to paper (see CBI above). Figure 10 below provides an example of the past simple lesson presented to the TI group.

Figure 10. Past simple lesson adapted from traditional grammar book

The presentation of TI materials followed the current practice at DELL: I started first by writing the examples on the board. Then, I gave some time to the students to finish writing the examples. After that, there was a classroom discussion of the examples presented with the teacher present providing guidance. After discussing the examples, the participants had to write the rules that I dictated. Practice took place in a separate session (see Section 4.7 below and Appendix F5). The practice exercises were adapted from traditional grammar books and are detailed below.

4.6.2.6 TI practice.

In order to help the participants in the TI group practice what they had learned in class and give them a chance to use the three target forms dealt with in the study, six exercises were adapted from three traditional grammar books (Cowan, 2008; Murphy, 1994; Thompson & Martinet, 1986). The practice was paper-based and feedback was given orally at the end of the session.

4.6.2.6.1 Exercise one.

Exercise one consisted of five sentences. Participants were asked to identify the type of the verb in each sentence, state or event (see appendix F5). Sentence one was given as an example to help the participants complete the task. Exercise one was adapted from Ron Cowan (2008), however, the sentences used in the exercise were taken from Murphy (1994); Thompson & Martinet, (1986).

4.6.2.6.2 Exercise two.

Similarly to exercise one, in exercise two the participants were asked to identify the tense and the aspect of six verbs used in sentences (see Appendix F5). The first sentence was given as an example. Both exercises were adapted from Ron Cowan (2008); Murphy (1994);

Thompson & Martinet (1986). The aim behind exercise one and exercise two was to assess the participants ability to differentiate between the lexical aspect of the verbs, grammatical aspect and the tense.

4.6.2.6.3 Exercise three.

Exercise three was adapted from Murphy (1994). Participants were asked to provide a subordinate clause to an already given main clause. The participants had to use the past continuous in the subordinate clause. The answer of the first sentence was given as an example. The aim behind exercise three was to assess the participants' ability to form correctly the past continuous.

4.6.2.6.4 Exercise four.

Exercise four was also adapted from Murphy (1994). Participants were asked to put the verbs between brackets into the past simple or the past continuous. The exercise consisted of five sentences and an example. The aim behind exercise four was to help the participants use the past simple and the past continuous (See Appendix F5).

4.6.2.6.5 Exercise five.

Adapted from Thompson and Martinet (1986), exercise five dealt with the present perfect. Participants were asked to rephrase five sentences using the present perfect with *for* and *since* (see Appendix F5). In order to help the participants accomplish the task, two examples were provided. The aim behind exercise five was to assess the participants' ability to form the present perfect correctly.

4.6.2.6.6 Exercise six.

Similar to task four, the aim behind exercise six was to assess the participants' ability to use the past simple and the present perfect. The exercise was adapted from Thompson and Martinet (1986). It was in a form of a conversation that contained 16 gaps. Participants were

asked to put the verbs in brackets into the correct tense using the present perfect or the simple past.

4.6.3 Pre and Post-tests.

In order to provide answers to research questions one, two and three, two tests were designed : (a) Metalinguistic test (MLK), to evaluate the participants' understanding of the concept of tense and aspect; and (b) Language use test (LUT) to evaluate their use of the target forms. The tests were administered three times during the study as pre-test, immediate post-test and three-week delayed post-test (see also Section 4.7 below). The tests were administered to the participants in the CBI group and the TI group. Drawing on Cohen, Manion, and Morrison (2011) guidelines when constructing and administrating tests, the researcher gave particular attention to ensuring that (a) the pre-test and the post-test had the same content; (b) the level of difficulty was the same in both tests; and (c) the same pre-test and post-test were used for both groups (see further details below).

4.6.3.1 Metalinguistic test (MLK test).

The metalinguistic test (MLK test) was adapted from Gánem-Gutiérrez and Roehr (2011), and Harun (2013). The MLK test passed through a series of revisions, corrections, and piloting. The aim behind using the MLK test was to assess the participants' understanding of the concept of tense and aspect and; hence, to address research questions one, two, and three.

The MLK test (see Appendix C1a) consisted of eight questions, divided into two sections (A and B): section A consisted of four questions. Participants were asked to provide definitions of four grammatical items. The aim behind section A was to assess the participants' understanding of these concepts. Table 2 below illustrates one of the questions included in section A of the MLK test.

Table 2

Question 3 of the MLK test

Please define the following items based on your own understanding:	Model answer
English can mark two aspectual distinctions, can you name them and explain how they are formed?	The progressive: Be+ V +ing Perfect: Have/has+ past participle Had +past participle.

Section B consisted of four pairs of sentences. Participants were asked to explain the differences in meaning between each pair. The aim behind the section was to assess the participants' ability to distinguish between the meanings that the three target forms express. Table 3 below provides an example of the type of questions included in section B of the MLK test.

Table 3

Question 5 (1) included in section B of the MLK test

Look at the following examples: Are there any differences in meaning between them? If yes, can you explain the difference(s)?	Model answer
A. She has been in England for four years. B. She was in England for four years.	A. entails that she is still in England.

	B. entails that she is not in England
	in more.

4.6.3.2 Language use test (LUT).

The LUTs were adapted from IELTS 2011 reading test passage 3 *"Travel Books"* (pp. 114-116) and IELTS 2007 reading test passage 3 "*The Fruit Book"* (pp.41-43). Both texts are narrative texts. The "*Travel Books*" narrates the evaluation of travel books throughout time, and the "*The Fruit Book*" narrates the story of a researcher who wrote a book about types of trees and flowers that were subject to deforestation in the Amazonian forest. Unlike the MLK test, two LUTs were used in the study. The pre-test and the immediate post-test were identical, i.e., using the "*Travel Books"* text (see Appendix D1a). In addition, a second (matched) test was used as the three-week delayed post-test "*The Fruit Book"* (see Appendix D2a).

When constructing the tests, the researcher took into account the level of proficiency of the participants and the time allocated for the study. Thereby, some parts of the texts where omitted since the original texts where too long; some texts were also simplified in terms of the language used. The aim was to keep the participants' focus on the objective of the tests, i.e., the use of tenses. The tests consisted of 20 gaps focusing on the target forms dealt with during treatments. From those 20 gaps, 15 gaps in the pre-post-test and 14 gaps in the delayed post-test were a combination of simple past, past continuous and present perfect. The remaining gaps in the tests were distractors. Table 4 and Table 5 below provides more information about the content of the tests.

Table 4

The Pre/Post-tests: The Travel Books

Tense	Type of situation		Verb
Past Simple	Event	Durational	took
	Event	Durational	established
	Event	Punctual	jumped
	Event	Punctual	hit
	State		appeared
	State		witnessed
Past Continuous	Event	Durational	was researching
	Event	Durational	was searching
	Event	Durational	were looking for
	State		were desiring
Present Perfect	Continuative	State	has had
	Continuative	Event	have followed
	Resultative	Event	have travelled
	Resultative	Event	have related
	Experiential	State	have desired
Distractors			provide
			give
			are
			to understand
			visit

Table 5

The three-week delayed post-test: The Fruit Book

Tense	Type of situation		Verb
Past Simple	Event	Durational	ran
	Event	Durational	ate
	Event	Durational	changed
	Event	Punctual	revealed
	Event	Punctual	noticed
	State		realized
	State		knew
Past Continuous	State		was getting
	Event	Durational	were striking
	Event	Durational	were thinking
Present Perfect	Continuative	State	has had
	Resultative	Event	has written
	Experiential	Event	have praised
	Resultative	Event	have read
Distractors			be
			identify
			see
			tell
			have
			had fallen

An extract of the text "*Travel Books*" used as a pre-post LUT is provided below to illustrate its form and content.

Travel Books

There are many reasons why individuals (1)……. (travel) beyond their own societies. Some travellers simply (2) ……. (desire) to satisfy curiosity about the larger world. Until recent times, however, travellers did start their journey for reasons other than mere curiosity. While travellers' accounts (3) ……..(give) much valuable information on these foreign lands and (4) ……(provide) a window for the understanding of the local cultures and histories, they (5)……. (be) also a mirror to the travellers themselves, for these accounts help them to (6) ……(understand) themselves.

4.6.4 Questionnaires.

In order to gather data about the participants' attitudes towards the CBI and the TI treatments, two questionnaires were used: (a) Concept-Based questionnaire (CBIQ) administered to the participants in the CBI group, and (b) Traditional Instruction questionnaire (TIQ) administered to the participant in the TI group, (see Appendix G, and Appendix H). The questionnaires were adapted from Gánem-Gutiérrez (2016). Gánem-Gutiérrez developed a post-trial questionnaire with five questions that measured: the helpfulness of CBI treatment in understanding the concept of tense and aspect; the level of dificulty in understanding the content of the materials developed; the satisfaction with the treatment as a whole; the time allocated to it; and the overall value of the sessions the participant attended (see Section 2.5).

Based on Gánem-Gutiérrez's (2016) questionnaire, the CBIQ and the TIQ were constructed including four categories: (a) easiness of understanding (EU); (b) helpfulness of the approach (HA); (c) level of interest in the approach (IA); and (d) time allocation (TA). Each questionnaire consisted of a set of five-point Likert scale items ranging from strongly disagree

to strongly agree (strongly disagree=1, disagree=2, neither agree nor disagree=3, agree=4, strongly agree=5), in addition to a comment space (see below). The questionnaires were organized according to the procedure followed during the interventions. (More details will be provided below).

The questionnaires consisted of a number of positively worded items and reverse worded items. The latter are constructed either by adding negative particles such as *not* or by replacing the opposite phrase or expression used in the original item. According to Zhang, Noor, & Savalei (2016, p.1), "[reverse worded] items are used in Likert scales to reduce or eliminate acquiescence bias, which is the respondents' tendency to agree with a given item regardless of its content.". As it has been previously mentioned, both questionnaires went through a series of revisions and corrections. The CBIQ and the TIQ were administered at the end of both treatments (see Section 4.7). They were paper-based and administered in presence of the researcher.

In order to assess the reliability of the questionnaires, Cronbach's alpha was calculated. Cronbach's alpha measures the degree of relatedness of a set of items in a questionnaire. Hence, it refers to the internal consistency of a questionnaire (Cortina, 1993; Field, 2009; Tavakol & Dennick, 2011). An acceptable value of alpha ranges from .7 to .8 (Field, 2009). However, Cortina (1993) stated that Cronbach's alpha should be interpreted with caution since the number of items in the questionnaire may affect the value of alpha. A larger number of items may increase the value of alpha whereas a fewer number of items may have a reverse effect even if the items are related.

Before calculating the Cronbach's alpha coefficient, all reverse worded items were reverse coded (see Field, 2009). Negative items provide a negative value of alpha; hence, a negative relationship with the other items in the questionnaire. Hence, the coding of the five-

point Likert scale in a reverse worded item would be as follow (strongly disagree=5, disagree=4, neither agree nor disagree=3, agree=2, strongly agree=1).

4.6.4.1 Concept-Based Instruction questionnaire.

CBIQ consisted of 28 items and a comment space divided into three sections. The organization of the CBIQ reflected the steps followed in implementing the CBI model. Section one related to the participants' attitudes with regards to the CBI cards. It consisted of 13 questions. Section two dealt with verbalization (4 questions). Section three consisted of 11 questions concerned with the approach as a whole and the time allocated for the treatment. And finally, a comment space to give the participants an opportunity to express themselves freely (see Appendix G).

In order to analyse the data gathered form the CBIQ, the 28 items were reorganized according to the four categories stated above: (a) easiness of understanding (EU), (b) helpfulness of the approach (HA), (c) level of interest in the approach (IA), and (d) time allocation (TA). As shown in Table 6 below, each of the categories contain a number of positive worded items and reverse worded items, except time allocation (TA) category. The first category, easiness of understanding (EU) consisted eight items, five positive and five reverse items. The second category, helpfulness of the approach consisted of 15 items, nine positive items and six reverse items. The third category, interest in the approach consisted of four items, three positive items and one reverse item. The last category, time allocation (TA) consisted of only one positive item. Some of the categories of the questionnaire used in Loewen et al. (2009) study consisted of only two items (see Section 2.5). Mean scores were calculated for the first three categories. More details are provided in Table 6 below.

Table 6

CBIQ categorization

Categories	Positive items	Negative items
EA	Q1, Q2, Q6, Q8, Q13.	Q4, Q10, Q17.
HA	Q3, Q11, Q14, Q15, Q18, Q19, Q22, Q24, Q20.	Q5, Q7, Q9, Q12, Q21, Q23.
IA	Q16, Q26, Q28.	Q27.
TA	Q25	

Note. EA= easiness of understanding; HA= helpfulness of the approach; IA= interest in the approach; TA= time allocation.

Before calculating the reliability coefficient using Cronbach's alpha, reverse worded items were reverse coded. The Cronbach's alpha coefficient was calculated for easiness of the approach (EA), helpfulness of the approach (HA), interest in the approach (IA) since they consisted of more than one item. Cronbach's alpha was not calculated for time allocation (TA) since the category consisted of only one item. Reliability was high for all of the three categories; easiness of understanding (EU), α= .72; helpfulness of the approach (HA), α= .77; and interest in the approach (IA), α= .8. The high Cronbach's alpha indicates that the items under each of the three categories stated above are interrelated.

4.6.4.2 Traditional Instruction questionnaire.

TIQ consisted of 39 items divided into five sections and a comment space at the end of the questionnaire. The organization of the TIQ reflected the same steps followed in the implementation of the traditional instruction treatment (see Section 4.7.2). Hence, all the items in section one were concerned with the first lesson, the verb. The items in section two related to lesson two, the past simple. Section three related to lesson three, the past continuous. Section

four related to lesson four, the present perfect. The last section, section five, consisted of a set of items related to the procedure followed to implement the traditional instruction. A comment space to allow the participants to express themselves freely or to add any suggestion they thought might be useful.

The items in the TIQ were organized around the four categories of the questionnaire; easiness of understanding (EA), helpfulness of the approach (HA), interest to the approach (IA), and time allocation (TI). Each of the categories consisted of a number of positive and reverse worded items. As shown in Table 7, the first category, easiness of understanding (EA) consisted of five positive statements and seven reverse statement. Helpfulness of the approach (HA) consisted of 14 positive statements and six reverse worded statement. The third category, interest in the approach consisted of two positive and one negative items. The last category, time allocation consisted of two positive and two negative statements. The TIQs were analysed by calculating the mean scores for each category. Table 7 below provides more information about the categorization of the TIQ.

Table 7

TIQ categorization

Categories	Positive items	Negative items
EA	Q1, Q8, Q19, Q23, Q31.	Q4, Q6, Q11, Q13, Q17, Q25, Q29.
HA	Q3, Q5, Q9, Q10, Q12, Q14, Q15, Q18, Q21, Q26, Q27, Q30, Q33, Q36.	Q2, Q7, Q20, Q24, Q32, Q35.
IA	Q37, Q39.	Q38.
TA	Q22, Q28.	Q34, Q16.

Note. EA= easiness of understanding; HA= helpfulness of the approach; IA= interest in the approach; TA= time allocation.

Before calculating the Cronbach's alpha all reverse worded items were reverse coded (see above). The Cronbach's alpha was high for easiness of understanding (EU), α= .72; and helpfulness of the approach (HA), α= .89. However, Cronbach's alpha for interest in the approach (IA) and time allocation (TI) was low, α= .26, α= .42 respectively. The low value of alpha for IA and TA may have been caused by the number of items underlying each category. According to Cortina (1993) the low number of items in a questionnaire provide a low alpha result even if the items are interrelated. In their study, Savignon & Wang (2003) found a low alpha among the items of the questionnaire they used. Similarly to Cortina (1993), they explained that low alpha might be affected by the number of items in the questions (see Section 2.5).

4.7 Data Collection Procedure

The data collection took place over a period of nine successive weeks with the teacher-researcher present all the time. Each group received a total of nine hours of treatment divided into six sessions of approximately 1h 30min; Table 8 and Table 9 show summaries of the data collection procedures. As mentioned above, the CBI group was divided into dyads and individuals (see Section 4.4). The participants were free to choose with whom to work, however. All the tests were completed individually and verbalization was digitally audio-recorded with the participants consent. Data collection followed the same procedure for all the participants, and all tests and questionnaires were administered in group mode under supervised conditions. Further details are provided in the sections below.

Before the start of the intervention, consent forms were distributed to the participants in both groups (CBI and TI). Consent forms were written in English (see Appendix A). The teacher-researcher was present all the time and ensured that the participants understood what

was written on the form. I also explained to the participants their rights and that they were allowed to withdraw at any time during the intervention. I informed the participants that all the data collected would be anonymised and that their real names and personal information would not be revealed in the study. Most of the participants agreed to participate and signed the consent forms except two students who chose for their data not to be included in this study. This, I believe, was a testament that students felt comfortable enough to refrain from participating in the study knowing there would be absolutely no consequences for them while they could still benefit from their classes.

4.7.1 CBI group.

Session 1: Induction

During the first session the researcher provided an explanation about the experiment and the ethics of research, and then the participants filled in a consent form to take part in the study (see Appendix A). This was followed by the participants completing the MLK, the LUT pre-tests as well as the PBQ (see Appendix B, Appendix C1a, and Appendix D1a).

Session 2: Treatment

During the second session, participants worked with the SCOBA cards, after the teacher-researcher exemplified and demonstrated the procedure of working with the cards and the verbalization. Thus, the participants were asked to look at the cards, read them and say aloud (either self-explain, if working individually or explain to each other, if working in pairs) what they understood and what they thought about while going through the materials. A short demonstration was also given by one participant in the subgroups of individuals and a pair in the subgroups of dyads.

It was noticed, however, that the participants who verbalized individually the idea of speaking aloud to themselves challenging since most of them spent a considerable time reading the cards silently.

Session 3: Treatment

During the third session, the participants worked with the SCOBA cards again and engaged in verbalization as session 2. By the end of the session, the teacher-researcher provided some explanation focusing on the points that the participants seemed to be struggling with during their verbalization. The explanation was provided orally for the whole group.

Session 4: Practice

During the fourth session, the participants were invited to complete a series of exercises to practise what they had learnt while dealing with the CBI materials. By the end of the session, the participants were invited to provide their answers so that feedback could be given.

Session 5: Immediate post-test

During the fifth session, participants completed the MLK test and the LUT post-tests and the CBIQ.

Session 6: Three-week delayed post-test

Three weeks later, the participants were invited to complete the MLK and the LUT delayed post-test.

Table 8 below provides summary of the procedure followed to collect data in the CBI group.

Table 8

Data collection procedure: CBI group

Week one						**Week two**				**Week three**	
Session one		Session two		Session three		Session four		Session five		Session six (Three weeks later)	
	Time		Time		Time		Time		Time		Time
Induction Pre-tests: MLK and LUT. PBQ.	10’ 30’ 30’ 15’	Explanation about the SCOBA, verbalization demonstration and recording. Recording trial. Verbalization while working with the SCOBA.	20’ 5’ 45’	Verbalization while working with the SCOBA. Teacher led instruction.	45’ 30’	Practice tasks. Feedback at the end of the session.	45’ 30’	Post MLK and LUT tests. CBIQ.	30’ 30’ 15’	Delayed post-tests: MLK and LUT.	30’ 30’

4.7.2 TI group.

The same procedure was followed to collect data in the TI group.

Session 1: Induction

During the first session the researcher provided explanation about the experiment and the ethics of research, and then the participants filled in a consent form to take part in the study (see Appendix A). After that, the participants completed the MLK and the LUT pre-tests and the PBQ (see Appendix B, Appendix C1a, and Appendix D1a).

Session 2: Treatment

During the second session, the teacher-researcher presented lesson one and lesson two to the participants (see Appendix F1, Appendix F2) following the type of instruction which is customary at the DELL. I first wrote the examples on the board. The participants copied them on their copybooks. After that, a group discussion was conducted to help the participants understand the examples. Finally, the teacher dictated the rules to the participants.

Session 3: Treatment

During the third session, the teacher presented lesson three and lesson four to the participants, following the same procedure as in session 2. In other words, examples were written on the board, group discussion followed and the session finished with dictation of the grammar rules.

Session 4: Practice

During the fourth session, the participants were invited to complete a number of traditional grammar exercises (see Appendix F5). No restrictions were imposed; they were free to work individually or in pairs. By the end of the session, the participants were invited to provide their answers by raising their hands. The teacher-researcher selected a participant each time and corrected wrong answers if, after trying to elicit self-corrections, students failed to provide the correct answers.

Session 5: Immediate post-tests

During the fifth session, the participants completed the MLK and the LUT post-test and the TI questionnaire.

Session 6: Three-week delayed post-tests

Three weeks later, the participants completed the MLK and the LUT delayed post-tests.

Table 9 below provides a summary of the procedure followed to collect data in the TI group.

Table 9

Data collection procedure: CBI group

Week one						Week two				Week three	
Session one		*Session two*		Session three		Session four		Session five		Session six (Three weeks later)	
	Time		Time		Time		Time		Time		Time
Induction about the experiment and ethical approval. Pre-tests: MLK and LUT PB Questionnaire	10’ 30’ 30’ 15’	Lesson one: Verb. Lesson two: past simple.	40’ 40’	Lesson three: past continuous. Lesson four: present perfect.	40’ 40’	Practice. Feedback at the end of the session.	45’ 30’	Post-tests: MLK and LUT. TI Questionnaire.	30’ 30’ 15’	Delayed post-tests: MLK and LUT	 30’ 30’

4.8 Data Analysis Procedures

The following sections provide details about the procedure followed to analyse the different data collected in the study. The procedure followed to analyse the MLK and the LUT tests will be presented first. After that, a detailed explanation about the transcription, coding and the analysis of the audio-recording of the verbalization will be provided. The last section will be devoted to the procedure followed to analyse the CBIQ and the TIQ. A number of software packages were used to organise, manage and analyse the data. The data collected from the MLK and LUT tests, the CBIQ and the TIQ were analysed using SPSS. The audio recordings were transcribed using the software Express Scribe Transcription and Dragon NaturallySpeaking Home. More details are provided below.

4.8.1 Metalinguistic test (MLK test).

The MLK test (see appendix C1a) was administered three times during the data collection procedure. The same test was used as a pre-test, immediate post-test and three-week delayed post-test (see Section 4.7). The maximum possible score a participant could get was 24. As mentioned above (see Section 4.6.3.1), the MLK test was divided into two sections (A and B). A detailed description of the scoring scheme of the MLK test is provided below.

Section A

Section A contained four questions, Questions one, two and four were scored using Gánem-Gutiérrez & Roehr (2011) scoring scheme (see Table 10), Question three was scored differently.

Gánem-Gutiérrez and Roehr (2011) scoring scheme ranges from zero to three. Zero was given if the participant provided no answer, and three was provided when the participants' answer was coherent and fully accurate. Table 10 and Table 11 below provide a detailed description of the MLK test scoring scheme.

Table 10

MLK test section A scoring scheme

Level	Operationalisation/Criteria
0	- No evidence of metalinguistic knowledge or awareness. - No examples provided And/or - Completely inaccurate answer.
1	- Minimal evidence of metalinguistic knowledge or awareness, which could be at the level of exemplification exclusively. - Description/ explanation not fully accurate.
2	- Evidence of metalinguistic knowledge or awareness expressed coherently even if description/ explanation not fully accurate.
3	- Metalinguistic knowledge is evident. Coherent and fully accurate description/ explanation.

Table 11

MLK test scoring example (pre-post-test)

Question 2	Key
Have you ever heard about "aspect" in English? If, yes explain what you understand by "aspect" in English?	Aspect is the grammatical form used by the speaker to describe how she/he views the situation.
Participant' answer	level
Aspect is the part or element or a specific feature of something.	0
Aspect is the grammatical form in which the speaker views the events as a whole or part from it, and there are two types: we have progressive (continuous)/non-progressive (simple) and perfect.	3

Table 11 above exemplifies the way the scoring scheme was used in assessing one of the participant's answers to question 2 of the MLK test.

Question three, however, was a discrete-point question. Therefore, one point was given for each correct answer, the maximum possible was 4 as exemplified in Table 12. As it can be seen, one point was given to each aspectual marker, e.g., progressive, perfect; one point for the progressive form and one point for both forms of the perfect.

Table 12

Question 3 scoring scheme

Please define the following items based on your own understanding:	Model answer	Scores
English can mark two aspectual distinctions, can you name them and explain how they are formed?	The progressive: Be+ V +ing Perfect: Have/has+ past participle Had +past participle.	Progressive=1 Form=1 Perfect=1 Form=1 (0.5 for each form)

Section B

Section B was about form-meaning contrasts (See Appendix C1a and Section 4.6.3.1). The section contained four paired sentences. One point was given for each correct explanation. The maximum score a participant could get was 8 points. Table 13 exemplifies the procedure.

Table 13

MLK test section B model answer

Look at the following examples: Are there any differences in meaning between them? If yes, can you explain the difference(s)?	Model answer	Scores
A. She has been in England for four years.	A. entails that she is still in England.	2 points: 1point for each correct answer.
B. She was in England for four years.	B. entails that she is not in England in more.	

Due to the open-ended nature of most of the questions in the MLK test two raters scored the test independently, the researcher and a "Maître de conference class A" equivalent to a lecturer in linguistics at the department of English at the Teacher Training School of Constantine, Algeria. In order to enhance the reliability of the procedure, rater two was trained by the researcher prior to scoring the tests.

The training procedure for rater 2 followed Syed and Nelson (2015) training coders' procedure. The researcher provided the coding scheme to rater 2 where explanation and discussion of the scoring scheme was provided and relevant questions were addressed. After that, a sample of the data, i.e. one test, was selected and scored by both raters together as a practice to ensure mutual understanding of the application of the scoring scheme. Finally, the scoring of the remaining MLK tests was done by the researcher and the lecturer independently.

As stated above, given the fact that a level of judgement was involved in scoring the MLK tests, inter-rater reliability was calculated using Cohen's Kappa (κ) (Multon & Coleman, 2018; Syed & Nelson, 2015). Table 14 below provides the results of the inter-rater reliability.

Table 14

Results of the Cohen's kappa reliability of the MLK test

	Value	*Asymp. Std. Error* [a]	*Approx. T* [b]	*Approx. Sig.*
Measure of agreement Kappa	.56	.047	19.09	.000

Table 14 above indicates that Kappa = .56 (95% CI, p< .001) with 60.7% of agreement. According to Landis and Koch (1977), a Kappa value of (.56) indicates a moderate level of agreement between the scorers, (.40< κ = .56 < .60).

The disagreements were resolved via consensus between the raters. According to Syed & Nelson (2015), the strength of this approach relies in resolving the discrepancies in the coding by a general decision between the raters or the research team members. Thereby, the final mark is based on agreement between the raters.

4.8.2 Language Use Test (LUT).

As mentioned above (See Section 4.6.3.2), the LUTs were used to assess the participants' accurate use of the past simple, the past continuous, and the present perfect. The tests were a fill-in the gaps format. These type of tests are discrete-point tests scored generally as right or wrong with the grammatical accuracy as the sole criterion of correctness (see Purpura, 2004, p.253). Therefore, following Purpura (2014), the LUTs were marked based on a prepared key and on dichotomous basis, with each gap correctly filled in the tests given one point. The maximum possible score a participant could get was 20 points.

4.8.3 Analysis procedures

An important aim behind the study was to compare two pedagogical models using two independent groups in order to assess level of understanding of the concept of tense and aspect, and the use of the simple past, the past continuous and the present perfect. To that end, two different measures, the MLK and the LUT tests were used. These two groups were assessed at three different times during the two treatments, using a pre-test, an immediate post-test and a three-week delayed post-test. Therefore, a mixed design ANOVA was regarded as the most suitable statistical test to analyse the results of the tests. According to Field (2009), in a mixed design ANOVA we integrate repeated measures and independent designs. The mixed design ANOVA needs at least two independent variables or more depending on the complexity of the data. Hence, in order to address the research questions a mixed between-within subjects design ANOVA was carried out to assess the impact of the two different interventions (CBI and TI) on participants understanding of the concept of tense/ aspect, and use of the target forms (Measures: MLK and LUT tests), across the three time periods (pre-test, immediate post-test, and three week delayed post-test). All data was analysed using IBM *Statistical Package for the Social Sciences*, SPSS.

In order to conduct the mixed design ANOVA certain assumptions must be met such as, the normal distribution and the equal homogeneity of data (Field, 2009). The Shapiro-Wilk test of normality and Levene's test of homogeneity were conducted to check the previously mentioned assumptions. The results of the tests showed that the data were normally distributed and homogenous (see Appendix J). Hence, a mixed design ANOVA was used to analyse the results of the tests. The statistical analysis was checked by a statistician at the Department of Language and Linguistics at the University of Essex and by a "Maître assistant class B", equivalent to assistant professor, in computer sciences at the University of Constantine 2, Algeria.4.8.4 Audio-recording: Verbalization.

According to Vygotsky (1962, p. 132), "to study an internal process it is necessary to externalize it experimentally, by connecting it with some outer activity; only then is objective functional analysis possible". Therefore and as stated previously, the CBI group participants in the study were invited to say aloud what they were thinking while working with the CBI materials (see Section 4.6.2.2 and Section 4.6.2.3). The participants' verbalization was digitally audio-recorded and transcribed in full to produce protocols for analysis. The total number of hours for the data base was 12h 37min. The audio recordings were transcribed using Express Scribe Transcription software and Dragon NaturallySpeaking Home. The transcription conventions used were adapted from Otha (2001) (see Appendix I).

Based on Harun, (2013); Knouzi et al., (2010); and Swain et al., (2009), a sub-set of participants (N=8) was selected for the study of languaging in the present study. The participants were selected based on their MLK test scores and were further classified into high achievers and low achievers. Thus, the audio recordings of two high achievers and two low achievers from each sub-group (see below) were transcribed verbatim and in full and subsequently

analysed. Table 15 below provides more information on the selection criteria, the selected participants are shown in bold.

Table 15

The participants' improvement based on their scores on the MLK test

Participants	Pre-test (%)	Post-test (%)	Delayed post-test (%)	Improvement (%)	Level
PES1	13	21	29	13	
PES2	**8**	**33**	**38**	**27**	**High**
PES3	**33**	**58**	**25**	**8**	**Low**
PES4	21	50	25	17	
PES5	17	33	29	15	
PES6	29	50	38	15	
PES7	**4**	**42**	**25**	**29**	**High**
PES8	**29**	**38**	**38**	**8**	**Low**
PES9	17	25	33	13	
PED1	**13**	**42**	**29**	**23**	**High**
PED2	21	50	33	21	
PED3	29	38	38	8	
PED4	4	17	29	19	
PED5	8	21	38	21	
PED6	17	21	29	8	
PED7	**21**	**21**	**25**	**2**	**Low**
PED8	21	21	25	2	
PED9	8	25	17	13	
PED10	8	33	13	15	
PED11	**4**	**29**	**29**	**25**	**High**
PED12	17	33	29	15	
PED13	25	42	46	19	
PED14	**33**	**38**	**21**	**-4**	**Low**
PED15	8	38	21	21	
PED16	29	46	25	6	

The level of improvement (or otherwise) was calculated by subdividing the sum of the participants' score in the post-test and delayed post-test, the results was then subtracted from the scores of the pre-test. For example, to calculate the level of improvement (or otherwise) of PES4 the following formula was followed: (25+50)/2- 21. The selected participants were (a) from the subgroup who worked individually, PES8 and PES7 and who were high achievers with an improvement of 29% and 27% respectively, plus PES3 and PES8 who were low achievers with only 8% of improvement; (b) from the subgroup who worked in dyads, PED11 and PED1

(high achievers with 25% and 23% of improvement) and PED14 and PED7 who were low achievers (-4% for PED14 and an 2% for PED7).

The verbal protocols selected were first analysed in terms of various linguistic mechanisms used by participants during verbalization, such as use of L1 and L2. The use of L2 was further divided into read and non-read English. Further analysis was conducted based on Swain et al (2009). Languaging according to Swain (2006) is a form of verbalization used as a mediational tool to make meaning, and shape knowledge and experience through language. Hence, Swain et al., (2009) analysis focused on languaging units (LUs). The languaging units are "cognitively complex on- task talks arising from the explanatory text" (Swain et al, 2009, p10). The participants may use more than one languaging unit to reflect on the concepts presented on the cards. A series of languaging units is referred to as languaging sequence (Swain et al, 2009) (See Figure 11 below).

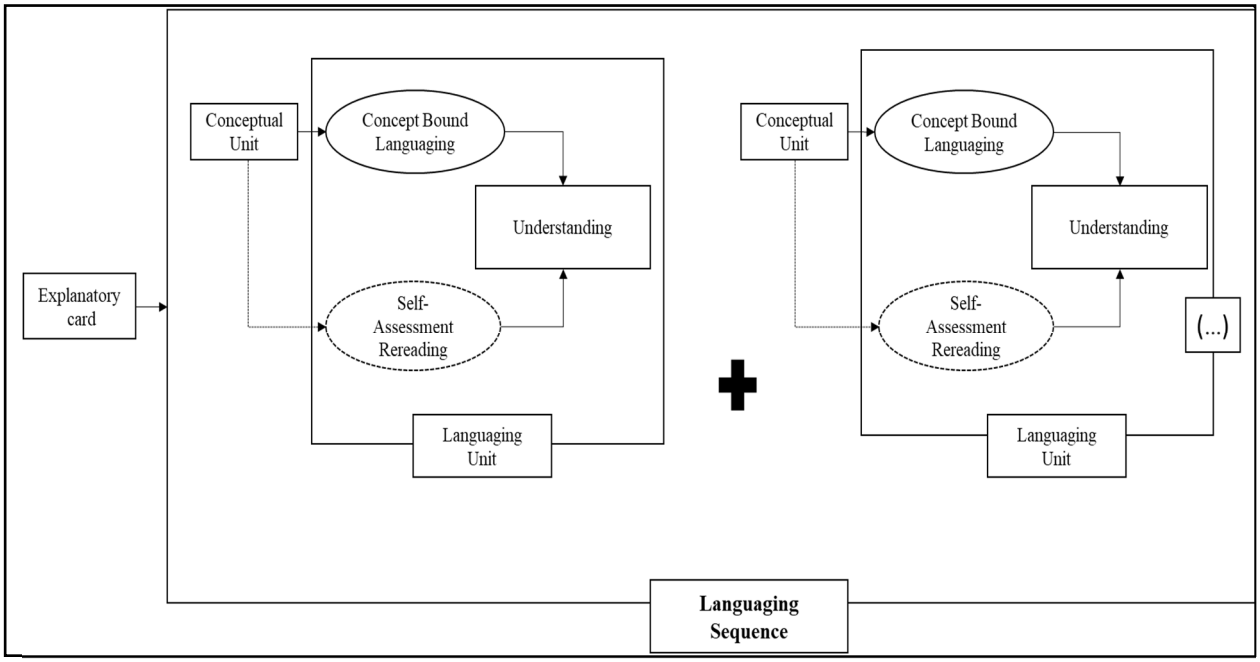


Figure 11. Coding of the participants' verbalization during languaging stages (adapted from Swain et al. 2009, p11)

Note: A dotted line indicates that the relationship and/or the component may/may not be present.

Swain et al., (2009) classified the Languaging Units into two categories: concept-bound languaging which are the language units that are directly related to a conceptual unit and are

classified into three categories: paraphrasing, inferencing and analysing; and, non-concept bound languaging. The latter units are not directly related to a conceptual unit but help the participants develop their understanding of a specific concept. They are classified into self-assessment and re-reading. Each instance of languaging, whether concept-bound or not, was counted as a languaging unit.

In their study, Swain and her colleagues did not take into account the participants' first reading. However, when listening to the participants' audio recording, I noticed that most of them relied on only their first reading to develop a conceptual understanding of the grammatical concept. Hence, to fit with the data collected in the present study, both reading and (re) reading were coded as a single languaging unit, i.e., (re)reading. Table 16 below provides a detailed explanation of the languaging coding scheme used in the study and adapted from (Swain et al., 2009).

Table 16

Languaging coding scheme

Concept-Bound Languaging		
Paraphrasing		The participant repeats a conceptual unit expressed in the card that he/she has read.
Inference	Integration	The participant uses information presented in previous cards. The LU shows evidence of learning (at least declarative knowledge) in that the participant is able to use new information to 'think about' the concept of tense and aspect. The most frequent instance of integration is the participant's use of metalinguistic terms when attempting to understand the structure of the sentences. The main characteristic of these LUs is that they are similar to the original conceptual units on which they draw In other words, these are paraphrases that occur on one or several cards after the original card.
	Elaboration	The participant does not only show evidence of retaining the information presented previously, he/she also appropriates the information either by incorporating it with her prior knowledge (trying to fit the new information in her system) or by incorporating several pieces of information of the explanatory text. Unlike integration LUs, these LUs go beyond what is stated in the cards (e.g. comparing /contrasting two conceptual units).
	Hypothesis formation	The participant forms a hypothesis based on what he/she has already learned or understood.
Analysis		The participant applies new knowledge to a specific sentence/example, including the analysis of a sentence in terms of tense and aspect (with reference to simple past, past continuous and present perfect)
Non-Concept-Bound Languaging		
Self-assessing		The participant monitors his/her understanding (e.g. 'I don't understand this part; 'this is not clear'; 'I'm not sure what this means').
(Re)reading		The participants reads or rereads part or all of a card.

To analyse the verbal protocols, the data was first organized based on the languaging sequences the participants produced on each card. Following Syed and Nelson (2015) inter-rater reliability procedure stated above, the languaging sequences produced by a group of dyads and one individual on the first five SCOBA cards was coded by the researcher and the supervisor as a practice to ensure similar understanding of the application of the coding scheme. After discussion following the first coding stage, the coding of the remaining two verbal protocols was done by the researcher and the supervisor independently.

Table 17 below illustrated a sample of the procedure followed to code the languaging produced by PES7.

Table 17

Sample coding of the languaging produced by PES7

Card	Excerpt	Conceptual unit
5	"ah event like (.) we have a dynamic situation they involve internal development change the change" they do not (.) stay as it is (.) they change from (.) to time "they have inherent boundaries they are supposed to come to an end to some point" like I build a house which means he was building a house in a period of time and he finish he he there is a development he started a house he build it until he finish finished the building this is dynamic situation it has a progressive aha sorry development change (.) however "static static situations situations they do not involve development change they do not have inherent boundaries because they are seen as rather per permanent situations they are seen as rather permanent situations" which means like I like english I like english is a permanent situation it doesn't have boundaries it doesn't have an end all the time I like in english no like I build a house I build it I do progressive development in building and I stopped it has an end but I like english it doesn't have an end like I like it all the time (.)	(Re)reading Paraphrasing (Re)reading Elaboration (Re)reading Elaboration

Note. "words"= utterance read from the text; words= languaging unit; (.) pause

The example in

Table **17** thus shows six conceptual units uttered while PES7 was looking at Card 5. These units intersperse (re)reading with paraphrasing and elaboration.

Given the fact that a level of judgement was involved in coding of the verbal protocols, inter-rater reliability was calculated using Cohen's Kappa (κ) (Multon & Coleman, 2018; Syed & Nelson, 2015). Table 18 below provides the results of the inter-rater reliability analysis.

Table 18

Results of the Cohen's kappa reliability of the languaging analysis

	Value	*Asymp. Std. Error* [a]	*Approx. T* [b]	*Approx. Sig.*
Measure of agreement Kappa	.79	.05	13.12	.000

Table 18 above shows Kappa = .79 (95% CI, p< .001). According to Landis and Koch (1977), a Kappa value of (.79) indicates a substantial level of agreement between the two raters.

The researcher, therefore, coded the remaining data for the purpose of analysis. The languaging units (LUs) produced by each participant were counted and descriptive statistics was conducted to compare between individual versus dyadic verbalization.

4.8.5 Questionnaires.

The questionnaires used a five-point Likert scale ranging from strongly disagree to strongly agree (strongly disagree=1, disagree=2, neither agree nor disagree=3, agree=4, strongly agree=5). The questionnaires measured: (a) ease of understanding (EU), (b) helpfulness of the approach (HA), (c) level of interest in the approach (IA), and d) time allocation (TA) (see Section 4.6.4). Means were used to calculate the scores of the participants. According to Boone & Boone (2012), Likert-scale data can be analysed as interval data when measuring the composite score of four or more Likert scale items. Additionally, many researchers agreed that parametric tests, such as t-test, ANOVA, etc. can be used for Likert-

scale data when the data is homogeneous and normally distributed (Bonett & Wright, 2014; Harpe, 2015; Sullivan & Artino, 2013). Given the fact that the data gathered from the two questionnaires did not met the two assumptions mentioned above, the non-parametric MANN Whitney U test alternative was used to compare the participants' attitudes towards the CBI treatment and the TI treatment (see Section 4.6.4) based on the responses to the questionnaires. The results of the normality distribution and homogeneity of variance of the data tests can be found in Appendix K.

4.9 Conclusion

In this chapter, I started first by stating the rationale of the study, outlining the research questions addressed, and explaining the purpose of the study. Then, I provided a description of the context where data collection took place, and a description of the participants. After that, I introduced the materials and tools which were designed to address the research questions. In the last two sections of the chapter, I reported the procedure followed to implement both treatments, CBI and TI, and analyse the data gathered in the study.

Chapter 5: Results

5.1 Introduction

In this chapter, I will present the results of the investigation. I will first report the results obtained from the metalinguistic knowledge tests (MLKs) and the language in use tests (LUTs) by making a comparison between the CBI group and the TI group. I will then report on the analysis and exploration of the effect of the two types of verbalization on enhancing the participants' understanding of the concept of tense/aspect as well as the use of the target forms. The results will be supported by a quantitative and a qualitative analysis of the participants' verbal protocols. At the end of this chapter, I will report on the participants' attitudes towards the respective treatments they received.

The study investigated the effect of CBI on Algerian learners' understanding of the concept of tense/aspect and the accurate use of the target forms; this was assessed by MLK tests and LUTs. CBI results were compared to a Traditional model of grammar presentation (TI). The study also explored the effect of individual verbalization as compared to dyadic verbalization by relying on the MLK tests, the LUTs and the audio recordings of the participants' verbalization. I also gathered data about the participants' attitudes toward the treatments they received using two different questionnaires. The data was gathered during a semester at the DELL, University of Constantine 1, Algeria. Two intact classrooms participated in the study. The different instruments used in the study allowed me to investigate the research issues from different perspectives. The participants' progress was assessed using pre/post-tests. The transcribed protocols of the participants' verbalization provided insights into their interactions (either with other students, i.e., dyadic, or with the self). Finally, the questionnaires gathered data about the participants' opinions with regard to CBI and TI. For ease of reference, the research questions posed at the beginning of the dissertation are hereby reproduced:

RQ1- What is the immediate and longer term (three weeks) effect of CBI on improving Algerian learners':

(a) understanding of the concept of tense/ aspect in L2 English and;

(b) accurate use of the target forms (past simple, past continuous and present perfect)?

RQ2- Is CBI more effective than traditional instruction (TI) for improving Algerian learners':

(a) Understanding of the concept of tense/aspect in L2 English and;

(b) Accurate use of the target forms (past simple, past continuous and present perfect)?

RQ3- Which type of verbalization, individual or dyad-based, leads to higher levels of improvement in learners':

(a) understanding of the concept of tense/ aspect in L2 English and;

(b) accurate use of the target forms (past simple, past continuous and present perfect)?

RQ4- What are the participants' attitudes towards the pedagogical intervention they received (either CBI or TI)?

5.2 Understanding and Use

In this section, I will report on the effect of the CBI treatment on improving the participants' understanding of the concept of tense/aspect and on the accurate use of the target forms. I will then compare the effect of CBI to the effect of TI. Hence, in the following section I will address the first three research questions by analysing the participants' answers to the MLK tests and the LUTs. The questions subsequently focus on the immediate and longer term effect of CBI on improving the participants' (a) understanding of the concept of tense/aspect,

(b) accurate use of the target forms, and (c) the effect of CBI as compared to TI. Percentages were used throughout the data analysis.

Table 19 below displays the descriptive statistics for the two measures adopted in the study. Percentages of mean scores are used to present the results of the MLK tests and the LUTs.

Table 19

Descriptive statistics: MLK test and LUT

Group	Tests		*n*	*M %*	*SD %*	*Min %*	*Max %*
CBI group	MLK	Pre-test	25	17.5	9.47	4	33
		Post-test	25	34.5	11.31	17	58
		Delayed Post-test	25	29	7.46	13	46
	LUT	Pre-test	25	35.2	12.11	5	60
		Post-test	25	40	13.46	25	65
		Delayed Post-test	25	49	9.9	25	70
TI group	MLK	Pre-test	20	14.17	6.68	4	29
		Post-test	20	20.63	8.05	4	38
		Delayed Post-test	20	17.71	8.42	4	33
	LUT	Pre-test	20	32.5	11.29	0	45
		Post-test	20	35.75	8.62	20	50
		Delayed Post-test	20	35.75	14.35	10	55

5.2.1 Descriptive statistics.

As shown in Table 19, the participants' percentages of the mean scores on the MLK tests in both groups improved after the two treatments. For the CBI group there was a considerable improvement at the level of pre-post-test (17 %) and small deterioration of scores at the level of post-delayed post-test (5.5%). For the TI group, small improvement was also noticed at the level of the pre-post-test (5.83%) as well as a small deterioration of scores at the

level of the post-delayed post-test (2.92%). With regard to the LUT, Table 19 shows that the mean scores of the CBI group improved by (4.8%) at the level of the pre-post-test, and by (9%) at the level of the post-delayed post-test. For the TI group, the scores increased by (3.25%) at the level of the pre-post-test and remained the same at the level of the post-delayed post-test.

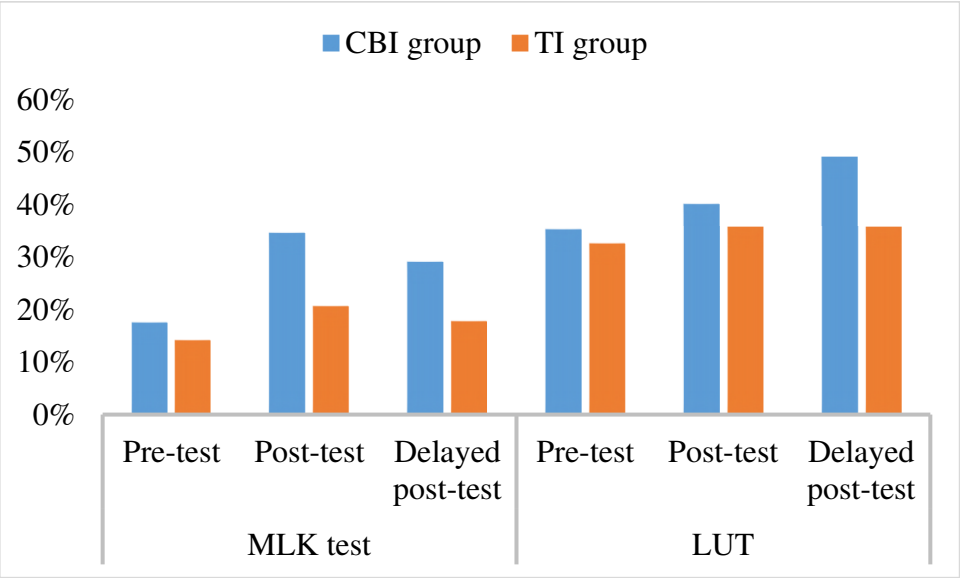


Figure 12. Descriptive statistics: MLK test and LUT

Figure 12 demonstrates the results obtained from the MLK test and the LUT. It can be seen that CBI treatment helped the participants improve both their understanding of the concept of tense/aspect and use of the target forms to a higher degree than TI treatment. After CBI treatment, the participants' scores on the MLK test improved considerably at the level of the immediate post-test and decreased little bit three weeks later. Surprisingly, their scores on the LUT were on continuous increase. After TI treatment, participants' scores on the MLK test slightly improved at the level of the immediate post-test and slightly decreased three weeks later. Unexpected results can also be noticed on participants' results on the LUT where scores at the level of the post-delayed post-test remained the same.

To further probe the results of the descriptive statics displayed above, a mixed design ANOVA test was used (see Chapter 4). In the sections that follows, I will address the research

questions posed at the beginning of this section (see Section 5.2) with reference to the mixed design ANOVA as well as t-tests for independent samples as appropriate.

5.2.2 Inferential statistics.

In order to address the research questions, a mixed between-within subjects design ANOVA was carried out to assess the impact of CBI and TI (interventions) on the participants' understanding of the concept of tense/ aspect, and use of the target features measured by the MLK test and the LUT, across the three time periods (pre-test, immediate post-test, and three-week delayed post-test). The results of the mixed design ANOVA are displayed in Table 20 below.

Before referring to the results of Table 20, it ought to be mentioned that the assumptions of the normality of distribution of data and homogeneity of variance were all met (see Appendix J). Additionally, the Mauchly's sphericity test was not violated within the repeated measures (time), ($X^2(2) = .89$, $p<.05$) and within the interaction of time with the measures (MLK tests and LUTs), ($X^2(2) = .97$, $p<.05$). Therefore, no correction was applied.

Table 20

Overall analysis of the data using mixed design ANOVA

Source	*df*	*Error*	*F*	*p*	ηp^2
Time [a]	2	86	22.96	**<.001**	.35
Time*Group[c]	2	86	4.27	**.017**	.09
Measure*Group	1	43	2.4	.13	.055
Time*Measure*Group	2	86	2.42	.095	.05

Note. [a] The pre-test, the immediate post-test and the three-week delayed post-test.
[b] The C-test and the MLK test.
[c] The experimental group and the control group.

Table 20 above displays the following results:

A significant effect for time, F (2, 86) = 22.96, p< .001, ηp²= .35 (time row in Table 20). This effect indicates that regardless of the group, and the measures used, the difference between the participants' mean scores in the pre-tests, the immediate post-tests and the three-week delayed post-tests were significant.

A significant interaction effect between time and group was also observed, F (2, 86) = 4.27, p< .05, ηp²= .09. The result confirms the observation made from Table 1 and Figure 12. That is, the CBI group performed better than the TI group in both the MLK test and the LUT.

However, Table 1 shows that there was no significant interaction between measure and group, F (1, 43) = 2.4, p> .05. Similarly, there was no significant interaction between time, measure, and group, F (2, 86) = 2.42, p> .05.

I will now summarise the results in terms of the research questions addressed in this section.

RQ1 (a). What is the immediate and longer (three weeks) effect of CBI on improving Algerian learners' understanding of tense and aspect in English?

Table 21

Mixed ANOVA MLK test

Group	Source	*df*	*error*	*F*	*p*	*ηp²*
CBI	Time	2	48	29.01	**<.001**	.55
TI	Time	2	38	4.98	.12	.21

In order to gain a more detailed picture of the overall results presented above, further analyses were conducted for RQ1a. A further mixed between-within subjects design ANOVA was carried out to compare the effect of CBI versus TI on improving the participants' understanding of the concept of tense and aspect. Once again, Mauchly's sphericity was not violated neither for the CBI group nor for the TI group, X^2 (2) = .9, X^2 (2) = .93 respectively, $p < .05$. Hence, no correction was applied.

Table 21 indicates a significant main effect for the CBI group, F (2, 48) = 29.01, $p < .001$, $\eta p^2 = .55$, but no significant main effect for the TI group. Thereby, the results suggest that CBI treatment was more effective for improving the participants' understanding of the concept of tense/aspect than the TI treatment.

Improvements made by the CBI group were further analysed at the pre-test, the immediate post-test and the three-week delayed post-test. The ANOVA paired comparison is reported in Table 22 below. A Bonferonni adjustment was conducted, hence the results are reported at p= .016.

Table 22

Mixed ANOVA pairwise comparison

Group		*MD*	*Std. Error*	*p*
CBI	Pre-test- Post-test	-17	2.05	**<.001**
	Pre-test- Delayed Post-test	-11.5	2.13	**<.001**
	Post-test- Delayed Post-test	5.5	2.61	.14

Table 22 reveals that statistical significant improvement was noticed between the results of the pre-test and the immediate post-test, and between the pre-test and the three-week delayed post-test, $p < .001$. However, no significant improvement was observed between the immediate post-test and the three-week delayed post-test, $p > .05$. The results indicate that CBI did not only

helped the participants improve their immediate understanding of the concept of tense/aspect, but it also enabled them to sustain their understanding three weeks after the end of the treatment.

RQ2 (a). Is CBI more effective than TI regarding understanding of the concept of tense and aspect?

In order to address RQ2a, a t-test for independent samples was used as a follow up test to compare the results of the CBI and the TI groups.

Table 23

Independent samples t-test (MLK)

	t	*df*	*p*
Pre-tests %	1.33	43	.19
Post-tests %	4.62	43	**<.001**
Delayed post-tests %	4.76	43	**<.001**

The results revealed that the difference between the two groups at the pre-test stage was not significant p> .05 (see Table 23). Hence, it was clear that the groups' metalinguistic knowledge of tense and aspect in English prior to both interventions was broadly similar. However, the difference observed between the results of the two groups at the immediate post-test and the three-week delayed post-test level was statistically significant p< .001 (see Table 23). This suggests that CBI treatment was more effective than TI treatment for improving the participants' understanding of the concept of tense/ aspect.

RQ1 (b). What is the immediate and longer (three weeks) effect of CBI on improving Algerian learners' accurate use of the target forms (past simple, past continuous and present perfect)?

In order to address RQ1b the same data analysis procedure as described above was followed. Table 1 above provides the descriptive statistics for the LUT. Once again, Mauchly's

sphericity was not violated for neither the CBI group nor the TI group, X^2 (2) = .58, X^2 (2) = .8 respectively, p < .05. Hence, no correction was applied.

Table 24

Mixed ANOVA LUT

Group	Source	*df*	*error*	*F*	*p*	*ηp²*
CBI	Time	2	48	9.74	**.001**	.29
TI	Time	2	38	.6	.55	.031

The mixed between-within subjects ANOVA was used to compare the effect of treatment on the participants' accurate use of the target forms. The results revealed a significant main effect for the CBI group F (2, 48) = 9.74, p< .001, ηp^2= .29, but no significant main effect for the TI group. The results indicate that CBI treatment helped the participants improve their use of the simple past, the past continuous and the present perfect.

Improvements made by the CBI group were then analysed at pre-test, immediate post-test and three-week delayed post-test times. The ANOVA paired comparison is reported in Table 25 below. A Bonferonni adjustment was conducted, hence the results are reported at p= .016.

Table 25

Mixed design ANOVA Pairwise comparison

Group		*MD*	*Std. Error*	*p*
CBI	Pre-test- Post-test	-4.8	3.03	.38
	Pre-test- Delayed Post-test	-13.8	3.6	**<.001**
	Post-test- Delayed Post-test	-9	3.41	.044

The analysis revealed no statistical difference between the pre-test and the immediate post-test. Hence, the improvement noticed in Table 1 is not significant. No statistical significant

improvement was observed between the immediate post-test and the delayed post-test either. However, a significant difference was found between pre-test and delayed post-test.

RQ2 (b). Is CBI more effective than TI regarding use of the past simple, the past continuous and the present perfect?

Table 26

Independent samples t-test (LUT)

	t	*df*	*p*
Pre-tests %	.765	43	.45
Post-tests %	1.28	41.23	.2
Delayed Post-tests %	3.66	43	**.001**

The results of the independent sample t-test showed no significant difference between the CBI group and the TI group at the level of the pre-test, and this suggests again that they had similar abilities prior to both interventions (see Table 1). No statistically significant difference was found between the two groups for the immediate post-test either. However, the difference between the percentages of the mean scores for the three-week delayed post-test was found to be statistically different.

5.2.3 Conclusion.

The statistical analysis of the MLK and the LUT tests results suggest that CBI helped the participants improve their immediate understanding of the concept of tense/ aspect as well as sustain their understanding three weeks after the end of the treatment. As it was noticed in Table 1 and Figure 12, the participants' mean scores after the TI treatment improved a little; nonetheless, this improvement was not statistically significant. The analysis revealed also that at the beginning of both treatments, the participants' abilities in the CBI group and the TI group were similar. Notwithstanding that after the interventions, the CBI group outperformed TI group

at all levels. CBI treatment appears to have been more effective than TI treatment in helping the participants' improve their immediate and longer term understanding of the concept of tense/ aspect. Additionally, the CBI treatment was more effective in helping the participants' sustain their use of the target forms than the TI treatment.

5.3 Individual versus dyadic Verbalization

In the previous section (see Section 5.2), the statistical analysis of the MLK test and the LUT test revealed that CBI treatment appeared to be more effective than TI treatment, and CBI treatment helped the participants' improve both their immediate and longer term understanding of the concept of tense/aspect and their accurate use of the target forms. In order to gain deeper insights in relation to that improvement, I conducted further analysis by comparing the results of the participants who, during treatment, verbalized individually to those who verbalized in dyads (see Chapter 4). The statistical analyses presented in this section, therefore, address RQ3: Which type of verbalization, individual or dyad-based leads to higher levels of improvement in learners' (a) understanding of the concept of tense/ aspect and (b) accurate use of the target forms (past simple, past continuous and present perfect)?

5.3.1 Descriptive statistics.

Table 27 below displays the descriptive statistics for the MLK test and the LUT.

Table 27

Descriptive statistics: Individual versus collaborative verbalization

Condition	Tests		*n*	*M%*	*SD%*	*Min%*	*Max%*
Individual	MLK	Pre-test	9	18.98	10.01	4	33
		Post-test	9	38.9	12.33	21	58
		Delayed Post-test	9	31.02	5.56	25	38
	LUT	Pre-test	9	40.56	11.58	25	60
		Post-test	9	39.44	16.28	25	65
		Delayed Post-test	9	50.56	12.11	30	70
Dyads	MLK	Pre-test	16	16.67	9.38	4	33
		Post-test	16	32.03	10.29	17	50
		Delayed Post-test	16	27.86	8.3	13	46
	LUT	Pre-test	16	32.2	11.7	5	50
		Post-test	16	40.31	12.17	25	65
		Delayed Post-test	16	48.13	8.73	25	60

5.3.1.1 Individual verbalization.

As shown in Table 27 above, the percentages of the MLK test mean scores for the participants who verbalized individually improved considerably after the CBI treatment. As it can be seen above, there was an important improvement at the level of pre-post-test (19.92%). The scores decreased slightly from the immediate post-test to the delayed post-test (7.88%).

Nonetheless, the results of the descriptive statistics show that the CBI treatment helped the participants who worked individually to understand and retain their understanding of the concept of tense/ aspect.

With regard to the use of the target forms, Table 27 shows that after CBI treatment the percentages of the mean scores decreased slightly in the immediate post-test by (1.12%). However, three weeks later, the scores increased considerably (10%). The results suggest that CBI treatment helped the participants sustain their use of the target forms three weeks after the end of the treatment, even if a small decrease was noticed at the level of the immediate post-test.

5.3.1.2 Dyadic verbalization.

Table 27 shows that the percentages of the MLK test mean scores for the participants who verbalized in dyad improved considerably after the CBI treatment. As it can be seen above, there was an important improvement at the level of the pre-post-test (15.36%). The scores of decreased slightly from the immediate post-test to the delayed post-test (4.17%). Nonetheless, the results of the descriptive statistics show that the CBI treatment helped the participants who worked in dyads understand and retain their understanding of the concept of tense/ aspect.

With regard to the use of the target forms, Table 27 shows that after CBI treatment the mean scores improved immediately and improvement was sustained after three weeks. The scores improved by (8.11%) at the level of pre-post-test. Further increase of scores was also noticed from the immediate post-test to the delayed post-test (8.18%).

5.3.1.3 Individual versus dyadic verbalization.

Figure 13 below shows the descriptive statistics for both tests comparing participants who verbalized individually with those who verbalized in dyads.

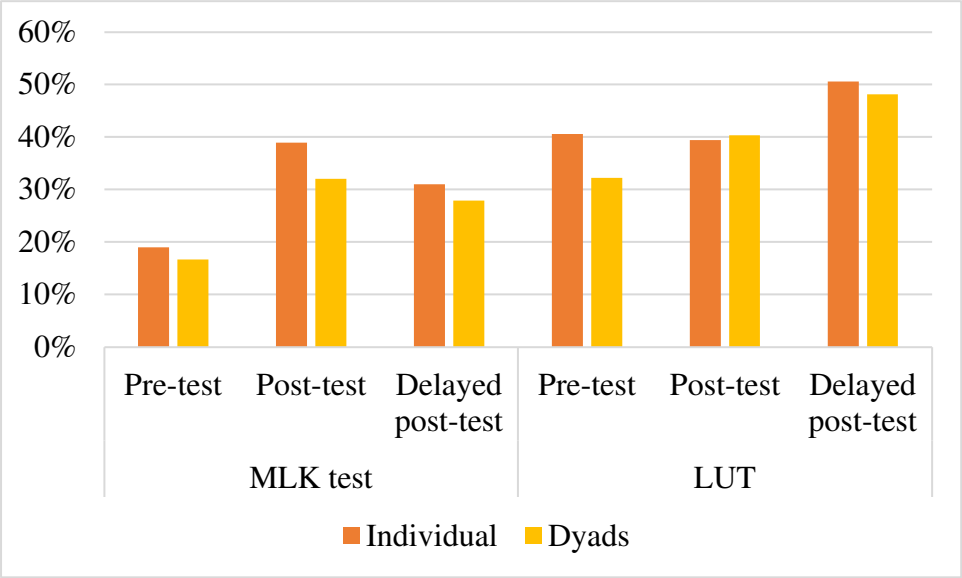


Figure 13. Descriptive statistics: individual versus dyad-based verbalization

As shown in Figure 13, the mean scores of the participants in both subgroups improved after CBI treatment. The results of the MLK test indicate that the participants who verbalized individually achieved higher scores than those who verbalized in dyads, especially after immediate post-testing where the score of the individuals outperformed the scores of dyads by (6.87%). The mean scores of both subgroups decreased slightly three weeks after the end of the treatment. The results of the LUT test show that there was a steady improvement of the mean scores for the dyads but for the individuals, the mean scores fluctuated. In other words, the mean scores decreased slightly for the immediate post-test and then went up for the three-week delayed post-test.

To further probe into the results of the descriptive statics displayed above, a repeated measures ANOVA test was conducted (see Chapter 4). In the sections that follow, I will address the research question posed at the beginning of this section (see Section 5.3) with reference to the repeated measures ANOVA as well as the *t*-tests for dependent samples as appropriate.

5.3.2 Inferential statistics

In order to address RQ3 and determine whether there was a significant difference between the two types of verbalization in terms of improvement, repeated measures ANOVA

was conducted. The repeated measures ANOVA was carried out with two groups (individuals and dyads) as the between subjects factor, and time (pre-test, post-test and delayed post-test) as within subjects factor.

RQ3 (a) Which type of verbalization, individual or dyad-based, leads to higher levels of improvement in learners' understanding of the concept of tense and aspect?

Table 28 below displays the results of the repeated measures ANOVA for the MLK test. Mauchly's sphericity was not violated X^2 (2) = .9, p >.05. Hence, no correction was applied.

Table 28

Repeated measures ANOVA: MLK test

	df	*error*	*F*	*p*	*ηp²*
Time	2	46	27.97	**<.001**	.54
Time*group	2	46	.51	.61	.02

Table 28 indicates a significant main effect for time F (2, 46) = 27.97, p< .05, with a large effect ηp^2= .54, but no significant interaction between time and group F (2, 46) = .51, p> .05. Hence, no difference was found between the results of the two subgroups with regards to their understanding of the concept of tense and aspect.

Further analyses were conducted to better understand the substantial differences noticed with respect to time, i.e., pre-tests, immediate post-tests and the three-week delayed post-tests. Paired samples *t*-tests were conducted to measure the within-group effects made by each subgroup.

Table 29

Paired samples *t*-test: MLK test

Group		*t*	*df*	*p*
individual	Pre-test/ Post-test	-5.75	8	**<.001**
	Pre-test/Delayed Post-test	-3.4	8	**.01**
	Post-test/Delayed Post-test	-1.6	8	.15
Dyad	Pre-test/ Post-test	-6.04	15	**<.001**
	Pre-test/Delayed Post-test	-4.09	15	**.001**
	Post-test/Delayed Post-test	-1.4	15	.19

Table 29 shows that there was a significant difference between pre/post-tests for both subgroups, and in both immediate and longer term periods ($p < .05$). No significant main effect was noticed between the post/delayed tests, $p > .05$.

To sum up, the analysis of the MLK test showed that participants in both subgroups (either individual or dyads) benefitted equally from the CBI treatment they received since the repeated measures indicated no significant interaction between time and groups. The analysis also indicated that either individuals or dyads demonstrated immediate improvement after CBI treatment. Even though there was some attrition between the immediate post-tests and the three-week delayed post-tests for both subgroups, the analysis showed that this drop down was not significant. Additionally, the results of the three-week delayed post-tests were significantly higher than the mean scores of the pre-tests. Overall, the analysis indicated that both modes of verbalization were equally useful in helping the participants improve and sustain their understanding of the concept of tense/aspect.

RQ3 (b) Which type of verbalization, individual or dyad-based, leads to higher levels of improvement in learners' accurate use of the target forms (past simple, past continuous, and present perfect)?

In order to address RQ2 (b), the same procedure for data analysis was followed. Table 30 below presents the results of the repeated measures ANOVA.

Table 30

Repeated measures ANOVA: LUT

	df	*error*	*F*	*p*	*ηp²*
Time	2	46	8.23	**.001**	.25
Time*group	2	46	1	.38	.04

Table 30 indicates a significant main effect for time F (2, 46) = 8.23, p< .001, with a small effect ηp^2= .25. However, there was no significant interaction between time and group F (2, 46) = .38, with a tiny effect size ηp^2= .04. Hence, there was no difference between individuals and dyads with regard to their use of the target forms.

To further analyse the data regarding gains throughout time, paired samples t-tests were conducted.

Table 31

Paired samples t-test: LUT

Group		*t*	*df*	*p*
Individual	Pre-test/ Post-test	.2	8	.84
	Pre-test/Delayed Post-test	-2.4	8	**.04**
	Post-test/Delayed Post-test	-1.8	8	.12
Dyad	Pre-test/ Post-test	-2.34	15	**.03**
	Pre-test/Delayed Post-test	-3.8	15	**.002**
	Post-test/Delayed Post-test	-1.9	15	.08

Table 31 displays the results obtained from the paired samples t-test analysis. For the individuals' subgroup, significant difference between the percentages of the mean scores was noticed only between the pre-delayed post-tests, $p < .05$. There was no significant difference between the pre-post-tests or the post-delayed post-tests. For dyads, a significant difference was found between the pre-post-tests, and the pre-delayed post-tests. However, the improvement noticed in the percentages of the mean scores between the post-delayed post-tests (see Figure 13) was not significant.

The results of the LUT presented above (Table 30 and Table 31) indicate that both participants in both subgroups (either individual or dyads) benefitted equally from CBI treatment since no significant interaction was found between time and group (see Table 30). The analysis indicated that participants were able to improve and sustain their use of the three target forms. Nonetheless, a small attrition of scores was noticed in the group of individuals at the immediate post-test which was not significant. Overall, the analysis indicated that both modes of verbalization were equally useful in helping the participants improve their use of the three target forms.

5.3.3 Conclusion.

The analysis of the MLK test and the LUT revealed that both types of verbalization produced equal results since no statistical significance was found between the results of the subgroups. Hence, CBI helped both participants in both subgroups, i. e., those who verbalized individually and those who worked in pairs, improve and sustain their understanding of the concept of tense/aspect as well as use the three target forms dealt with in the study.

5.4 The Role of verbalization (individual and dyadic) as a mediational tool to enhance the participants' understanding of the concept of tense/aspect

In order to gain a deeper understanding of the role of verbalization as a mediational tool to enhance the participants understanding of the concept of tense/aspect and to explore the

relationship between the mode of verbalization the participants engaged in, individual or dyadic, and the amount and types of LUs (inferencing, paraphrasing, rereading, etc.), the data from the selected verbal protocols were analysed following Swain et al.'s (2009) LUs coding scheme. Participants' languaging was divided into languaging related to the target concept (concept-bound languaging) and languaging not directly related to the target concept (non-concept-bound languaging) (see Chapter 4).

As stated previously (see Chapter 4), eight verbal protocols were transcribed and analysed for comparison purposes (see Chapter 4).The selection of protocols was based on improvement (or otherwise) achieved by the participants after the CBI treatment. Four participants were selected from each subgroup (either individuals or dyads) to represent two participants who gained the most and the two participants who gained the least in each condition.

Table 32 below describes the condition and the level of improvement (or otherwise) of the participants concerned with the verbalization analysis. Participants verbalization' word count was calculated, percentages of their use of L2 read from the cards, L2 non-read and use of L1 were also taken into account (see Table 32 below).

Table 32

Verbalizers' level of improvement (or otherwise)

Participant	Condition	Category	Improvement (%)	Word count	L2 read (%)	L2 non-read (%)	Use of L1 (%)
PES3	Individual verbalization	LA	8	3059	78.7	21.3	0
PES 8	Individual verbalization	LA	8	2682	81.5	18.4	0
PED14	Dyadic verbalization	LA	-4	555	55.3	50.5	0
PED7	Dyadic verbalization	LA	2	1173	72	5	23.5
PES2	Individual verbalization	HA	27	1328	68.5	1.6	29.8
PES7	Individual verbalization	HA	29	3219	68.1	32	0
PED1	Dyadic verbalization	HA	23	601	53.4	46.6	0
PED11	Dyadic verbalization	HA	25	807	30.5	69.5	0

Note. LA= Low Achiever; HA= High Achiever.

Table 32 indicates clearly that there was variation in the amount of verbalization produced by the participants during CBI treatment. Their verbalization ranged from 555 to 3219 words. The majority of the participants verbalized using English (FL). It is important to

highlight that most of the English (FL) identified in the protocols was (re)reading aloud the information presented on the cards. PED11 was the only participants who used English (FL) for non-reading purposes (69.5%). Only two participants verbalized using Algerian Dialect (L1) (PED7= 23.5%, PES2= 29.8%).

5.4.1 The quantity and the quality of the Languaging Units (LUs).

Table 33 below provides a detailed description of the amount and types of LUs used by the eight participants under consideration. Percentages in the table were calculated in relation to the overall number of LUs produced by the participants.

Table 33

Participants' quantity and quality of languaging

Participants' profile based on performance	Concept-Bound Languaging	Non-Concept-Bound Languaging	Total

		Paraphrasing	Integration	Elaboration	Hypothesis	Analysis	Self-assessment	(Re)Reading	
PES3	Low Achiever	2.4% (10)	3.12% (13)	1.2% (5)	0	0	0.72% (3)	15.11% (63)	22.54% (94)
PES8	Low Achiever	3.12% (13)	0	0.24% (1)	0	0	0.96% (4)	11.75% (49)	16.07% 67
PES2	High Achiever	2.4% (10)	0.96% (4)	0	0	0	0	5.28% (22)	8.63% (36)
PES7	High Achiever	3.6% (15)	1.2% (5)	0.7% (3)	0	0	0	13.2% (55)	18.71% (78)
PED14	Low Achiever	1.68% (7)	0	0.48% (2)	0	0	0	2.64% (11)	4.8% 20
PED7	Low Achiever	4.32% (18)	1.68% (7)	0.24% (1)	0.24% (1)	0.24% (1)	3.6% (15)	10.07% (42)	20.38% (85)
PED1	High Achiever	0.72% (3)	0.96% (4)	0.24% (1)	0	0	0	2.16% (9)	4.08% (17)
PED11	High Achiever	0.96% (4)	0.24% (1)	1.2% (5)	0	0.24% (1)	0	2.16% (9)	4.8% (20)
Individual Group		11.51% (48)	5.28% (22)	2.16% (9)	0	0	1.68% (7)	45.32% (189)	65.95% (275)
Dyad Group		8% (32)	3% (12)	2% (9)	0.23% (1)	0.47% (2)	4% (15)	17% (71)	34% (142)

Note. Figures in parentheses are raw numbers.

In total, the eight participants selected for analysis produced 417 LUs during the intervention stage. Participants who verbalized individually produced 275 LUs while the participants who verbalized in dyads produced 142 LUs. Clearly, the comparison regarding

number of LUs produced by either individuals or dyads must be necessarily contextualised given that individual verbalizers did not have to share the available time. In this light, it is thus not surprising that the number of LUs produced by individuals surpasses the number of LUs produced by dyads.

Table 33 suggests that the participants on both groups relied approximately on the same types of LUs. Both individuals and dyads relied mostly on (re)reading and paraphrasing. They relied less on integration, elaboration, and self-assessment.

Table 33 shows also that participants' rare use of hypothesis formation and analysis. In sum, participants in both groups, individuals and dyads, used the same type of Languaging Units (LUs) but the amount of languaging was different.

Figure 14 below visually illustrates the difference between the quality and the quantity of LUs produced by individual verbalizers and dyads verbalizers.

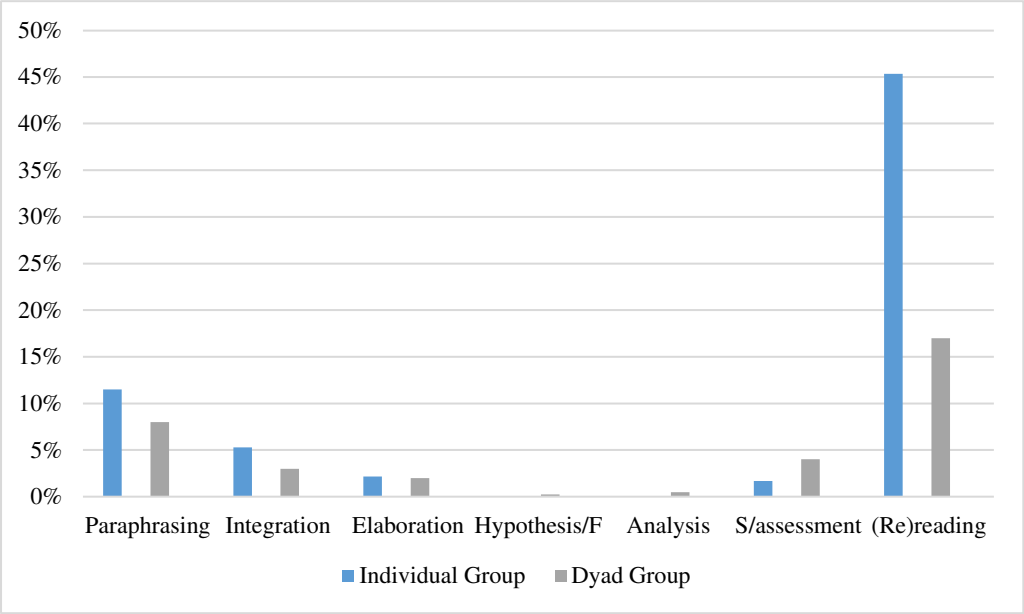


Figure 14. The Languaging Units produced by Individuals and dyads.

Figure 14 clearly shows that most participants, individuals and dyads, relied primarily on (re)reading and to a much lesser extent, paraphrasing. The number of (re)reading units produced by individuals exceeded those produced by dyads by 28.23%, thus a considerable difference. Both individuals and dyads used approximately the same number of integration, elaboration and self-assessment. The participants showed approximately no use of hypothesis formation and analysis.

Figure 15 below shows the difference between the quantity and quality of LUs produced by High Achievers (PES2, PES7, PED1, and PED11) and Low Achievers (PES3, PES8, PED14, and PED7).

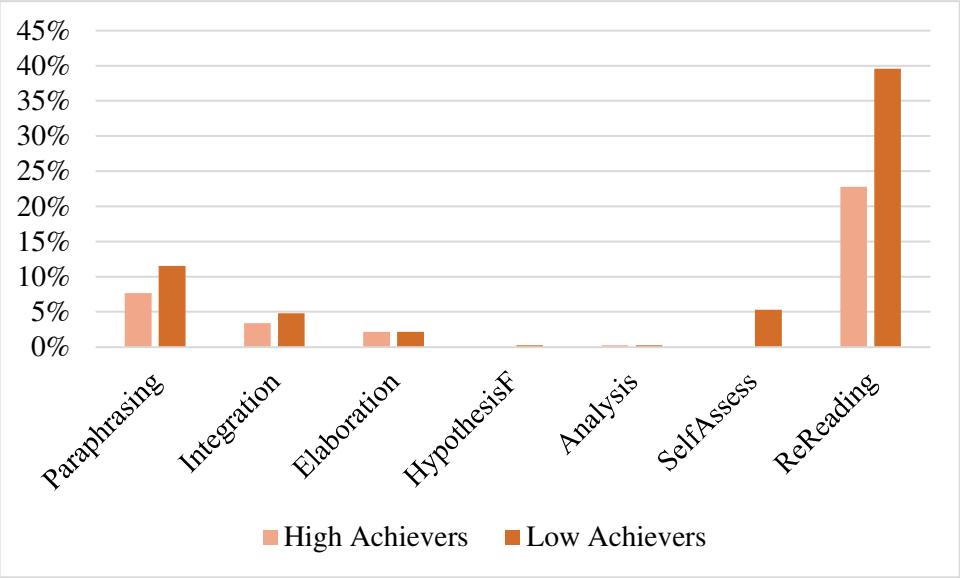


Figure 15. Quantity and quality of LUs produced by high achievers vs low achievers

Figure 15 demonstrates that Low Achievers (LA) produced more LUs than High Achievers (HA). However, they relied approximately on the same types of LUs. Both, LAs and HAs relied considerably on (re)reading, then on paraphrasing, integration, and elaboration. LAs produced more (re)reading LUs (39%) than the HAs (23%). LAs produced more paraphrasing (11%) and integration (5%) than the HAs (7%) and (3%) respectively. Both the LAs and HAs produced an even number of elaboration (2%). LAs and the HAs did not produce any hypothesis or analysis units. Finally, a fair number of self-assessment LUs was produced by LAs.

A complementary perspective on the data is shown in Figure 16 and Figure 17 below, which display the differences by mode of verbalization, i.e. individual vs dyadic.

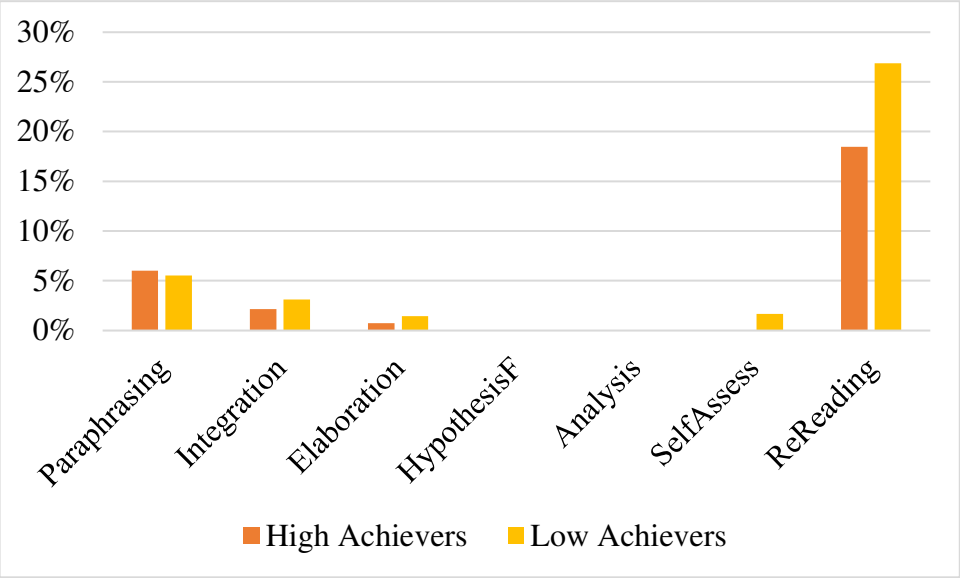


Figure 16. Individual verbalization: high achievers versus low achievers

As shown in Figure 16, there is a small variation in the amount and types of LUs used by HAs and LAs in the group of individuals with the LAs producing more LUs than the HAs except for paraphrasing where the percentages of LUs of the HAs slightly exceed the percentages of LUs of the LAs. Low Achievers (LAs) produced more (re)reading LUs (26%) than the High Achievers (HAs) (19%). A slight difference between the percentages of integration and elaboration LUs where the LAs exceeded the HAs is noticed. The LAs used approximately 2% of the LUs to self-assess their understanding; whereas, the HAs used none for this purpose. Neither, LAs nor HAs engaged in any hypothesis testing or analysis.

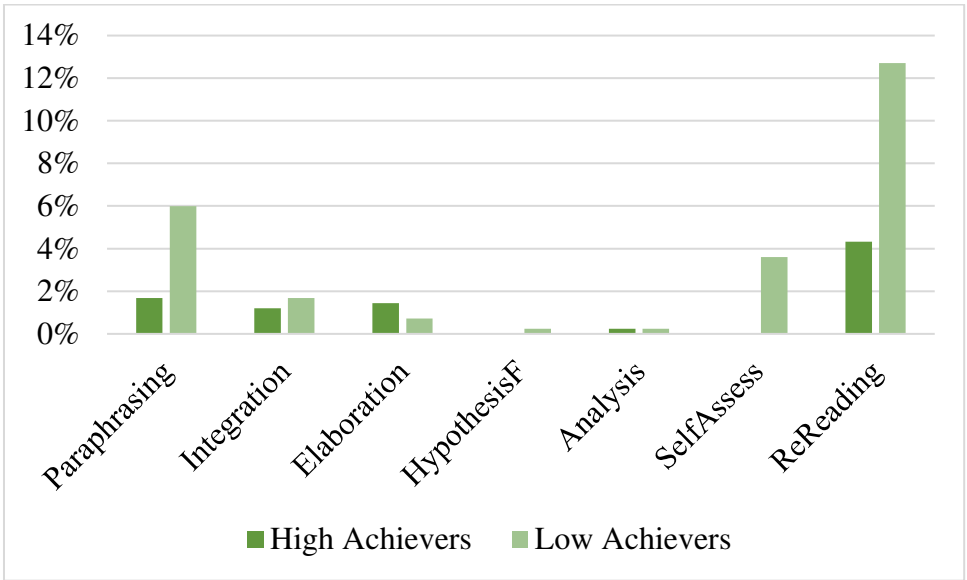


Figure 17. Dyadic verbalization: high achievers versus low achievers

Figure 17 demonstrates again that both HAs and LAs used the same types of LUs but not in the same amount. As shown in Figure 17, the number of (re)reading and paraphrasing LUs used by the LAs was two times greater than those used by the HAs. With regard to integration and elaboration a small difference was noticed between LAs and HAs. A tiny and equal reliance on analysis was noticed in both LAs and HAs (0.24%). With regard to hypothesis formation and self-assessment, the HAs did not use any; however, the LAs used a limited percentage of hypothesis formation (0.24%) and of self-assessment (3%).

A comparison between the amount and types of LUs used by the High achievers in each group was conducted. Figure 18 below shows the results obtained.

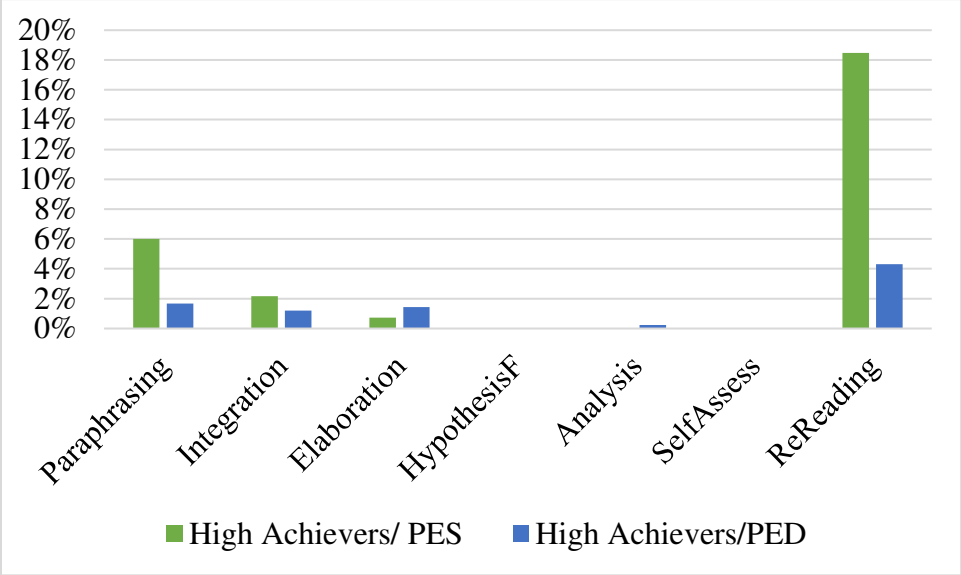


Figure 18. High achievers individuals versus high achievers dyads

As shown in Figure 18 HAs in both groups, individuals and dyads, used the same types of languaging. Nonetheless, HAs working individually verbalized more than those in the group of dyads. Although, as noted above, individuals did not have to 'share their time' with a partner, this comparison is still interesting because there is a difference not observed among low achievers. Participants in both groups relied mostly on (re)reading and paraphrasing. Both individuals and dyads used a few number of integration and elaboration. The rate of elaboration

LUs used by the HA in the group of dyads slightly exceeded the rate of the HAs in the group of individuals. A negligible percentage of analysis was used by the HAs in the group of dyads.

A comparison between the amount and types of LUs used by the Low Achievers in each group was also conducted.

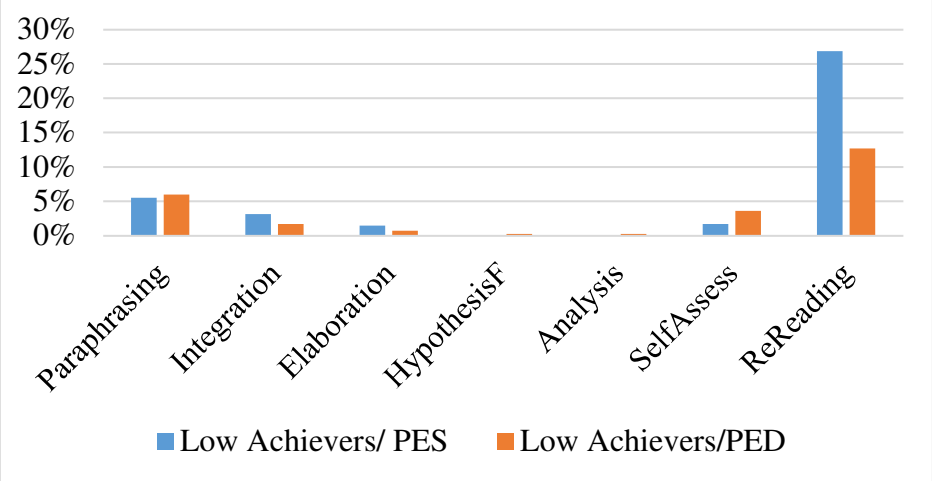


Figure 19. Low achievers individuals versus low achievers dyads

Similarly Figure 19 demonstrates that the LAs under both verbalization conditions used approximately the same types of LUs. Nonetheless, individual LAs used a wider range of LUs than dyads LAs. Low achievers in the group of individuals and dyads relied largely on (re)reading. They relied less on paraphrasing, integration, elaboration and self-assessment. They showed no use of hypothesis formation and analysis.

5.4.2 Conclusion.

The analysis of the eight participants' verbal protocols revealed that most of the verbalization was conducted in English and participants in both groups (individual and dyads) used approximately the same types of Languaging Units but to different degrees. Although, the number of LUs produced by the group of individuals was twice as high as the number of LUs produced by the participants in the group of dyads, the comparison between the number of LUs produced by individuals and dyads must be read cautiously since -as noted above- dyadic verbalizers were 'sharing' the verbalizing space.Participants in both groups (individual and

dyads) produced similar types of LUs. They relied mostly on (re)reading aloud and paraphrasing. They engaged less on integration, elaboration and self-assessment. They produced a negligible number of analysis and hypothesis formation units The analysis of protocols showed no considerable difference in the types of languaging used between high and low achievers

5.5 Attitudes towards CBI and TI

In this section, I will report on the participants' viewpoints with respect to the type of pedagogical intervention received, either Concept-Based or Traditional Instruction. Hence, in this section I will focus on addressing ***RQ4: What are the Algerian learners' attitudes towards using CBI in grammar learning compared to TI?*** The analysis is based on the participants' answers to either the CBI Questionnaire (CBIQ) or the TI Questionnaire (TIQ) (see Appendix G and Appendix H) depending on the treatment each group received. Results of both descriptive statistics as well as inferential statistics are presented in the section. The four categories included in the questionnaire were (a) easiness of understanding (EU), (b) helpfulness of the approach (HA), (c) level of interest in the approach (IA), and (d) time allocation (TA) (see Chapter 4 for further details).

5.5.1 Descriptive statistics.

Table 34 below displays the descriptive statistics for the two questionnaires adopted in the study.

Table 34

Descriptive statistics: CBIQ and TIQ

Group	Categories	*n*	*M*	*SD*	*Min*	*Max*	*Mo*
CBI	EU	25	3.42	.59	2	5	4
	HA	25	3.2	.58	3	5	2
	IA	25	2.8	1.19	1	5	2/5
	TA	25	3.1	1.23	1	5	4

TI	EU	20	3.8	.48	3	5	4
	HA	20	3.9	.48	3	5	4
	IA	20	3.8	.61	3	5	4
	TA	20	3.5	.6	2	4	4

Note. EU= easiness of understanding; HA=helpfulness of the approach; IA= interest in the approach; TA= time allocation.

As shown in Table 34, the participants in the TI group had more positive attitudes towards the treatment they received than the participants in the CBI group. The participants in the TI group thought that the TI materials were easy to understand (M= 3.8) compared to M= 3.42 for the CBI group. TI treatment seemed to have been perceived as more helpful than CBI (M= 3.9, M=3.2, respectively). With regard to the level of interest in the approach, TI also outperformed CBI (M= 3.8 compared to M= 2.8). And finally, the mean score for time allocation in the TI group was also higher than that of the CBI group. Hence, participants who received the TI treatment were more satisfied with their experience than those who received CBI.

Table 34 also demonstrates that the majority of participants in the TI group agreed that their treatment had been easy to understand, was helpful, and interesting, and that they had sufficient time (*Mo*= 4). By contrast, participants in the CBI group had conflicting views about the treatment they received. The majority of the participants agreed that the treatment had been easy to understand, and they had had enough time devoted to it (*Mo*= 4). Nonetheless, the majority thought that the treatment had not been helpful (*Mo*= 2). With regard to interest of the approach, the participants' views were divided between disagree (*Mo*= 2) and strongly agree (*Mo*= 5).

5.5.2 Inferential statistics.

RQ4: What are the Algerian learners' attitudes towards using CBI in grammar learning compared to TI?

In order to address this research question, the MANN Whitney U test was carried out. Table 35 below presents the results of the MANN Whitney U test. Before discussing the results of Table 35, it ought to be mentioned that the effect size was calculated using the formula stated below since this is not included in SPSS (Field, 2009):

$$r = \frac{Z}{\sqrt{N}}$$

Z refers to the z-score produced by SPSS output and N refers to the number of the participants in the study, i.e., N=45.

Table 35

MANN Whitney U test for CBIQ and TIQ

Categories	*U*	*z*	*p*	*r*
EA	154.5	-2.19	**.03**	-.33
HA	79.5	-3.9	**<.001**	-.6
IA	136	-2.63	**.008**	-.4
TA	220.5	-.69	.5	-.1

Table 35 demonstrates a significant difference between the mean scores of the CBI group and the TI group for most categories: easiness of understanding (EA), helpfulness of the approach (HA) and interest for the approach (IA). The mean score of the EA category in the TI group differs significantly from the mean score of the same category in the CBI group with a small effect size, U= 154.5, z= -2.19, r= -.33. A significant difference was also noticed between the TI group and the CBI group for helpfulness of approach, p< .05, with a large effect, r= -.6 which indicates that the participants did really think that TI treatment helped them understand and use the grammatical concepts dealt with during the treatment. A significant difference also

appeared between the mean scores of the two groups for interest in the appraoch category, U= 136, z= -2.63, r= -.4. However, no significant difference for the time allocation category was observed. The results of the MANN Whitney U (Table 35) test thus confirm the results of the descriptive statistics (see Table 34) except for the time allocation category where the difference between the mean scores was not significant.

5.5.3 Conclusion.

In sum, the analysis of the CBIQ and the TIQ showed that the participants who were exposed to Traditional Instruction were more satisfied with the pedagogical intervention than those participants who were in the Concept-Based Instruction group. Participants who experienced traditional instruction judged this approach as easier to understand, more helpful and more interesting than those who experienced concept-based instruction. The participants in both groups agreed only upon one category which was the time allocated for the treatments; they all thought time had been sufficient as part of their respective treatments. Interestingly, the results regarding perception of helpfulness of treatment and so on do not reflect the participants' actual performance in the MLK and the LUT tests since TI, the treatment with higher results on the attitudes measure rendered lower scores than CBI on the performance measures.

5.6 Conclusion

This chapter presented the results obtained from the different research tools used in the study. The analysis of the MLK test revealed that CBI treatment was superior to the TI treatment in helping the participants improve and sustain their understanding of the concept of tense/aspect. The analysis of the LUT revealed the superiority of CBI over TI but only in the long term. The comparison between the two modes of verbalization (individual vs dyadic) revealed neither mode appeared to be more advantageous than the other. This finding was further supported by the qualitatively oriented analysis of their verbal protocols which revealed similarities in the type of languaging produced by all participants. The analysis of the CBIQ

and the TIQ revealed that the participants who experienced TI were more satisfied with their pedagogical treatment than those who participated in the CBI treatment; nonetheless, the latter provided better results in terms of test scores. I will now proceed to discuss these findings in Chapter 6.

Chapter 6: Discussion

6.1 Introduction

This chapter discusses the results of the study reported previously in chapter 5. First, a reminder of the research questions addressed, the procedure followed, and the tools used for the data collection is provided. Then, sections 2 and 3 discuss the results obtained from the metalinguistic knowledge test (MLK test), and the language use test (LU test). After that,

section 4 discusses the results of the comparison of the two modes of verbalization as well as a qualitative analysis of the participants' verbal protocols. The last section of the chapter discusses the results obtained from the two questionnaires used in the study to assess the participants' attitudes towards the types of instruction they received.

6.2 A Brief Summary Reminder

Based on a body of research literature framed within Sociocultural theory and its application to language teaching/learning (Gánem-Gutiérrez & Harun, 2011; Harun, 2013; Lantolf & Poehner, 2014; Negueruela, 2003, among others), the intervention with CBI treatment in the present study followed three fundamental steps: (a) the concept of tense/aspect was used as a minimal unit of instruction. (b) The concept of tense/aspect was materialized by using didactic models such as diagrams, pictures, concept maps and texts. (c) Participants were asked to verbalize their thinking while working with these didactic models to foster their understanding. The materials used in the study were constructed using English (FL), the target language. English was also used as a means of verbalization by most of the participants even when no restrictions were imposed on them.

As it has been mentioned throughout this work, the study followed a quasi-experimental design with two comparative groups. Two intact classrooms were included in the study. One group received the CBI treatment and the other received a TI treatment following a traditional grammar instruction that is used at the DELL, University of Constantine 1 Algeria. Each group received nine hours of instruction for the target concept/features divided into six sessions. The participants were second year university students' of English as a foreign language (see Chapter 4).

The findings reported previously (see Chapter 5) suggest that the CBI treatment significantly helped in improving and sustaining the participants' understanding of the concept of tense/aspect and use of its associated forms. The CBI treatment proved to be more efficient

than the TI treatment at all levels. The TI treatment generated poor results since it did not help the participants improve neither their understanding of the concept of tense/aspect nor their use of the target forms. The comparison between the two conditions of verbalization, individual and collaborative, indicated similar results. Moreover, the analysis of the participants' verbal protocols revealed similar use of the types of LUs but revealed variation in the amount of LUs produced. Finally, the analysis of the questionnaire revealed that the participants' attitudes towards the treatments they received, either CBI or TI, did not reflect their actual level of improvement (or otherwise).

6.3 The Metalinguistic Dimension: Understanding Tense and Aspect through CBI

This section discusses the results obtained from the analysis of the MLK test. The focus is on investigating the immediate and the longer-term effect of CBI on improving learners' understanding of the concept of tense/aspect in English and how it compares to the traditional instruction (TI).

In this study, participants' understanding of the concept of tense and aspect was assessed before and after the intervention using pre/post and a three-week delayed metalinguistic knowledge test (MLK test) (see Appendix C1a). The analysis of the MLK test revealed that the participants in the CBI group were able to improve and sustain their understanding of the target concept. By contrast, the participants in the TI group showed less improvement. Therefore, the results point to the superiority of CBI over TI (see Chapter 5).

According to Lantolf (2008, p.37) " learning a second language under properly organized instructional conditions is a different process from learning it under other circumstances." He argued that although many researchers point out the importance of explicit grammatical knowledge in L2 instruction, few have investigated the quality of this explicit knowledge. From a SCT perspective, when instruction is based on simplistic and/or incomplete grammatical explanations, as it tends to be the case in many traditional grammar classrooms,

most learners would be unable to form a deep understanding of the target grammatical concepts. However, when instruction draws on appropriate theory, a deeper understanding of linguistic concepts, for example, is more likely to develop. Therefore, my study supports the argument that when instruction is organized around scientific concepts, in the Vygotskyan sense, and learners are given the opportunity to verbalize their understanding of these concepts, L2 development can occur.

The results of the pre-test show that at the beginning of the intervention neither group of participants could provide appropriate answers to the questions posed; at best in some cases students simply recalled some of the grammatical rules they had been exposed to. Overall, they relied on identifying the forms, e.g. perfect, continuous, or provided a word for word recall of grammatical rules. This suggest that their answers were based on incomplete knowledge drawn from previous instruction. In sum, their answers indicated (a) a lack of understanding of the meanings of the target grammatical concepts and (b) a lack of retention of full grammatical rules despite having been exposed to that kind of information prior to the study and, despite probably years training in rote memorization of such rules. This indicates that if proper understanding does not occur, retention cannot be achieved either.

After the intervention, it was noticed that the participants in the TI group were consistent in the way they approached the MLK test. They used the same strategy as in the pre-test. They kept relying on identifying the forms and/or providing a word for word recall of the grammatical rules. Furthermore, few changes were noticed in the three-week delayed post-test since some participants repeated their answers of the immediate post-test.

By contrast, the improvement noticed in the CBI group indicates that when instruction is properly organized based on theoretical concepts, deeper understanding as well as retention can occur. By providing learners with a generalized and abstract description of the concept of tense/ aspect, they were able to transform their previous incomplete understanding of the

concept from what was probably rooted in empirical orientation into an increasingly more complete orientation. This supports what was advocated by Arievitch and Stetsenko (2000) among other scholars, that is, when learners are provided with a theoretical analysis of a concept, deep conceptual understanding can develop. Therefore, the results of the study build on previous evidence of the potential of theoretical concepts from a Vygotskyan sense as a mediational tool for enhancing metalinguistic understanding.

As an evidence of the importance of the quality of explicit grammatical knowledge (scientific versus spontaneous) in helping learners develop their conceptual understanding, I would like to highlight some observations from one participant's data, Ann (pseudonym). When, at the beginning of the study, Ann was asked to define the concept of aspect, she could only refer to information gathered through empirical knowledge. Text (1) below illustrates Ann's answer from the pre-test to the question *Have you ever heard about "aspect"? If, yes explain what you understand as "aspect" in English?*

(1) "Aspect is the part or element or a specific feature of something"

Ann relied on her everyday knowledge of the word aspect to define the concept. Her answer was empirical, superficial and incomplete. In the immediate post-test, her answer considerably changed (See text (2) below). She was able to use the explanation provided in the SCOBA to define aspect. She realized that aspect is a grammatical concept that relates to the way the speaker can view an event and not a part of an object.

"Aspect is the grammatical form in which the speaker views the event as a whole or part from it, and there are two types: we have progressive (continuous)/ non-progressive (simple) and perfect."

Rather interesting, Ann's answer in the three-week delayed post-test was even more elaborated (see text (3) below).

(2) “Aspect is the grammatical quality of a verb which determines the relationship of the speaker to the event or the verb that is described and also the speaker views from the outside as a whole…etc. We have two aspects in English we have the perfect and progressive and nonprogressive.”

In the delayed post-test, Ann started to use her own wording to define *aspect*. Ann’s definition was different from the definition written in the SCOBA “aspect is the grammatical form used by the speaker to describe how he/she view the situation” (see Appendix E1). She incorporated further grammatical explanation provided in the SCOBA and was able to realize that *aspect* has to do with the relationship that exists between the speaker and a situation or event. Ann used the word “quality” in “grammatical quality of the verb” instead of “grammatical form”, “quality” which is a synonym of “feature”. This process is reminiscent of Negueruela's developmental account (2003, p. 336) when he suggested that “ the choice of words is relevant and revelatory to study L2 learners’ conceptual development at specific moments in ontogenesis.” The participant tried to incorporate her everyday understanding tothe scientific understanding that was provided in the SCOBA. This action is also suggestive of Ann moving from “meaning” to “sense” from a Vygostskyan perspective (Lantolf & Poehner, 2014). Ann was trying to form her own understanding, “sense”, of the concept of aspect by incorporating “the everyday meaning” and “the grammatical (scientific) meaning” of aspect. She was trying to give personal significance to the meanings she appropriated from the social plane. Hence, I am arguing that this kind of data also provide insights into the internalization process.

The fact that Ann’s elaboration was observed in the three-week delayed post-test may indicate that when instruction is properly organized, it paves the way to more mature understanding. This supports Lantolf's (2008, p. 37) claims stated above, that is, “a different learning process”. It seems that during the three week period between the immediate and the

delayed post-testing, the participant might have been able to form her own understanding of the concept rather than just memorizing and repeating the input she had received. I would describe this as the participant's thinking evolving from mere verbalism (Negueruela, 2003) to a more sophisticated kind of understanding.

Overall, the results obtained from the MLK test suggest that the CBI treatment improved and sustained learners' understanding of the concept of tense/aspect. The results of the study are, therefore, in line with the findings by Harun (2013), Negueruela (2003) among others. Furthermore, my study has further supported the results of Cetina (2019), thus showing the advantages of CBI over traditional instruction. CBI succeeded in guiding attention to the explanations provided in the SCOBA and helping students develop their own understanding of the target grammatical concept.

6.4 The Language in use dimension: Enhancing the use of the target forms through CBI

Negueruela (2003), amongst others, rightly reminds us that sophisticated understanding might not lead to accurate use of the grammatical concepts. In other words, the focus on metalinguistic knowledge in L2 classroom might not necessarily lead learners to use the language successfully in communicative contexts. Therefore, in an effort to help learners use the grammatical forms dealt with during the study, a practice component was included in the CBI model. The focus of this section, thus, is on the immediate and longer-term effects of CBI on improving learners' use of the past simple, past continuous and present perfect, and how it compares to traditional instruction (TI).

Research on the role of practice in helping learners use the language has been subject to scrutiny, but overall results are inconclusive. Practice in SCT research has received little attention since most published studies, particularly in relation to CBI, focus on developing learners' metalinguistic knowledge rather than the improvement of language use as such.

Therefore, to the best of my knowledge this study is one of the few (see Negueruela, 2003 below) which have included a specific component of practice exercises.

Practice, according to DeKeyser (2015), helps in the proceduralization of the explicit knowledge presented to learners in the classroom. DeKeyser (2015) argues that the kind of practice included in the traditional model of grammar presentation (PPP) might be sufficient to help learners achieve mastery of the language. He proposed that mechanical and meaningful exercises can lead to proceduralization while, communicative exercises aim at automatization (see Chapter 2).

To be clear, in CBI research, the practice component has been reflected in verbalization in the form of communicated thinking where learners are provided with the opportunity to practice their use of the language with another partner (Lantolf, 2011). The application of the CBI model as advocated by Gal'perin aims at enhancing learners' metalinguistic knowledge rather than the use of the language; which is understandable given that his model represents a general pedagogical model rather than being specific to L2 learning. Thus, and as previously mentioned, Harun (2013) for example, did not incorporate practice in her study. Unsurprisingly, her findings showed that her student were unable to make better use of the target forms (see Chapter 2). She, therefore, highlighted the importance of incorporating practice in the CBI model.

Harun's results were further supported by a recent study conducted by Negrete Cetina (2019). As in my study, Negrete Cetina assessed the role of STI for improving Spanish speaking teacher trainees' understanding of the concept of tense/aspect in English as well as their use of the simple past, past continuous and present perfect. Although she found that the STI treatment was superior to traditional instruction in helping the participants improve their understanding of the concept of tense/aspect no improvement was noticed in terms of the use of the target

forms. Similarly to Harun (2013), Negrete Cetina (2019) argued that the absence of the practice component had led to a lack of improvement in learners' use of the language.

A study which incorporated practice activities with the CBI model was that of Negueruela's (2003) (see Chapter 2). Practice in Negueruela's study was in a form of spontaneous oral and written communicative activities. The results of his study indicated that the participants were able to improve their use of Spanish only in written activities. Overall, research to date has indicated that without the practice component, the CBI model appears to be limited to developing learners' metalinguistic knowledge exclusively.

In order to fill this gap in SCT research, therefore, this study incorporated five practice exercises within the CBI model to promote the use of past simple; past continuous and present perfect (see Chapter 4). Participants' use of the three grammatical forms was assessed using pre/post-test and a three-week delayed Language in Use post-test (LUT). Interestingly, the results suggested that CBI helped the participants improve their use of the language but only after the three week period. The improvement was not recorded for the TI group.

It seems, therefore, that as has been observed from other theoretical perspectives, practice plays an important role in L2 development. Clearly the fact that the participants in the TI group did not appear to benefit, when their treatment also included a practice element, represents an interpretive challenge to which I can offer two tentative explanations. The first one is that:

The participants in the CBI group might have had some kind of further exposure to the target forms during the three-week period that the participants in the TI group did not have. This further exposure (and potentially practice) to the L2 – and those forms in particular- is unlikely at least in terms of formal L2 work because participants in both groups were exposed

to their normal classes based on the DELL curriculum. So, any extra practice would have been primarily during personal, extra curricula activities.

Alternatively, the observed difference in results between the two groups could be attributed to the type of practice exercises they were exposed to during their respective treatments. As stated earlier, five practice exercises were included in both treatments (either CBI or TI). Most of the TI exercises followed a mechanical approach where learners were asked to identify a type of verb or rephrase a sentence using either *since* or *for.* That is, they were more in line with the theoretical perspective that tends to be associated with PPP, Skill Acquisition Theory (see DeKeyser, 2015). Only two of these exercises focused on meaning and the relationship between meaning and form by highlighting the aspectual distinction marked by the target features, i.e., simple past, past continuous, and present perfect.

By contrast, the focus of the CBI practice exercises was first and foremost on meaning making by guiding learners to think about form via the conceptual understanding promoted through the SCOBAs. During the practice exercises students were asked to either verbalize individually, i.e., self-explain, or in pairs, i.e., explain to each other, while working through the materials. For instance, the first exercise asked learners to discuss the veracity of statements such as 'When using the v + *ing* the speaker is "zooming in" the situation.' Exercise two asked them to match sentences with diagrams thus aiming to activate the use of conceptual knowledge to convey a specific meaning through a specific form. The last three exercises prioritised attention to form (see Robinson et al., 2012) albeit by encouraging students to make use of the kind of information they had been exposed to via the SCOBAs.

I can only tentatively conclude that this type of practice activity might have worked at a deeper level than the more traditional exercises where less attention is placed on relationships between form and meaning by working on conceptual understanding through verbalization of explicit knowledge and explanations. This would also explain that more time, e.g., three weeks,

was necessary for this type of knowledge to become usable when transferred to tasks such as gap-filling, which was what the post-tests required. What can be said with some certainty and regardless of the theoretical perspective adopted is that meaningful, communicative practice is necessary for learners to be able to more comfortably and accurately use their L2.

6.5 Individual versus Dyadic Verbalization

As mentioned in section 2.3.2, verbalization (languaging) is at the core of Gal'perin's model. It is an important step towards internalization since it aims to help learners shift from the material support (SCOBA) to the mental plane. According to Swain & Lapkin (2013, p. 105), the role of language cannot be limited to communicative purposes, language is a tool by which "one comes to know what one does not know". Languaging helps learners focus their attention, solve problems, construct knowledge, etc. (Swain & Lapkin, 2013). Languaging, thus, is a tool of thought. As explained previously, languaging can take two forms: (a) individual (private) speech where learners speak to themselves, and (b) collaborative speech where learners share their thoughts with another partner (Swain, 2000) (see Section 2.3.2).

Studies have shown that both modes of verbalization have an impact on the process of learning and are part of it (see Section 2.3). According to Swain & Lapkin (2013, p. 107), languaging, either collaborative or private, "constitutes a part of the process of formulating the idea…[it] is used to mediate conceptualization and problem-solving" language related issues. Few studies, however, have compared the two modes of verbalization. The only study which has addressed directly the aforementioned issue is the study conducted by Harun (2013). Harun's (2013) study was discussed in section 2.3.4, and will be alluded to below. Therefore, my study constitutes a move forward in this respect as well.

This section, thus, discusses the findings relating to the comparison between the two types of verbalization in this study. The section is divided into two parts: in the first part results of verbalization are discussed in relation to the quantity and quality of languaging and key

semiotic tools. In other words, the results of the present study will be compared to similar studies such as Swain, et al. (2009), Harun, (2013) and Gánem-Gutiérrez (2009). In the second part of this section, I will discuss the role of L1 as a mediational tool since, unlike the present study, participants in most of SCT studies have made a considerable use of their L1.

As stated previously (in chapter 2), much of Swain and her colleagues' works have investigated the role of collaborative verbalization as a tool for thought. Learners' verbalization was analysed in terms of the quantity and quality (paraphrasing, integration, elaboration, etc.) of languaging units (LUs) produced by the participants. Their studies reveal a positive relationship between the quantity and quality of languaging and learners' development of their understanding of the target concept, e.g. voice in French (e.g. Knouzi et al., (2010); Lapkin et al., (2008); Swain et al., (2009)). The participants who formed a deeper understanding of the target concept languaged more and they generated different types of languaging units (LUs) than middle and lower languagers. Much of their languaging was concept bound, i.e. they produced an even number of integration, elaboration, and hypothesis formation. They relied less on paraphrasing, and rereading. The latter are considered as basic semiotic tools that provide insufficient support to learners.

Swain and her colleagues' findings were further supported by Hurun's (2013) study (see chapter 2). In her comparison of individual versus collaborative verbalization, Harun (2013) found that individual verbalization was more useful than collaborative verbalization. Individual verbalizers languaged more and used a wide range of languaging units (LUs). They produced a balanced number of inferencing, i.e. integration, elaboration, and hypothesis formation and they relied, to a greater extent, on analysis and paraphrasing to construct their understanding of the concept of tense/aspect in English. Overall, in both studies discussed above, researchers suggested that the quantity and quality of languaging produced by learners during verbalization reflects their level of conceptual development.

Additionally, the role of verbalization as a mediational tool has also been addressed in terms of learners' use of a number of semiotic tools such as reading aloud and L1 (see Gánem-Gutiérrez, 2009). Reading aloud was identified to serve two purposes: (a) it was used by learners to create and maintain intersubjectivity; for example, to establish an atmosphere of collaboration; and (b) it was deployed as a working tool to contextualize the information presented to learners. However, despite its potential importance as a reasoning tool, much is still unknown about its role in improving learners' conceptual development (Gánem-Gutiérrez, 2009). As stated above, the role of L1 will be discussed in the second part of this section.

In this study, to further investigate the role of verbalization as a mediational tool I first compared the results from both subgroups (individuals and dyads) in the MLK test and LU test and then pursued a qualitatively oriented approach to the data. The quantitative analysis revealed that both modes of verbalization were equally useful in helping learners improve their understanding of the concept of tense/aspect and use of target forms. In order to conduct the qualitative analysis on the participants' verbal protocols eight verbal protocols were selected and analysed following Swain, et al's. (2009) coding scheme. The analysis of the transcripts revealed that participants relied mostly on (re)reading the information presented in the SCOBA and paraphrasing. Participants produced a limited number of integration, elaboration, self-assessment and analysis and did not produce any hypothesis formation. Furthermore, this pattern was found in both high achievers and low achievers alike.

The findings of this study, therefore, contrasts those of Harun's (2013) where individual verbalization was more useful than dyadic verbalization. Furthermore, findings of the qualitative analysis were also different from those of Swain et al's., (2009) and Harun's (2013) discussed above where, unlike my participants, learners used a variety of languaging units (LUs) to enhance their conceptual understanding. As previously mentioned, participants in both subgroups followed the same strategy while verbalizing. They started first reading aloud the

information presented in the SCOBA and then they provided their own explanation using paraphrasing. Most of their reading aloud was used as a way to access the information presented in the SCOBA and to offer opportunity for further discussion. In other words, reading aloud was used as a working tool to contextualize the information presented (Gánem-Gutiérrez, 2009). Additionally, in the case of dyads, reading aloud was sometimes used to create and maintain an atmosphere of collaboration by sharing the information presented in the SCOBA (Gánem-Gutiérrez, 2009). Reading aloud, thus, appears to be a semiotic tool which might, albeit indirectly, help to enhance learners' conceptual development (Gánem-Gutiérrez, 2009).

Furthermore, participants in both subgroups used paraphrasing to provide their own understanding to what they had read using their own wordings. Paraphrasing, thus, was used as a semiotic tool to move the information from both the social plane and the material support, i.e. the SCOBA, to a more conceptual level of understanding. Participants were trying to give a personal sense to what they had read through paraphrasing. From a SCT perspective, these instances provide insights into the process of internalization. Furthermore, during dyadic verbalization, paraphrasing was used to ensure mutual understanding, for example, when one participant read aloud the information, the other one paraphrased what she/he had heard probably as a way to ensure that they both shared the same understanding. Overall, although considered as a basic semiotic tool, paraphrasing appears to have helped learners construct their understanding of the concept of tense/aspect.

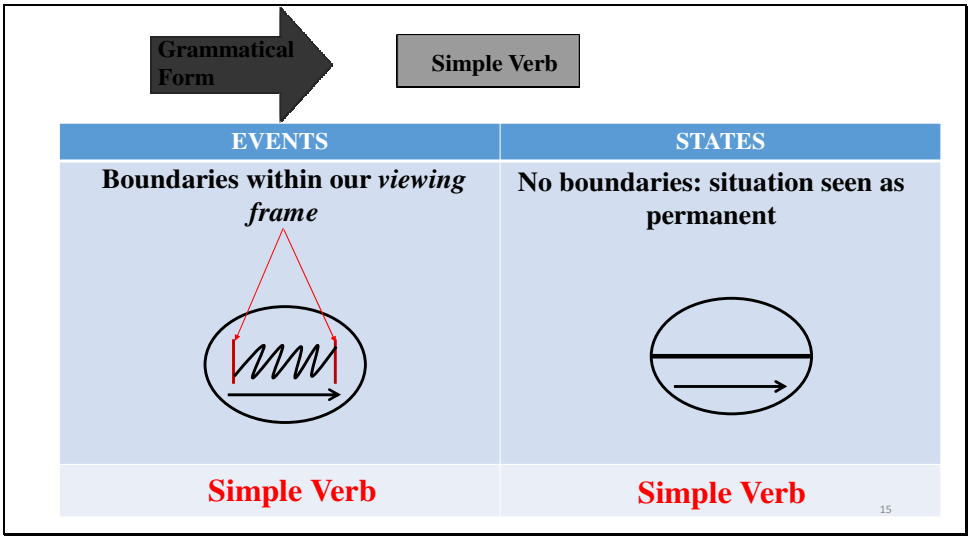
In what follows, I will continue the discussion by alluding to specific evidence of how individual and dyadic verbalizers used reading aloud and paraphrasing following a similar pattern to develop their conceptual understanding of the target concept. The two excerpts presented below are illustrative of the patterns followed by most of the participants. Excerpt 1 below relates to dyad verbalizers Jane and Molly (pseudonyms) and Excerpt 2 relates to individual verbalizer Dana (pseudonym).

Excerpt 1 presents Jane and Molly's verbalization while trying to understand the information presented in Card 15 (see below).

Excerpt 1

Jane: grammatical form simple verb events boundaries within our viewing frame simple verb	Reading
Molly: it means that the action has a beginning and an end	Paraphrasing
Jane: state no boundaries situation seen as permanent simple verb	Reading
Molly: situation does not have a particular beginning or a particular end (.)	Paraphrasing

Card 15



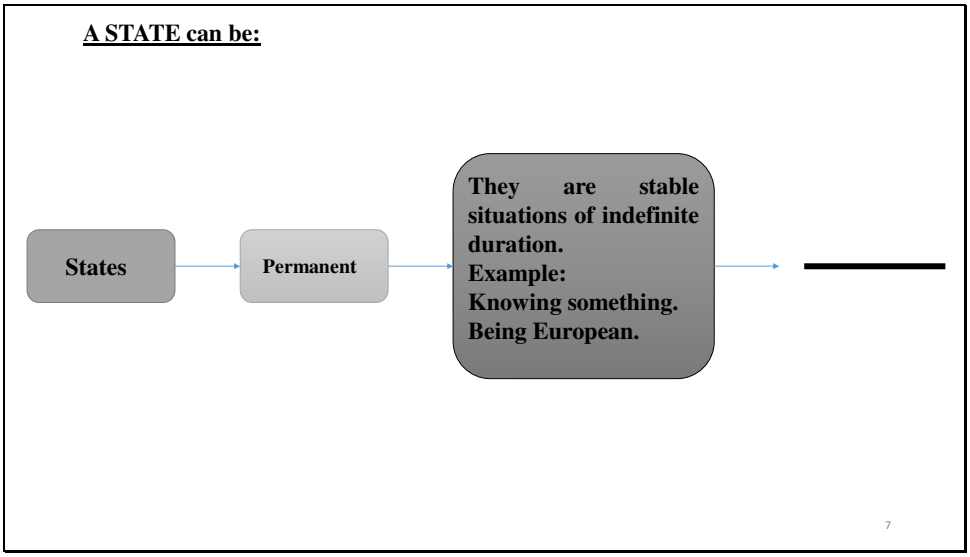
Excerpt 1 exemplifies how reading aloud and paraphrasing were being deployed by Jane and Molly under dyadic verbalization. This languaging sequence provides evidence of the languaging strategy discussed above, that is, one participant read the information in a card and the second participant paraphrased what she had heard. Jane started first by reading aloud the information presented in Card 15 as a way to access and share the information as well as to open an opportunity for further discussion, i.e. reading aloud was used as a working tool (Gánem-Gutiérrez, 2009). Molly then paraphrased, each time, what Jane read to provide her own explanation of the target concept trying to construct a personal sense of the information presented in Card 15. This was signalled each time by "it means". She was also trying to ensure that her understanding matched that of Jane's.

Similarly to Molly and Jane, Dana who verbalized individually (see Excerpt 2 below), was trying to construct her understanding of the information presented in Card 7 (see below) using reading aloud and paraphrasing.

Excerpt 2

state state can be state can be per permanent they are stable situations of indefinite duration like example knowing something being European	Reading
which means (..) state is permanent which means ahh lasting or continuing for a very long time or forever knowing something or being European or I like English you don't know (..) that (..) being European it's it can be temporary or changing (..)	Paraphrasing
state permanent they are stable situations of indefinite duration example knowing something being European	Reading
it means is a situation ahh staying or lasting or continuing for a long time we don't knowing if it is going to be at attt we don't know if it is	Paraphrasing

Card 7



As exemplified in Excerpt 2 above, Dana started first by reading aloud to access the information presented in Card 7. She then paraphrased what she had read using her own wording. Her paraphrases were signalled by "which means" in the first turn and "it means" in the second. As it was observed with Molly and Jane, "it means" appears to be an important reasoning tool that helps learners move the information from the social plane to the individual plane. Furthermore, Dana paused many times during her first paraphrasing unit and used the interjection "ah" in the second. The use of pauses and the interjection "ah" indicates that she was taking time to think about the concepts in Card 7. Dana, thus, was trying to transform the meanings appropriated from the Card into personal senses. Therefore, I would, in fact argue that, Dana's speech delivery provides evidence of the process of internalization.

As mentioned above, many SCT studies use learners' L1 as a language for verbalization and most use it as well as for the design of CBI materials. In this study, however, the participants used a limited amount of L1 during verbalization, an issue which I will now discuss in what follows.

The role of L1

Vygotsky (1986) argued that,

> In learning a new language one does not return to the immediate world of objects and does not repeat past linguistic developments, but uses instead the native language as a mediator between the world of objects and the new language (p. 161).

As stated previously (see chapter 2) and from SCT perspective to L2 learning, the use of L1 should not be prohibited during verbalization since this could affect the learning process (Negueruela & Lantolf, 2006). In most CBI studies, verbalization has, therefore, made considerable use of participants' L1 (Harun, 2013; Negrete Cetina, 2019; Negueruela, 2003, among others). It is considered as an important semiotic tool that promotes conceptual development (Antón & Dicamilla, 1999; Centeno-Cortes & Jimenez Jimenez, 2004; Gánem-Gutiérrez, 2009; Gánem-Gutiérrez & Roehr, 2011; Swain & Lapkin, 2000; Swain, Lapkin, & Deters, 2013). L1 has been identified to provide scaffolded help in the ZPD (Antón & Dicamilla, 1999), focusing learners' attention (Swain & Lapkin, 2000), organizing and structuring reasoning (Gánem-Gutiérrez & Roehr, 2011). Antón and Dicamilla (1999) stated that during collaborative dialogue L1 could be used as a semiotic mediational tool between learners (inter-psychological level) and within them (intra-psychological level). They added that when faced with a challenging task, even advanced learners would shift to L1. Along the same line, Swain and Lapkin (2013) argued that learners usually use L2 only in less complex tasks because it is not sufficiently developed to be used as a mediational tool.

In this study, participants were free to verbalize using any language; no restrictions were imposed (see chapter 4). Interestingly, the results indicated that most of the participants verbalized using English; only two participants verbalized using the Algerian Dialects (L1). The two participants were PED7 low achiever under dyadic verbalization and PES2 high achiever under individual verbalization (see chapter 5). Given the overall results of this study, it seems that learners' conceptual development, e.g., better understanding the target concepts,

can occur using the FL, English in the case of this study, as well as using L1, Algeria Dialect. Participants' limited use of L1 in general, however, might be attributed to other factors such as participants' learning history.

From a Vygotskyian perspective, the life histories (ontogenesis) of individuals play an important role in the way they internalize different beliefs, and those beliefs affect their behaviours (Swain & Lapkin, 2013). Therefore, the participants might have used English while verbalizing because they were accustomed to using the target language in the language classroom and thus they tend to avoid L1 (the Algerian dialect and/or the Modern Standard Arabic). This is due to the restrictions imposed by their former teachers. In the Algerian educational context, teachers usually forbid the use of any language in the classroom except the target language. Additionally, as a personal observation during the treatment, when I informed the participants that they were allowed to use L1, most of them were surprised.

As a consequence of this, learners' avoidance of L1 might also explain their limited use of inferencing discussed above. As explained in the beginning of the second part, more elaborated types of reflection need a well-developed linguistic system, i.e. learners' L1 and since learners were accustomed to avoiding their L1 in the L2 classroom they might have been unable to elaborate more, at least overtly, during verbalization. Alternatively, learners might have relied on English simply because they did not see a need for using their L1 which, in turn, could have led to the predominance of reading aloud and paraphrasing as basic languaging units. Overall, these are just tentative explanations and further studies should be conducted to investigate the potential of L1 as a mediational tool, as well as reasons as to why students might actually avoid its use when allowed to do so.

To sum up, the analysis of the participants' verbal protocols provided insights into the role of verbalization as a mediational tool. Based on the findings of this study, it seems that both types of verbalization (individual and dyadic) were equally useful for the development of

understanding. This was probably the case because, as I argued in this section, the characteristics and use of language by individuals and dyads alike, were similar. In other words, participants in both groups deployed similar strategies while verbalizing and used the same semiotic tools. Reading aloud and paraphrasing appeared to be important semiotic tools that helped learners access the information presented, create and maintain an atmosphere of collaboration, and internalize the target concept. Furthermore, learners' limited use of L1 might be attributed to their past language learning experience where the Algerian Dialect is not allowed in the language classroom.

6.6 Learners' Attitudes towards CBI and TI

As stated previously (see Section 6.4), learners' attitudes towards grammar instruction might affect their performance in the classroom (Horwitz, 1988; Volkan & Dollar, 2011). Learners usually come to the language classroom with pre-existing beliefs about the way they want to be taught, if a mismatch occurs between their beliefs and the type of instruction used in the classroom their learning processes might be affected (Horwitz, 1988; Savignon & Wang, 2003; Schulz, 2001). Despite its importance, research concerned with learners' attitudes towards specific pedagogies is still scarce. Therefore, the results of this study are a step forward into better understanding this aspect regarding L2 instruction.

The aim of this section is to discuss participants' attitudes towards the treatments they received (either CBI or TI). For this purpose, two questionnaires were used to elicit data about how easy, helpful and interesting the two contrasting pedagogical interventions were found and what the participants thought about the time they had to complete the treatment and work on the various activities.

The analysis of the questionnaires revealed that the participants in the TI group had positive attitudes towards the treatment overall. Significant differences were found between the two groups with respect to three categories: easiness of understanding, helpfulness of the

approach, and how interesting they found the approach. No significant difference was found in terms of time allocation. In other words, the participants in the TI group found that the materials easy to understand, the pedagogical approach helpful, and interesting, and the time allocated for the treatment sufficient. In contrast, participants in the CBI group had conflicting views about the treatment. The majority agreed that the treatment was easy to understand and that the time allocated to work on the materials and activities was sufficient. However, they thought that the treatment had not been helpful. With regard to the third category, how interesting they found the approach, their views were divided between those who disagreed and those who strongly agreed. Overall, then, the analysis revealed that the participants had more positive views towards the TI treatment than the CBI treatment. What is particularly interesting is that their views did not reflect the actual results in terms of scores on the MLK and LUT tests. In other words, TI was rated more positively than CBI even though CBI proved to be more effective in helping learners improve their knowledge of the concept and, in the case of CBI, the use target forms to an extent.

The findings of the questionnaire can be interpreted in light of two factors: (a) the participants' familiarity with the type of instruction, and (b) the outcome of their past learning experience.

Thus, positive attitudes towards the traditional treatment might be attributed to the participants' familiarity with this mode of instruction since this is what they have been exposed to; and therefore, their expectations were fulfilled. Previous studies have indicated that learners' past and current language learning experience might affect positively learners' attitudes towards a particular type of instruction (e.g., Horwitz, 1988; Schulz, 2001). Additionally, by having gained access to the Department of English Language and Literature and having approved the first year of Licence Degree (Bachelor degree), their English learning experience to date was indeed successful and, given that they were having been exposed to what we have termed

traditional instruction could have contributed to favourable views. According to Schulz (2001), successful past experiences might lead to positive attitudes towards a type of instruction.

By the same token, the conflicting views about the CBI treatment might have been caused by the novelty of the approach, at least to an extent. Participants did not expect such type of grammar instruction in their classrooms, and hence, their expectations were not fulfilled. As a result, they might have felt uncomfortable with the pedagogical treatment. Additionally, the novelty of the approach might have confused the participants since they might have felt unable to match their previous knowledge with the new information presented; similar concerns were expressed by Harun (2013) "learners generally faced conflicts to connect the newfound understanding of grammar to their existing understanding of how language works and functions in general" (p. 284).

With regard to the time allocation, participants in both groups agreed that the time was sufficient. However, the results of the tests (MLK and LUT) revealed that more time of instruction would have probably generated better results. They might have overestimated the amount of time needed to understand the concept of tense/aspect and use of the target forms. This would not be surprising given that previous studies have shown that learners sometimes overestimate the time needed to learn a language (see for example Horwitz (1988)).

6.7 Conclusion

This chapter discussed the results obtained from the different research tools used for data collection in the study. The study revealed the promising nature of the CBI treatment in helping learners improve their understanding of the concept of tense/aspect. Learners' conceptual development was enhanced and supported by the use of the SCOBA and verbalization as mediational tools. The chapter also highlighted the role of practice aimed at supporting better use of the target forms. Verbalization, regardless of mode (individual or dyadic) played an important role in helping learners enhance their understanding of the concept

of tense/aspect. The quality of learners' verbalization affected the way they constructed and re-constructed their understanding of the target concept. Finally, prior language learning might have explained, at least to an extent, their attitudes towards a specific type of instruction.

General Conclusion

7.1 Introduction

This final chapter is divided into four sections: section one provides a brief summary of the results. Section two outlines the study contribution to knowledge. Section three describes the limitations of the study and recommendations for future studies. The last section highlights the implications for teaching.

7.2 Summary of the Results

Framed within a sociocultural perspective that highlights the important role of mediation either physical or psychological, in this study I applied CBI principles into an intact foreign language (FL) classroom. I provided a rich description of the procedure followed, and the materials and activities used. The implementation of the CBI model was centred on: concepts as a minimal unit of instruction, materialization of the target concept, and verbalization of concept-based explanations in order to foster internalization.

The results of the CBI treatment were compared to those of a traditional grammar instruction (TI) used at the DELL at the university of Constantine 1, Algeria. The results of the study revealed the superiority of the CBI treatment over the TI treatment. The CBI treatment helped participants in the study improve and sustain their understanding of the concept of tense/aspect as well as improve their use of the three target forms (past simple, past continuous and present perfect). My results support findings from previous studies indicating that the CBI model can be an effective tool in promoting and supporting learners' metalinguistic knowledge of a given target concept. Therefore, CBI can be implemented as an effective tool to teach metalinguistic knowledge.

The results also suggest the importance of incorporating practice exercises into grammar classes. Practice appeared to help learners improve their use of the three target forms dealt with in the study at least in the long run. Furthermore, the study also revealed that not all

types of grammar exercises might improve learners' use of the language. Practice should be designed in a way to help learners focus and make form-meaning connection. Overall, the quality of the grammar exercises presented to learners' plays an important role in L2 classroom.

The study also revealed that both modes of verbalization were equally useful in helping learners enhance their understanding of the concept of tense/aspect and use of the three target forms. The qualitative analysis indicated that learners' relied mostly on reading aloud and paraphrasing to promote their understanding of the linguistic concepts. These two semiotic tools appeared to help learners handle the task, create an atmosphere of collaboration, make sense of the explanation provided, and internalize the knowledge. Furthermore, participants relied on the target language (English) for their verbalization even when they knew they could use any language (L1, L2 French or L2 English) during the verbalization phases of the treatment. This indicates that learners do not necessarily need to rely on their L1 to construct an understanding about a foreign language. Therefore, despite the fact that the L1 has been potentially useful as a mediational tool in the L2 context (given references here), its use might very depend on specific circumstances and individual preferences and needs.

Data elicited from the two questionnaires used in the study revealed that learners had more positive attitudes towards the traditional instruction than CBI even if the latter provided better results. Learners' past learning experience affected their attitudes towards a type of instruction. Learners appeared to like the instruction that they were accustomed to. Additionally, although the study indicated that better results would have been achieved if more time was available, learners in both groups seemed to be satisfied with the time devoted to the treatments they received (either CBI or TI). Therefore, I suggest that while learners' attitudes towards a type of instruction cannot be ignored, teachers' pedagogical decisions should also be evidence based in order to provide better learning opportunities for students.

7.3 Contribution to knowledge

Framed within SCT principles, this study constitutes an expansion of what has been done before on CBI research (e.g., Harun, 2013; Negueruela, 2003; Swain et al., 2009 among others). The results of this study adds to the body of research suggesting that CBI can be an effective pedagogical intervention to help learners improve their conceptual understanding. Statistical analysis indicated that the CBI model helped learners internalize and gain a deeper understanding of the concept of tense/aspect as compared to traditional intervention. The CBI model had an impact on the quality of learners' metalinguistic knowledge. Thus, CBI supports the explicit presentation of grammatical knowledge. It can be considered as an effective tool in teaching learners metalinguistic knowledge. Additionally, this study provided new insights on the role of verbalization as a mediational tool by proving statistically that both types of verbalization (individual and dyadic) can be beneficial in helping learners develop their conceptual understanding. Thus, learners should be given the opportunity to use the language either on their own or in collaborative work.

Although the results of this study with regards to the effectiveness of the practice activities are still inconclusive, the study represents a step forward in this respect by designing and incorporating practice tasks to the CBI model. Practice appeared to be an important classroom component. Attention should be given to the quality of the practice exercises presented to learners. Educators should avoid the type of practice based on structural grammar exercises that emphasize focus on form and, in doing so, neglect the meaning. Researchers and educators should think of new ways of helping learners capitalise on the metalinguistic knowledge they learn in the classroom so that they can make effectively see the form meaning mappings underlying the linguistic system.

Despite its importance, a lot is still unknown with regard to learners' attitudes and feelings towards specific types of instruction. This research, thus, can be considered as a step

forward in our understanding of this aspect of teaching and learning. The results of this study provide insights on how learners think about the learning material presented to them and, importantly, on some of the discrepancies uncovered between perception and reality in terms of benefits from the two types of intervention. .

7.4 Limitations of the Study and Suggestions for Future Research

The study main contributions were: (a) I was able to implement CBI model into an intact classroom and compare it to the traditional grammar model used at the Department of English Language and Literature at the University of Constantine 1; (b) Unlike previous studies, I was able to incorporate the practice component into the CBI model; (c) I made a comparison between the two modes of verbalization (individual and dyadic); and (d) I explored learners' attitudes towards the two contrasting pedagogical models used in the study (either CBI or TI). Although, all goals were achieved, this study inevitably has some limitations.

Despite the fact that the study rendered promising results, more time to work with the SCOBA and engage in practice of the target concepts would have very likely provided better results. Exposure to novel methodologies cannot be underestimated and it is also likely that a longer period of time familiarizing students with the materials would have been beneficial. This does not necessarily relate exclusively to the improvement of the language per se, but also to affective factors. For example, some participants expressed a level of discomfort in their responses on the CBIQ which showed discrepancy between perceived and actual benefits of the treatment.

Furthermore, although the study provided promising results with regards to the effect of practice in helping learners enhance their use of the target forms, the results obtained in this study were difficult to explain and only tentative explanations were provided. Further research

should build on the present findings and develop further practice that draws on SCT and CBI principles. In other words, we need to work further as practitioners to strengthen pedagogies in order to obtain better results in this respect. The effect of time also needs to be well addressed since positive results were only observed in the long term. Overall, this study represents a first step into a long research process concerned with the role of practice in CBI.

Although this research filled in some gaps with regards to the use of CBI in language classrooms, future research should further assess the effectiveness of CBI (or otherwise) as compared to other methods and approaches to grammar teaching, e.g., beyond the PPP model. This can be considered as a beneficial expansion of the present work. Additionally, including a true control group where participants do not receive any intervention would be a step forward. This can reinforce our understanding of CBI and its full potential as an alternative pedagogical intervention.

As a personal future project, I intend to explore the role of verbalization itself. This would help discriminate between the potential value of languaging as a developmental tool versus the specific contribution of CBI components such as the SCOBA. This type of research would provide specific evidence for the relative value of these two important components of the CBI model. Therefore, I am eager to compare the results of this study to an additional group where learners would work with CBI materials and their respective tasks but without being asked to verbalize. Such a study may provide researchers with the opportunity to look at the CBI model from different angles. In sum, this should provide further insights on the specific and, potentially relative, role of each mediational tools, i.e., verbalization vs SCOBA as within the overall pedagogical cycle in CBI.

7.5 Implication for teaching

I think it is time to begin implementing the CBI model systematically in the L2 curriculum and as an integral part of academic cycles given the evidence on its potential

accumulated thus far. To achieve this however, further studies need to investigate ways and strategies to promote teachers' awareness about the importance of implementing CBI models in their classrooms (see Esteve (2018) and Esteve, Fernández, and Bes, (2018)). Researchers need to link their efforts with those of teachers and provide training and recommendations for real applications of the CBI model. An ultimate goal is to aim towards the development and design of textbooks based on SCT approaches to pedagogy.

With regard to the specific Algerian context, the implementation of CBI might be challenging since CBI requires considerable effort and time for the design of the teaching materials. Teachers are used to the traditional way of grammar presentation where there is a plethora of grammar textbooks and publications that are ready to be used. Additionally, most teachers might think that students will have difficulties to grasp grammatical points presented to them in such a different way and thus they will need more time to get used to this new way of grammar presentation. The grammatical explanations provided by Cognitive Linguistics (CL) might be challenging for most English teachers not only the Algerian ones given that there is still a prevalence in the use of structural linguistics as the source for input in the L2 context. Therefore, this can lead to avoidance of using CBI and a desire to continue using the traditional grammar textbooks familiar to them.

I believe, however, the mounting evidence suggesting CBI can be a powerful pedagogical model merits a place in language teacher education. At the very least, there should be awareness of a range of approaches, including CBI, as alternatives to the still prevalent PPP model. Encouraging teachers to implement CBI in their language classrooms could be done gradually. For example, Algerian teachers could be offered the opportunity to learn about this novel pedagogical approach through the organisation and promotion of workshops and conferences. Teachers could also be given the opportunity to first experience CBI as part of in-service developmental opportunities, for example. They should be

encouraged to explore and be exposed to Cognitive Linguistics approaches to language. Teachers should also be encouraged to read more about research in general and CBI specifically to enhance their personal development; therefore, access to research outlets and publications should be more easily available to them.

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Appendices

Appendix A: Participant Information Sheet

University of Essex

Department of Language and Linguistics

Participant Information Sheet

Project title: *Investigating the effect of Concept-Based Instruction for enhancing understanding and use of English tense and aspect markers by Algerian learners of English.*

Aim of the Project: The aim of this project is to compare between two language-teaching instruction. The focus of the project is to enhance the understanding and the use of English tense and aspect by English learners at Constantine 1 University, Algeria.

What does participating involve? If you agree to participate in this project you will be asked to complete a personal background questionnaire, to take a pre/post and a delayed metalinguistic test, a pre/post and a delayed language use test, to work with cards that present the concept under study and finally to complete two questionnaires about the study as a whole. Part of your participation will be audio recorded. You need to attend ten sessions of one hour and a half each. The total amount of time required for participation is approximately 15 hours. You will not receive any rewards for your participation in this study. The study is going to take place at Constantine 1 University, Algeria. The target population is second year English students.

Are there any risks? You will not be at any risk during the study.

Confidentiality and anonymity: your personal information such as names and e-mail addresses will be treated confidentially and, by no means, revealed to a third part. Fictitious names will be used to ensure anonymity.

Withdrawal: your participation is voluntary, you can withdraw from the study at any time and you do not have to provide any reasons for that.

For further information about the project and on you participation you can email the researcher.

Contact details of the researcher:

Researcher: Maroua Benhamlaoui
Department of Language and Linguistics
University of Essex
Email: mb17220@essex.ac.uk

University of Essex
Department of Language and Linguistics
Participant's Consent (adults)

Title of project: Investigating the effect of concept-based instruction for enhancing understanding and use of English tense and aspect markers by Algerian learners of English.

Please tick Yes or No.

	Yes	No
I have read and understood the information given about the project in the participant information sheet.	[ ]	[ ]
I agree to take part in this research.	[ ]	[ ]
I understand that my participation is voluntary; I can withdraw from the study at any time and I do not have to give any reasons for that.	[ ]	[ ]
I understand that I have the right to ask questions about the project and my participation at any time.	[ ]	[ ]
I understand that the data collected from my participation will be used only for this project and for educational purposes.	[ ]	[ ]
I agree for my anonymized data to be used in research publications and dissemination of findings.	[ ]	[ ]
I agree to be audio recorded.	[ ]	[ ]
I agree that the researcher has explained to me the procedures of anonymity and confidentiality of the information I provide.	[ ]	[ ]
I understand that I am not at any risk during this study.	[ ]	[ ]
I agree that the researcher has provided me with her email address to be contacted in case I want a report of the findings of this study or in case I have any other questions about this research project.	[ ]	[ ]

Participant's Full name:

Benhamlaoui

Signature:

Date:

Researcher's Full name: Maroua

Signature:

Date:

Appendix B: Personal Background Questionnaire

University of Essex
Department of Language and Linguistics
Personal Background Questionnaire

General instruction:

The aim behind this questionnaire is to help us get an idea about your personal experience regarding English. Your answers are very valuable for our study. There is no wrong answer. **Your name and participation in this test will be kept confidential.**

- Please answer sincerely to the questions below.

Name:

Group:

1- Year

2- Semester: ……

3- What is your first language?.....

4- Stream in the high school: ……

5- English score in the Baccalaureate Exam: …….

6- General score in the Baccalaureate Exam: ……

7- How long have you been studying English in school? ……..

8- Have you had an oral entrance test? Yes ☐ No ☐

9- Have you received any other training in English out of the school setting?

Yes ☐ No ☐

If yes, for how long?……

10- Have you ever prepared or taken an IELTS or TOEFL or any other international English tests? Yes ☐ No ☐

If yes, please write the name of the test and the obtained score.

- Test:…… Score:…….
- Test:…… Score:……

11- Have you ever visited an English speaking country?

Yes ☐ No ☐

If yes, please write the name of the country and the length of your stay there.

	Country:	Length of stay:
1-	……...	……
2-	…….	…….

12- How many foreign languages have you learned or are you learning in a formal setting (e.g. School or university)?

……

List the languages and the length of study below

	Language:	Length of study:
1-	……..	……..
2-	…….	……..

THANK YOU

Appendix C1a: Metalinguistic test (MLK test)

University of Essex
Department of Language and Linguistics

Metalinguistic test (MLK test)

General instructions:

The aim behind this test is to help us get an idea about your knowledge regarding tense and aspect in English. Your answers are very valuable for our study. It is not a pass/fail test. There is no wrong answer. **Your name and participation in this test will be kept confidential.**

- Please write your full name.
- Please provide an explanation to the items stated in the following test.
- There is no time limit for the completion of the test.

Name:

Group:

Section A:

Please define the following items based on your own understanding:

1- What is “tense” in English?

2- Have you ever heard about “aspect” in English? If, yes, explain what you understand from “aspect” in English?

3- English verbs can be marked for two *aspects*; can you name them and explain how they are formed?

4- There are two types of verbs in English “Events” and “States”. Can you explain what the difference between them is?

Section B:

5- Look at the following examples:

Is there any differences in meaning between them? If yes, can you explain the difference?

1-a- She has been in England for four years.

b- She was in England for four years.

2- a- Have you seen my coat?

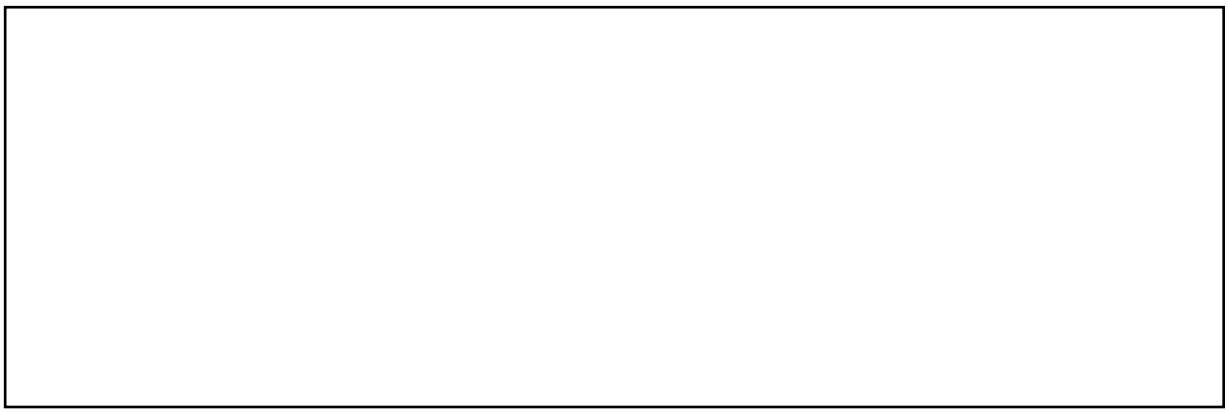
b – Did you see my coat?

3- a- He kicked the ball.

b- He was kicking the ball.

4- a- He left when you arrived.

b- He was leaving when you arrived.



THANK YOU

Question	Key	Points
Section A		
1. What is tense?	Tense refer to where the speaker locate the situation in time.	0-3
2. Have you ever heard about “aspect” in English? If, yes, explain what you understand from “aspect” in English?	Aspect is the grammatical form used by the speaker to describe how she/he views the situation.	0-3
3. English can be marked with two aspect can you name them and explain how they are formed?	The progressive. Be+ V +ing Perfect. Have/has+ past participle Had +past participle.	0-4 Perfect=1pt Form=1pt Progressive=1pt Form= 0.5 pt for each forms
4. There are two types of verbs in English “State” and “Event”. Can you explain what is the difference between them is?	Events: Dynamic verbs: they involve internal development (change). They have inherent boundaries: they are supposed to come to an end at some point. States: Static verbs: they do not involve internal development (change). They do not have inherent boundaries because they are seen as rather permanent situations.	0-6 Events= 0-3 States= 0-3
Section B		
1. A. She has been in England for four years. B. she was in England for four years.	A. entails that she is still in England. B. entails that she is no more in England.	2 1pt for each sentence
2. A. Have you seen my keys? B. Did you see my keys?	A. entails that I am still looking for my keys. B. entails that I am not looking any more for my keys.	2 1pt for each sentence
3. A. He kicked the ball.	A. he kicked the ball one time. B. he kicked the ball many times.	2

B. He was kicking the ball.		1pt for each sentence
4. A. He left when you arrived. B. He was leaving when you arrived.	A. he left before your arrival. B. he was in about to leave when you arrived.	2 1pt for each sentence

Appendix C1b: MLK test key answers

Appendix D1a: Language Use Test (LUT)

University of Essex
Department of Language and Linguistics

Language Use Test (LUT)

General instructions:

The aim behind this test is to help us assess your ability to use tense and aspect markers in English. Your answers are invaluable for our study. It is not a pass/fail test; there is no wrong answer. **Your name and participation in this test will be kept confidential.**

- Please write your full name.

Name:…….

Group:……..

LUT (Pre/Post-test)

Put the verb in brackets in the appropriate form:

Travel Book

There are many reasons why individuals (1)……. (travel) beyond their own societies. Some travellers simply (2) ……. (desire) to satisfy curiosity about the larger world. Until recent times, however, travellers did start their journey for reasons other than mere curiosity. While travellers' accounts (3) ……..(give) much valuable information on these foreign lands and (4) ……(provide) a window for the understanding of the local cultures and histories, they (5)……. (be) also a mirror to the travellers themselves, for these accounts help them to (6) ……(understand) themselves.

Travel accounts (7) ……(appear) in Mesopotamia and Egypt in ancient times. They held strong appeal from rulers who (8)……..(desire) useful information about their kingdom. Herodotus, the Greek historian, used travel accounts to report on his travel to Egypt and Anatolia. He (9)…… (research) the history of the Persian war. The Chinese envoy Zhang Qian described much of central Asia when he (10) …….. (search) for allies for the Han dynasty. Travel accounts were also used by Geographers to compile vast compendia of geographical knowledge.

During the postclassical era, trade and pilgrimage emerged as major incentive for travel to foreign lands. Muslim merchants travelled along the eastern hemisphere. They (11) …….(look for) trading opportunities. They supplied the first written accounts of societies in sub-Saharan West Africa. While merchants set out in search of trade and profit, devout Muslims travelled as pilgrims to Mecca to make their Hajj and (12) ……(visit) the holy sites of Islam. Since the prophet Mohamed's original pilgrimage to Mecca, untold millions of Muslims (13)……. (follow) his example, and thousands of hajj accounts (14) …….. (relate) their experiences.

In the early modern era, European explorers (15)…….. (take) the centre stage. European travellers ventured to the distant corners of the globe. Their travel

accounts were for the first time published in the press. The volume of the travel literature (16) ……(jump) so great that several editors assembled numerous travel accounts and made them available in enormous published collections. In the 19th century, European travellers made their way to the interior regions of Africa and the Americas. During their exploration, they were depicting the culture and the way of living of Africans and Americans in their travel writing. Meanwhile, European colonial administrators devoted numerous writing to the societies of their colonial subject Asian and African colonies they (17) …….. (establish).

The 20th century (18) ……..(witness) an explosion in both the frequency of long-distance travel and in the volume of travel writing due to the inexpensive and reliable means of mass transport. Publications of travel books (19)……. (hit) the peak due to the emergence of new types of travel such as, tourism. Tourism enabled people to go away from home to see the sights in Rome, take a cruise in the Caribbean or go on safari in Kenya. A peculiar variant of travel account arose to meet the needs of those tourists, such as the guidebook that offered advice on food, lodging, shopping, etc. Tourism (20) ……(have) a massive impact throughout the world, but other new forms of travel have also had considerable influence in the contemporary times.

Appendix D1b: LUT (Pre/Post-test) Key Answers

Put the verb in brackets in the appropriate form:

Travel Book

There are many reasons why individuals (1) have travelled beyond their own societies. Some travellers (2) have simply desired to satisfy curiosity about the larger world. Until recent times, however, travellers did start their journey for reasons other than mere curiosity. While travellers' accounts (3) give much valuable information on these foreign lands and (4) provide a window for the understanding of the local cultures and histories, they (5) are also a mirror to the travellers themselves, for these accounts help them (6) to understand themselves.

Travel accounts (7) appeared in Mesopotamia and Egypt in ancient times. They held strong appeal from rulers who (8) were desiring useful information about their kingdom. Herodotus, the Greek historian, used travel accounts to report on his travel on Egypt and Anatolia. He (9) was researching the history of the Persian war. The Chinese envoy Zhang Qian described much of central Asia when he (10) was searching for allies for the Han dynasty. Travel accounts were also used by Geographers to compile vast compendia of geographical knowledge.

During the postclassical era, trade and pilgrimage emerged as major incentive for travel to foreign lands. Muslim merchants travelled along the eastern hemisphere. They (11) were looking for trading opportunities. They supplied the first written accounts of societies in sub-Saharan West Africa. While merchants set out in search of trade and profit, devout Muslims travelled as pilgrims to Mecca to make their Hajj and (12) visit the holy sites of Islam. Since the prophet Mohamed's original pilgrimage to Mecca, untold millions of Muslims (13) have followed his example, and thousands of hajj accounts (14) have related their experiences.

In the early modern era, European explorers (15) took the centre stage. European travellers ventured to the distant corners of the globe. Their travel accounts were for the first time published in the press. The volume of the travel literature (16) jumped so great that several editors assembled numerous travel accounts and made them available in enormous published collections. In the 19th century, European travellers made their way to the interior regions of Africa and the Americas. During their exploration, they were depicting the culture and the way of living of Africans and Americans in their travel writing. Meanwhile, European colonial

administrators devoted numerous writing to the societies of their colonial subject Asian and African colonies they (17) established.

The 20th century (18) witnessed an explosion in both the frequency of long-distance travel and in the volume of travel writing due to the inexpensive and reliable means of mass transport. Publications of travel books (19) hit the peak due to the emergence of new types of travel such as, tourism. Tourism enabled people to go away from home to see the sights in Rome, take a cruise in the Caribbean or go on safari in Kenya. A peculiar variant of travel account arose to meet the needs of those tourists, such as the guidebook that offered advice on food, lodging, shopping, etc. Tourism (20) has had a massive impact throughout the world, but other new forms of travel have also had considerable influence in the contemporary times.

Appendix D2a: Language Use Test (LUT) Delayed Post-test

University of Essex
Department of Language and Linguistics

Language Use Test (LUT)

General instructions:

The aim behind this test is to help us assess your ability to use tense and aspect markers in English. Your answers are invaluable for our study. It is not a pass/fail test. **Your name and participation in this test will be kept confidential.**

- Please write your full name.

Name:…….

Group:……..

LUT (Delayed Post-test)

Put the verb in brackets in the appropriate form:

The Fruit Book

The book is called *Fruit Trees and Useful Plants in the Lives of Amazonians*, but is better known simply as the *Fruit Book*. The second edition was produced at the request of politicians in western Amazonia. Its blend of hard science and local knowledge on the use and trade of 35 native forest species has been so well received that no less a dignitary than Brazil's environment minister (1)…… …….(write) the foreword. Many well-known Brazilian figures (2)…….. (praise) Shanley's book.

Shanley's work on the book began a decade ago, after a request she received from the Rural Workers' Union of Paragominas, a Brazilian town whose prosperity is based on the exploitation of wood. The union (3)……(realize) that deforestation companies would be soon knocking at the doors of Caboclos, peasant farmers living in Rio Capim, a Brazilian province. Isolated and illiterate, Caboclos would have little concept about the value of their trees and would (4)……(be) soon selling their lands to the deforestation companies for a pittance. The Worker's Union of Paragominas wanted to know how valuable the forests were, Shanley recalls.

The Rural Worker's Union wanted to know if harvesting wild fruits would be more beneficial to the economy of the area than on selling trees to deforestation companies. At that time, environmental companies and green-minded businesses (5)……..(think) about the idea. A study done at that time (6)…….(reveal) that revenues from the sale of fruits could far more exceed those from one-off sale of trees to the deforestation companies.

At the beginning of her work Shanley was coldly welcomed by the Caboclos. Most of them thought that she was going to rob their trees. Mangueira was the only farmer who

welcomed Shanley and worked with her on her study. His land, an hour's walk from Rio Capim, is almost entirely covered with primary forest. A study of Mangueira's land and other tracts selected by the communities enabled Shanley to (7)…….(identify) three trees, found throughout the Amazon, whose fruits were much favoured by the Caboclos. The Caboclos used their fruits, extracted oils and (8)……. …(know) what sort of wildlife they attracted. But, in face of aggressive tactics from the deforestation companies, they had no measure of the trees' financial worth.

Six years of field research enabled Shanley to collect a mass of data about the flowering and fruiting behaviour of the trees. Shanley and her team were also able to study the ecosystem's reaction to deforestation and forest fire after the 1997 major fire. The results showed that the changes (9)……..(strike) They (10)…… (notice) that the average annual household consumption of forest fruit (11)……..(fall) dramatically after the forest fire. The deforestations and the fires (12)……..(change) Caboclos diet. By 1999, Caboclos (13)…… (eat) less g*ame* than they used to do in 1993.

At last, the team (14)……..(get) a handle on which trees were worth keeping. "This showed that selling *piquia* trees to [deforestation companies] for few dollars made little sense," explains Shanley. "Their local value lies in providing a prized fruit, as well as flowers which attract more *game* than any other species."

Shanley and her colleagues decided to do more than just report their results to the union. Together with two of her research colleagues, Shanley wrote the *Fruit Book*. This, the *bible* and a publication on medicinal plants co-authored by Shanley and designed for people with minimal literacy skills are about the only books you will (15)…… (see) along this stretch of the Rio Capim. The first print (16)…….. (run) to

only 3000 copies, but the *Fruit Book* (17)……(have) a remarkable influence, and is used by colleagues, peasant unions, industries and Caboclos themselves. Its success is largely due to the fact that people with poor literacy skills can understand much of the information it contains, thanks to illustrations, anecdotes, stories and songs. "The book does not (18)…….. (tell) people what to do but it provides them with choices." The Caboclos who (19)…….. (read) the book now (20)……. (have) much better understanding of which trees to sell to deforestation companies, and which to protect.

Appendix D2b: LUT (Delayed Post-test) Key Answers

Put the verb in brackets in the appropriate form:

The Fruit Book

The book is called *Fruit Trees and Useful Plants in the Lives of Amazonians*, but is better known simply as the *Fruit Book*. The second edition was produced at the request of politicians in western Amazonia. Its blend of hard science and local knowledge on the use and trade of 35 native forest species has been so well received that no less a dignitary than Brazil's environment minister has written the foreword. Many well-known Brazilian figures have also praised Shanley's book.

Shanley's work on the book began a decade ago, after a request she received from the Rural Workers' Union of Paragominas, a Brazilian town whose prosperity is based on the exploitation of wood. The union realized that deforestation companies would be soon knocking at the doors of Caboclos, peasant farmers living in Rio Capim, a Brazilian province. Isolated and illiterate, Caboclos would have little concept about the value of their trees and would be soon selling their lands to the deforestation companies for a pittance. The Worker's Union of Paragominas wanted to know how valuable the forests were, Shanley recalls.

The Rural Worker's Union wanted to know if harvesting wild fruits would be more beneficial to the economy of the area than on selling trees to deforestation companies. At that time, environmental companies and green-minded businesses were thinking about the idea. A study done at that time revealed that revenues from the sale of fruits could far more exceed those from one-off sale of trees to the deforestation companies.

At the beginning of her work Shanley was coldly welcomed by the Caboclos. Most of them thought that she was going to rob their trees. Mangueira was the only farmer who welcomed Shanley and worked with her on her study. His land, an hour's walk from Rio Capim, is almost entirely covered with primary forest. A study of Mangueira's land and other tracts

selected by the communities enabled Shanley to identify three trees, found throughout the Amazon, whose fruits were much favoured by the Caboclos. The Caboclos used their fruits, extracted oils and knew what sort of wildlife they attracted. But, in face of aggressive tactics from the deforestation companies, they had no measure of the trees' financial worth.

Six years of field research enabled Shanley to collect a mass of data about the flowering and fruiting behaviour of the trees. Shanley and her team were also able to study the ecosystem's reaction to deforestation and forest fire after the 1997 major fire. The results showed that the changes were striking. They noticed that the average annual household consumption of forest fruit had fallen dramatically after the forest fire. The deforestations and the fires changed Caboclos diet. By 1999, Caboclos ate less g*ame* than they used to do in 1993.

At last, the team was getting a handle on which trees were worth keeping. "This showed that selling *piquia* trees to [deforestation companies] for few dollars made little sense," explains Shanley. "Their local value lies in providing a prized fruit, as well as flowers which attract more *game* than any other species."

Shanley and her colleagues decided to do more than just report their results to the union. Together with two of her research colleagues, Shanley wrote the *Fruit Book*. This, the *bible* and a publication on medicinal plants co-authored by Shanley and designed for people with minimal literacy skills are about the only books you will see along this stretch of the Rio Capim. The first print ran to only 3000 copies, but the *Fruit Book* has had a remarkable influence, and is used by colleagues, peasant unions, industries and Caboclos themselves. Its success is largely due to the fact that people with poor literacy skills can understand much of the information it contains, thanks to illustrations, anecdotes, stories and songs. "The book does not tell people what to do but it provides them with choices." The Caboclos who have read the book now have much better understanding of which trees to sell to deforestation companies, and which to protect.

Appendix E1: SCOBA

Card 1

This tutorial helps you to understand the difference between tense and aspect and how they are used in English to convey the speaker's perspectives on situation and time.

Therefore, you will look at:

- ❑ **Types of situations.**
- ❑ **Aspect.**
- ❑ **Tense.**

1

Card 2

In order to understand how tense and aspect in English work we need to :

1- Consider the type of the situation that we want to talk about.

2- Locate the situation in time (tense).

3- Decide which aspect better reflects our view of the situation:

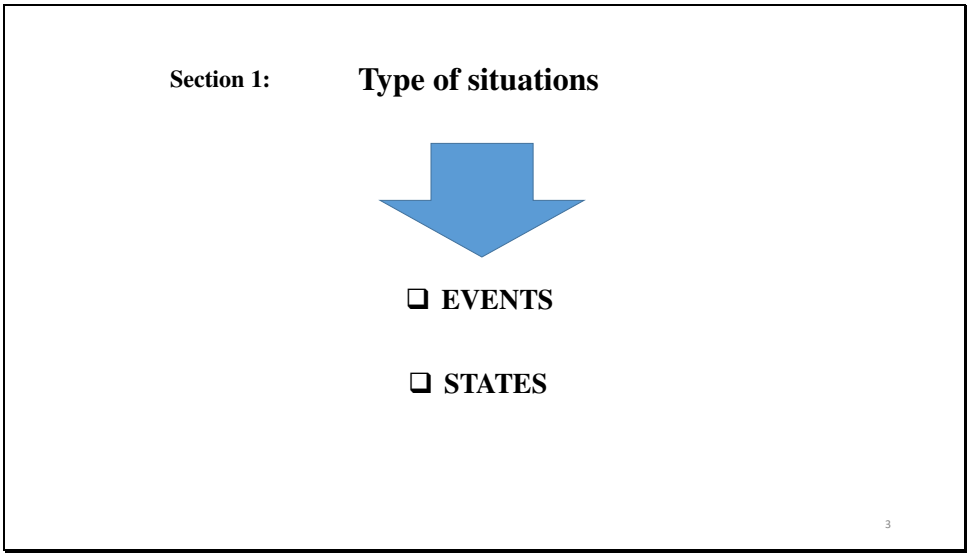
- ❑ **Non-progressive viewing scope (maximal viewing frame) *or* progressive viewing scope (restricted viewing frame)**

and

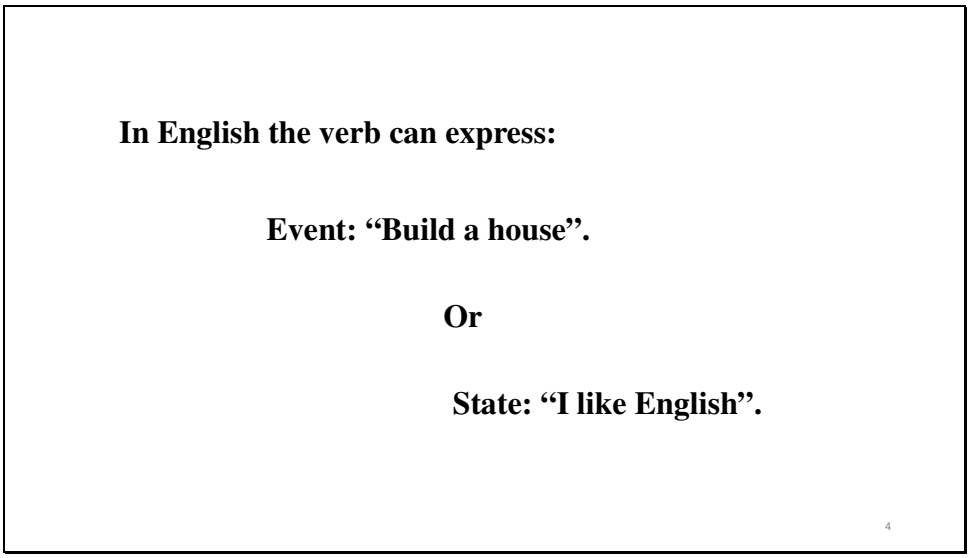
- ❑ **Non-retrospective viewing direction (straight) *or* retrospective viewing direction (backward)**

2

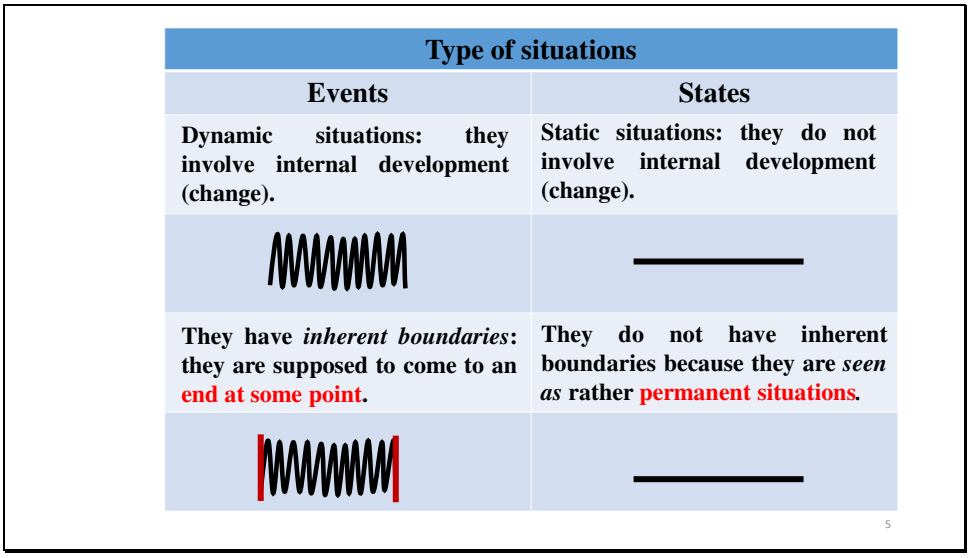
Card 3


Section 1:
Type of situations
❑ EVENTS
❑ STATES
3

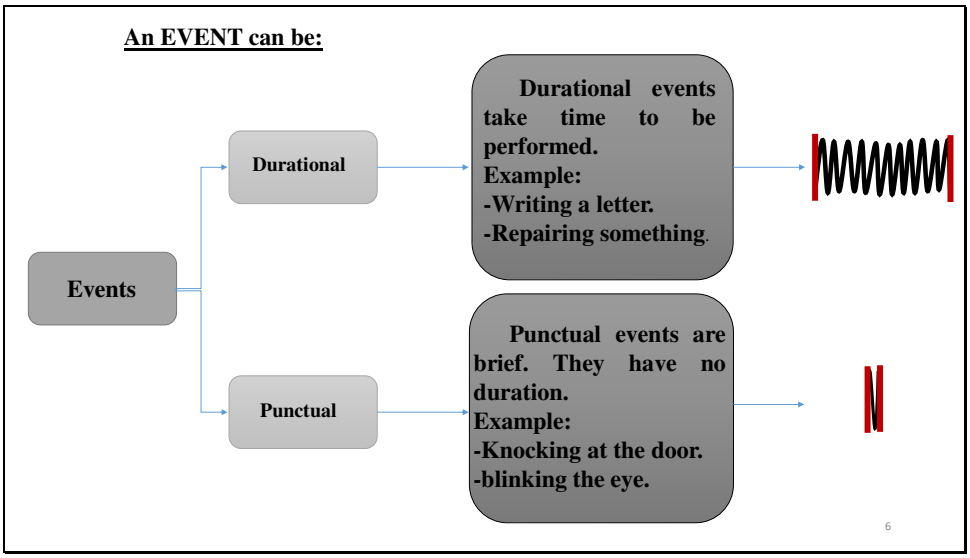
Card 4


In English the verb can express:
Event: “Build a house”.
Or
State: “I like English”.
4

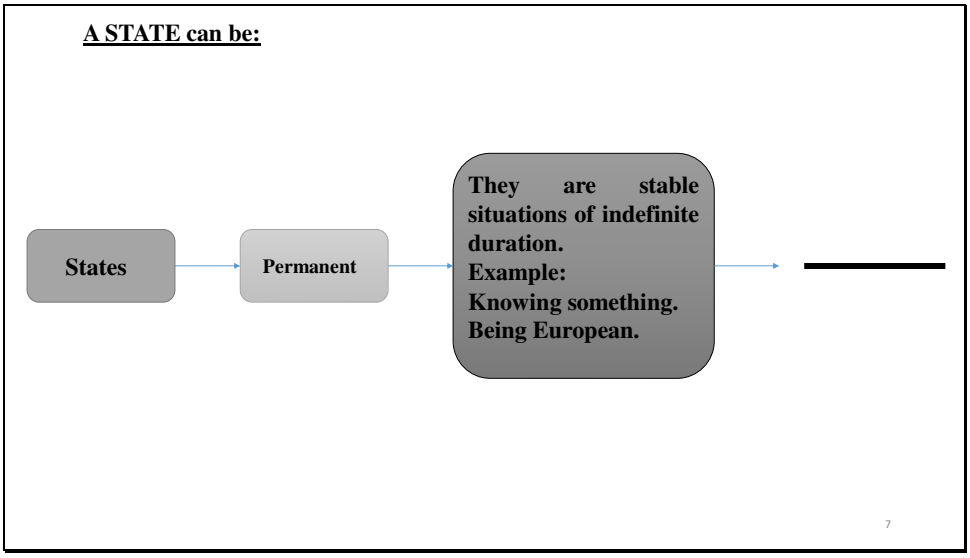
Card 5


Type of situations
Events
States
Dynamic situations: they involve internal development (change).
Static situations: they do not involve internal development (change).
They have *inherent boundaries*: they are supposed to come to an end at some point.
They do not have inherent boundaries because they are *seen as* rather permanent situations.
5

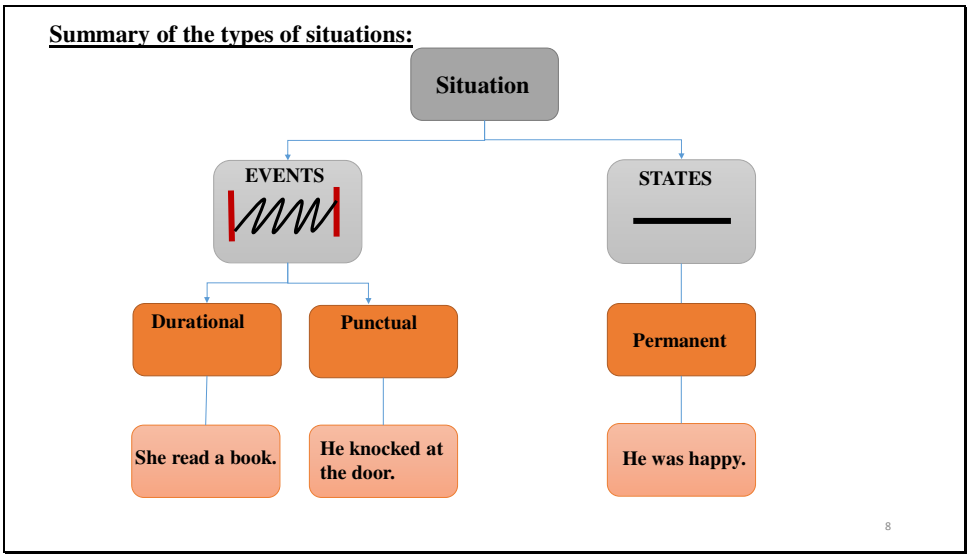
Card 6


An EVENT can be:
Events
Durational
Punctual
Durational events take time to be performed.
Example:
-Writing a letter.
-Repairing something.
Punctual events are brief. They have no duration.
Example:
-Knocking at the door.
-blinking the eye.
6

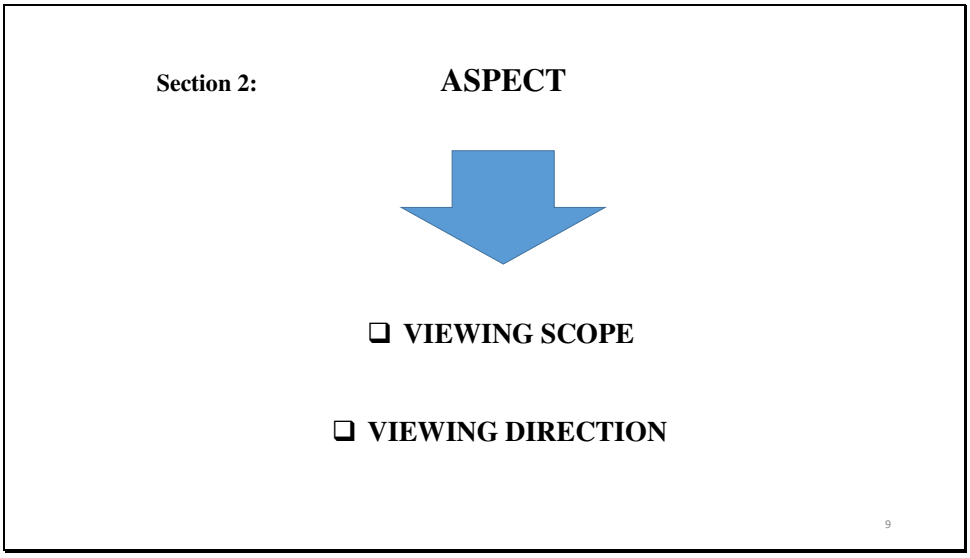
Card 7


A STATE can be:
States
Permanent
They are stable situations of indefinite duration.
Example:
Knowing something.
Being European.
7

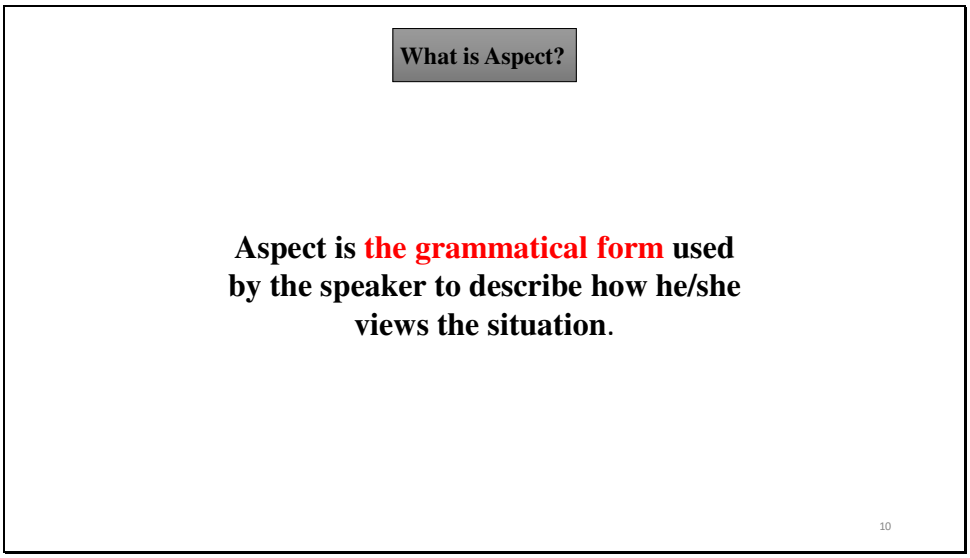
Card 8


Summary of the types of situations:
Situation
EVENTS
STATES
Durational
Punctual
Permanent
She read a book.
He knocked at the door.
He was happy.
8

Card 9



Card 10



Card 11

When using ASPECT the speaker focuses on:

1- The Viewing Scope :

The speakers can view the situation as a complete (non-progressive) or in progress (progressive).

2- The Viewing Direction:

Non-retrospective viewing direction (straight) or retrospective viewing direction (backward).

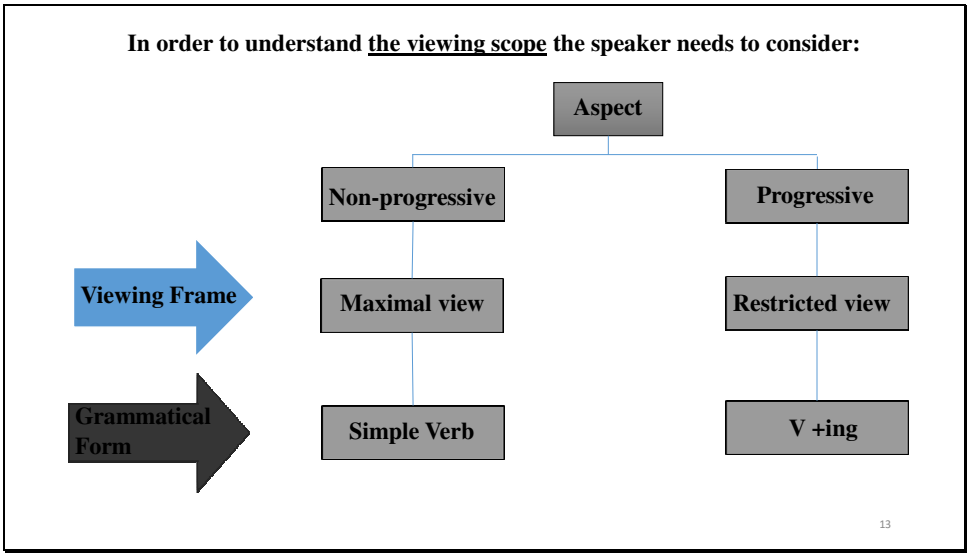
11

Card 12

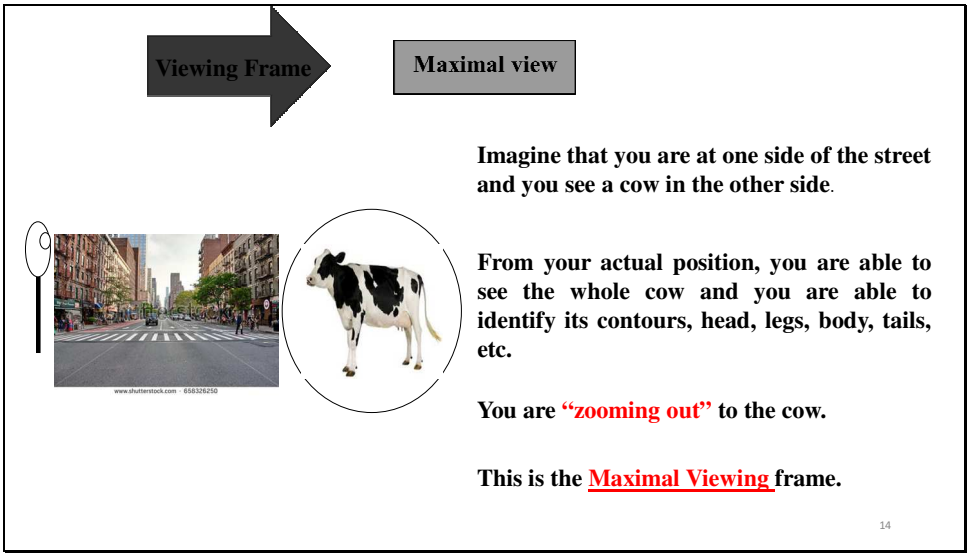
Let us first focus on the Viewing Scope:
Non-progressive and progressive aspect

12

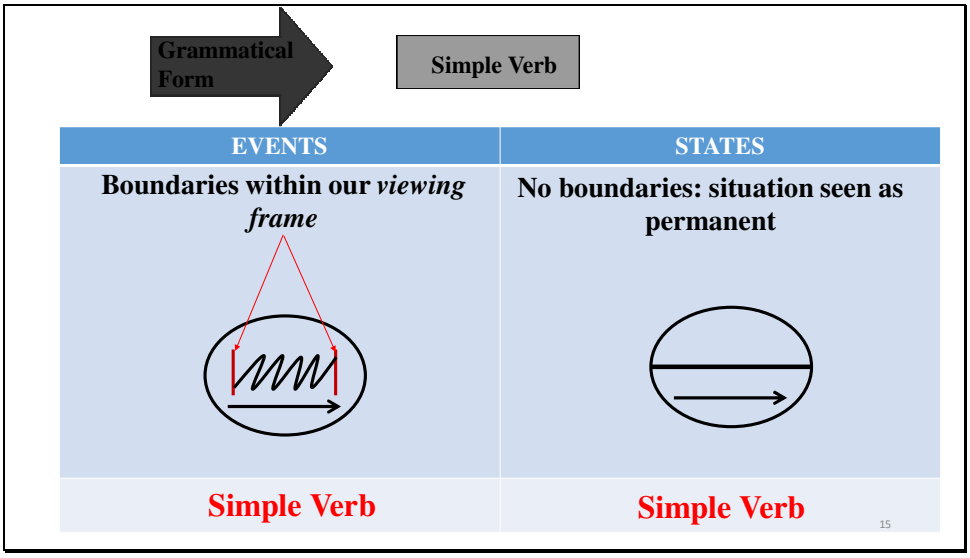
Card 13



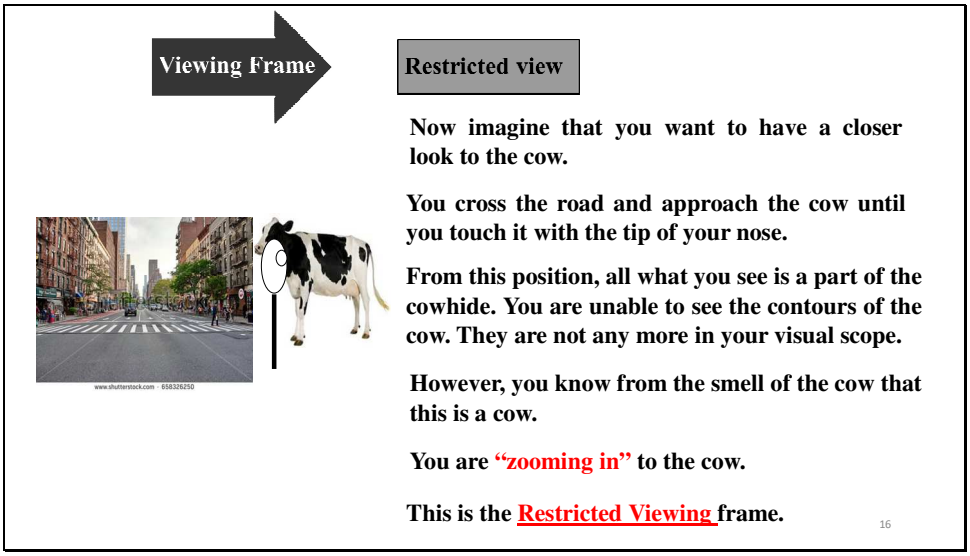
Card 12



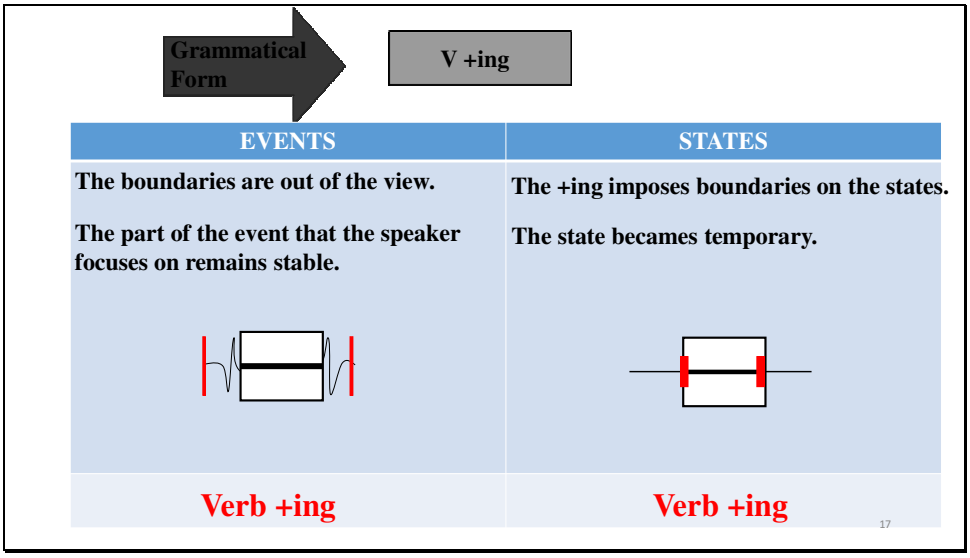
Card 15



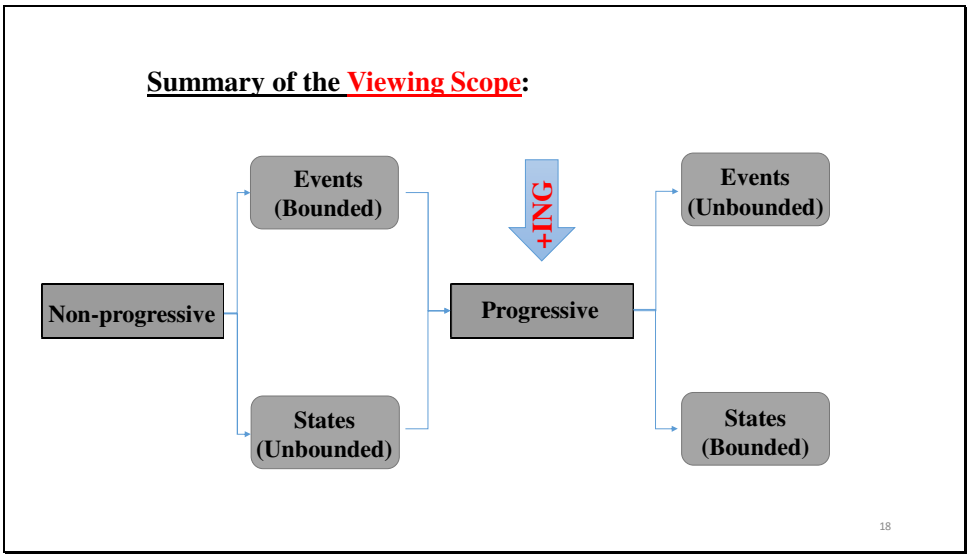
Card 16



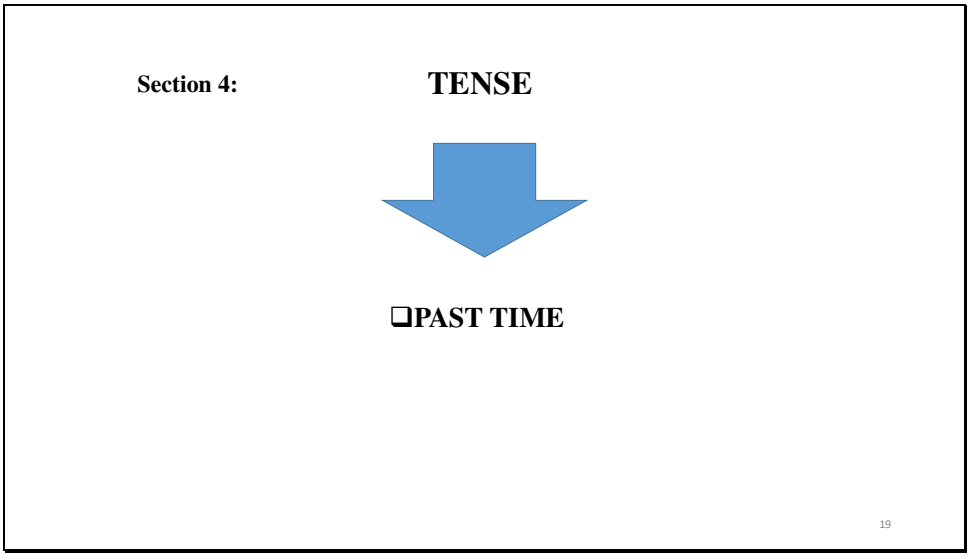
Card 17



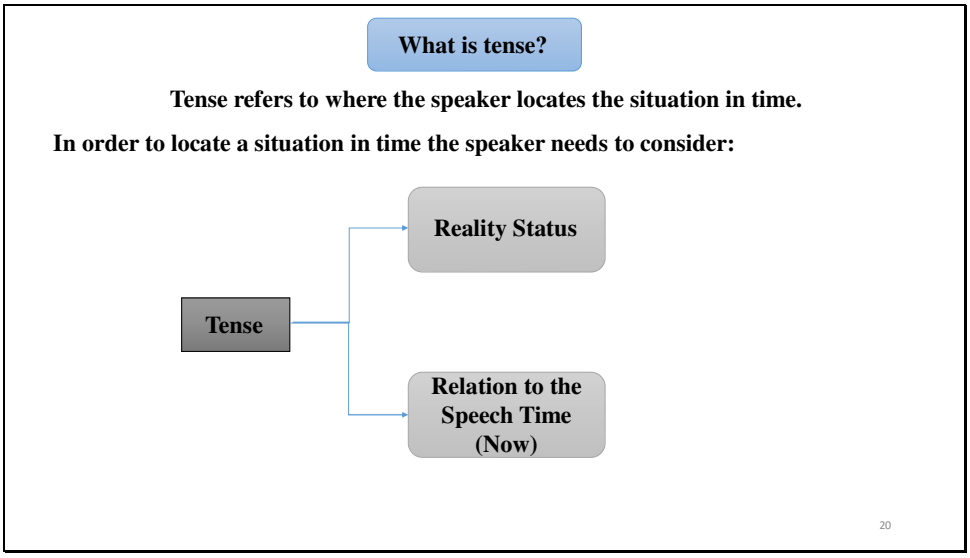
Card 18



Card 19



Card 20

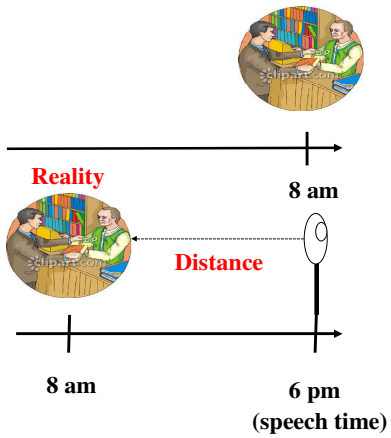


Card 21

Let us focus on the Past Time

21

Card 22



Imagine that it is 8 am now, you go to a shop and buy a book.

When you go home at 6 pm you meet you mother and she asks you: what did you do today?

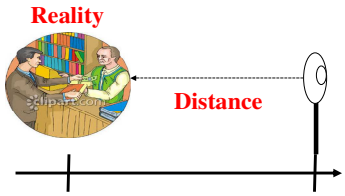
You answer: "I bought a book this morning."

Therefore, you are locating a real situation (a situation that really happened) from a distance position from the speech time (6 pm).

22

Card 23

When the speaker locates a situation in the past:



1- He is looking retrospectively to a situation from the speech time.

2- The located situation is real.

3- He is looking at the situation from a distant position.

4- The grammatical form used by the speaker is V+ -ed or the irregular form of the verb.

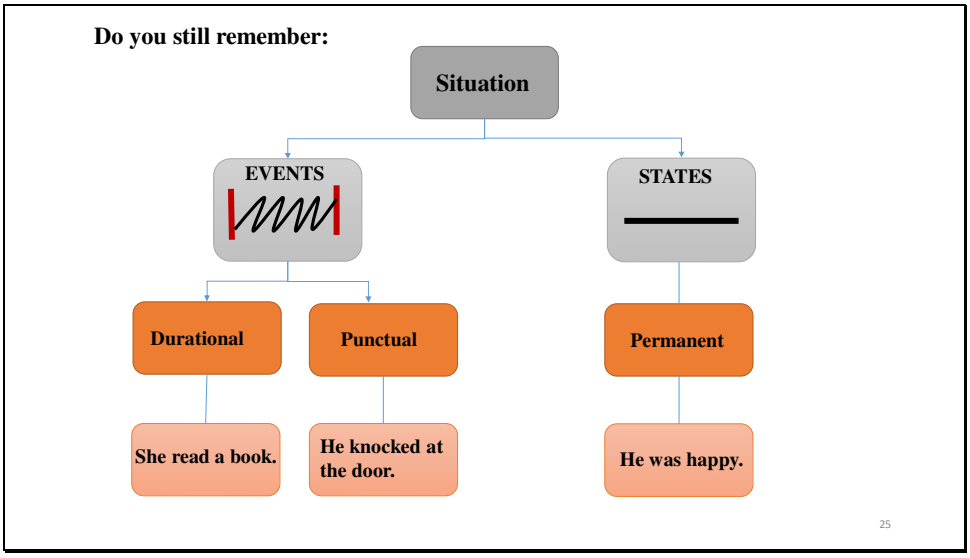
23

Card 24

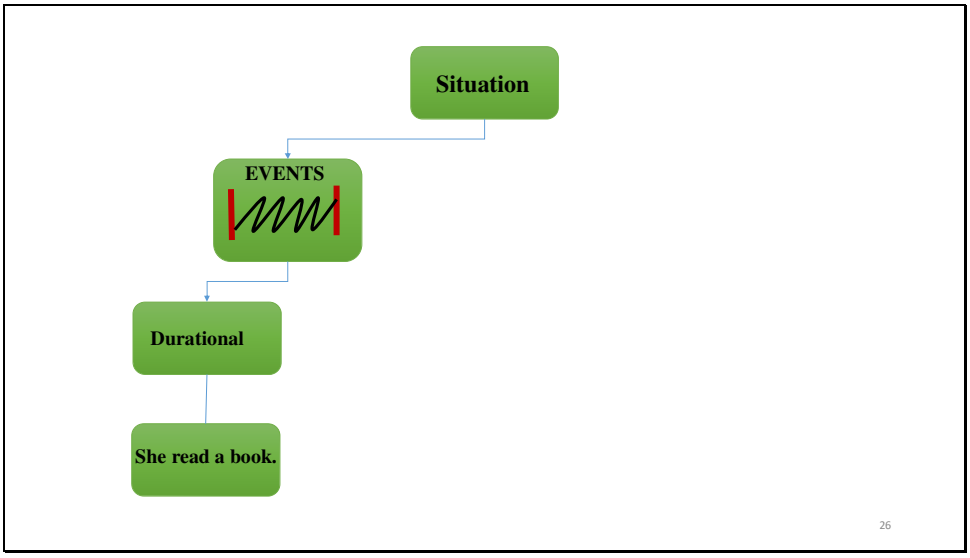
The Interaction between the GRAMMATICAL ASPECT and TYPES OF SITUATIONS in the PAST TIME

24

Card 25



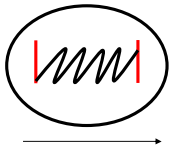
Card 26



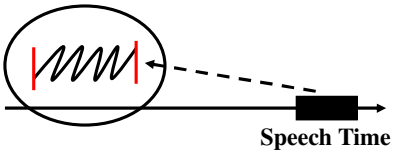
Card 27

❑ **Non-progressive Durational Past Events**

She repaired her car.



Maximal viewing



Speech Time

The action of reading a book takes time, Durational event.

The situation is viewed with a MAXIMAL VIEWING frame, the absence of +ing.

The event is seen as a complete with clear boundaries:

She started repairing her car.

She finished repairing her car.

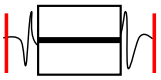
The situation is grounded in the past, the presence of –ed.

27

Card 28

❑ **Progressive Durational Past Events**

She was repairing her car.



Speech Time

The situation is viewed with a RESTRICTED VIEWING FRAME, the presence of +ing.

The speaker focuses on only one part of the event and it remains stable.

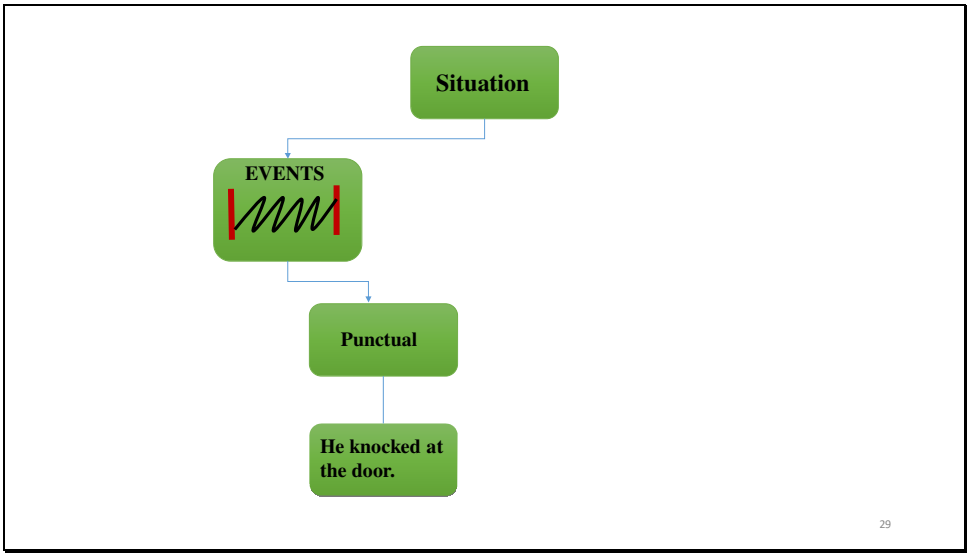
The event is seen in progression. The boundaries of the event are out of our view.

There is no result yet since she is still in the process of repairing her car.

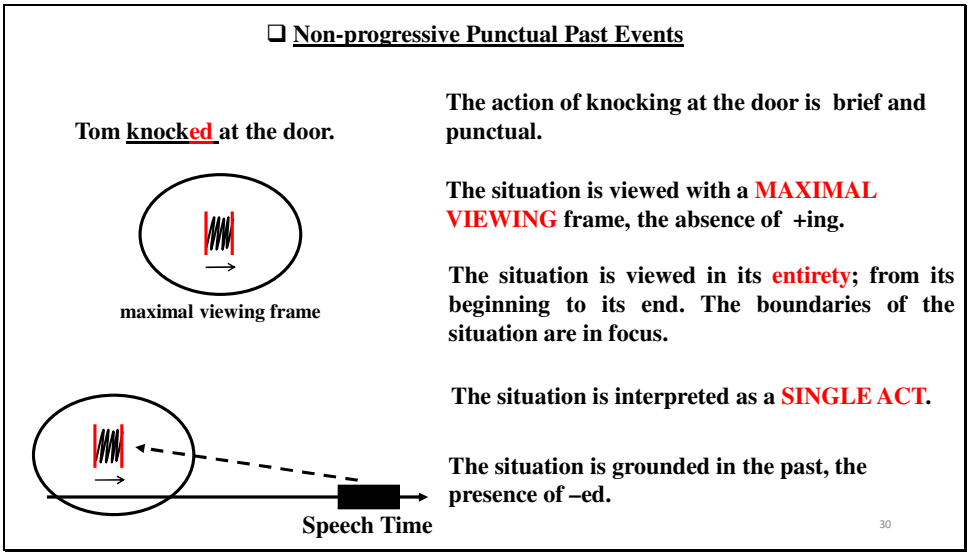
The situation is grounded in the past, the auxiliary "BE" in the past (was).

28

Card 29



Card 30

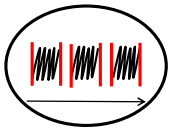


Card 31

❑ Non-progressive Punctual Past Events

Tom knocked at the door three times.

The situation is viewed with a MAXIMAL VIEWING frame, absence of +ing.

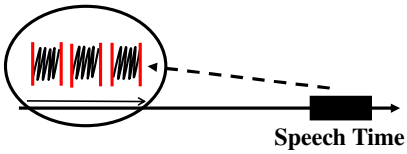


maximal viewing frame
repetitive act

The situation is viewed in its entirety; from its beginning to its end.

The boundaries of the situation are in focus.

We interpret the event as a MULTIPLE ACT.



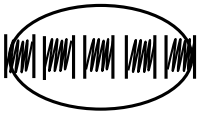
The situation is grounded in the past, the presence of –ed.

31

Card 32

❑ Progressive Punctual Past Events

Tom was knocking at the door.



restricted viewing frame
repetitive act

The situation is viewed with a RESTRICTED VIEWING frame, the presence of +ing.

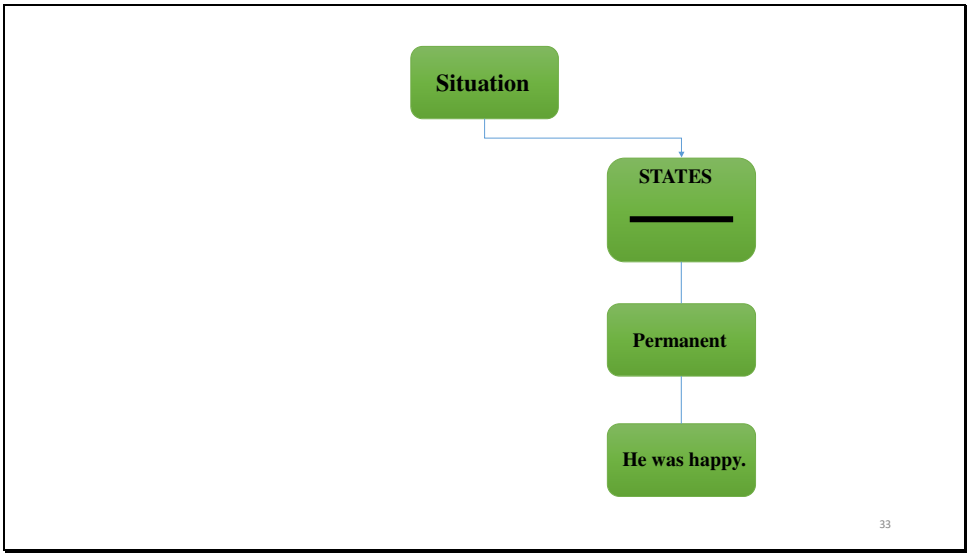
We 'zoom in' on the situation and view it as repetitive; as an 'unbounded' event. The inherent boundaries of the verb 'knock' are *not* in focus instead…

The event is interpreted as a CONTINUOUS REPETITIVE ACT.

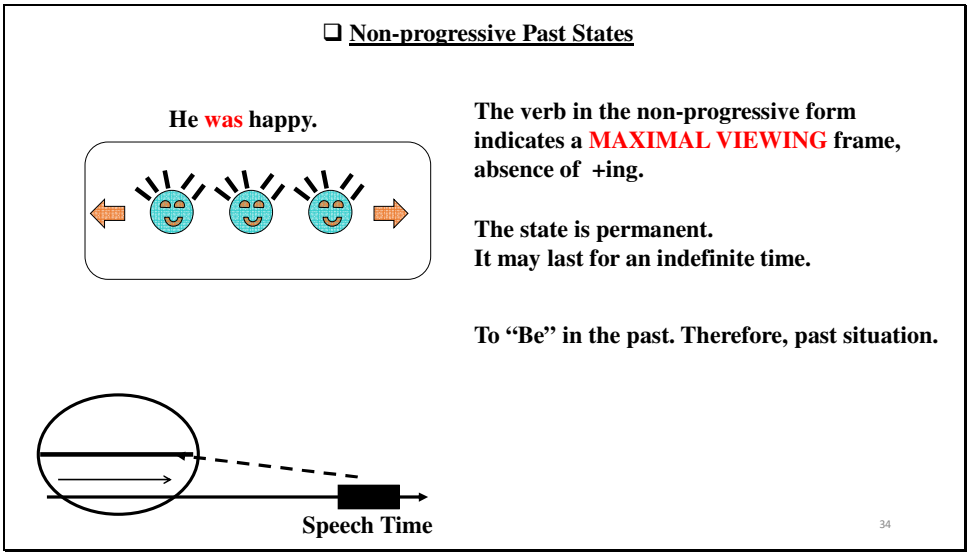
The situation is grounded in the past, the presence of "BE" in the past (was).

32

Card 33



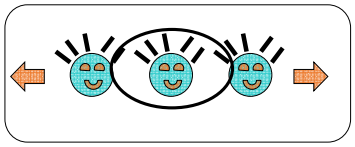
Card 34



Card 35

❑ Progressive Past States

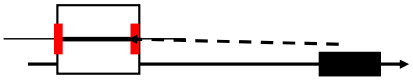
He was being anxious.



The verb in the progressive form indicates a RESTRICTED VIEWING frame, the presence of +ing.

The 'zooming in' the situation turns it into a temporary state.

The presence of the auxiliary "Be" in the past (was), locates the situation in the past.



Speech Time

35

Card 36

Summary of the interaction between the grammatical aspect and the types of situations in the PAST:

Events *Non-progressive*	States *Progressive*	Events *Progressive*	States *Non-progressive*
➢maximal viewing frame: The situation is viewed in its entirety; from its beginning to its end. The boundaries of the situation are in focus.	➢restricted viewing frame: The state is only temporary. We 'zoom in' on the state and thereby impose boundaries on it.	➢restricted viewing frame: We 'zoom in' on the situation and view it as ongoing; as an 'unbounded' event. The boundaries are not in focus.	➢maximal viewing frame: The state is seen as permanent. It does not have any boundaries because it is indefinitely lasting.

36

Card 37

Keep in mind that the use of the non-progressive and the progressive aspect depends on the speaker's choice.

If the speaker wants to focus on the goal (end-point) of the situation, he/she will use the non-progressive aspect.

If he/she wants to focus on the duration of the situation, he/she will use the progressive aspect.

37

3

Card 38

Section 5: **Perfect**

Present Perfect

38

Card 39

Another way of looking retrospectively to a situation is by using the Present Perfect.

- **Keep in mind that the focus of this section is the present perfect, but for better understanding you will be looking first at an example with the past perfect**

39

Card 40

Perfect

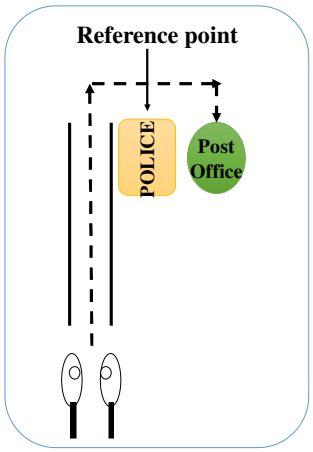
The perfect is used to locate situations that are anterior to a reference point.

In order to understand the perfect, the speaker needs to consider four main points:

- **Speech time.**
- **Event time.**
- **Reference time.**
- **Backward looking.**

40

Card 41



Imagine that you are walking in the street, and suddenly someone come close to you and ask for the direction to the nearest post office.

This person is a stranger and does not know the town.

The post office is at the back of the police station, which both of you can see from your actual position.

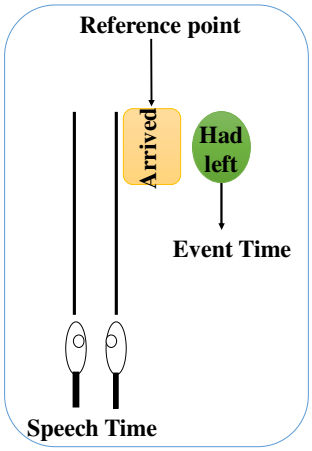
Therefore, you tell him to go straight forward and to turn on the right of the police station.

In order to give that person the right direction you used the police station as a REFERENCE POINT to locate the post office.

41

Card 42

Now, lets consider the following sentence:



Our train had left when we arrived.

In this sentence, the speaker used "our arrival" to locate an event that happened earlier "the leaving of the train".

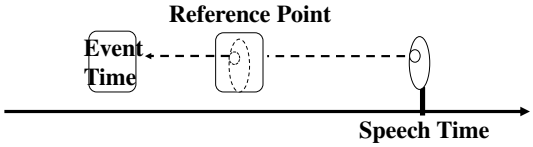
Therefore, "our arrival" is a REFERENCE POINT that the speaker used to look backward at a prior event.

42

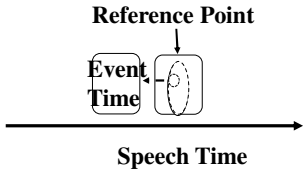
Card 43

The Perfect aspect is used when the speaker is looking backward to a situation from a reference point.

1- The reference point can be located in the past as in the above example (the past perfect).



2- Or, it can be located in the present as in the present perfect.



43

Card 44

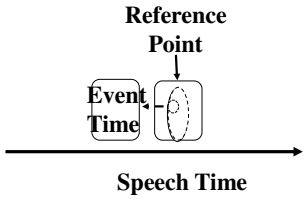
Present Perfect

In the present perfect, the reference point is equated with the speech time.

By using the present perfect, the speaker is looking backward to a situation that is anterior to the present.

And continue to have relevance to the moment of speaking.

The speaker's focus is not on the event as such but on its result.



44

Card 45

The present perfect is used to express <u>FOUR meanings</u>:

1- Resultative.
2- Experiential.
3- Recentness.
4- Continuation.

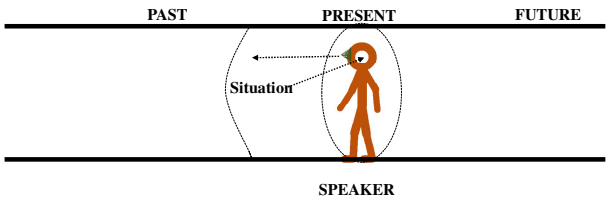
45

Card 46

Resultative Perfect

Grandpa has repaired his tractor.

The speaker's focus is on the result of the action. The reparation of the tractor has started and ended at a time in the past. The result of the reparation is valid at the moment of speaking. Therefore, the grandpa can use his tractor now.



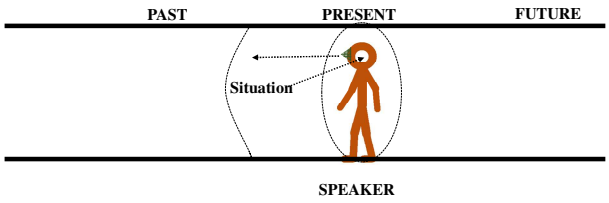
46

Card 47

Experiential Perfect

Bill has been to America.

The speaker's focus is on a past event which remains memorable.



47

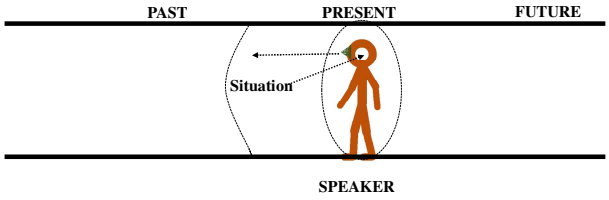
Card 48

Recent Perfect

I have just talked with my lawyer.

The speaker's focus is on the recentness of a past event. The situation of meeting the lawyer has just happened. It almost coincides with the speech time.

The recent perfect is usually expressed with time adjuncts such as just, already, now, etc.



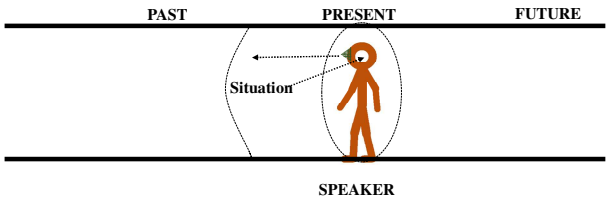
48

Card 49

Continuative Perfect

She has been engaged for over a year now.

The speaker's focus is on the continuation of a past event to the present. Therefore, she is still engaged to someone.



49

Card 50

END OF TUTORIAL

THANK YOU

50

Appendix E2: CBI Practice

Exercise 1: True/False

State whether the following sentences are correct (C) or incorrect (I). Supply correction if the sentence is incorrect.

1- In a state verb, the focus of the speaker is on the boundaries of the action.
…….

2- "Walking in the street" is a punctual event.
……

3- The internal constituency of an event is static.
……

4- Durational events take time to be performed.
……..

5- The speaker's focus on the present perfect is on the event.
……..

6- In the present perfect, the reference point is located in the past.
……..

7- Situations located in the past are real situations.
……..

8- In a restricted viewing frame, the speaker "zooms out" in a situation.
……..

9- When using the V+ing form the speaker is "zooming in" the situation.
……

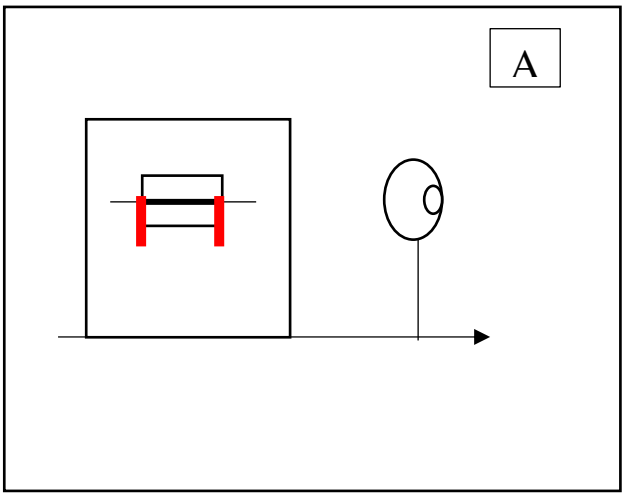
10- Aspect refers to where the speaker locates the situation.
……..

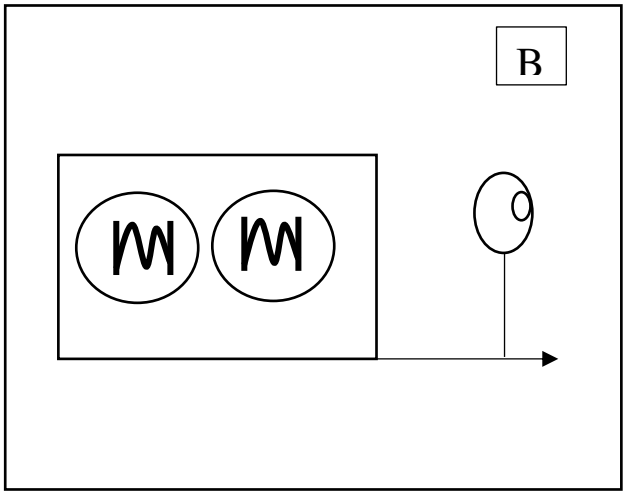
Exercise 2: Matching

Match each sentence with the diagram that best reflects the meaning of the sentence. Use the table below to answer. An example is already provided. A diagram can reflect the meaning of more than one sentence. One sentence is odd.

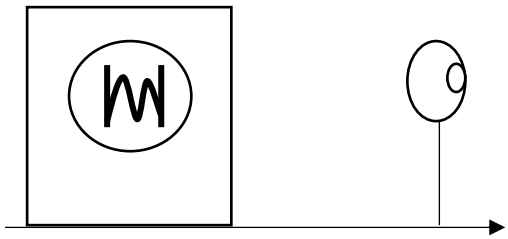
Diagram	Sentence
A	
B	
C	
D	4
E	

1- We were eating and listening to music.
2- He was living in New York at that time.
3- We ate and listened to music.
4- I have worked in the company since 1993.
5- Grand pa has passed his driving license.
6- He painted a graffiti on the wall.
7- He had his heart broken before he met her.

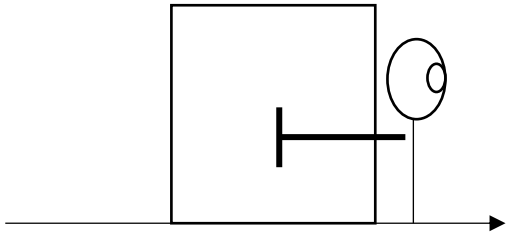




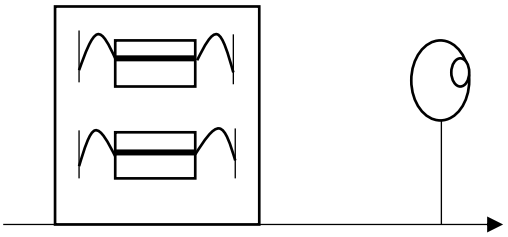
C



D



E



Exercise 3: Explanation

With your partner, read the conversation below and explain why Ann and Tom have used the **bolded** verb forms. Your discussion will be audio recorded.

Ann: Hello, Jack! I **have not seen** you for ages! Where **have** you **been**?
Jack: I **have been** in Switzerland. I **meant** to send you a postcard but I **have not had** your address with me.
Ann: Never mind. You **did you have** a good time in Switzerland? How long **were** you there?
Jack: I **was** there for a month. I **have** just **got** back. Yes, I **enjoyed** it thoroughly. I **skiied** all-day and **danced** all night.
Ann: I **skiied** when I **was** at the university, but I **broke** a leg five years ago and since then I **have not done** any.

Exercise 4: Identification

In the sentences below, identify the following:

1- The type of the verb.
2- The aspectual distinction.
3- The tense used.

Example:

1- She **gave** the book to her brother.
   - Type of verb: **Event.**
   - Aspect: **non-progressive.**
   - Tense: **past simple.**

2- She has already posted the letter.
   - Type of verb:
   - Aspect:
   - Tense:

3- They were watching the TV.
   - Type of verb:
   - Aspect:
   - Tense:

4- He owned a large car.
   - Type of verb:
   - Aspect:
   - Tense:

5- She is tossing and turning in her bed.
   - Type of verb:
   - Aspect:
   - Tense:

Exercise 5: Gap filling (A)

Put the verbs in brackets in the correct form based on the description provided under each sentence.

The answer for sentence 1 is already provided.

1- They **have locked up** the store.
   - The speaker is looking at the situation retrospectively from a reference point located in the present.
   - The speaker's focus is on its current relevance.

2- Tom…… (write) the introduction to the report.
   - The speaker is looking at the situation retrospectively from the speech time.
   - The boundaries of the situation are not in focus.

3- John eventually ……..... (recover) from a bad case of pneumonia.
   - The speaker is locating the situation from a distance from the speech time.
   - The speaker's focus is on the boundaries of the situation.

4- We …….(reach) the summit just before noon.
   - The situation is viewed with a maximal viewing frame at distant position from the speech time.
   - The speaker's focus is on its end- point.

5- He…….(read) the book.
   - The situation is located prior to a reference point located in the present.
   - The result of the event is still valid at the moment of speaking.

Appendix E3: CBI Practice Key Answers

True/False task

1- False.
2- False.
3- False.
4- True.
5- False.
6- False.
7- True.
8- False.
9- True.
10- False.

Matching task 1

Diagram	Sentence
A	2
B	3
C	6
D	4-5
E	1

No diagram for sentence 7. It is used as a distractor.

Identification task

1- Event/ non-progressive/ past.
2- Event/ perfect/ present perfect.
3- Event/ progressive/ past.
4- State/ non-progressive/ past.
5- Event/ progressive/ present.

Gap filling task 1

1- Have locked up.
2- Was writing.
3- Recovered.
4- Reached.
5- Has read.

Gap filling task

1- Have cleaned.
2- Hated.
3- Hit.
4- Was walking.
5- Bounced.
6- Seemed.

The verb (owe) is a distractor.

Appendix F1: Verb

Verbs in English can be classified into **two types**:

Dynamic verbs/ Events	Stative/ state verbs
- Jane **went** to bed. - I **bought** new car. - I **lent** Jeremy five pounds.	- Jane **was** tired. - I **need** a new car. - Jeremy **owes** me five pounds.

Verbs such as do, like, go, buy are **events**. They require some input for the subject. Events can be: an activity, an achievement, and an accomplishment.

1- Activity verbs such as **develop, grow, sit**, and **work** express an action that can go for an indefinite period of time. They do not have an end point.
2- Achievement verbs such as **faint, bounce, kick** and **knock** express an instantaneous action, a brief action with an end point.
3- Accomplishment verbs such as **build, draw, paint** and **write** express a durational action that has an end point.

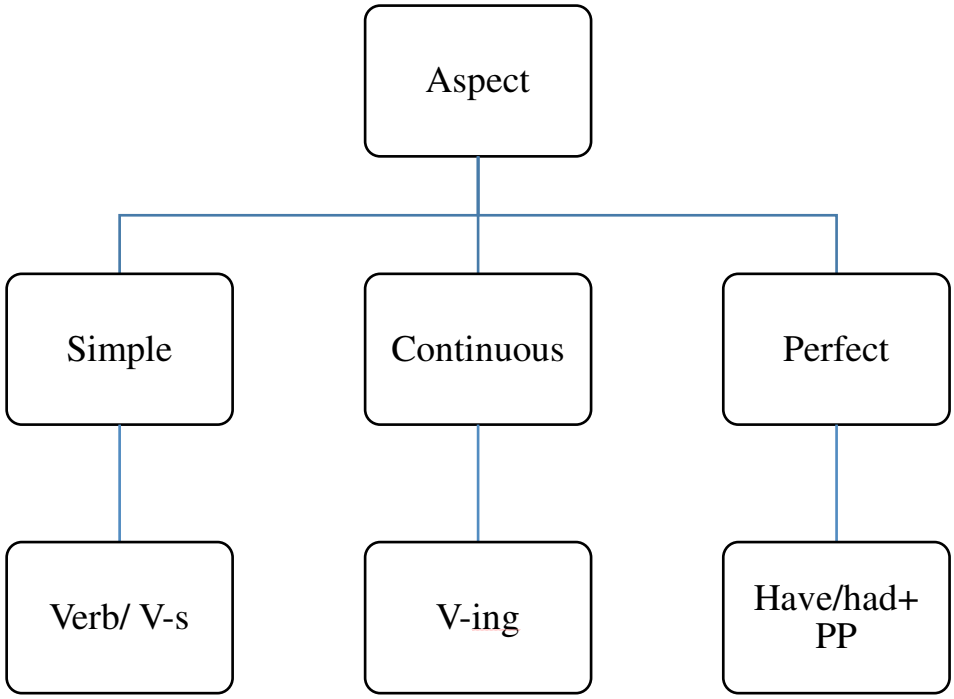
Verbs such as **be, adore, believe,** and **depend** express **states**. They express continuous and unchanging situations lasting for an indefinite period of time (permanent situations). They do not have an end point. State verbs usually do not occur in the progressive form.

The progressive can be used only with some state verbs if they describe something as active thinking or feeling for a period of time rather than a permanent attitude.

1- **I love holidays. (permanent attitude)**
2- **I am loving every minute of this holiday. (Active enjoyment).**

Aspect

The verb in English can take **three** aspects:



Aspect expresses how the speaker views the action of the verb. In English two aspects are expressed through auxiliary verbs and the form of the main verb:

1- The **continuous/ progressive** aspect represents an ongoing action. Example:

We are decorating the room.

We are looking for you.

We were getting pretty desperate.

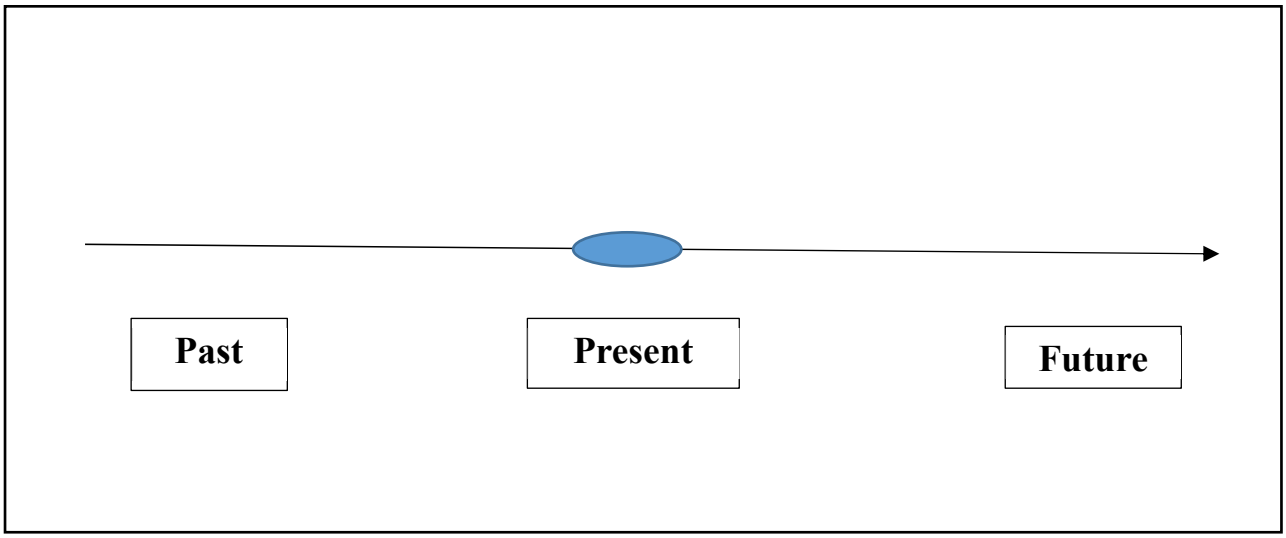
2- The **perfect** aspect represents an action that is complete and has a relation with another point in time.

We have just finished decorating the room.

We have been there for a month now.

When you arrived, Jane had already left.

Tense/Time



Tense in verbs expresses the time that an action occurs in relation to the moment of speaking. It has three dimensions, present, past, and future.

In fact, in English only two tenses are expressed by inflections on the verb- present and past. The past time is indicated by adding –ed to a regular verb or changing the form of an irregular verb, such as: **We heard about it from a friend.**

The present time for the third person singular is indicated by adding –s, such as: **He thinks he is handsome.**

Appendix F2: Past Simple

Examples

1- I ***loved*** her then.
2- I ***ran*** three miles yesterday.
3- They ***built*** that house a long time ago.
4- We ***reached*** the summit just before noon.
5- Last night we ***ate*** dinner in that Italian restaurant you like so much.

Rules

1- The simple past tense is represented by ***–ed*** inflection on regular verbs and by other ***changes*** in the case of irregular verbs.
2- The simple past expresses an action ***prior to*** the time of speaking.
3- The simple past tense frequently occurs with expressions that indicate ***a specific point in time*** when the action was carried out, such as ***yesterday, a week ago, last Monday, at four o'clock, in the morning, on Tuesday*** and so on.
4- The simple past can be used with ***state verbs***.
5- Since state verbs have an unlimited duration, the presence of a time adverb such as ***then*** with stative, leaves open the possibility that the ***state still exist*** (Example 1).
6- When two complete actions follow each other, we use the past simple:
Tim ***got up*** when the doorbell ***rang***.

7- The simple past is usually used for ***narration***. (*Once upon a time a Princess **went** into a wood and **sat down** by a stream).*

Appendix F3: Past Continuous

Examples

1- He ***was studying*** for his exam ***when*** I ***saw*** him this afternoon.
2- She accidentally ***cut*** her hand ***when/while*** she ***was chopping*** vegetables for a salad.
3- She ***was studying*** in the library ***when*** I ***was talking*** to Tom.
4- He ***was watching*** TV ***at eight o'clock***.
5- From what I could hear from the next room, he ***was working*** on those shelves ***until midnight.***
6- I ***was studying*** in the library ***yesterday from three to five o'clock***.

Rules

1- The past continuous/ progressive is formed with a past form of be (was or were) and a present participle.
2- The past continuous expresses an ongoing action in the past.
3- Often the action expressed with the past continuous was ongoing at the time another action occurred. In such cases, the action that occurred is expressed with the simple past, and the sentence generally includes a subordinate clause that begins with when or while. (Example 1 and 2).
4- With ***when*** the past continuous can be in the main clause and in the subordinate clause.
5- With ***while*** the past continuous can be put only in the subordinate clause.
6- The past continuous can be also used when two ongoing situations occur simultaneously in the past (Example 3).
7- The past continuous frequently occurs with time expressions that indicate a point in time when the action was ongoing (Example 4), the point when it was terminated (Example 5) or the period during which it was ongoing (Example 6).

We usually use the simple past for stative verbs.

Appendix F4: Present Perfect

Examples

1- They ***have lived*** in Chicago ***since*** 1976.
2- My father ***has been*** a Cubs fan ***for*** over 30 years.
3- I ***have loved*** her ***since*** the day I first saw her.
4- She ***has worked*** for that company ***for*** over 15 years.
5- The Japanese climbers ***have reached*** the peak of Mount Everest.
6- Her plane ***has arrived***.
7- Alan ***has recently written*** an article on that subject.
8- She ***has just drawn*** a circle on the board.
9- He ***has read*** all Shakespeare's plays.
10- I ***have already seen*** the movie.
11- The value of his house ***has doubled over the past two years***.
12- He ***has grown*** over two inches ***in the past six months***.

Rules

1- The present perfect tense is formed with a present form of have/has and a past participle of the main verb. It occurs with a time expression of duration such as since 1999, for six years, over the last six months and so on.
2- The present perfect can express a situation that started in the past and continues to the present. (Example 1, 2, 3, and 4)
3- The present perfect expresses a recently completed action. (Example sentence 5, 6, 7, and 8)
4- The present perfect expresses an action that occurred at an unspecified time and has current relevance. The notion of ***"current relevance"*** is also phrased as the action is being regarded by the speaker as ***noteworthy***.
5- The present perfect describes an action occurred over a period of time that is completed at the time of speaking.

Appendix F5: Traditional Instruction Practice

Exercise 1: Identification (A)

Identify the type of verbs in each sentence as State or Events. An example has been already provided.

1- She adores your coat. (State)

2- Jane built new house.

3- Tom was working when I met him.

4- I owe you a lot.

5- She understood what you said.

Exercise 2: Identification (A)

Identify time and aspect of the following. An example has been already provided.

1- He had worked for hours.

Time: past

Aspect: perfect

2- She has locked the store.

Time:

Aspect:

3- He was enjoying his last moment with her.

Time:

Aspect:

4- I am writing the letter.

Time:

Aspect:

5- They were looking for her.

Time:

Aspect:

6- She has been looking for her.

Time:

Aspect

Exercise 3: Sentence completion

Use your own ideas to complete the following sentences. Use the past continuous.

1- Tom burnt his hands when **he was cooking dinner**.

2- The doorbell rang while I …….

3- We saw an accident while we ……..

4- Mary fell asleep while she……

5- The television was on but nobody……

Exercise 4: Fill-in-the gap (A)

Put the verbs into the correct form, past continuous or past simple.

1- Jane **was waiting** (wait) for me when I arrived.

2- "what……..(you/do) this time yesterday?" "I was asleep."

3- "…….(you/go) out last night?" "No, I was too tired"

4- "was Carol at the party last night?" "Yes, she……(wear) a really nice dress."

5- How fast……(you/drive) when the accident……..(happen)?

Exercise 5: Sentence rephrasing

Rephrase the following sentences, using the present perfect tense with for or since:

- I last read a newspaper on June 2.

I *haven't read a newspaper since June 2.*

- It is two years since I saw Tom.

I *haven't seen Tom for two years.*

1- It's two years since I had a puncture.

2- It's two months since he earned any money.

3- He last shaved the day before yesterday.

4- I last drank champagne at my brother's wedding.

5- It's two years since I was last in Rome.

6- I saw Tom last on his wedding day.

Exercise 6: Fill-in- the gap (B)

Put the verbs in brackets into the correct tense: present perfect or simple past.

Paul: I…… ….. (1)(play) football since I was five years old.

Tom: You…….(2) (play) since you……(3) (come) to England?

Paul: Oh, yes. I ……(4)(play) quite a lot. I.……(5) (join) a club the day after I.……(6)(arrive).

Tom: You……. (7) (play) any matches?

Paul: We…… (8) (play) about ten. We have two more to play. We……..(9) (have) a very good season, we……..(10)(win) all our matches so far, though we…….(11) (not really deserve) to win the last one.

Tom: I……(12) (play) football when I.……(13) (be) at school but when I…….(14) (leave) school I.……(15) (drop) it and……..(16)(take) up golf.

Appendix F6: Traditional instruction (TI) Practice Key Answers

Exercise 1

(2) event
(3) event
(4) state
(5) state

Exercise 2

(2) past/ perfect
(3) past/progressive
(4) present/progressive
(5) past/ progressive
(6) past/ perfect progressive

Exercise 3

(2) Was having a shower
(3) Was waiting for the bus
(4) Was reading the paper
(5) Was watching it

Exercise 4

(2) Were you doing
(3) Did you go
(4) Was wearing (wore)
(5) Were you driving ……..happened

Exercise 5

1- I haven't had a puncture for 20
2- He hasn't earned any money for 21
3- He hasn't shaved since 22
4- I haven't drunk champagne since 23
5- I haven't been in Rome for 24
6- I haven't seen Tom since 25

Exercise 6

1- have played/have been playing;
2- Have you played
3- Came
4- have played
5- joined
6- arrived
7- Have you played

8- have played
9- have had
10- have won
11- didn't really deserve
12- Played
13- Was
14- Left
15- Dropped
16- took

Appendix G: CBI Questionnaire

University of Essex
Department of Language and Linguistics
CBI Questionnaire

General Instruction:

The aim behind this questionnaire is to help us to collect your opinions about the concept-based instruction (CBI) treatment. Your answers are very valuable for our study. It is not a pass/fail test; there is no wrong answer. Please give your answers sincerely; as only this will guarantee the success of our investigation. **Your name and participation in this questionnaire will be kept confidential.** Thank you very much for your help.

- Please write your full name.
- Please answer to the questions by ticking (✓) the box that best reflects your opinion.

Name:…….

Section 1: The cards

Tick (✓) the box that best reflects your opinion:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1- The content of the **cards** was easy to understand.	☐	☐	☐	☐	☐
2- The section on **type of situations** was easy to understand.	☐	☐	☐	☐	☐
3- The section on **types of the situations** helped me understand events and states.	☐	☐	☐	☐	☐
4- The section on **aspect** was difficult to understand.	☐	☐	☐	☐	☐
5- The section on **aspect** did not help me understand the concept of aspect.	☐	☐	☐	☐	☐
6- The section on **tense** was easy to understand.	☐	☐	☐	☐	☐
7- The section on **tense** did not help me understand tense	☐	☐	☐	☐	☐
8- The section on **the combination between the type of situations and aspect** was easy to understand.	☐	☐	☐	☐	☐
9- The section on **the combination between the type of situations and aspect** did not help me find a link between the two concepts.	☐	☐	☐	☐	☐
10- The section on **the perfect** was difficult to understand.	☐	☐	☐	☐	☐
11- The section on **the perfect** helped me understand the perfect.	☐	☐	☐	☐	☐
12- Presenting the **five sections** mentioned above all together was not helpful.	☐	☐	☐	☐	☐
13- Presenting the **five sections** mentioned above all together was easy to understand.	☐	☐	☐	☐	☐

Section 2: Verbalization

Tick (✓) the box that better reflects your opinion.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
14- Talking while looking at the cards was helpful.	☐	☐	☐	☐	☐
15- Talking to myself while dealing with the cards helped me understand better.	☐	☐	☐	☐	☐
16- Talking aloud while dealing with the cards was a good idea.	☐	☐	☐	☐	☐
17- Talking while dealing with the cards was not easy for me.	☐	☐	☐	☐	☐

Section 3: The Approach

Tick (✓) the box that better reflects your opinion.

	Strongly disagree	disagree	Neither agree nor disagree	Agree	Strongly agree
18- The sessions on tense and aspect were helpful.	☐	☐	☐	☐	☐
19- This approach helped me identify events and states.	☐	☐	☐	☐	☐
20- I am unable to identify aspect in English.	☐	☐	☐	☐	☐
21- This approach did not help me identify tense in English.	☐	☐	☐	☐	☐
22- This approach helped me use the past simple.	☐	☐	☐	☐	☐
23- This approach did not help me use the past continuous.	☐	☐	☐	☐	☐
24- This approach helped me use the	☐	☐	☐	☐	☐

present perfect.

25- The time allocated for the whole treatment was sufficient. ☐ ☐ ☐ ☐ ☐

26- I like this approach to grammar learning. ☐ ☐ ☐ ☐ ☐

27- This approach to grammar learning is not interesting. ☐ ☐ ☐ ☐ ☐

28- I intend to use it in the future. ☐ ☐ ☐ ☐ ☐

Any comments you want to add:

Appendix H: TI Questionnaire

University of Essex
Department of Language and Linguistics
TI Questionnaire

General Instruction:

The aim behind this questionnaire is to help us collect your opinions about the treatment you have received. Your answers are very valuable for our study. It is not a pass/fail test; there is no wrong answer. Please give your answers sincerely; as only this will guarantee the success of our investigation. **Your name and participation in this questionnaire will be kept confidential.**

- Please write your full name.
- Please answer to the questions by ticking (✓) the box that best reflects your opinion.

Name:…….

Section 1: Verb

Tick (✓) the box that best reflects your opinion:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1- The examples about **types of verb** were easy to understand.	☐	☐	☐	☐	☐
2- The examples about **types of verb** did not help me understand the **types of verb** in English.	☐	☐	☐	☐	☐
3- The rule explaining **types of verb** helped me understand the lesson.	☐	☐	☐	☐	☐
4- The rules about **types of verb** were difficult to understand.	☐	☐	☐	☐	☐
5- The section of **types of verb** helped me differentiate between state and event verbs.	☐	☐	☐	☐	☐
6- The examples illustrating **aspect** were difficult to understand.	☐	☐	☐	☐	☐
7- The examples presented about **aspect** did not help me understand the concept of aspect.	☐	☐	☐	☐	☐
8- The rules presented about **aspect** were easy to understand.	☐	☐	☐	☐	☐
9- The rules presented about **aspect** were helpful.	☐	☐	☐	☐	☐
10- The section of **aspect** helped me identify aspect in English.	☐	☐	☐	☐	☐
11- The examples presented about **tense** were not easy to understand.	☐	☐	☐	☐	☐

12- The examples about **tense** helped me understand the concept of tense.	☐	☐	☐	☐	☐
13- The rules about **tense** were difficult to understand.	☐	☐	☐	☐	☐
14- The rules about **tense** helped me understand the concept of tense.	☐	☐	☐	☐	☐
15- I am able to identify **tense** in English now.	☐	☐	☐	☐	☐
16- The time allocated for the **lesson of verb** was not sufficient.	☐	☐	☐	☐	☐

Section 2: Simple past

Tick (✓) the box that better reflects your opinion.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
17- The examples explaining the **lesson on past simple** were difficult to understand.	☐	☐	☐	☐	☐
18- The examples presented in the **lesson on simple past** helped me understand the past simple.	☐	☐	☐	☐	☐
19- The rules dealt with during the **lesson on past simple** were easy to understand.	☐	☐	☐	☐	☐
20- The rules dealt with during the **lesson on simple past** did not help understand the lesson.	☐	☐	☐	☐	☐
21- The practice I received during **the lesson on simple past** helped me use the past simple.	☐	☐	☐	☐	☐
22- The time allocated for **the lesson on simple past** was sufficient.	☐	☐	☐	☐	☐

Section 3: Past continuous

Tick (✓) the box that better reflects your opinion.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
23- The examples explaining the **lesson on past continuous** were easy to understand.	☐	☐	☐	☐	☐
24- The examples presented in the **lesson on past continuous** did not help me understand the past continuous.	☐	☐	☐	☐	☐
25- The rules dealt with during the **lesson on past continuous** were difficult to understand.	☐	☐	☐	☐	☐
26- The rules dealt with during the **lesson on the past continuous** helped me understand past continuous.	☐	☐	☐	☐	☐
27- The practice I received during the **lesson on past continuous** helped me use the past continuous.	☐	☐	☐	☐	☐
28- The time allocated for the **lesson on past continuous** was enough.	☐	☐	☐	☐	☐

Section 4: Present perfect

Tick (✓) the box that better reflects your opinion.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
29- The examples explaining the **lesson on present perfect** were not easy to understand.	☐	☐	☐	☐	☐
30- The examples presented in the **lesson on present perfect** helped me understand the present perfect.	☐	☐	☐	☐	☐
31- The rules dealt with during the **lesson**	☐	☐	☐	☐	☐

on present perfect were not difficult to understand.

32- The rules dealt with during the **lesson** ☐ ☐ ☐ ☐ ☐

on present perfect did not help me understand the present perfect.

33- The practice I received during the **lesson** ☐ ☐ ☐ ☐ ☐

on present perfect helped me use the present perfect.

34- The time allocated for the lesson on ☐ ☐ ☐ ☐ ☐

present perfect was not enough.

Section 5: The approach

Tick (✓) the box that better reflects your opinion.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
35- The lessons presented did not help me make the difference between the uses of the **simple past** and the **present perfect.**	☐	☐	☐	☐	☐
36- The lessons presented helped me understand the difference between the uses the **simple past** and the **past continuous.**	☐	☐	☐	☐	☐
37- I like this approach to grammar learning.	☐	☐	☐	☐	☐
38- This approach to grammar learning is not interesting.	☐	☐	☐	☐	☐
39- I intend to use it in the future.	☐	☐	☐	☐	☐

Any comments you want to add:

Appendix I: Transcription Conventions

[ ] used to signal that both participants are spoking at the same time

Inverted comes for (re)reading

? Rising intonation

(( )) comments

(.) Brief pause

(..) Longer pauses

(º º) reduced volume- soft voice

// to signal a conceptual the beginning and the of a conceptual unit

Italics English translation

Bold French words

WORD to signal a conceptual unit except (re)reading

Appendix J: Metalinguistic test and Language Use Test normality Distribution and Homogeneity of Variance

The normality distribution of the scores of the MLK test and the LUT was calculated using Shapiro-Wilk test of normality (Field, 2009). Table 36 presents the results of normality using percentages of the mean scores.

Table 36

MLK test and LU test normality distribution test

	Tests		*Statistic*	*df*	*p*
MLK test	Pre-test	CBI group	.92	25	.07
		TI group	.94	20	.25
	Post-test	CBI group	.95	25	.25
		TI group	.94	20	.25
	Delayed post-test	CBI group	.96	25	.38
		TI group	.94	20	.21
LUT	Pre-test	CBI group	.96	25	.4
		TI group	.83	20	**.002**
	Post-test	CBI group	.88	25	**.01**
		TI group	.94	20	.24
	Delayed post-test	CBI group	.96	25	.38
		TI group	.86	20	**.009**

Table 36 above shows that the percentages of the mean scores in only three LUTs are below $p < .05$, the results of the TI group in pre-test and delayed post-test $p = .002$ and $p = .009$ respectively, and the results of the CBI group in the post-test $p = .01$. Therefore, only 1/3 of the data shows a deviation from normality. Given that the majority of the tests passed the normality

assumption, ANOVA was used for analysis. Furthermore, it has been argued that that non-normality of the data do not affect the F-ratio of the ANOVA (Blanca, et al., 2017; Khan & Rayner, 2003).

Homogeneity of variance was calculated using Levene's test of homogeneity (Field, 2009). Table 37 below shows the results of the homogeneity of variance.

Table 37

MLK test and LU test homogeneity of variance

		Levene statistic	*df1*	*df2*	*p*
MLK test	Pre-test	3.6	1	43	.06
	Post-test	3.9	1	43	.06
	Delayed post-test	.6	1	43	.44
LUT	Pre-test	.18	1	43	.7
	Post-test	5.4	1	43	**.02**
	Delayed post-test	3.9	1	43	.055

Table 37 above shows that only the percentages of the mean scores in the post LUT resulted in unequal homogeneity of variance p= .02. As cited in her mini-review, Nimon (2012) stated that studies done by Boneau (1960) and Glass et al. (1972) indicates that the F-ratio of ANOVA can be robust when there is a " moderate violations of homogeneity of variance as long as the sample sizes in each group are approximately equal" (p. 4).

Appendix L: Derivation and Inflection in Arabic

The Arabic words morphological system is based on the process of the systematic derivation from roots or a root/pattern system. According to Ryding (2014), this process is at the heart of the Arabic word creation system. The understanding of the morphological derivational Arabic system is of a paramount importance for the understanding of the Arabic semantic system since unlike other languages, Arabic dictionaries are not organized around the spelling of words but rather around the lexical roots of the words, and within the roots, according to the order of phonemes. The new words created by the morphological modification of the root are known as paronyms. Traditionally[1], this process is known as "*ishtiqaaq"*; equivalent to "derivational etymology" in English.

Any word or semantic concept in Arabic is represented by a specific model root, a template that is {*f ʕ l*} "doing" (Bahloul, 2008; Ryding, 2014). All words must fit within that model *f ʕ l.* This process is known as "qiyaas" "analogy" (Ryding, 2014). Thereby, verbs in Arabic must fit within two basic roots {*faʕala}* and {*faʕlala*}. Verbs analogous to the root *faʕala* consist of three consonants and three vowels C1V C2V C3V such as "*ka-ta-ba"* "to write" , thereby they are tri-consonantal verbs. Verbs that fit within the root *faʕlala* consist of four consonants and three vowels C1V C2 C3V C4V such as "*za-l-za-la"* "to shake", hence they are a quadri- consonantal verbs (Bahloul, 2008; Mazyad, 1999; Ryding, 2014).

According to Mazyad (1999), nine verb stem templates could be derived from tri-consonantal root and only three from the quadri-consonantal root in Modern Standard Arabic (MSA). He added, traditionally tri-root and quadri-root verbs counted more than that but these templates are regarded today as unproductive and archaic. However, Ryding (2014) stated that

[1] The Arabic language studied and used today in schools is referred to as the Modern Standard Arabic (MSA). MSA is rooted on the Classical Arabic (CA), ancient Arabic which is sometimes referred to as the Quranic Arabic. MSA is a simplified version of CA (Attia, Pecina, Tounsi, Toral, & Genabith, 2011). Most of the native speakers of Arabic today do not use the MSA in their speech but rather derivations of it, i.e. dialects. MSA is taught in schools only.

fifteen verb-templates derive from the tri-consonantal root, five of them are rarely used and four templates are derived from the quadri-consonantal root.

Inflection in Arabic

Arabic words inflect for tense and aspect, mood, gender, case, person, voice, etc. Inflection is realized through suffixes, prefixes (Mazyad, 1999) and infixes (Ryding, 2014). Arabic verbs inflect for: (a) person (first, second, third); (b) number (singular, dual, plural); (c) mood (imperative, subjunctive, indicative, jussive); (d) gender (feminine, masculine) (Mazyad, 1999; Ryding, 2014); (e) voice (active, passive); and finally (f) tense (past, present, future or perfect and imperfect) (Ryding, 2014). Table 38 below provides an illustration of some of the above paradigms. Table 38 is adapted from Mazyad (1999). The conjugated verb is "*kataba"* "to write" in the Perfect in the active voice (also referred to as the past).

Table 38

Conjugation of the verb "*kataba*" "to write" in the Perfect

Person	Number	Gender	Prefix	Base	Suffix	Inflected verb
1st Person	Singular	masc. and fem.		katab	-tu	katabtu
	Plural and Dual	masc. and fem.		katab	-naa	katabnaa
2nd Person	Singular	masc.		katab	-ta	katabta
		fem.		katab	-ti	katabti
	Dual	masc.		katab	-tumaa	katabtumaa
		fem.		katab	-tumaa	katabtumaa
	Plural	masc.		katab	-tum	katabtum
		fem.		katab	-tunna	katabtunna
3rd Person	Singular	masc.		katab	-a	kataba
		fem.		katab	-at	katabat
	Dual	masc.		katab	-aa	katabaa

	fem.	katab	-ataa	katabataa
Plural	masc.	katab	-uu	katabuu
	fem.	katab	-na	katabna

Table 38 indicates that suffixes in the perfect indicates gender, number and person. No prefixes are used to indicate the Perfect. Sometimes the plural and the dual are denoted by the same suffix, like in the first person dual and plural. The masculine and the feminine are referred to using the same suffix like in the first person singular. It is also observed that different suffixes are used to indicate gender, and number. Unlike other languages, Arabic has special markers for duals, masculine and feminine.

Table 39

Conjugation of the verb "*kataba*" "to write" in the Imperfect

Person	Number	Gender	Prefix	Base	Suffix	Inflected verb
1st Person	Singular	masc. and fem.	a-	katab	-u	aktabu
	Plural and Dual	masc. and fem.	na-	katab	-u	naktabu
2nd Person	Singular	masc.	ta-	katab	-u	taktabu
		fem.	ta-	katab	-u	taktabu
	Dual	masc.	ta-	katab	-aani	taktabaani
		fem.	ta-	katab	-aani	Taktabaani
	Plural	masc.	ta-	katab	-uuna	taktabuuna
		fem.	ta-	katab	-na	taktabna
3rd Person	Singular	masc.	ya-	katab	-u	yaktabu
		fem.	ta-	katab	-u	taktabu
	Dual	masc.	ya-	katab	-aani	yaktabaani
		fem.	ta-	katab	-aani	taktabaani

Plural	masc.	ya-	katab	-uuna	yakatabuuna
	fem.	ya-	katab	-na	yaktabna

Table 39 presents the conjugation of the verb "*kataba*" "to write" in the Imperfect, the equivalent of the present and the future in English. Unlike the Perfect, the Imperfect is indicated by prefixes and suffixes. Different suffixes and prefixes are used to demonstrate gender and number. Similarly to the Perfect, the same prefix and suffix are used to indicate number and gender in the first person.

Subject Verb Agreement in Arabic

According to Ryding (2014), Arabic takes account of two sentence structures, a) Subject+ Verb (SV), and b) Verb+ Subject (VS). Full agreement is noticed only when the verb follows the subject (SV), like in:

(8) *al- banaat-u* *daras-na* *fii l-maktabat-i*

THE-GIRLS-NOM. STUDIED 3F.PL. IN THE-LIBRARY-GEN.

The girls studied in the library.

Full agreement requires that the verb reflects the number and the gender of the subject. Example (1) indicates that the verb *daras-na* (*na-* suffix indicates plural feminine) agrees with the subject *al-banaat-u (*plural of *binet GIRL- GIRLS).*

However, if the subject follows the verb, there is partial agreement with the gender only not the number:

(9) *daras-at* *al-banaat-u* *fii-l-maktabat-i*

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The girls studied in the library.

Example (2) shows that the verb *daras-at* agrees with the subject only in gender *feminine* and not in number *plural.* Note that the agreement rule applies only when the subject is human.

In the case of non-human subjects, the verb agrees with the subject in both the gender and the number whatever the sentence structure is (Ryding, 2014).