

Overpassivization of English Unaccusatives Revisited: A Look Behind the Scenes

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Choi, Jungeun. 2019. Overpassivization of English unaccusatives revisited: A look behind the scenes. *Korean Journal of English Language and Linguistics* 19–3, 407–431. This paper examines what causes Korean learners of English to struggle to acquire English unaccusative constructions by investigating the learners' decisions in a grammaticality judgment test. Unlike other related studies, this paper took a closer look behind the test results in order to reveal what lies in learners' overpassivization of these forms. It also considered differences among English language proficiency levels in the sources of overpassivization errors. A total of 67 Korean learners of English participated in the study, and some of them were asked for a retrospective interview based on their answers in the test. The results showed that overpassivization depended on the inherent verb types and the presence of passive morphemes in L1 translation. Moreover, the effects of such factors differed according to L2 proficiency. As for the learners' underlying mechanism for the construction, three primary causes were found: the conceptual presence of external causers, the inanimacy of the subject, the knowledge of lexical items. Based on the results, pedagogical implications are suggested.

Keywords: English unaccusatives, overpassivization, source of errors, Korean learners of English

1. Introduction

Overpassivization has been consistently reported as the main problem in the acquisition of English unaccusatives in SLA literature (Balcom 1997, Chen 2012, Ju 2000, Montrul 2005, Oshita 2000, 2001, Yip 1995, Zobl 1989). Overpassivization of English unaccusative verbs is attributed to a characteristic of English which linguistically belongs to the type of nominative–accusative (Zobl 1989). In other words, a nominative–accusative language generalizes subject properties to the subjects of transitives and intransitives, regardless of different thematic roles the respective subjects bear (Zobl 1989). Hence, such underlying thematic role distinction often

causes L2 learners to struggle to fully and accurately acquire English unaccusatives.

Many L2 researchers have tried to identify causes of L2 learners' overgeneralization in the acquisition of English unaccusative constructions from diverse aspects (e.g., Ahn 2015, Balcom 1997, Chung 2015, 2016, Croft 1995, Hwang 2006, Ju 2000, Kong 2018, Montrul 2000, No and Chung 2006, Oh 2014, Okamoto 2010, Oshita 2000, Owada 2017, Pae et al. 2014, Yip 1995, Zobl 1989). Some findings include factors such as NP movement (Zobl 1989), the presence of conceptualizable agents (Ju 2000), the semantic nature of intransitive verbs (Kim 2006, 2007), the inanimacy of subjects (Pae et al. 2014, Oh 2014, Owada 2017) and L1 transfer (Hwang 2006, Montrul 2000, No and Chung 2006). While these studies have contributed to expanding our understanding about L2 learners' overpassivization of English unaccusatives, most of them constituted efforts to determine or infer causes by analyzing learners' performance on certain tasks such as grammaticality judgment tests or writing. However, despite such abundant research, we still remain unclear about the basis on which L2 learners judge grammaticality in those tests, and ultimately what drives them to persistently produce the overpassivized forms of English unaccusatives. Therefore, unlike previous studies, the present study tried to find what lies behind L2 learners' overpassivization by employing a mixed-methods approach, which incorporated grammaticality judgment tests and interview data. In doing so, the present study is expected to provide an actual descriptive account of L2 learners' cognitive processes in regards to the usage of unaccusative verbs.

In addition, many of the previous studies have reported that ill-formed constructions with English unaccusative verbs were also often found from advanced L2 learners (e.g., Chung 2016, Ju 2000, Kim 2004, Lee 2007, No and Chung 2006, Pae et al. 2014). For this reason, their performance has gained much attention from researchers in order to reveal the impediments to the acquisition of these constructions even at later stages of L2 development. By contrast, specific information about lower-level learners is relatively scarce. Even though some researchers considered the difference in the use of unaccusative verbs by proficiency levels, most of them concluded that the error rate decreased as the level of L2 proficiency increased (e.g., Shin 2011, Yang 2007). Thus, with the current lack of studies addressing more specific differences between proficiency levels, further study is needed in order to provide more detailed information about where the difficulty lies depending on L2 proficiency. This attempt is crucial in that it will facilitate a more proficiency-level-appropriate approach in classroom instruction.

The major purpose of the present study was to re-explore factors affecting L2 learners' overpassivization of English unaccusatives. Specifically, this study aimed to examine causes of learnability problems in English unaccusative constructions in a quantitative way, and more importantly, to investigate what underlies learners' decisions in a grammaticality judgment test about unaccusatives. Furthermore, the consideration of differences among English language proficiency levels in the sources of overpassivization errors was also addressed.

For these purposes, the present study raised three research questions as follows:

- (1) What types of verb affect overpassivization of English unaccusatives for Korean learners of English?
- (2) How do Korean learners differ in their rate of overpassivization according to English language proficiency level?
- (3) What makes Korean learners of English overpassivize unaccusative verbs?

2. Literature Review

2.1. English Unaccusatives and Overpassivization

In traditional grammar, English has two classes of verbs depending on whether or not a direct object accompanies the main verb: transitive or intransitive. Intransitive verbs that do not require the accompanying objects, according to the Unaccusative Hypothesis (Perlmutter 1978), are further divided into two different classes: unergative and unaccusative, and the latter is also termed ergative (Burzio 1986). These two subclasses of intransitive verbs are distinguished by the theta-roles of their subjects. In other words, unergatives like *walk* and *work* describe volitional acts of subjects, and so the subjects take an agent theta-role. However, unaccusative verbs like *arrive* and *fall* denote a change of state and have nonagentive subjects that lack volitional control. Thus, unaccusatives assign a theme theta-role to the subject position (Zobl 1989, Zyzik 2006). Here, learnability problems for L2 learners with unaccusatives arise in that the mapping of logical grammatical relations to the surface structure is contrary to the canonical configuration of English. According to the configurational mapping principle in English, the verb assigns the thematic relation *theme* to the position of the syntactic object, and the thematic role *agent* to the

position of the syntactic subject (Zobl 1989). However, as Levin and Rappaport Hovav (1995) mentioned, since unaccusativity is “semantically determined” but “syntactically represented” (p. 4), the alignment problems between thematic roles and grammatical relations in English unaccusatives have been a challenge for L2 learners.

L2 learners’ difficulties with English unaccusative verbs have been found in the phenomenon of overpassivization. L2 learners often produce ill-formed passive sentences in that the grammatical subject receives the thematic role *theme*, not *agent*, which results in a similar final form of passivization. This is because in argument structure terms, an unaccusative verb has a direct internal argument but no external argument as passive verbs do. In this sense, unaccusative verbs are the same as passive verbs in D-structure configurational terms (Levin and Rappaport Hovav 1995). Examples of L2 learners’ overpassivization are provided below.

- (1) a. *The most memorable experience of my life was happened 15 years ago.
 b. *Most of people are fallen in love and marry with somebody.
 c. *My mother was died when I was just a baby. (Zobl 1989, p. 204)

Overpassivization of English unaccusatives is frequently observed in L2 learners’ interlanguage systems. It has been reported to be unrelated to L2 proficiency levels and L1 linguistic backgrounds (e.g., Balcom 1997, Chung 2015, 2016, Han 2006, Ju 2000, Kondo 2005, Kong 2018, Montrul 2005, Oshita 2000, 2001, Owada 2017, Zobl 1989). That is, even highly-advanced L2 learners also showed overuse of the passive form for unaccusative verbs, and the errors were common in learners from diverse L1 linguistic backgrounds including Spanish, Arabic, Chinese, and Korean.

Unaccusative verbs are subdivided into two groups depending on whether they have transitive counterparts or not: alternating (paired) and non-alternating (unpaired) (Levin and Rappaport Hovav 1995, Yip 1990). Paired unaccusative verbs have corresponding transitive verbs as shown in (2), whereas unpaired verbs do not as in (3). The different properties of these subclasses can be one cause for learnability problems for L2 learners, which will be discussed in detail below.

- (2) a. The ice melted.
 b. The sun melted the ice. (Yip 1990, p. 48)

- (3) a. The leaves fell.
b. *The wind fell the leaves. (Yip 1990, p. 48)

In explaining overpassivization of English unaccusatives, Ju (2000) introduced two theoretical hypotheses: the transitivization hypothesis and the postverbal NP movement hypothesis. First, the transitivization hypothesis was proposed by Yip (1990); she hypothesized that learners “...somehow interpret ergatives [unaccusatives] as underlyingly transitive (because only transitive verbs allow passivization in English)” (p. 53). This notion comes from the distinct properties of the two subclasses of unaccusative verbs, i.e., paired and unpaired, and implies that L2 learners hardly differentiate one from the other. Yip (1990, 1995) also presented L1 and L2 errors as evidence for her claim, as shown in (4).

- (4) a. *Do you want to see us disappear our heads? (L1, Bowerman 1983)
b. *The shortage of fuels occurred the need for economical engine. (L2, Rutherford 1987)

This evidence was interpreted as showing that learners regard unaccusatives as transitives and add objects to them, which ends up making unaccusatives passivized (Ju 2000). This interpretation is plausible in that as Yip (1990) mentioned, learners are likely to “mark the verb with passive morphology” whenever the object is in the subject position (p. 55).

The other hypothesis was from Zobl (1989): the postverbal NP movement hypothesis. Zobl (1989) took the syntactic approach to overpassivization of unaccusatives, hypothesizing that the errors are produced by the syntactic movement from transitives. He also assumed that learners adopt a core argument structure for unaccusative verbs as in (5).

- (5) [∅ [V NP]]

As indicated earlier, Zobl (1989) considered that English unaccusatives have a single internal argument structure, and that learners gain knowledge about a lexical rule by which the postverbal NP (the logical object) is moved to the subject position. Then, once learners acquire the passive rule, which is the core rule for the NP movement, the lexical rule is applied under it (Ju 2000). Hence, the verb automatically receives

passive morphology in the final form, and thus ill-formed passivization of unaccusatives occurs.

Many later researchers pointed out the limitations of these early theories of overpassivization of English unaccusatives. Some presented various factors such as between-verb variations (e.g., Balcom 1997, Hwang 1999a, 2001, Ju 2000), inanimacy of subjects (Oh 2014, Pae et al. 2014), and L1 transfer (e.g., Hwang 2006, Montrul 2000). The following section addresses this issue in detail.

2.2. Factors Affecting Overpassivization Errors

As one of the factors underlying overpassivization errors, researchers have tried to provide empirical evidence for between-verb variations. As seen earlier, there are two subclasses of English unaccusatives, paired and unpaired verbs, and L2 learners have been reported to show different error rates in these two subclasses. Although labels of subdivisions were different among studies, common findings were that learners are sensitive to the verb classes of English unaccusatives and their transitivity possibilities (Balcom 1997, Hwang 1999a, 2001, 2006, Ju 2000, Lee 2007), especially in the case of Korean learners (Hwang 1999a, 2006, Kim 2004, Kim 2010, Lee 2007, No and Chung 2006, Oh 2014, Oshita 2000). Specifically, several studies that employed grammaticality judgment tests and written production tasks for Korean L1 learners demonstrated that overpassivization errors were more frequent in paired unaccusative verbs than those in unpaired ones (e.g., Lee 2007, Oh 2014, Hwang 2006).

However, different error rates even within the same type of unaccusative verbs were also reported, especially in the case of paired unaccusative verbs. In Ju's (2000) study, while L2 learners did not show a difference in overpassivization error rates between paired and unpaired unaccusatives, they demonstrated a significant difference in performance within the paired verbs. She interpreted this discrepancy in error rates within the same category of unaccusatives as resulting from "different degrees of directness in the causation of events" (p. 103). That is, conceptual agents in discourse bear the importance in these errors, and thus L2 learners tend to produce more overpassivization errors in environments that imply the presence of external agents. Taking these studies together, regarding between-verb variations, the presence of possible objects and conceptually external causes of the event can affect L2 learner's ungrammatical passivization of unaccusative verbs, and this can be connected with the issue of inanimacy of subjects in sentences, which is addressed below.

Another factor affecting overpassivization errors is whether or not the grammatical subjects are agentive. In other words, since L2 learners have practiced passive constructions, they are likely to make passive forms with unaccusative verbs where a nonagentive subject is present (Ju 2000, Yip 1995). This is because they think that the sentences with subjects that are not agents require the passive in English (Yip 1995). Thus, many researchers have paid attention to the effect of inanimacy of subjects on L2 erroneous passivization of unaccusative verbs (e.g., Chen 2012, Croft 1995, Oh 2014, Pae et al. 2014). However, among such studies, there arose some contradictions regarding the effect of inanimacy of subjects. In Croft's (1995) early study, it was revealed that overpassivization error rates were reduced in the case of animate subjects whereas increasing errors were observed in sentences with inanimate subjects. On the other hand, recent studies such as Oh (2014) and Pae et al. (2014) demonstrated higher rates of overpassivization errors even with animate subjects than those with the counterpart. In these contradictory studies, the authors focused more on the passive meaning of the sentences containing unaccusative verbs rather than the condition of the subject's animacy or inanimacy itself. Therefore, this issue of the inanimacy of subjects also needs a closer examination of the learners' actual perception of the use of the verbs in sentences.

Additional effort to identify the sources of errors for unaccusatives was made with L1 transfer (Hwang 2006, Juffs 1996, Montrul 2000, No and Chung 2006). Montrul (2000) investigated the L1 influence on unaccusative verbs with English, Spanish, and Turkish L1 learners. According to the results of the study, Spanish learners of English were likely to accept the *get* passive (e.g., the window got broken) more easily than the unaccusative use of 'the window broke.' She viewed this as an influence of the intransitive marker 'se' in Spanish. Similarly, after comparing overpassivization errors across different L1 groups, Oshita (2000) reported that Korean learners of English produced more errors compared with other L1 groups. Following this, No and Chung (2006) examined the influence of Korean passive morpheme 'ci' on Korean learners' overpassivization and found that the learners tended to accept the passivized constructions of unaccusatives when their Korean translations included passive morphemes than when they did not. Likewise, learnability problems such as overpassivization of English unaccusatives involve a variety of factors in addition to the syntactic and semantic features highlighted by earlier investigations (Balcom 1997, Croft 1995, Oshita 2000, Zobl 1989). With this consideration, Montrul (2000) cautioned, as a conclusion of her study, that although L2 learners are more accurate in

accepting transitive forms than intransitive forms, it is difficult to say that L2 learners find the intransitive form syntactically more marked than the transitive form.

Later, an approach considering the effects of multiple factors was taken to deal with overpassivization of English unaccusatives. Specifically, No and Chung (2006) focused on the number of factors engaged in different unaccusative constructions. They examined why all unaccusative verbs produce different rates of overpassivization. As a result, they suggested that multiple factors are involved in the difference in error rates, and that the factors included English inherent factors (paired or unpaired verbs), passive morphemes in Korean translation, and nonagentive subjects. They found that Korean learners produced more ungrammatical passive forms when the verbs were paired, learners' L1 translations contained passive morphemes, and the subject was inanimate. Based on the results, they suggested that L2 learners have more difficulty with unaccusative verbs when multiple variables are involved. Many other researchers have also taken a multiple factor view over single factors and produced meaningful results (e.g., Chung 2015, Kim 2010, Lee and Choi 2011, Okamoto 2010).

As such, a number of studies have made considerable attempts to discover sources of errors related to English unaccusative verbs from diverse perspectives. However, in terms of the research methodology, most of the studies have focused on the behavioral factors of learners to identify the actual causes of the errors; as such, L2 learners' cognitive processes have been largely excluded. Many studies targeted certain factors beforehand, devised tasks for learners (e.g. grammaticality judgment tests), and inferred the source of errors based on the learners' behaviors in the tasks. Of course, it is important to analyze language developmental aspects through the lens of behaviorism, but this approach is inherently limited. It is also meaningful to look at learners' actual cognitive processes in performing the task. This is because it is significant to clarify the cause of errors in various ways in the developmental stages of language learning. Therefore, in the present study, it is necessary to incorporate an examination of actual descriptive accounts of how L2 learners understand and perceive the sentences that are often reported to cause errors with unaccusative verbs. In addition, in a variety of perspectives, the causes for overpassivization errors can be converged into three common factors as No and Chung (2006) suggested: English inherent factors, L1 influence, and semantic factors. Therefore, the present study adopted the classification of factors from their study as a framework.

2.3. Overpassivization Rates by Proficiency Levels

Despite the abundant empirical research on overpassivization errors, there is no consensus about the role of English language proficiency. While some studies have shown that the errors improve as L2 proficiency develops (e.g., Hwang 2006, Kim 2003, Montrul 2000, Shin 2011, Yang 2007, Yip 1995, Yuan 1999), others have revealed that even advanced L2 learners produce a certain number of errors in the usage of English unaccusatives (e.g., Chung 2016, Hwang 1999b, Ju 2000, Kim 2004, Lee 2007, No and Chung 2006, Pae et al. 2014). Moreover, results from such studies indicated that there were types of verbs with which the advanced L2 learners made errors such as paired unaccusative verbs (Hwang 1999b, Kim 2004, Lee 2007). Taking a closer look at a selection of those studies, Hwang (1999b) examined the learnability of English unaccusative verbs depending on L2 proficiency. He categorized the verbs into two groups, change-type verbs that allow transitive alternation and happen-type verbs that have no transitive alternation. As a result of a grammaticality judgment test, he found that even advanced L2 learners were not able to correctly accept the grammatical forms of the verbs, especially for the change-type ones. Similarly, Lee (2007) also demonstrated that L2 learners at later stages of learning development were not able to demonstrate a complete understanding of the correct usage of this type of verb.

No and Chung (2006) further examined advanced L2 learners' use of English unaccusative verbs by including the factor of the presence of Korean L1 passive morphemes in translation in order to see the effects of multiple factors involved in overpassivization. Even though they divided the participants into two groups by proficiency level, most of them were the advanced English learners, as the authors mentioned. The results indicated that the advanced L2 learners exhibited a difference in performance depending on the types of unaccusative verbs. That is, the learners tended to incorrectly accept ungrammatical passive sentences in which paired unaccusative verbs were included. However, this overpassivization rate increased when the verbs reflected Korean passive morphemes in translation. In a more recent study, Chung (2016) also demonstrated a large difference in correct response rate between paired and unpaired unaccusative verbs even among advanced L2 learners.

In the literature, for English unaccusatives, it can be frequently observed that the learnability or acquisition of the correct use of the verb forms remains problematic even at the later stages of language development. As indicated above, many studies

have reported that advanced L2 learners often experience difficulty with the use of these verbs. This might be the reason that many researchers have focused their attention on the use of the verbs among advanced L2 learners. Despite such abundant attempts, however, little specific information for lower-level L2 learners is known yet. Even in studies that employed a systematic approach to identify sources of overpassivization (e.g., No and Chung 2006), consideration of lower-level learners was scarce. There still exists a need for further research into the effect of proficiency level on variation in the production of overpassivization errors in different environments. Thus, the present study, employing a multivariate approach, aimed to include a wider range of proficiency levels.

3. Method

3.1. Participants

A total of 67 college students initially participated in the study, but 16 of them were excluded from the data analysis. The students were from various majors such as global communication, business, electronics, law, German, English language and literature, and English education. Most of them (39 students) were freshmen, and there were six sophomores, 12 juniors, and 10 seniors. The participants were recruited from three different classes of the college English program, and only those who agreed to participate in the study were included in the analysis. Further exclusion was made due to their incompleteness of the required tasks, the English language proficiency test and the main grammaticality judgment test. The tests were administered on two different days; the students took the APTIS grammar and reading tests by British Council before taking the main test. Each test lasted for about 30 minutes. The APTIS test was selected as a proficiency test because it is an authorized standardized test, so that more objective and reliable proficiency information could be obtained for the study. The participants were divided into three groups according to the final scores of the proficiency tests.

3.2. Materials

The participants in the study completed a grammaticality judgment test. The test

was adapted from No and Chung (2006), and 45 sentences were chosen for the purpose of the present study. The sentences examined multiple effects of the learnability of English unaccusatives such as between-verb variation, possibility of L1 transfer from Korean, and inanimacy of the subject. More specifically, the sentences tested the effect of paired (having a transitive counterpart) or unpaired unaccusative verbs, the presence or absence of the passive morphemes such as *ci*, *i*, *hi*, *li*, *ki* in Korean translations of each verb, and the inanimacy of the subject which could affect the passive construction (No and Chung 2006). The reason why the present study utilized parts of grammaticality judgment test items of No and Chung (2006) was that the construction of the test items systematically represented the frequently discussed factors causing the learners' overpassivization.

The test items consisted of four different verb types, categorized as paired or unpaired unaccusative verbs, and those with and without passive markers in Korean translation. Examples of unaccusative verbs in each category are provided in Table 1.

Table 1. Examples of Verbs Used in the Test

Verb types	Unaccusative verbs
Paired with L1 passive marker	break, change, close
Paired without L1 passive marker	boil, freeze, burn
Unpaired with L1 passive marker	disappear, vanish, fall
Unpaired without L1 passive marker	happen, appear, arrive

An additional modification in the grammaticality judgment test was made to the way the participants responded to the test items. While the original version of the test had the participants only decide whether a given sentence is grammatical or not, in the present study, they had another option, 'not sure,' in case they could not make a decision about the grammaticality of the sentence. By doing so, the present study minimized the likelihood of participants guessing the answer. Moreover, in order to explore the participants' cognitive processes underlying their judgments, the present study had them provide reasons for their decision making for each test item. These data served as a basis for the retrospective interview that was held after the test.

3.3. Data Analysis

The analysis excluded the responses of ‘not sure’ in order to assure that the participants were exercising some degree of surety of judgment.¹ All the responses were coded according to whether they were correct or incorrect. Only the response to the target verb form was considered. For example, the sentence in (6) was scored as an incorrect response; even though the learner accurately marked the sentence as ungrammatical, they did so for the wrong reason. Moreover, the responses that only corrected the verb tense in a sentence were also scored as an incorrect response, even if the judgment was accurate and the correction was made to the target verb form. An example is provided in (7).

(6) (G / Ⓢ / Not sure) The thief was vanished into the crowd and was never seen again. → has

(7) (G / Ⓢ / Not sure) Suddenly the rain was changed into showers. → is

One point was assigned to each test item if the student gave a correct answer; otherwise, a score of zero was given. For statistical analysis of the study, a mixed ANOVA analysis was conducted. Independent variables included overpassivization factors such as English inherent features (paired or unpaired) and the presence or absence of the passive morphemes in Korean translation of the verb as within-subjects variables, and English proficiency as a between-subjects variable. All the statistical analyses were performed using IBM SPSS Statistics Version 23 for Windows with the alpha level set at .05.

In addition, the grounds of the learners’ decision making on grammaticality were examined through retrospective interviews based on their answers in the test. Then, their verbal reports for the incorrect answers in the test were categorized and described qualitatively. The interview was conducted in Korean, and the researcher translated relevant extracts into English.

¹The majority of ‘not sure’ was related to the learners’ limited lexical or grammatical knowledge (e.g., verb tense or voice) for the sentences in the test.

4. Results and Discussion

4.1. Between-verb Variation with Overpassivization

To answer the first research question, concerning what type of unaccusative verbs Korean learners of English are sensitive to, L2 learners' correct responses on the grammaticality judgment test were analyzed. Table 2 presents the mean correct responses of 51 learners by four verb types. As in No and Chung's (2006) study, the verb types were classified based on the combination of subclasses of unaccusative verbs, [+/-P], and the presence or absence of the passive morphemes in Korean translation, [+/-Ci]. For more precise analysis, the correct responses were divided by the number of sentences for each verb type.

Table 2. Mean Correct Responses

Verb types	Mean	SD	N
[+P, +Ci]	.3859	.2127	51
[+P, -Ci]	.5135	.2489	51
[-P, +Ci]	.6673	.2826	51
[-P, -Ci]	.7514	.2162	51

As Table 2 illustrates, the students performed better with unpaired verbs (i.e., *appear, arrive, happen, disappear, vanish, fall*) than with paired ones (i.e., *break, change, close, boil, burn, freeze*). Within each verb type, correct responses increased when the verbs did not have passive morphemes in the L1.

In order to test the effect of each unaccusative verb type, the participants' correct responses were submitted to a two-way factorial ANOVA. There were statistically significant effects exerted by the English inherent features [+/-P], $F(1, 50) = 102.475$, $p < .05$, and the presence of the L1 passive morphemes [+/-Ci], $F(1, 50) = 23.325$, $p < .05$. These effects were comparable with related prior studies (Hwang 1999b, Kim 2004, Lee 2007, No and Chung 2006). On the other hand, there was not a significant interaction effect between the variables of the English inherent features and the L1 passive morphemes, $p > .05$, which contradicted No and Chung's (2006) findings, though their participants were mostly fairly advanced L2 learners. Thus, including the wider range of proficiency levels for the participants in the present

study, the results indicated the effects of each verb type. That is, overall, although the interaction effect between the two factors was not found from the statistical analysis, the results of the present study demonstrated that the English inherent features and the presence of the L1 passive morphemes might have individually affected overpassivization of Korean learners of English. Specifically, they tended to overpassivize paired unaccusative verbs rather than the unpaired. In addition, they were less likely to overpassivize the verbs which do not include passive morphemes in Korean translation. The influence of L2 proficiency on these results will be addressed in the next section.

4.2. Differences Between Language Proficiency Levels

In order to see if there is any difference in response patterns depending on the English language proficiency levels, for the second research question, a total of 51 students were divided into three groups by the final scores of proficiency tests. Each group was denoted as Advanced, Intermediate, and Low. Table 3 provides mean comparisons between the groups.

Table 3. Mean Correct Responses by Proficiency Levels

Groups	N	[+P, +Ci]		[+P, -Ci]		[-P, +Ci]		[-P, -Ci]	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Advanced	11	.5218	.2358	.7118	.2070	.8936	.1051	.9473	.0858
Intermediate	28	.4079	.1827	.5525	.1954	.7514	.1832	.7907	.1498
Low	12	.2100	.1401	.2408	.1569	.2633	.1526	.4800	.1673

The response patterns showed a difference between the verb types depending on the proficiency levels. For the advanced learners, the correct responses notably increased when the verbs are unpaired and do not have L1 passive morphemes. However, the low-level learners did not seem to show a difference between the verb types, except for the verb type of [-P, -Ci].

For the statistical effects of the factors by proficiency levels, a 3 (L2 proficiency groups as the between-subjects variables) x 2 (English inherent factors, IH, as the within-subjects variables) x 2 (the presence of the L1 passive morphemes, PM, as the within-subjects variables) mixed ANOVAs were conducted. The two

within-subjects factors had main effects; $F(1, 48) = 85.103$, $p < .05$ for IH, and $F(1, 48) = 21.462$, $p < .05$ for PM. A significant difference in response rates between L2 proficiency groups was also found, $F(2, 48) = 73.304$, $p < .05$. In addition, there were significant interaction effects between IH and proficiency, $F(2, 48) = 3.304$, $p < .05$, and between IH, PM, and proficiency, $F(2, 48) = 4.373$, $p < .05$.

Taking the significant interaction effect between IH, PM, and proficiency into consideration, post-hoc results of pairwise comparisons confirmed the different effects of the verb types by proficiency levels. The advanced and intermediate learners significantly performed better when paired unaccusative verbs did not have L1 passive morphemes in translation, but with unpaired unaccusative verbs, the presence of L1 passive morphemes did not significantly affect overpassivization. On the other hand, the opposite results were found for the low-level learners; they did not show any significant variance in performance according to the presence or absence of L1 passive morphemes when unaccusative verbs were of the paired type. Rather, with unpaired verbs, they performed significantly better on the grammaticality judgment test when the verbs did not have the L1 passive morphemes in translation. These contrasts in performance-affecting factors between proficiency-level groups can be interpreted to suggest that for advanced and intermediate learners, when unaccusative verbs are paired, the presence of L1 passive morphemes plays a role in producing errors. On the other hand, regardless of the presence of L1 passive morphemes in translation, low-level learners have more difficulty with the correct use of unaccusative verbs when they have the transitive counterparts. Although prior studies have reported differences in overpassivization of unaccusative verbs between proficiency levels (e.g., Kim 2003, Montrul 2000, No and Chung 2006, Yang 2007, Yip 1995, Yuan 1999), it is meaningful that the present study demonstrated a specific difference in the factors affecting the performance of different proficiency levels of Korean learners of English.

One pedagogical implication can be drawn from these findings for the effective classroom instruction of English unaccusative verbs, especially for Korean learners of English. It appears that instruction methods should vary according to proficiency to accommodate the difference in difficulty-causing factors affecting learners at different proficiency levels. For advanced and intermediate learners, attention needs to be paid to the presence of L1 passive morphemes when they are translated in Korean. However, for low-level learners, instruction needs to be focused on the fundamental features of unaccusative verbs. In order for them to establish a basic knowledge of the

verbs, they have to be made aware of the English inherent features discussed above and the differences in usage governed by them. Attention should also be given to the possibility of overpassivization when the verb has a passive morpheme in L1 translation.

4.3. What Makes the Learners Overpassivize the Unaccusatives?

With respect to the third research question, the grounds of the learners' incorrect answers, i.e., overpassivization, in the grammaticality judgment test were examined through retrospective interviews. Three main causes were found to be influencing their decisions: the conceptual presence of external causers, the inanimacy of the grammatical subject, and the knowledge of lexical items.

4.3.1. The conceptual presence of external causers

The dominant explanation given by the learners for their incorrect answers was the possibility of the presence of external causers of the verbs. In other words, they chose to give the passive verb forms to the unaccusative verbs in cases when they think there must be an external agent. This was the case with paired unaccusative verbs such as *break*, *burn*, *freeze*, etc. For instance, the majority of the students changed the grammatical verb forms to the passive voice in the sentences provided in (8) through (12).

- (8) All the windows broke during the last earthquake.
- (9) When the two planes crashed, one of them was broken into two pieces.
- (10) The log house burned in the Valley Fire.
- (11) When we sneeze, our eyes are closed instantly.
- (12) She dropped the plate and it broke into several pieces.

In cases of the sentences in (8), (9), and (12), there is a considerable possibility that the learner passivized these sentences because the external causes were implied in the sentences: *the last earthquake*, *the crash of the two planes*, and *her dropping the plate*. Nevertheless, it is interesting that, for the sentence in (10) which does not denote any agents, they thought that the house could not be burned without the external causes, as exemplified in the excerpts below:

Interview Excerpt 1

I think the windows or the house cannot be broken or burned by itself. They are the things which can change only through external causers. Thus, I think they must be in 'passive voice' since they are the ones being subjected to breaking and burning.

Interview Excerpt 2

[For the sentence 'The lake is not frozen even when the temperature goes down below zero.'] I think for the sentence in 35 the verb must be changed into the passive form. How can the lake freeze itself? I think it can only be frozen by the cold weather.

In addition, some students replied that for the sentence in (11), we cannot move any body part without the control of the brain, thus resulting in overpassivization.

Interview Excerpt 3

I've learned that most of the verbs related to the body parts must be in the passive voice. This is because they are all controlled by the brain. We cannot control them in most cases. Especially, closing the eyes is usually done subconsciously even though I can control it.

On the other hand, in addition to paired unaccusative verbs, despite being rare, there were some cases concerning unpaired ones: *arrive*, *fall*, and so on. The learners reported that even though they are intransitive verbs, the meaning of the sentence was like something done by someone, thus the sentence must be in the passive voice. The excerpt below exemplifies this idea:

Interview Excerpt 4

[For the sentence 'New videos will arrive in the shops this month.'] I think this verb should be changed to 'will be arrived.' This is because 'new video' is brought by a person. Can it arrive in the shops by itself? No, I don't think so. But I'm not sure, a little bit confused.

This report was from an intermediate-level learner. Based on this report, it can be inferred that in some cases learners judge grammaticality based on the meaning of the

sentence, not the argument structure of a verb. In other words, if the learners knew that intransitive verbs cannot be passivized, they would not have made inaccurate grammaticality judgments about them. Thus, it is suggested that when teaching such type of verbs, the importance of the argument structure of a predicate be emphasized. Lastly, this can also be connected to the matter of inanimacy of the subject, which will be addressed in 4.3.2.

Meanwhile, contradictory to the previous work of No and Chung (2006), no relationship between overpassivization and the presence of Korean passive morphemes was found in the interview data. As shown in Table 2, although the students did worst on [+P, +Ci], the paired unaccusatives with Korean passive morphemes (i.e., *break, change, close*), in the retrospective interview session, most of the participants did not report any relevance of L1 transfer. When asked about any possible influence from their L1, they replied that they did not consider it to have much of an effect. Instead, the data suggested that the possibility of external causers was more likely to affect the passivization of the verbs. The report of one student is presented below:

Interview Excerpt 5

I never thought about that [Korean passive morphemes in translation of the verb]. When I judged the sentence whether it must be in the passive voice or not, I just cared about whether the subject is being done by someone or something.

4.3.2. The inanimacy of the subject

The second notable pattern in the learners' responses was about the inanimacy of the subject in a sentence. Although this issue could be argued to be related to 'the presence of external causers' discussed above, it was categorized as an independent pattern in that some learners passivized the verbs almost automatically based on this criterion. In other words, some learners corrected the grammatical unaccusative verb (e.g., The cookie house vanished in a second when Hansel turned back) into the ungrammatical one by adding 'was,' even before they examined whether the sentence bears active or passive meaning. What is interesting was that they exhibited this pattern of behavior whether the unaccusative verbs were paired or unpaired. This means that regardless of the inherent features of the verbs, when a non-agentive subject appeared in a sentence, they tended to make the verb passive.

Interview Excerpt 6

The subject in this sentence is not a person, so I think the verb must be in the passive. In the first part of the test, I think I did quite well, but as the sentences are repeatedly asking about the same verb in the later part, I seemed to lose my way. Thus, I couldn't help but guess the answer by the subject.

Interview Excerpt 7

[For the sentence 'New videos will arrive in the shops this month.'] I think this verb [arrive] must be in the passive because there is an inanimate subject [new videos].

The student in interview excerpt 7 was an advanced-level learner, who did quite well throughout the test. Nevertheless, this kind of response may be attributable to the prior classroom instruction on the construction of the passive voice. Students appeared to have been taught that sentences with grammatical subjects that are not the agent require the passive in English, and this concurred with a report by Yip (1995), which examined Chinese students' interlanguage.

4.3.3. The knowledge of lexical items

Another pattern revealed in the interview data in this study was the factor of the knowledge of lexical items. This pattern was observed mostly among intermediate-level learners who were presumed to have established knowledge of not only the passivization, but the different use of intransitive and transitive verbs. Some of the students did very well with certain intransitive verbs including *boil*, *fall*, *happen* in judging the grammaticality of the sentence. On the contrary, with other verbs including *appear*, *arrive*, *vanish*, they exhibited a higher rate of ill-formed construction. This was interesting in that the verbs they struggled with were all unpaired ones, which is often reported as a comparatively easy verb type for grammaticality judgments in the relevant literature. What they did with these verbs resulted in overpassivization according to the grammatical subject in a sentence.

Interview Excerpt 8

I do not exactly know the word 'vanish.' I might have known this word in the past, but I seem to have forgotten it. But, I guess it means to 'disappear.'

Anyway, for this sentence, because the subject is 'the airplane,' not a person, I think 'was vanished' would be correct.

Thus, what can be inferred from this report is that even though they were well versed in intransitive verb constructions, they were more likely to overpassivize unfamiliar verbs. This conforms to Montrul's (2000) claim that when L2 learners are not familiar with verbs (or the argument structure of a verb), they tend to recognize them as transitive verbs.

4.3.4. Differences between the proficiency levels

Lastly, concerning the relationship between language proficiency levels and learners' overpassivization, they did not seem to show much difference. This is because, regardless of the proficiency levels, the majority of the learners reported the matter of the presence of external causers. Among the advanced learners, however, some of the English-major students showed a superior ability in discerning unaccusative verbs, not only paired but unpaired ones. Nevertheless, there were cases in which some advanced learners gave incorrect answers; in these cases, they cited the possibility of the external causers and the lexical meaning as reasons.

On the other hand, the intermediate and low-level learners showed a similar pattern. They were confident in distinguishing the intransitive verbs from the transitive verbs, but generally, they did not go any further. Moreover, for these learners, the inanimacy of grammatical subjects dominated as the reason cited for overpassivization. The belief that the verb forms must be passivized when a grammatical subject is not able to do something voluntarily was very common.

To sum up, the advanced learners seemed to have a good amount of knowledge of unaccusative constructions in which the internal argument of the verb in the embedded clause is raised to the matrix subject position. However, the intermediate and low-level learners were likely to remain at the stage of distinguishing only between transitive verbs, which can be passivized, and intransitive verbs, which cannot be passivized.

5. Conclusion

Given the existing abundant research that has considered L2 learners' interlanguage systems for English unaccusatives, the present study tried to re-explore the causes of erroneous passivization of verbs. Focusing on Korean learners of English, this study adopted a mixed-methods approach in order to closely examine what lies behind L2 learner's overpassivization. Specifically, based on the existing findings, the present study focused on the most frequently reported factors such as the inherent features of English unaccusatives and the presence of passive morphemes in L1 translations of the verbs. The study included learners from a wide range of proficiency levels in order to provide more detailed information about the difference in factors affecting unaccusative constructions depending on L2 proficiency. Moreover, as a meaningful extension of the study, the underlying mechanisms of L2 learners' overpassivization were explored by examining the learners' actual cognitive processes, which is rarely addressed in the previous studies. To achieve this, the present study employed a combination of a grammaticality judgment test and a series of retrospective interviews to collect the research data.

The results of the study revealed the significant effects of English inherent factors and the presence of L1 passive morphemes on overpassivization. When considering proficiency, such effects became clearer. For the advanced and intermediate learners, when unaccusative verbs are paired, the presence of L1 passive morphemes in translation affected overpassivization. However, the influence of L1 passive markers did not seem to be influential to the low-level learners. Rather, what was more influential in their case was the English inherent factors of unaccusative verbs, that is, whether or not the verbs have the transitive counterpart. For the last issue of the present study, three major causes of overpassivization were found from the learners' verbal reports: the conceptual presence of external causers, the inanimacy of the grammatical subject, and the familiarity with the specific lexical items in a given sentence. The learners were more likely to overpassivize unaccusative verbs when they perceived that there must be an external causer, when the grammatical subject in a sentence was inanimate, and when they were not familiar with the lexical items. Meanwhile, contradictory to several prior studies that considered L1 transfer as a major factor in overpassivization, it was found that most of the learners were hardly affected by L1, although they appeared to be influenced by the presence of Korean passive morphemes in the statistical analysis.

From the current findings, one appreciable insight was gained: the college students were not likely to be equipped with sufficient knowledge of unaccusative verbs by their secondary education. What they learned through classroom instruction in school might have served only to distinguish the intransitive verbs from the transitive verbs; many of the participants did not analyze the verbs beyond this distinction. Some of those who applied more advanced knowledge of English inherent properties reported having acquired that knowledge independently, through college education or through private language education. In fact, the introduction of the unaccusative verb use in English textbooks starts from the earlier stages of secondary education in the Korean national curriculum (Han 2011). However, it is often pointed out that unaccusative verbs are not balanced in secondary English textbooks, and that Korean EFL teachers also lack the relevant knowledge to teach this construction (e.g., Chung 2011). Therefore, these findings should represent a call for teachers and researchers and even textbook developers to consider how to help students establish a balanced knowledge of English unaccusatives in a systematic way.

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Examples in: English
Applicable Languages: English
Applicable Level: Secondary, Tertiary

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