“The effect of the first language in learning English ‘to’ with manner-of-motion to goal constructions by L1 Saudi Arabic speakers”
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Abstract

This study investigates the effect of the first language (L1) on learners by using negative and positive evidence in the classrooms while teaching English directional prepositions ‘to’ and ‘into’ like John ran to the house vs. John ran into the house. It is assumed that Arabic has two versions of ‘to’. It has the directional interpretation without boundary-crossing which is equivalent to the English ‘to’. In addition, it also denotes a similar interpretation to English directional preposition ‘into’ which is unavailable in Arabic and involves boundary-crossing. White (1991) assumes that the overlap (superset/subset relation) between the first language and the second language leads to learnability problems. To examine the effect of the overlaps, two groups who are at an intermediate stage of development take a part in this study: the experiment group (E.G.) and the control group (C.G.). The control group is the base to measure the effectiveness of the treatments on the experiment groups’ judgments. Hence, an Acceptability Judgment Task is devised in order to elicit participants' judgments on the task items in the pretest and the posttest. Results show that clear advantage of the negative evidence in the experiment group’s performance over the control group’s judgments in the posttest in learning ‘to’ with and without boundary-crossing. The result indicates that there is a difference in the experiment group’s performance in the posttest in learning ‘into’ with the boundary-crossing event after receiving the positive evidence. Similarly, a difference is observed in the experiment group’s judgment with those of the control group in the comparison between ‘to’ and ‘into’ with the boundary-crossing event in the posttest.

Key words: superset – subset – boundary-crossing – positive evidence – negative evidence – first language (L1)

1. Introduction

The studies of argument structures in the first and second languages have led to the growing interest in the field of Second Language acquisition (SLA). Studies by (Juffs 2000, White 2003, White 1987, White 1991, Mazurewich 1984 among others) explore the effect of over-/under-generalization based on L1 property of dative alternation. Similarly, other studies examine the acquisition of causative alternation by different L1s (Montrul 1997, Cabrera and Zubizarreta 2003, 2005, Moore 1993, Rezai and Ariamanesh 2011 and many others). In a similar vein, White (1991) examines the under/over-generalization in the relation to superset and subset on Anglophone children learning French. She suggests that the overlap
relationship poses learnability problems for the L2 learners that the overlap leads L2 learners to adopt two type of scenarios\(^1\). The first scenario is when the L1 is the subset and the L2 is the superset. This type of overlap leads L2 learners to undergeneralize (restrict) the L2 grammar to that of the L1. In this situation, White claims that the L2 learners will adopt the conservative position and will fail to notice that L2 has a range of structures that are absent in the L1 - Figure (1) illustrates the overlap of this situation. On the other hand, when L1 is the superset and the L2 is the subset, as in Figure (2), L2 learners tend to overgeneralize L2 grammar because the L2 data matches the L1. Therefore, nothing in the input will inform L2 learners that certain constructions are impossible in L2. If L2 learners maintain the position of the first scenario, White suggests a treatment to broaden L2 learners' grammar via positive evidence. Positive evidence is ‘information about which strings of words are grammatical sentences in the ambient language’ (Marcus, 1993, p.53). However, negative evidence is a suitable option to limit L2 learners' grammar and overcome overgeneralization. According to Jabbari and Niroomizadeh (2008), ‘negative evidence provides information to learners about what is not possible in the target language (Long 1996, White 1990 and White 2003). It can be provided preemptively (e.g., through an explanation of grammar rules), or reactively (e.g., through error correction). Reactive negative evidence highlights the differences between the target language and a learner’s output and as such is often described as negative feedback’ (Jabbari and Niroomizadeh, p.46). In contrast, positive evidence is usually in the form of what the learners hear or read unconsciously in the classroom. Generally speaking, learners are exposed to this type of evidence in the course of learning any given language.

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\(^1\) The third type where there is no overlap between L1 and L2 is overruled. This due do the fact that L1 and L2 provide two different inputs. Hence, the transfer from L1 to L2 and vice versa should not arise a learnability problem (White 1991, p. 194).
White (1991) examines dative alternation in the English and French languages. English allows prepositional dative construction, such as (1a). In addition, it allows double-object dative alternation, as in (1b).

1. a. John gave the book to Mary
   b. John gave Mary the book

On the other hand, French allows prepositional but not the double-object dative construction as in the following example (2).

2. a. Jean a donné le livre à Marie
   b. * Jean a donné Marie le livre

As a result, French maintains the subset position of English dative alternation. The results show that English speakers accept double-object construction as it is in their L1. White suggests that this result is due to absence of exposure to this construction in the input. English speakers are unaware that this construction is impossible in French.

The French speakers, on the other hand, learn the grammaticality of the English double-object dative despite the fact that this argument construction is impossible in French. As per White’s claim, the difference between English and French speakers is a result of the availability of this construction in the input. In other words, French speakers are exposed to this construction in the input via positive evidence. The positive evidence enables French speakers to realize that English has a wider range of dative construction than French.

Inagaki (2001) addresses the issue of the overlap in the acquisition of motion verbs with goal prepositional phrases (PPs) by English and Japanese speakers. English permits two types of verbs to co-occur with goal PPs: the manner-of-motion verbs, such as walk and run and directed motion verbs, such as go as it is presented in (3). However, Japanese licenses the occurrence of the directed motion verbs only as in (4).

3. a. John walked to school
   b. John ran into the house
   c. John went to school (by) walking
   d. John went into [or] entered the house (by) running

4. a.? * John-ga gakkoo-ni aruita
   John-NOM shool-at walked
‘John walked to school’

b. * John-ga ie-no naka-ni hassita
   John-NOM house-of indide-at ran
   ‘John ran into the house’

c. John-ga gakkoo-ni aruit itta
   John-Nom school-at walking went
   ‘John went to school (by) walking’

b. John-ga ie-no naka-ni hasitte itta [or] haitta
   John-Nom house-of inside-at running went [or] entered
   ‘John went into (or entered) the house (by) running’

Inagaki conducts a bidirectional study using a picture-based task in the form of an Acceptability Judgment Task testing the naturalness of these constructions in both languages. He hypothesizes that Japanese speakers will encounter no difficulty in acquiring constructions such as *John-ga gakkoo-ni aruita ‘John walked to school’ is impossible in Japanese. The lack of positive evidence which informs the English speakers that this construction is ungrammatical in the Japanese language allows English speakers to assume that they are possible constructions as they are in their L1. Results support the hypotheses and show that the Japanese speakers accepts manner-of-motion verbs that occur with goal PPs as in the English example (3a). In contrast, English learners - including advanced level learners of Japanese - accept the *John-ga gakkoo-ni aruita ‘John walked to school’ as a natural sentence in Japanese.

Extending this, Inagaki (2002) explores the superset/subset relation in the acquisition of English manner-of-motion verbs with ambiguous PPs by Japanese speakers. Inagaki examines if the Japanese speakers recognize the directionality of the prepositions under and behind when they co-occur with manner-of-motion verbs, such as walk, swim, etc. He explains that in English, prepositions such as under and behind can give rise to an ambiguous interpretation in English as in (5).

5. a. John swam (in a circular motion) under the bridge (locative)
b. John swam (at one point in his path being) under the bridge  (direction)

On the other hand, Japanese licenses just the locative meaning of these prepositions, as it is illustrated in (6).

6. a. John-wa hasi-no sita-de oyoida
       John-TOP bridge-GEN under-at swam
       ‘John swam under the bridge’ (locational only)

b. John-wa kabe-no usiro-de hasitta
       John-TOP wall-GEN back-at ran
       ‘John ram behind the wall’

Inagaki explains in his (2001b) study that Japanese learners face no difficulty with PPs, such as to, into and onto. One reason is because these prepositions are frequent in the input. Secondly, they are morphologically cued with an overt reflexive of a path. However, Inagaki predicts that Japanese learners will fail to recognize manner-of-motion verbs with the goal prepositions under and behind. This prediction is a result of the fact that (1) construction is infrequent in the input in comparison to unambiguous prepositions to and into (2) Japanese learners will analyze this construction as denoting locative meaning only. A written picture-matching task results showed that Japanese learners failed to recognize the ambiguous readings of under and behind despite the exposure to positive evidence in the input. Inagaki concludes that the existence of the positive evidence alone is insufficient to broaden L2 grammar. Positive evidence has to be robustly and frequently available in the input.

Similarly, Montrul (2001) investigates the acquisition of agentive verbs, such as march and walk with manner-of-motion structure. She conducts a bidirectional study examining Spanish and English speakers in the relative construction. Agentive verbs alternate transitively when they co-occur with PPs in English, such as The captain marched the soldiers to the tents vs. The soldiers marched. In Spanish language, on the other hand, this alternation is unacceptable *El general marchó a los soldados al campamento vs. Los soldados marcharon. Montrul examines if Spanish speakers will undergeneralize the given construction in English. Likewise, she looks at if English speakers will overgeneralize the Spanish structure. The results of the picture judgment task support both types of
generalization, thereby validating White (1991)’s argument. Montrul suggests that with exposure to positive evidence, Spanish speakers will overcome undergeneralization in learning English argument structure.

Like White, Carroll and Swain (1993), Izumi and Lakshmanan (1998), Ellis et al. (2006), and Kang (2009) believe that negative evidence plays an essential role in learning L2 grammar. Izumi and Lakshmanan, for example, investigate the effect of the negative evidence of formal instruction on learning the English passive on Japanese speakers. Japanese allows the direct and indirect passive. English, on the other hand, permits only the direct passive. After receiving an explicit instruction on the impossibility of indirect passive in English, the result indicates that the experiment group’s performance outperforms the control group who received no instruction on the target construction.

In their study on explicit learning, VanPatten and Cadiernoa (1993) examines the explicit instruction in two types of instruction: a traditional form-focused instruction and a processing instruction. Traditional instruction takes the form of explaining and practicing the grammar. However, processing instruction provides explanation, learners’ processing the input and practicing. Results show that the explicit instruction is effective on the level of comprehension and production for the group who is exposed to the processing instruction. However, the traditional form-focused group is successful on the production level only.

Li (2009) investigates the effects of explicit and implicit feedback of Chinese classifier on L2 Chinese learners L1 English, Korean and Japanese at different levels of proficiency. The result indicates that explicit feedback is effective with low-proficiency learners, but not with high-proficiency learners.

Likewise, Norris and Ortega (2000, 2002) compare 49 studies related to the effectiveness of L2 instruction. The collected data reveal that focused instruction leads to an increase of target-like structures in the performance of L2 learners. Furthermore, data indicate that the explicit instructions are more effective than implicit ones.
Ellis (1989) finds out that the classroom learners are as their counterpart learners who learn German word order in a naturalistic setting. Both groups follow the same pattern of acquiring complex grammatical features. However, the classroom learners have a tendency to be more successful in learning the relevant word order rapidly and in a short period.

Atay (2010) investigates the effect of causative/inchoative alternation by L1 Turkish learners learning English as a second language. Turkish learners were assigned to three instruction groups: no instruction group, non-contrastive form-focused group instruction and a contrastive form-focused instruction group. In addition, native English speakers formed a control group. The results indicate that both explicit instruction groups perform better than a no instruction group.

 Fotos (1993) address the issue of raising learners’ consciousness of grammatical structures. She examines the treatments of both the teacher-fronted grammar lesson and interactive, grammar problems solving tasks. The task performance is equally as effective as the formal instruction. The study proves that learners notice the grammatical structures in communicative input after their consciousness is raised.

Similarly, Schmidt (1990) looks at consciousness in input processing. He examines subliminal learning, incidental learning and implicit learning. He examines subliminal learning in relation to noticing that the input consciously will lead to language learning, while the incidental learning looks at paying attention consciously to the target structure in the process of learning. The implicit learning, on the other hand, looks at whether the exposure to an input allows the learner to guess consciously or unconsciously the target structure. Schmidt concludes that the incidental learning is effective in focusing the learner’s attention during the learning process. ‘N. Ellis (2005) further claimed that language acquisition can be speeded up by explicit instruction and that without any focus on form or conscious raising formal accuracy would be an unlikely result’ (Atay 2010, p. 741).
In light of previous researches on argument structures, this study attempts to investigate the Arabic directional preposition ‘to’ in relation to manner-of-motion to goal constructions. Although many studies in the field of Second Language Acquisition examine the effect of either the negative or the positive evidence, few studies investigate the role of both evidences in the classrooms. This study determines the effect of both treatments in learning L2 argument structures in relation to manner-of-motion constructions. In addition, it is the first study to address the relationship of the overlap between L1 and L2 using animation clips. Many studies recommend both evidences as treatments for generalization, but never actually test these treatments in the classroom. This study recommends and examines if learners are successful in learning the structures based on the given treatments.

**The directional preposition ‘to’ with manner-of-motion verbs in English and Arabic**

This section illustrates descriptive facts of the directional prepositions in English and Arabic. English has the directional preposition ‘to’ that denotes a movement with respect to a path towards a goal without involving boundary-crossing (henceforth B-C), as in (7).

7. John ran to the school

In this example, John moves to reach the goal (the school), but his final location does not involve being inside the school i.e. he does not cross the boundary to be inside the school. Pantcheva (2011) mentions that the endpoint of John’s path has the interpretation of at the school. On the other hand, she suggests that ‘the path can “continue” within the location’.

Pantcheva (2011) observes that a path involves three components: a direction, a specified starting point and a specified ending point. However, Saeed (2014) assumes that every path does not necessarily imply the three elements. She states that it depends on the preposition used in the event. For example, ‘to’ implies a direction and an end point in English. Accordingly, ‘to’ has the path type properties as follows:

8. Cofinal (+ TRANSITIONAL, + ORIENTED, – DELIMITRD): to the school (Saeed 2014, p. 57)
The ‘transitional’ component implies that the path has a ‘transition from one spatial domain to a complementary spatial domain’. However, ‘orientation’ indicates the presence of direction conveyed by the directional preposition. A delimitation, on the other hand, specifies a terminative or the starting point in a path (Pantcheva 2011, p. 14). For the purpose of this study, delimitation type will be examined thoroughly. Now, consider the following example from Pantcheva.

9. The frog jumped into the lake

In this example, she states that the frog’s path is directed towards the goal. Therefore, it has the feature of + TRANSITIONAL. In addition, the endpoint of the path is precisely specified to be in the lake. This argument makes it possible to assume that ‘into’ carries the feature of + DELIMITED.

As far as the interpretation of English directional ‘to’ is concerned, the Arabic ʔila (or li-) ‘to’ behaves very much like English ‘to’. It belongs to the goal category and has the properties in (10) as follows:

10. ʔila l-metro
    ʔəxəɾən məhətət
    waʔəl-ə-t
    PST-3SG finally to station DEF-metro
    ‘At last she arrived at the metro station.’
    (Saeed 2014, p. 58)

However, one point is absent in the reading of ʔila in Saeed’s observation following Pantcheva’s proposal. It is likely to assume that ʔila implies an ambiguous terminative point, unlike English. It is proposed by Kabli (2013) that ʔila may involve B-C interpretation. Examining example (10), the common interpretation is that ʔila implies that the entity reached the goal, but does not exceed the boundary to be inside the station. The other possible interpretation is that the individual is likely reached and entered the station. To disambiguate the construction, an adverb of place is required to give rise to B-C
interpretation Saeed (2014) and Kabli (2007), as the following example illustrated from Saeed (2014, p. 61).

11. ʔɨla  daxil  məħəʕat  il-metro  
to  inside  station  DEF-metro  
‘to inside the metro station’

Example (11) shows that ʔɨla with the adverb of place ‘inside’ implies the interpretation of English directional preposition ‘into’. This directional preposition and its counterpart ‘onto’ is absent in Arabic. Hence, Arabic speakers use adverb of place to convey the B-C meaning.

Another alternative interpretation of B-C is as suggested by Saeed (2014) and Kabli (2013), is deleting the directional preposition ʔɨla optionally when it co-occurs with motion verbs with a path meaning, as in (12).

12. dəxəl-na  (li-) l-hədiqə  
enter.PST-IPL  to  DEF-garden  
‘We entered the garden.’ (Saeed 2014, p. 47)

Now, as in example (10), it is possible to argue that ʔɨla carries the feature of ±DELIMITED in Arabic. In this respect, if it confirms that this is true, the directional preposition ʔɨla ‘to’ is likely to behave differently from the English ‘to’. It is likely to convey the interpretation of ± B-C.

2. The Present Study

Shedding light on the difference between English and Arabic in the realization of the directional prepositions, will make it possible to understand White (1991)’s proposal. According to White, ʔɨla has a wider range of interpretation than the English ‘to’ as in Figure (3). Thus, the partial fit between L1 and L2 will lead to a learnability problem. L2 learners will overgeneralize ʔɨla in learning English ‘to’. They will treat ‘to’ as denoting the B-C interpretation as well.
However, the situation is different in relation to English directional prepositions. English allows three types of directional prepositions ‘to’, ‘into’, and ‘onto’, unlike Arabic. Thus, English will occupy the position of the superset while Arabic is the subset as in Figure (4).

This study will explore the potential effect of the overlap between L1 and L2 in learning of the English directional preposition 'to' and 'into' with manner-of-motion verbs by Saudi Arabic speakers. It is assumed that this overlap will cause learnability problems to L2 learners in the aforementioned constructions. Examining the overlap between English and Arabic in the term of realizing these constructions will allow identification of the role of the first language and to observe if there is a development after receiving the treatment. When L1 is the subset and L2 is the superset, this overlap leads L2 learners to
undergeneralize the L2 grammar. Thus, teachers should adopt the positive evidence approach in their classrooms. However, when the languages are in a reverse position, L2 learners tend to overgeneralize L2 grammar. In this situation, the negative evidence technique will be a suitable treatment in the classrooms to restrict L2 learners’ grammar.

Based on White’s proposal, Saudi Arabic learners will treat the English ‘to’ as it is in their L1 at the initial stage of development. Therefore, it is expected that both groups of L2 learners will allow ‘to’ as denoting both ± B-C interpretation in the pretest. Consequently, learners require exposure to negative evidence in order to obstruct the overgeneralization of the L1 grammar. If the negative evidence allows the limiting of the L1 grammar, then it is expected that the experiment group (hereafter E.G) learners will avoid over usage of the directional preposition ‘to’ in the posttest.

On the other hand, Saudi Arabic will be the subset and English will be the superset in relation of the directional B-C preposition ‘into’. Since this preposition is unavailable in Arabic, the positive evidence will permit L2 learners to broaden their L2 grammar. Therefore, it is expected that the performance of the E.G. will be better in the posttest than the pretest. The undergeneralization of the L2 grammar will be dissolved after the exposure.

Based on the hypotheses, this study aims to answer the following research questions:

1. If the L2 is a subset and the L1 is the superset, will both groups of Saudi Arabic speakers overgeneralize the English ‘to’ as denoting both ± B-C interpretations in the pretest as it is in their L1?
2. Will negative evidence help the E.G. to restrict their interlanguage grammar to the L2 grammar in case of ‘to’ with B-C in the posttest?
3. Will positive evidence enable the E.G. to broaden the L2 grammar in learning of ‘into’ with B-C in the posttest?
4. Will there be a difference between the judgments of the two groups in ‘to’ and ‘into’ with B-C event in the posttest after the E.G. received the positive evidence?
3. Methodology

3.1 Participants

The study took place in the English Language Institute at King Abdulaziz University, Jeddah in Saudi Arabia. Four classes \((n = 96)\) joined in the pretest. Two classes were the control group (henceforth the C.G.) while the remaining two groups were the experiment group (E.G.). Classes were assigned randomly to each group. After pooling the number of students, many participants were excluded from the data. This is due to criteria set for the study: (1) the first criteria is the exclusion of participants who missed the pretest or the posttest (2) many students were exempted from data because they were absent during the instructional days (3) other students were removed because they lived in an English community during their childhood (4) students who selected one choice, leaving the other choices blank were eliminated as well. Based on these criteria, the total number of participants who enrolled in the study is 26 students in the E.G. and 25 students in the C.G. \((n = 25)\).

According to the bio-data questionnaire which accompanied the task, none of the students had ever lived or been exposed to the language in a native English speaking community during their childhood. In addition, they were all monolingual speakers of Arabic and all female. All participants had studied English formally in the classroom for 7 to 9 years. The average age of participants ranged between 19 to 20 years old.

The aforementioned institute used Online Oxford Placement to classify students according to their level. The European framework classified these students as a high B1 and placed students in level 4. The procedure adopted in teaching students is a communicative approach. Students received 18 hours of English instruction per week given by both native and non-native teachers.

3.2 Materials

3.2.1 Questionnaire
Acceptability Judgment Task (AJT) was developed to elicit participants’ judgments on the task items. Students watched video clips on class projectors and marked their responses on the answer sheets. They selected their judgments based on three Likert scale ranges from completely *acceptable* to completely *unacceptable* with ‘not sure’ as a mid-point. The (un)acceptability judgments were based on whether the items reflected the actual depicted motion in the video clips as an appropriate English interpretation. The 'not sure' was used to determine if participants could not decide whether the task items were proper interpretation in English. The task was untimed since the clips were presented manually. Therefore, the presentation was controlled to provide no longer than one minute for each clip to ensure that students would not go back and forth to check their responses.

The task was divided into two main scenarios. Each scenario contained six target structures which were followed by two choices. The first scenario involved an entity that performs a motion without crossing the boundary, for example, a man swam to the cave but he does not go inside it, as in (13). In contrast, the second scenario showed an entity that performed a motion and crossed the boundary, for example, *a man swam into the cave*, as in (14). The first choice had the directional preposition ‘to’ while the second choice had the directional preposition ‘into’. The total numbers of target items were 12 items with 24 choices. The 11 remaining structures with their choices were distractors. These distractors were unrelated to the task and were excluded from the analysis. Examples of task items are presented below:

13. **Event involving no B-C animation clip**
   - The man swam into the cave   Acceptable Not Sure Unacceptable
   - The man swam to the cave     Acceptable Not Sure Unacceptable

14. **Event involving B-C animation clip**
   a. The man swam into the cave   Acceptable Not Sure Unacceptable
   b. The man swam to the cave     Acceptable Not Sure unacceptable

The task items with the choices were randomized randomly throughout the task. The task started by three distractors to ease the anxiety at the beginning of the task. Similarly, it ended by three distractors in order to avoid the factor of tiresome.
3.2.2 Instructional Materials

The E.G. received 1 hour of instruction over two consecutive days. In contrast, the C.G received no instruction on the target items and continued with their normal instruction. The instructional week took place a week after the pretest.

Students received instruction on the directional prepositions to, into, and onto. In addition, they were exposed to locative prepositions in, on, under, behind and over. The locative prepositions were chosen because students were familiar with their structures and students should not encounter difficulty with learning prepositions since they are available in their L1. Additionally, these prepositions would serve as fillers in the task items.

The instruction began by projecting the directional preposition slides. Students were requested to provide the counterparts of these PPs in their L1 in order to raise students’ consciousness towards the relevant construction. Students were unable provide an equivalent nor a translation of the directional prepositions ‘into’ and ‘onto’ in their L1. Unlike locative prepositions, they could find a corresponding preposition in their L1 easily. The interpretation of each preposition was displayed by using animation clips in the powerpoint slides showing the differences between these prepositions. Students were asked to spot the difference between the direction preposition ‘to’ in one hand and the directional prepositions ‘into’ and ‘onto’ on the other using their own words. This allows students to process the difference in their input raises the L2 learners conscious in the relevant structure. After confirming that students were aware of the dissimilarity, seven video clips were displayed for directional prepositions as an activity. Students were requested to form a sentence with the appropriate preposition. The researcher replied ‘That’s correct’ after each well-formed response. In case students supplied a wrong answer, the researcher kept silent with an expression of disapproval on her face or said ‘No, that’s incorrect’. Once the right answer spilt out, the researcher approved the answer by saying ‘That’s right!’ or ‘Yes, that’s correct!’, as follows:

Learner: The girl walked to the room
Researchers: No, not really
Learner: The girl walked through the room
Researcher: Through?! No, not through
Learner: (a few seconds silent) into, yes, into
Researcher: That’s correct! (The well-formed construction appeared on the board)

In the above example, two types of evidence were involved. The learner’s response was adjusted via negative evidence to control the overgeneralization of the directional preposition ‘to’. Once the learner supplied the well-formed structure with ‘into’, the positive evidence was applied to broaden learner’s grammar. On the same day, students were given a gap filling task to discuss the possible answers in pairs while displaying the video clips. In this task, the directional and locative prepositions were included. Students’ responses were checked by means of correcting each other and explaining the reason for supplying the given answer. In the case of supplying incorrect answers, students were informed that their responses were incorrect. Once another pair of students supplied the right answer, the research reacted by using the positive evidence. During the instructional session, it was guaranteed that the attention of the whole class was focused on the interaction.

The next day, past tense was introduced in relation with manner-of-motion verbs, such as fly, swim, crawl, jump, etc. The past tense was introduced because students had obtained prior knowledge of this tense in level 1. Therefore, they reached the level which likely enabled them to master this type of tense. In addition, it was introduced with manner-of-motion verbs in order to avoid any misinterpretation of irregular verbs in the task, such as fly = flew, run = ran, swim = swam. Instead of providing a translation of these verbs in the task, they were presented to students in advance during the construction. Students were given fill in the gap sheet as an activity. They were requested to watch 10 animation clips. They were required to work in pairs in order to supply the correct prepositions and the correct verb tense in the blanks based on what they saw in clips. Upon completing the task, the students discussed the answers together with the researcher. They were requested to correct each other and explain the reason for selecting certain construction.

### 3.3 Procedure
Class teachers informed their students briefly about the researcher’s visit to their classes. On the day of the pretest, the researcher introduced herself to the classes. She clarified the purpose of the study briefly. She read the introduction from the questionnaire and translated the important points in the introduction into Arabic. Then, she requested the classes to fill out the bio-data on the first page of the questionnaire and sign the consent form prior to the administration. Upon completing the first page, students were requested to go to the second page of the task. Instructions of the task were read and were translated into Arabic to ensure that all students were fully aware of the questionnaire techniques. Therefore, two examples were provided to students for this purpose. After answering students’ inquiries about the task and confirming that all students were ready, the task was administrated by projecting the video clips one by one manually. After each video clip, students were asked if they were ready to watch the next clip. A month later, after the experiment group received the instruction and the control group attended their usual classes, the same task was run again.

4. **Data Analysis**

Statistical Package for the Social Sciences (SPSS) version 21 is used to analyze quantitative data after administration. Descriptive statistics for both groups on both sets of tests are measured. Test of reliability (Cronbach’s alpha) shows a value of .658. However, a test of normal distribution reveals that the $p < .05$. Therefore, non-parametric tests are chosen for data analysis. The Mann-Whitney test is used to measure the performance of both groups in the one type of item. For example, it is used to measure the performance of the E.G. and the C.G. on the directional preposition ‘to’ without boundary-crossing event. Furthermore, the Wilcoxon test is used to compare the performance of the individual group before and after instruction, in addition to comparing two sets of test items in each group.

5. **Results**

This section reports the findings obtained from the Acceptability Judgment Task of this study. The table below indicates the overall percentage scores of participants’ judgments on the target items. Items in the same category are calculated together, and are rated based on the participants’ acceptable judgments. A summary of the descriptive statistics is illustrated in table (1).
Table (1): shows the pretest/posttest acceptable judgments of the E.G. and the C.G. in percentages

<table>
<thead>
<tr>
<th>Type of Items</th>
<th>Experiment Group (E.G.)</th>
<th>Control Group (C.G.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Posttest</td>
</tr>
<tr>
<td>+ B-C + to</td>
<td>55 %</td>
<td>3 %</td>
</tr>
<tr>
<td>− B-C + to</td>
<td>83 %</td>
<td>88 %</td>
</tr>
<tr>
<td>+ boundary + into</td>
<td>78 %</td>
<td>98 %</td>
</tr>
<tr>
<td>− boundary + into</td>
<td>39 %</td>
<td>13 %</td>
</tr>
</tbody>
</table>

Preliminary Analysis

The above table shows that Saudi Arabic speakers accept ‘to’ with and without B-C in the pretest as is the case in their L1. The E.G. rated ‘to’ with B-C as 55 % in comparison to 57 %. Similarly, the E.G. judged 83 % for ‘to’ without B-C while the C.G. gave judgments of 66 % of all cases.

However, after the E.G. receives the negative evidence on ‘to’ with B-C construction, the gap in the posttest is increased between the two groups. The E.G. gave judgment of 3 % in the posttest in comparison of 55 % in the pretest. Despite the fact that both groups accept ‘to’ without B-C construction in the pretest as this construction is similar to their L1, the E.G.’s rating on this construction in the posttest is higher than the pretest (83 % vs. 88 %). In contrast, the performance of the C.G. remains constant in this construction (66 % vs. 67 %).

In light of table (1), both experimental groups allow the construction of B-C with ‘into’ in the pretest. The E.G. gave tokens of 78 % of all cases whereas the C.G. supplied them in 62.66 % of the cases. The E.G.’s performance in the posttest shows an increase of acceptance of proper English construction of 98 %. However, the performance of the C.G. remains in the range of 60 %.

For construction that does not involve B-C with ‘into’ in the pretest, both groups produce low judgments. The E.G. gave acceptable judgments of 39 % of all cases and the C.G. accepted of 30 % of all cases. The posttest reveals that the E.G.’s ratings are lower than 39
19

% (E.G. = 13 %). In contrast, the control groups’ performance remains stable (30 % vs. 29 %).

A comparison was drawn between the L2 learner groups to examine if there was any significant difference related to participants’ judgments on ‘to’ vs. ‘into’ with B-C event. According to table (1), the E.G. supply very low acceptable judgments in ‘to’ with B-C event (3 %) in comparison to ‘into’ with B-C event (98 %) in the posttest. In contrast, the control group accepted both interpretations (51 % - 60 %).

5.1 Results of ± B-C with ‘to’

An inferential statistic is run to determine if there are significant differences on ± B-C with ‘to’ for the two groups. The Mann-Whitney test shows no significant difference between groups in the pretest as the $p > .05$.

However, comparing the performance of two groups in the posttest, the Mann-Whitney test shows that there is a significant difference between the E.G. and the C.G. in the B-C event with ‘to’ construction ($U = 41.000, N_1 = 26, N_2 = 25, p = .000$, two tailed).

To compare the performance of an individual group before and after the exposure to the negative evidence, Wilcoxon test reveals a significant difference in the performance of the E.G. on ‘to’ with B-C construction ($z = 4.301, N – Ties = 2, p .000$). Nevertheless, no significant difference is found in the performance of the E.G. in the relevant construction nor in the performance of the C.G. as in both expressions $p > .05$.

5.2 Results of ± B-C with ‘into’

According to the Mann-Whitney test for ± B-C with ‘into’, there is a non-significant difference in the performance of both groups in the pretest as $p > .05$. Visual comparisons of the performance of both groups in ± B-C with ‘into’ are presented below:
Figure (5) A comparison between the E.G. and the C.G. in the construction involves B-C with ‘into’

Figure (6) A comparison between the E.G. and the C.G. in the construction does not involve B-C with ‘into’

The Mann-Whitney test is run on ± B-C with ‘into’. It reveals that there are significant differences between the two groups in the posttest when the event involves boundary-crossing with ‘into’ ($U = 80.000, N_1 = 26, N_2 = 25, p = .000$, two tailed) and in the event without B-C and ‘into’ ($U = 202.000, N_1 = 26, N_2 = 25, p = .013$, two tailed).
Results of + to vs. + into with B-C

To examine if a significant difference is found in the performance of the E.G. and the C.G. in the posttest in their judgments on ‘to’ versus ‘into’, the Wilcoxon test is administrated. The test reveals a significant difference in the performance of the E.G. group ($z = 4.720$, $N – Ties = 0$, $p .000$). On the other hand, the test shows no significant difference in the performance of the C.G. as the $p$ is .369. A visual comparison between the two groups in the test items is presented in Figure (6).

![Graph showing comparison between E.G. and C.G.](image)

**Figure (6) A comparison between the E.G. and the C.G. of ‘to’ vs. ‘into’ in the event involves B-C in the posttest**

**Discussion**

The first research question aims to examine if both groups overgeneralize English ‘to’ as denoting ± B-C interpretations in the pretest. The inferential statistics show that both groups of Saudi speakers transfer the property of the L1. They evaluate ‘to’ as denoting the same interpretation with and without B-C. Thereby, this result answers the first research question.

The second research question aims to determine if the negative evidence helps the E.G. to restrict their grammar according to L2 grammar in the posttest. The result indicates that the E.G. starts to limit their grammar to that of the L2. A significant difference is found
between the two groups in ‘to’ with B-C in the posttest. This outcome provides a positive answer and supports Ellis (1989) finding that classroom learners are more successful in learning L2 structures rapidly and in a short time. In addition, it supports N. Ellis (2005) proposal that explicit instruction will speed up the acquisition by focusing on the form and consciences raising. Likewise, a significant difference is found between the two groups in construction without B-C and ‘to’ in the posttest. This difference is due to an increased knowledge of this construction as being acceptable structure in English, in addition to L1 transfer.

The third research question looks at if positive evidence is an effective treatment to broaden the E.G. group’s grammar. Both groups demonstrate the acquisition of this property at this level of proficiency. Kabli (2013). She suggests that the availability of similar property in the L1 will facilitate the acquisition of a new construction in the L2. In her study, Saudi Arabic intermediate level of proficiency speakers shows the early acquisition of the directional prepositions into and onto. In addition, the directional prepositions ‘into’ and ‘onto’, as per Inagaki (2001 and 2002), are frequent in the input and are morphologically cued. Based on Ingaki’s observation, the plausible explanation is that students are exposed generally to positive evidence when they are instructed in the classroom. This finding supports White’s (1991)’s argument that positive evidence is a beneficial treatment to broaden L2 learners’ grammar when the L1 is the subset of the L2, thereby answering the research question 3. In addition, Montrul (2001) mentions that ‘if a learner posits a more restrictive grammar to start with, positive evidence in the input would always be available, leading the learner to eventually notice that a wider grammar is possible in the L2’. Moreover, learners benefit from the explicit feedback at this stage of proficiency level in learning the impossibility of the directional preposition ‘into’ without B-C as suggested by Li (2009).

The fourth research question addresses the issue of whether or not there is a difference in the judgments of ‘to’ and ‘into’ for both groups in the event depicting B-C after the E.G. received positive evidence. The statistics reveal that there is a significant difference in the performance of the E.G. in this type of construction in the posttest. This finding is due to the exposure to the positive evidences in the classroom. The E.G. is eventually aware of
the requirement of the directional preposition ‘into’ with B-C event. This is further evidence that supports White’s claim that positive evidence assists L2 learners to acquire a new property. These results prove that the E.G. benefits from the positive evidence, answering the fourth research question. This result indicates that the lack of exposure to positive and negative evidence leads the C.G. to accept the ungrammaticality of ‘to’ with B-C.

6. Conclusion

The present study investigates the effect of L1 in learning L2 directional prepositions related to manner-of-motion to goal constructions. It examines the negative evidence role in learning the English directional preposition ‘to’. In addition, it studies the positive evidence effect in the learning English directional preposition ‘into’. This study proves that negative and positive evidence are effective techniques in the classrooms supporting White (1991)’s argument. The findings of this study demonstrate that L2 learners are able to restrain the overgeneralization of ‘to’ with B-C event via negative evidence. Similarly, positive evidence helps the E.G. learners to broaden their L2 argument structures far more in the posttest in learning ‘into’ with B-C. The E.G. shows clear evidence of an increase of awareness to differentiate between ‘into’ and ‘to’ in the event depicting B-C event. Interestingly, both negative and positive evidence enable the E.G. to increase the awareness of the requirement of ‘into’ with B-C event and to limit the overgeneralization of ‘to’ in similar argument structure. As with all studies in the classrooms, there are a few limitations in this investigation. One limitation of the study is lack of qualitative data to enable students to express their point of views concerning these constructions by selecting students randomly for interviews. To counteract this, an open question at the end of the task is recommended, so that students can express themselves and obtain more information on the target items. The period between the pre- and the post-test is relatively short. It is desirable if students are exposed to posttest after several months to measure the effectiveness of these techniques. This will ensure if students have established L2 structures in their grammar in the long-term. However, due to the fact that the institute adopts the modular system, it is difficult to recruit the same students after the graduation from the foundation year. Several
questions remain open and require further investigation with respect to manner. If Arabic allows two interpretations of the directional preposition ‘to’ as it appears previously, will Saudi speakers accept to express manner as a complement with the directional preposition ‘to’ when an event involves boundary-crossing as is the case in Arabic? Kabli (2013) confirms that Saudi participants at different stage of acquisition accept this construction with the directional prepositions ‘into’ and ‘onto’. It is shown clearly that this property remains persistence in acquisition even with an advanced stage of development. Will this construction preserve a similar persistence in acquisition as it is counterpart in the aforementioned study? Another question appears on the surface as well. Why does Arabic allow the incorporation of manner with motion in addition to express manner as a complement? Based on Talmy’s typology in (1985), Romance languages, such as Spanish and Italian and Semitic languages, such as Arabic usually express manner separately from motion unlike English and other Germanic languages. However, without an empirical study, these questions continue to be unsettled.

There is another issue worth to be addressed but not central of the discussion. These findings are compatible with the SLA theory of Full Transfer/Full Access by Schwartz and Sprouse (1994). Participants prove that they transfer their L1 property during the course of development. With exposure to the input, they are able to reset L1 parameters and reconstruct their grammar by re-coursing to the Universal Grammar (UG) in response to the given input. In addition, they are able to add new values that are absent in their L1.

Acknowledgement
References


