



## The Effects of Cognitive Grammar-grounded Instruction and Formal-Traditional Grammar Instruction on Learning Simple Past and Past Perfect

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The English tense and aspect system has long posed great difficulty to second language (L2) learners due to their underlying complex concepts. This difficulty is compounded by oversimplified grammatical descriptions found in many ELT textbooks. Cognitive Grammar (CG) offers comprehensive accounts of tenses that could be useful for learners. This paper reports a quasi-experimental study investigating the differential effects of CG-informed form-focused instruction and formalist-traditional form-focused instruction on the acquisition of two English tenses, namely the simple past and the past perfect. Secondary school EFL learners (final pool: N = 36) were assigned to two groups (CG and Traditional). Learners in the CG group were exposed to CG-grounded grammatical descriptions of the tenses while learners in the traditional group received traditional accounts. Both groups performed awareness-raising tasks to enhance learning. Data were gathered from the learners' performance in a cloze narrative task. Results from an immediate post-test revealed that CG-based descriptions helped learners improve significantly and outperform learners in the traditional group. These findings indicate the superiority of a CG approach to a formalist approach to teaching the tenses and lend support to the applicability and efficacy of CG-grounded form-focused instruction in the classroom.

**Keywords:** cognitive grammar, EFL learners, the past perfect, the simple past, narratives

### Introduction

For decades, second language (L2) researchers have been exploring ways to improve grammar instruction so that it can assist learners in acquiring target structures successfully. However, many of them still focus on pedagogical practices such as teaching methods (see, for example, Ellis & Shintani, 2014) and psychological aspects of L2 learning such as individual differences and the importance of noticing. The investigation into the role of linguistic theory in L2 learning and to what extent insights from any current linguistic theory can be combined with current teaching approaches have largely been de-emphasized (Tyler, 2010, 2012). The dominant linguistic theory in L2 classrooms has been what Littlemore (2009, p. 6) refers to as the "rule plus lexis" model, which is influenced by structural and formal linguistics. Consequently, in order to learn a language in the instructed language-learning context, L2 learners need to master the rules and lexis without understanding the semantic concepts motivating the grammatical forms (Niemeier & Reif, 2008). Recently, education-oriented applied linguists have been

calling for the inclusion of alternative theoretical models of language that are more usage-based in both second language acquisition (SLA) research and L2 teaching practices (Boers & Lindstormberg, 2006; Fontaine, Bartett, & O'Grady, 2014; Jones & Lock, 2011; Littlemore, 2009; Taylor, 2008; Tyler, 2012). One such alternative model is the Cognitive Grammar (CG) approach, which is a leading theory of Cognitive Linguistics (CL), as it has been argued to offer more accurate, sophisticated and comprehensive accounts of grammatical structures (e.g., Langacker, 2008a; Tyler, 2012).

Langacker (2008a) discusses three fundamental features of CG that endow it with strong potential for instruction: the centrality of meaning, the meaningfulness of grammar, and its usage-based nature. The centrality of meaning is grounded in the claim that grammatical forms are as meaningful as lexical items, although the former are more abstract in terms of meaning. Learning grammatical meanings can be facilitative and may also be more enjoyable than rote memorization of rules and syntactic structures. The meaningfulness of grammar entails that all the elements used to describe grammatical structures such as *noun*, *verb* and *subject* should be semantically characterized first. From a CG perspective, *verb* as a grammatical element is profiled as a process which can evolve through time. This process can be construed as either temporally bounded (i.e., perfective) or unbounded (i.e., imperfective). Proper and in-depth analysis of every grammatical element can be a strong foundation for effective L2 teaching and learning. The usage-based nature suggests that fluent language learners have mastered a wide range of conventional linguistic units that are abstracted from usage events. This implies that providing learners with adequate exposure to a given unit is crucial in helping them to acquire it.

Moreover, linguistic units, including grammatical forms, appear in situated contexts. They are used to achieve communication purposes and serve as communication strategies. As such, to fully understand the occurrence of a grammatical form, learners can be instructed to take into account the discourse context, communicative function, and the underlying semantic notions.

A growing body of research has indicated that CL-grounded instruction can benefit English L2 teaching. However, a number of issues remain and need to be addressed. Firstly, there are other English grammatical forms that have been analyzed using CL theory but have not been adapted to L2 teaching materials. The tense system, for example, also includes complex tenses (i.e., the perfect tenses), and cognitive linguists have done in-depth cognitive analyses on these tenses, also (e.g., the past perfect: Irandoust, 1999). Secondly, most applied CL studies have been conducted with young adult and adult learners enrolled in college or English as a Second Language (ESL) programs. This certainly limits the generalizability of the positive results to adolescent learners studying English in secondary school, especially in English as a Foreign Language (EFL) contexts. The study reported in this paper aimed to investigate the applicability of CG-grounded explicit grammar instruction in teaching unexplored target English tenses to adolescent high school learners. Focusing on teaching the choice between the so-called simple past tense and past perfect tense when reference is made to two completed past events in two different time points, the paper first presents an overview of the tenses and the difficulties of learning them. Then it offers a comparative overview of the traditional, non-cognitive approach typically underlying the presentation of the distinction between the two tenses in most ELT practice versus a CG-oriented approach. The comparison will establish the thesis that a CG-based explication of the tenses, especially the past perfect, is more comprehensive, accurate and useful. Next, we present a quasi-experimental study that we conducted to investigate the effectiveness of CG-grounded instruction to teaching the tenses in question. Finally, we address the limitations of our study design for future research.

## Literature Review

### A General Overview of Simple Past and Past Perfect

The past tense is used to talk about a situation that took place before speech time and has no relevance or consequences to the present. Two tenses are used to describe events or situations viewed as completed,

namely the simple past and the past perfect. Due to their communicative functions, the tenses are taught explicitly to English language learners. The simple past tense is typically taught at the beginner level while the past perfect is provided at the intermediate level. The past perfect is usually juxtaposed with the simple past to highlight the differences in meaning and usage.

The past perfect is different from the simple past, in that the former insures the reader that the event described in this tense took place before another event described in another past tense (Cowan, 2008). Note that the flow of the plot of the narrative is contingent on the choice of tense. If a tense is chosen without consideration, the sequence of the plot will be negatively affected and the meaning that the narrator intends to convey will be altered. For instance, if we change the past perfect to the simple past in (1), the eventuality in the second clause will be perceived as ensuing after the narrator's arrival.

- (1) When I arrived, everyone had taken their seat.

While the conceptual distinction might appear quite straightforward, the past perfect tense poses tremendous difficulty to English language learners. Bardovi-Harlig (2000) in her series of papers on the acquisition of tense and aspect by L2 learners argues that the past perfect (or pluperfect) occupies the last stage in the acquisition sequence. Furthermore, our informal analysis of learner corpus on the International Corpus Network of Asian Learners of English (Ishikawa, 2013) showed that the past perfect was greatly underused. Even if there were attempts to use it, they exhibited erroneous tense pattern and/or inappropriate contextual usage. This clearly indicates learner problem in acquiring the past perfect.

Some explanations are proposed here. From a cognitive perspective (Hulstijn & de Graaf, 1994), both the simple past and the past perfect are complex structures, since their morphosyntactic forms are not salient. However, the past perfect can be considered more complex due to the following factors. First, it involves a backward looking stance to a completed event in the past from a reference point in the past time frame. Learners whose L1s do not possess a similar concept clearly have considerable difficulty in learning it (Jarvis & Pavlenko, 2008). Secondly, it is a complex grammatical structure as it consists of the past form of 'have' and a past participle verb. Learners need to become accustomed to using the past form of 'have', which is challenging especially for learners who speak tenseless languages and know the past participle form that comes after the past auxiliary *have* in order to form a correct past perfect clause. Finally, its occurrences in a longer narrative may not be explained straightforwardly. While native speakers of English can rely on their intuition, L2 learners need to draw on their explicit knowledge to construct output that is contextually and meaningfully appropriate. Explicit knowledge is formed through explicit learning, which depends on metalinguistic descriptions (Roehr-Brackin, 2015). For these reasons, past perfect deserves more elaboration in the comparative overview below.

## A Comparative Overview of Past Perfect and Simple Past

### The traditional view

Structural and formal linguists defined the simple past as  $E_R=S$  (i.e. the event time  $E$  precedes the reference time  $R$ , with  $R$  overlapping the speech time  $S$ ) and the past perfect as either  $E_R_S$  (Reichenbach, 1947) or as  $R_S$ , past, and  $E_R$  anterior (Johnson, 1981). As the past perfect and the simple past typically occur in narrative discourse, the semantics of the two tenses has been analyzed within discourse theories. Proponents of discourse representation theory (e.g. Kamp & Reyle, 1993; Kamp & Rohrer, 1983) posited that tenses are anaphoric. This means that in a series of sentences the occurrence of an event in each new sentence can be positioned only in relation to the previous context (Irlandoust, 1999). For the past perfect, Kamp and Rohrer (1983) argued that this tense denotes a state of affairs that lies in the past of the event labelled as the reference time and expressed in the simple past. Later, Kamp and Reyle (1993) proposed that the term reference point refers to the time which accounts for the progression of a narrative, while the term temporal perspective point (TPpt) refers to the point in

time that accounts for the intermediate time from which the eventuality reported in the past perfect is seen as past. In this account, the eventuality described in the first past perfect in (2) precedes the TPpt, while the second past perfect coincides with it:

- (2) Mary was consent. The past two days had been strenuous. But now she had sent off her proposal.  
(Kamp & Reyle, 1993, p. 599)

However, the authors admitted that their considerations of aspect (i.e., whether the past perfect situation is characterized as a state, an event, or a state with no result) and the temporal relations (i.e., the utterance time, the TPpt, and location time of the situation) result in three different combinations, which make past perfects triply ambiguous. They acknowledged that these ambiguities may seem to argue against their own theory, and so they would be glad to adopt a theory that can offer an analysis that will not result in any ambiguities. Moreover, this view restricts the functioning of the past perfect to linking events that are temporally related in an episode. This restriction overlooks the fact that it can also link an event to a prior event in a different episode (Irandoost, 1999). Thus, the anaphoric view alone is not sufficient to account for the uses of the past perfect (Irandoost, 1999).

Despite its limitations in accounting for the functioning of the past perfect, this view appears in most ELT textbooks and pedagogical grammars and influences the learning activities. Celce-Murcia and Larsen-Freeman (1999, p. 65) state that the tense refers to “an action completed in the past prior to some other past event” and add that there is no difference in meaning when the simple past is used before a temporal word, such as *before*. Murphy (2004), in addition to the similar explanation posed by Celce-Murcia and Larsen-Freeman (1999), presents a comparison between the present perfect and the past perfect. Through the comparison, the author expects that learners can infer that the past perfect can be used to talk about a completed past event but has a connection with a later completed event in the past. Eastwood (2002, p. 41) also refers to the past perfect as a tense that is used to “talk about things before this past time”. Furthermore, he explains that when the past perfect is used, we are looking back from the situation described in the simple past to the earlier situation(s). The latter explanation reflects the notion of TPpt proposed by Kamp and Reyle (1993). Hewings (2013) proposes a slightly different account of the past perfect. According to him, the past perfect is used to refer to “an event out of order...which happened before the last event in the sequence we have written” (p. 10). Hewings, however, does not explain why and when such out-of-order events should be mentioned. In sum, these accounts of the past perfect are similar, in that they offer a rule that the tense is used to describe a past event that took place before another past event. They do not, however, offer any explanation of why these so-called earlier events should be mentioned in a narrative and expressed in the past perfect, not in the simple past.

### The CG view

According to Langacker (2008b), a verb profiles a process that comprises a series of event entities. These entities are temporally interconnected. When a set of interconnected entities is focused on, a relationship can be conceptualized. As a result, these interconnected entities are construed as a single event entity that can serve a greater purpose. Thus, a conceptualization of an event amounts to seeing a motion picture of a ball falling down to the ground as opposed to scrutinizing a series of still photographs in which each still photograph depicts the ball occupying a particular location from the top to the bottom. On the other hand, in the motion picture, each depiction is perceived as continuous and unfolding through time, and the overall event is sequentially scanned. Sequential scanning is a cognitive process which gives rise to different construals of an event. As such, a verb can be construed as either temporally unbounded (imperfective) or bounded (perfective) (Radden & Dirven, 2007). In English, temporally bounded events are conveyed in the non-progressive form.

From a CG perspective, bounded events are ideally placed in the past time (Radden & Dirven, 2007). A bounded past event naturally makes room for another event to ensue and end on the timeline. If these

bounded past events are related, they form a group of chronologically ordered events that typically appear in a narrative. If all the events are construed in their sequential order of occurrence, the simple past is used to depict each individual event, as illustrated in Figure 1 and example (3). In such a sequence, the event described first is located in the past in relation to the speech time, while the subsequent events are located relative to their earlier event as a reference point (Radden & Dirven, 2007).



Figure 1. Diagram representing order of occurrence (Radden & Dirven, 2007, p. 219).

- (3) One day my friend and I just **said** goodbye to our friends. Suddenly, a car **stopped** near us and the man inside **came** out and **told** us to get into the car. I **realized** that something was wrong, so I **grabbed** my friend's hand and **went** to the nearest house and **rang** the doorbell. We almost **got** kidnapped!

However, narratives consist of not only chronologically ordered sentences, but also episodes (Irandoust, 1999). Episodes are comprised of coherent arrangements of sentences, linguistic markers to signify a beginning and/or end, and thematic unity (van Dijk, 1982). Each episode in a narrative "implies a reference frame, which is the conceptual space of the states and events described in that episode" (Irandoust, 1999, p. 282). The notion of reference frames is the application of the mental space theory developed by Fauconnier (1985). A reference frame can consist of several mental spaces. As the discourse unfolds, new mental spaces are built up and linked by means of space-builder expressions such as prepositional phrases (*in this picture, at that time*) and connectives (*if X then \_\_\_\_, either this or that*). Since these spaces are organized and linked in a network, they are accessible through other spaces (Sweetser & Fauconnier, 1996).

A situation can also be represented in a mental space by the use of tense (Radden & Dirven, 2007). Although in a speech event only one situation is mentioned, there are at least two mental spaces established: the base space containing the speech time and the event space comprising the situation/event time. The base space is understood as taking place at the present moment of speaking. The narrator usually views the event time from the base space but sometimes his/her viewpoint is shifted to a past or future time and perceives a given event in the event space from that shifted viewpoint.

On these theoretical grounds, Irandoust (1999) posits that the past perfect connects events across episodes in a narrative. As such, the functioning of the past perfect cannot be learnt only by analyzing it in terms of inter-sentential relations; rather, it must be viewed as working through a network of mental spaces prompted by space builders. The speaker utilizes the past perfect to indicate movements across mental spaces and help the reader recognize episodic boundaries. The formal analysis simply states that the situation portrayed by the past perfect is perceived as past from a vantage point in the past. Such analysis assumes the event described in the past perfect takes place right before the perspective point expressed in the simple past. Irandoust's cognitive analysis, on the other hand, points to the fact that the functioning of the past perfect can be warranted on the level of thematic relevance instead of temporal chronology. Thus, a situation whose occurrence is temporally undetermined (i.e., not necessarily just before the perspective point), such as the last sentence in (4), can be inserted into the narrative context using the past perfect and helps the speaker/narrator achieve his/her communicative purpose. In this sense, the event occurring in the preceding past episode will only become relevant if it is perceived and acknowledged by a character in a later past episode.

- (4) My wife and I were in a mountain road driving to our cabin. Suddenly, my wife felt something weird and told me to pull over. And so I did and tried to calm her down. After she was calm, I

continued driving. A kilometer up the road the load of logs **had come** loose and **spilled** off the truck.

According to Irandoust (1999), the reference frame in which the event has occurred is called the source space, while the reference frame in which the resultant state is perceived is the target space. She then proposed two configurations of the past perfect: the *T*-configuration and the *S/T*-configuration. The *T*-configuration refers to the “perfect-in-the-past” interpretation. In this configuration, our attention is driven to the target space, which is the resultant state of an event depicted in the past perfect (see Figure 2). This state can also serve as a strategy to discontinue the previous episode and anticipate a new episode in the narrative context since it signals changes in space and time. This configuration is exemplified in (5).

- (5) My parents left me for a week. One night, I **had locked** all the door, and this stranger appeared in my porch.

In (5), the temporal marker, *one night*, and the past perfect predicate indicate a spatio-temporal movement from the episode in which the narrator was left by his/her parents to the episode in which s/he was ready to go to bed in the night. By noticing the temporal marker and the past perfect the reader is now aware that the character is in a different time and place.

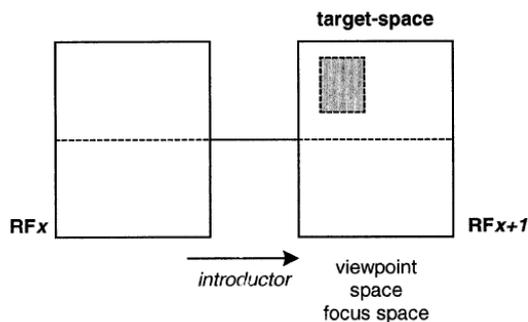


Figure 2. The *T*-configuration to anticipate a new reference frame (Irandoust, 1999, p. 288).

Sometimes, however, the narrator wants us to mentally locate the event in the source space so that we can infer the correct temporal associations. This time, the target space in which the resultant state is recognized is the viewpoint (typically described in the simple past), and our focus temporarily shifts to the event in the source space (described in the past perfect) (see Figure 3). This shift is known as a “flashback” of an earlier event. This “past-in-the-past” interpretation is called the *S/T*-configuration. This use halts the narrative’s forward progression. A narrative consists of a set of episodes with states and events, and an episode consists of a chain of events that characterize the episode. In telling a narrative there are events from earlier episodes that are not yet incorporated in the event chain of the current episode. The narrator may at times feel the need to revisit the earlier episodes and complete the current episode with those missing events as its sub-episodes, as illustrated in (6).

- (6) I felt really tired when I was at the bus stop yesterday because my wife and I **had been** to a friend’s party the night before. When I was about to get on the bus, I realized I **had left** my mobile phone at home.

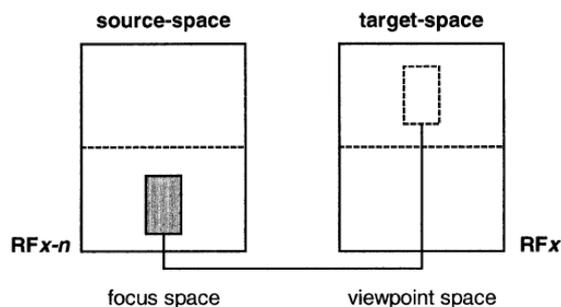


Figure 3. The *S/T*-configuration (Irاندوست, 1999, p. 293).

In sum, the past perfect is used to connect events and situations across episodic boundaries in the narrative context and can function as narrative strategies. The *T-configuration* centers our attention on the resultant state of an event and helps the reader to anticipate new episodes. On the other hand, the *S/T-configuration* induces a flashback of an earlier event and situation that could have been included in the previous sequence of the story. Treating the past perfect beyond the sentence level allows us to see the meaningful role of the past perfect in global coherence of a narrative. The above explanations have implications for teaching the tenses. First, since the target tenses typically appear in narratives, the learning of the target tenses should be supported by discourse-level input, as opposed to sentence-level input. By presenting the target input at the discourse level, learners and the teacher can also focus more on descriptions of “the interaction between the grammatical forms... and their pragmatic conditions” (Tomlin, 1994, p. 145). By means of explicit instruction, learners can be made aware of this interaction, especially in situations where the use of the past perfect seems to be interchangeable with the simple past. This awareness can be further enhanced through awareness-raising tasks. Secondly, learners should also practice using the tenses at the discourse level. Mechanical drills may not be very helpful, as their concern is mostly about grammatical forms, not about functional and meaningful use. Pedagogic tasks that are more function- and meaning-oriented such as text reconstruction tasks can further promote learners’ awareness of the target tenses when they produce the language.

## Previous Studies

Although there is a high level of interest in incorporating CG functional analyses of English tenses into teaching materials, there is still a dearth of research investigating the pedagogical value of CG theory in supporting L2 tense and aspect learning. The first such study was conducted by Bielak and Pawlak (2011), who investigated the efficacy of CG-based instruction in teaching English present progressive and simple present. The participants were high school students studying EFL in Poland. In general, they found that the CG-based instruction was moderately effective in assisting the learners to develop their explicit knowledge, and its effectiveness was comparable to traditional instruction. They argued that since the treatment was quite short, the relative simplicity of the traditional descriptions was sufficient for the learners, and the CG descriptions were too complex and thereby not deemed as highly relevant for the learners.

The second study investigated whether form-focused grammar instruction that incorporated CG descriptions was effective for teaching two pairs of tenses, namely, the present progressive with the simple present, and the present perfect with the simple past (Kermer, 2016). The participants were lower-level learners studying English in a secondary school in Germany. In general, the findings revealed that CG-based form-focused instruction was not more effective than traditional form-focused instruction. Kermer argued that the inconsistent effects of the CG-based instruction were due to learners’ cognitive styles, the semantic complexity of the target structures and learners’ cross-linguistic influence. She

suggested that applied CG research should combine CG descriptions and other models of grammar and teaching techniques.

The third study targeted English conditionals, which also involve the use of tense (Jacobsen, 2018). In this study, CG insights were combined with awareness-raising tasks to teach the grammatical targets to ESL learners who spoke different L1s. Participants were assigned to three groups: cognitive, conventional, and control. The findings of her study indicated that all the experimental groups outperformed the control group, indicating that explicit instruction was effective in assisting the participants to learn the target structure. Furthermore, participants who had been exposed to CG performed significantly better and showed a higher degree of understanding than those who had received a more conventional approach to understanding conditionals. Since both groups performed the same types of tasks, she attributed the findings to the adapted CG theory used in her study.

These studies have demonstrated that CG analyses could be translated into instructional L2 materials. However, when such instructional materials are provided to secondary school learners in EFL contexts, research shows that its effectiveness has been comparable to that of form-focused instruction based on traditional grammar. CG descriptions, despite being comprehensive, revealing, and accurate, seem to be not quite appropriate for less advanced EFL learners. It should also be noted that even though both Kermer (2016) and Bielak and Pawlak (2011) claimed that their CG-based descriptions were supported by form-focused instruction, their studies did not adopt the task-based approach as defined by Ellis (2003). Jacobsen (2018, p. 691) argues that CL, a usage-based linguistic theory, is highly compatible with the task-based approach, “which also emphasizes language learning through meaningful content and contextualized language use.” Jacobsen (2016) further argues that pedagogical tasks can function as an effective platform to highlight CG semantic descriptions in meaningful and contextualized language use. However, research that combines adapted CL theory and task-based language teaching is currently still scarce. Thus, more research is warranted to refine the presentations of CG-based descriptions, to make them accessible to learners, and to implement them in combination with tasks so that the expected learner benefits can be established, and the positive results from applied CL studies involving college-level learners in ESL contexts can be generalized to secondary school learners in EFL contexts. The current study was designed to investigate this.

## Method

The current study aims to address the concerns raised in the review of literature and add to the body of research on applied CL in instructed SLA. The following research questions are formulated:

1. Can CG insights bring a positive effect on adolescent EFL learners' use of the past perfect and the simple past in narrative contexts?
2. Can CG-inspired explicit instruction entail significantly better performance on the use of the past perfect and the simple past in a narrative context than the kind of instruction informed by the traditional representation?

Furthermore, concerning the target structure, the *S/T* configuration was selected as the target configuration for several reasons. First, ELT textbooks in general present the past perfect with the past-in-the-past interpretation in their examples. For example, Celce-Murcia and Larsen-Freeman (1999, p. 65) state that the tense refers to “an action completed in the past prior to some other past event” and give an example sentence “He had already walked to school before I could offer him a ride” to illustrate this meaning. Secondly, it is argued that senior high school students are developmentally more ready to receive an explanation on this configuration than the *T*-configuration, as they have learnt the concept of simple past. Finally, as supported by our informal analysis mentioned above, L2 learners mostly attempt to use this configuration, albeit far from successfully.

## Participants

The participants were secondary school learners who sat in two pre-determined intact classes of the eleventh grade. One class was assigned to be the CG group, while the other the traditional (hereafter, Trad) group. The participants were native speakers of Indonesian, who had been studying English as a foreign language since they were in the first grade, and their average age was 16. According to the syllabus, they had learnt the simple past tense but the past perfect had yet to be taught. To ensure internal validity, only the participants who had been present for all sessions were included in the data collection. This resulted in only 36 participants (CG group: N = 18; Trad group: N = 18).

As far as the instructors for the groups are concerned, it has been argued that applied CL research would require a teacher who is familiar with CL theory and believes in its usefulness for L2 instruction (Jacobsen, 2018). However, such a teacher might be less enthusiastic when trying to present the traditional description for the Trad group (cf. Tyler, Mueller, & Ho, 2010), causing bias. Thus, it was decided that the CG group would be taught by the second author, who also developed the instructional materials for both groups. The second author had been doing his internship there for a month so the participants were familiar with him. On the other hand, the Trad group would be instructed by one of the school's English teachers. This teacher had been teaching the students in this group for almost a semester, had no prior knowledge of the cognitive analysis of the tenses and used the traditional approach in teaching grammar.

## Materials

The pedagogical treatment for each group started with a reading comprehension activity. The narrative text for this activity was adapted from a global ELT textbook (Harris, Mower, & Sikorzyńska, 2006) and contained the target tenses. There were five comprehension questions in the form of true or false statements. The whole activity lasted for fifteen minutes. Then a teacher-fronted explanation consisting of explicit information on the tenses was provided via PowerPoint presentations for another fifteen minutes. Although both groups received metalinguistic aspects of the tenses, the one for the CG group was theoretically distinct from the one for the Trad group. The tasks for both groups were awareness-raising tasks in the forms of comprehension-based tasks and one production-based task. Awareness-raising tasks as opposed to exercises were chosen for learners to practice the target tenses, as these tasks have been considered to be beneficial in language pedagogy and in current teaching methodology (Révész, 2009). Comprehension-based tasks may support the teaching and learning of the two tenses, especially in the Indonesian context (Renandya, Hamied, & Nurkamto, 2018) while the production-based task may push the learners to deeper processing of the target structures and thereby fostering acquisition (Luciana, 2006; Swain, 2005). In total, the participants spent 60 minutes on the tasks.

### The CG group

The explicit instruction was grounded in CG accounts of simple past (Radden & Dirven, 2007) and past perfect (Iranoust, 1999). It consisted of CG terms related to the target tenses such as bounded events, episodes, and flashback. Participants were first explained that simple past was used to talk about a series of bounded events that make up an episode. Figure 1 was presented along with an excerpt from the text to help learners understand this concept. Participants were then made aware of the function of past perfect and the concept of flashback. This explanation was accompanied with another diagram (Figure 4) along with an excerpt from the reading text. We did not use the diagram in Figure 3 but instead created the diagram in Figure 4 because we thought this diagram would be pedagogy-friendly.

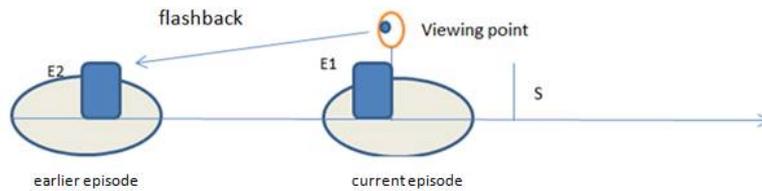


Figure 4. S/T configuration diagram for the CG group.

After the teacher-fronted explanation, participants performed pedagogic tasks to raise their awareness of the target tenses along with the meanings. The first task, a comprehension-based task, presented the participants with fourteen clauses taken from the reading text and required them to decide whether the event depicted in each clause served as a flashback or a viewpoint. The sentences in this task were not in chronological order, and they were all in simple past. To figure out the meaning of a given event, the participants had to refer back to the event in the text and see the form used to depict the event. Then participants had to match the viewpoints to the corresponding flashbacks.

After performing the comprehension-based task, participants performed a collaborative output-based task. Two versions of a narrative text containing the target tenses were prepared. The tenses accurately used in one version were inaccurately used in the other version. The story in both versions was not chronologically ordered. A participant who received version A worked in a pair with another participant receiving version B. They had to put the sentences in the correct order, choose the sentences which were grammatically accurate so that the text became coherent, and rewrite the whole story. After they were done, they compared their texts with the original one, and revised their texts.

### The Trad group

Similar to the CG group, the materials for the traditional group consisted of explicit information, two comprehension tasks, and one collaborative output-based task. The sample sentences in the explicit information, the sentences for the comprehension tasks, and the text for the production task were the same as in the CG group. Furthermore, the procedure for each task was also the same. The only aspects that were substantially different were the linguistic theory and grammatical descriptions, which relied heavily on explanations found in typical English grammar textbooks. That is, simple past is used to talk about a single event in the past and past perfect is used to talk about an event that happened earlier before another event or time in the past. Participants' understanding of simple past was first reviewed with the help of Figure 5 and an excerpt from the text. Then they were introduced to past perfect. The explanation delivered to them was aided by Figure 6 and an excerpt from the text.

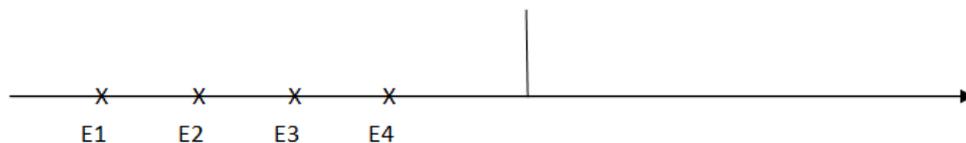


Figure 5. A simple past diagram for the Trad group.



Figure 6. A past perfect diagram for the Trad group.

In the comprehension task, the participants had to decide if the event described in each sentence was the earlier event or the latter one. Then they had to use the sentences in the first task and match the earlier event to the latter event. In the output task, the participants relied on the traditional explanation provided earlier. The procedure for this task was exactly the same as the one for the CG group. Efforts were made to ensure that the traditional group spent the same amount of time on each task.

## Tests

The tests had a fill-in-the-gap format. The tests contained short narratives taken from Touchstone 4, a popular corpus-based ELT textbook (McCarthy, McCarten, & Sandiford, 2006). For each gap in each narrative, the participants were required to use the correct tense for the verb provided in brackets. There were in total fifteen items in each test, with nine items in simple past, and six items in past perfect. Although the narratives in the tests used high frequency words, participants were allowed to ask questions about the vocabulary during the tests.

## Procedure

The pedagogical intervention in this study consisted of two twenty-minute testing sessions and two forty-five-minute treatment sessions spread over three days. On the first day, the participants' knowledge in both groups was pretested. A week later, each experimental group received instruction on the form and function of the past perfect followed by an input-based consciousness-raising task. On the last day, both experimental groups did another input-based task and a collaborative output-based task for forty-five minutes. Following its completion, still on the same day, a post-test was administered to investigate the effect of each type of instruction.

As for the scoring procedure, the total score for the task was 21 points. For the past perfect form, two points were awarded if the form was used correctly. However, if it was only partially correct (i.e., the auxiliary *had* was not correct), only one point was given. It was decided that the regularized irregular past participle verbs would be counted as correct, since some participants might have known to use the past participle but did not know the irregular form. No points were given for wholly incorrect forms. The correct use of the past simple was awarded one point, but zero points were given if the form was incorrect or not supplied. The regularized irregular simple past verbs would be considered correct, also. The scores were then converted into percentages.

## Results

The data generated in this study were analyzed with SPSS. Percent accuracy for the test was entered into the statistical analyses. To answer the research questions, a mixed between-within ANOVA, separate one-way ANOVAs, and paired samples t-tests were carried out. Partial omega squared ( $\omega_p^2$ ) was the statistic used to report the effect-size values associated with inferential comparisons, since the  $n$  size for both groups was the same. Effect sizes for the t-test results (Cohen's  $d$ ) were also calculated and consulted when the results were interpreted. Following Plonsky and Oswald's (2014) proposal, sizes for L2 research effects are small ( $d = .40$ ), medium ( $d = .70$ ), and large ( $d = 1.00$ ). Descriptive statistics for both groups are presented in Table 1, and a visual representation of the performance of both groups in the two tests is presented in Figure 7.

TABLE 1  
Descriptive Statistics for Mean Test Scores

Variable	n	Pre-test		Post-test	
		M	SD	M	SD
CG	18	71.48	11.89	83.14	11.68
Trad	18	73.14	15.86	72.77	10.74

A 2x2 mixed ANOVA with treatment (CG, Trad) as a between-subjects factor and time (pre-test, post-test) as a within-subjects factor was conducted on the assessment. The results revealed that there was a main effect for time,  $F(1, 36) = 8.126, p = 0.007, \omega_p^2 = .526$ , and a significant interaction between time and treatment,  $F(1, 36) = 9.230, p = 0.005, \omega_p^2 = .522$ . One-way ANOVAs were then run to investigate the time and treatment interaction in the assessment.

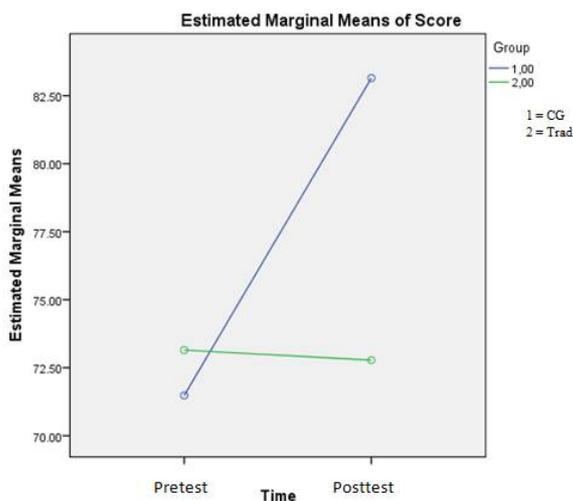


Figure 7. Means of test performance.

The ANOVA conducted on the pre-test showed that the accuracy of the CG group was not significantly different from that of the Trad group,  $F(1, 36) = .127, p = 0.723, \omega_p^2 = 0.048$ . So the two groups performed equally on the pre-test. A statistically significant difference was observed between the CG group and the Trad group on the post-test,  $F(1, 36) = 7.682, p = 0.009, \omega_p^2 = .156$ , which indicated that the CG group outperformed the Trad group after treatment. Paired samples t-tests showed that the mean accuracy the CG group gained from pre-test to post-test was significant,  $t(18) = -3.964, p = 0.001, d = 0.883$ ; however, the average score of the Trad group declined on the post-test by 0.37 percent. The decline, however, was not significant,  $t(18) = .140, p = 0.890, d = 0.024$ .

## Discussion

To answer our first research question, the results of this study indicated that CG-inspired instruction could bring about a positive effect on learning usage of the target tenses in a narrative context when performance was measured in a gap-fill short narrative task. The participants in the CG group showed significant gains from pre- to post-test. On the other hand, the Trad group demonstrated gains but the gains were not significant. To answer our second research question, our findings indicated that the treatment the CG group had received was superior to the kind of treatment the Trad group had. In sum, our CG-grounded explicit instruction was not only effective in teaching the simple past and the past

perfect to adolescent EFL learners, but it was also significantly better and showed a larger effect size than the traditional instruction.

Since the two groups only differed in the type of explanation they received, it could be argued that the gains the CL group experienced were attributable to the nature of the linguistic presentation of the tenses provided prior to doing the tasks. During the teacher-fronted presentation, the participants in this group had some new concepts and terms to learn. For instance, they were introduced to the concept of temporal boundedness in English and subsequently the concepts of episode, viewpoint and flashback in telling a narrative. These concepts represent wholly different ways of thinking about English grammar, particularly the tenses. At the same time, they were encouraged to learn the specific usage of the tenses and think about how the tenses are used to create coherence in the narrative. This might be cognitively demanding for learners. However, through the use of diagrams and accompanying example sentences, the presentation was arguably more meaningful, powerful, and highly useful for learners in performing the tasks.

In contrast, for the Trad group, the explanation of the simple past provided was a review of what they had learnt and the past perfect rule was very brief. They were also provided with example sentences and diagrams to help them make sense of the explanations. It had been assumed that such instruction would help the learners to decide which tense to use; however, they demonstrated no gains in the post-test. The fact that the Trad group did not improve was quite beyond our expectation. Research shows that explicit instruction is facilitative in raising awareness, and thus increasing the likelihood of learning (Rosa & Leow, 2004; Rosa & O'Neill, 1999). The participants in this group also performed some pedagogical tasks which were aimed at increasing their awareness of the target tenses along with the distinction. However, apparently, in learning the past perfect, it is also important for learners to understand the subtle distinction between situations where this tense should be and should not be used. Grammatical descriptions that are not comprehensively adequate will not reveal such important considerations. As argued elsewhere (Langacker, 2008a, p. 66), CL insights are "more comprehensive, revealing, and descriptively adequate", and can therefore assist learners in establishing form-meaning mappings, understanding the subtle differences, and optimally enhancing syntactic and semantic bootstrapping as they were doing the tasks. The traditional account used in this study, on the other hand, was anything but fragmentary. Consequently, the learners were not able to optimize their learning due to a lack of necessary information.

This ran counter to Bielak and Pawlak's (2011) assumption that the simplicity of the traditional descriptions could be more beneficial. In our study, the simplicity was not effective. Thus, we believe in the role of comprehensive linguistic representation in teaching grammar, especially to EFL learners. In our study, the CG group was informed that the past perfect is used to complete an episode with an event from an earlier episode. This information helped the learners understand whether the event in question was meant to complete the episode in which it appeared or it was to move the story forward. This information, however, did not figure in the traditional description for the Trad group.

Although the findings of the current study are promising, the study has several limitations that need to be considered and addressed in future research. First, the sample size in the current study was indeed very small. Another important limitation is that we only measured learners' performance using a gap-fill narrative task; we did not measure it in free production tasks. Researchers could have learners write their own narratives and analyze their usage of the target tenses in obligatory contexts (see Pica, 1983). Moreover, due to time and curriculum constraints, we were not given permission by the school to administer a delayed post-test, and the time allocation granted for the treatment was very short. Providing a longer treatment might reveal more insights into the effects of CG-grounded instruction. Finally, this study only targeted the *S/T* configuration. Future research could also target the *T*-configuration and investigate learners' use of this configuration in their narrative essays. By addressing these limitations in subsequent research, we will see the true effects of CG-inspired instruction.

## Conclusion

Our findings align with other CL researchers' (e.g., Jacobsen, 2018; Tyler, 2012) in pointing to the usefulness of CG theory in L2 education. CL theory can also be combined with the task-based approach. Although the current study provides support for using CG insights in L2 instruction and for combining adapted CG theory and the task-based approach to teaching English grammatical structures in an EFL classroom, the empirical effort so far is still not sufficient to establish the claim that CG theory is superior to formal and structural theory in L2 instruction. More research should be conducted to investigate the relative effect of CG-informed task-based instruction and traditional task-based instruction on learning other grammatical structures.

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## References

- Bardovi-Harlig, K. (2000). *Tense and aspect in second language acquisition: Form, meaning, and use*. Oxford: Blackwell.
- Bielak, J., & Pawlak, M. (2011). Teaching English tense and aspect with the help of cognitive grammar: An empirical study. *Studies in Second Language Learning and Teaching*, 1(3), 365-400.
- Boers, F., & Lindstormberg, S. (2006). Cognitive linguistic applications in second language or foreign language instruction: Rationale, proposals, and evaluation. In G. Kristiansen, M. Achard, R. Dirven, & F. Ruiz de Mendoza (Eds.), *Cognitive linguistics: Current applications and future perspectives* (pp. 305-355). Berlin: Mouton de Gruyter.
- Celce-Murcia, M., & Larsen-Freeman, D. (1999). *The grammar book: An ESL/EFL teacher's course*. Boston, MA: Heinle and Heinle.
- Cowan, R. (2008). *The teacher's grammar of English*. New York: Cambridge University Press.
- Eastwood, J. (2002). *Oxford practice grammar*. Oxford: Oxford University Press.
- Ellis, R., & Shintani, N. (2014). *Exploring language pedagogy through second language acquisition research*. New York: Routledge.
- Fauconnier, G. (1985). *Mental spaces: Aspects of meaning construction in natural language*. Cambridge, MA: MIT Press.
- Fontaine, L., Bartett, T., & O'Grady, G. (2014). *Systemic functional linguistics: Exploring choice*. Cambridge/New York: Cambridge University Press.
- Harris, M., Mower, D., & Sikorzyńska, A. (2006). *New opportunities: Intermediate students' book*. New York: Pearson Longman.
- Hewings, M. (2013). *Advanced grammar in use* (3<sup>rd</sup> ed.). Cambridge: Cambridge University Press.
- Hulstijn, J. H., & de Graaff, R. (1994). Under what conditions does explicit knowledge of a second language facilitate the acquisition of implicit knowledge? A research proposal. *AILA Review*, 11, 97-112.
- Irandoust, H. (1999). The past perfect: Moving across conceptual spaces. *Cognitive Linguistics*, 10(3), 279-302.
- Ishikawa, S. (2013). The ICNALE and sophisticated contrastive interlanguage analysis of Asian learners of English. In S. Ishikawa (Ed.), *Learner corpus studies in Asia and the world 1* (pp. 91-118). Kobe, Japan: Kobe University.
- Jacobsen, N. D. (2018). The best of both worlds: Combining cognitive linguistics and pedagogic tasks to teach English conditionals. *Applied Linguistics*, 39(5), 668-693.
- Jarvis, S., & Pavlenko, A. (2008). *Cross-linguistic influence in language and cognition*. New York, NY: Routledge.
- Johnson, M. R. (1981). A unified temporal theory of tense and aspect. In P. Tedeschi & A. Zaenen (Eds.), *Syntax and semantics: Tense and aspect* (pp. 145-175). New York: Academic Press.
- Jones, R. H., & Lock, G. (2011). *Functional grammar in the ESL classroom: Noticing, exploring and practising*. New York: Palgrave Macmillan.
- Kamp, H., & Reyle, U. (1993). *From discourse to logic*. Dordrecht: Kluwer.
- Kamp, H., & Rohrer, C. (1983). Tense in texts. In R. Bauerle, R. Schwarze, & A. von Stechow (Eds.), *Meaning, use and interpretation of language* (pp. 250-269). Berlin: Walter de Gruyter.
- Kermer, F. (2016). *A cognitive grammar approach to teaching tense and aspect in the L2 context*. Newcastle, UK: Cambridge Scholars.
- Langacker, R. W. (2008a). *Cognitive grammar: A basic introduction*. Oxford: Oxford University Press.
- Langacker, R. W. (2008b). Cognitive grammar as a basis for language instruction. In P. Robinson & N. Ellis (Eds.), *Handbook of cognitive linguistics and second language acquisition* (pp. 66-88). New York: Routledge.
- Luciana. (2006). Roles of output in foreign language learning: A case of collaborative grammar task. *The Journal of Asia TEFL*, 3(3), 143-176.

- Littlemore, J. (2009) *Applying cognitive linguistics to second language learning and teaching*. Houndsmills, UK: Palgrave.
- McCarthy, M., McCarten, J., & Sandiford, H. (2006). *Touchstone 4*. New York: Cambridge University Press.
- Murphy, R. (2004). *English grammar in use* (3<sup>rd</sup> ed.). Cambridge: Cambridge University Press.
- Niemeier, S., & Reif, M. (2008). Making progress simpler? Applying cognitive grammar to tense-aspect teaching in the German EFL classroom. In S. De Knop & T. De Rycker (Eds.), *Cognitive approaches to pedagogical grammar* (pp. 325-356). Berlin: Mouton de Gruyter.
- Pica, T. (1983). Methods of morpheme quantification: Their effect on the interpretation of second language data. *Studies in Second Language Acquisition*, 6(1), 69-78.
- Plonsky, L., & Oswald, F. (2014). How big is “big”? Interpreting effect sizes in L2 research. *Language Learning*, 64(4), 878-912.
- Radden, G., & Dirven, R. (2007). *Cognitive English grammar*. Amsterdam: John Benjamins.
- Reichenbach, H. (1947). *Elements of symbolic logic*. New York: MacMillan.
- Renandya, W. A., Hamied, F. A., & Nurkamto, J. (2018). English language proficiency in Indonesia: Issues and prospects. *The Journal of Asia TEFL*, 15(3), 618-629.
- Révész, A. (2009). Task complexity, focus on form, and second language development. *Studies in Second Language Acquisition*, 31(3), 437-470.
- Roehr-Brackin, K. (2015). Explicit knowledge about language in L2 learning: A usage-based perspective. In P. Rebuschat (Ed.), *Implicit and explicit learning of languages* (pp. 117-138). Amsterdam: John Benjamins.
- Rosa, E., & Leow, R. P. (2004). Awareness, different learning conditions and second language development. *Applied Psycholinguistics*, 25(2), 269-292.
- Rosa, E., & O’Neill, M. D. (1999). Explicitness, intake, and the issue of awareness: Another piece to the puzzle. *Studies in Second Language Acquisition*, 21(4), 511-556.
- Swain, M. (2005). The output hypothesis: Theory and research. In E. Hinkel (Ed.), *Handbook on research in second language teaching and learning* (pp. 471-483). Mahwah, NJ: Lawrence Erlbaum Associates.
- Sweetser, E., & Fauconnier, G. (1996). Cognitive links and domains: Basic aspects of mental space theory. In G. Fauconnier & E. Sweetser (eds.), *Spaces, worlds, and grammar* (pp. 1-28). Chicago: University of Chicago Press.
- Taylor, J. R. (2008). Some pedagogical implications of cognitive linguistics. In S. De Knop & T. D. Rycker (Eds.), *Cognitive approaches to pedagogical grammar: A volume in honour of Rene Dirven* (pp. 37-65). Berlin: Mouton de Gruyter.
- Tomlin, R. (1994). Functional grammars, pedagogical grammars and communicative language teaching. In T. Odlin (Ed.), *Perspectives on pedagogical grammar* (pp. 140-178). Cambridge: Cambridge University Press.
- Tyler, A. (2010). Usage-based approaches to language and their applications to second language learning. *Annual Review of Applied Linguistics*, 30, 270-291.
- Tyler, A. (2012). *Cognitive linguistics and second language learning: Theoretical basics and experimental evidence*. New York: Routledge.
- Tyler, A., Mueller, C. M., & Ho, V. (2010). Applying cognitive linguistics to instructed L2 learning: The English modals. *AILA Review*, 23, 30-49.
- Van Dijk, T. A. (1982). Episodes as units of discourse analysis. In D. Tannen (Ed.), *Analyzing discourse: Text and talk*. (pp. 177-195). Washington: Georgetown University Press.