

Error Analysis of Overpassivized Sentences Written by Japanese High School Students: An English Essay Corpus

日本人高校生の過度受動化文のエラー分析
—英作文コーパスを用いて—

Mihoko OKADA

岡田 美穂子

Abstract

A prevalent error among English as a second language (ESL) writers of various native language groups is the overuse of passive sentences (overpassivization) when writing in English. Oshita (2001) proposed the unaccusative trap hypothesis, which posits that intermediate learners tend to overpassivize unaccusative (rather than unergative) verbs, and that novice learners are less prone to making these errors. The present study tested this hypothesis by analyzing written compositions from a group of 208 Japanese high school students who were considered at the early learning stage. The study also analyzed the effect of subject animacy on overpassivization, a point rather neglected by prior studies. Ten alternating unaccusative verbs, 15 non-alternating unaccusative verbs, and 15 unergative verbs were extracted from an approximately 60,000-word corpus of English compositions written by the participants. The results of this study did not support the unaccusative trap hypothesis, as they showed a relatively higher rate of overpassivized unergatives, compared with unaccusatives. It also showed that learners produced relatively more overpassivized unaccusatives with animate (rather than inanimate) objects, which contradicts the findings of previous studies. The resulting discussion centers around the possibility of Japanese learners' equating English copula with Japanese topic markers, and directly translating Japanese causative-passives into overpassivized unergatives in English.

1. Literature Review

1.1 *Overpassivization Errors and Intransitive Verb Classes*

Intransitive verbs can be divided into two types: unaccusatives and unergatives. These two verb classes have subjects with different thematic roles: unaccusatives have a *target* subject, as in the sentence “The snow melted,” while unergatives have an agent subject, as in the sentence “The boy jumped.” The

structural difference between these verb classes is widely known as the unaccusative hypothesis (UH; Burzio, 1986; Perlmutter, 1978). This proposes that a noun phrase (target) and verb (NP-V) structure, typical of unaccusatives, is formed via NP-movement of the subject (S): the subject of unaccusatives is moved from object position (O), as shown in (1a) and (1b).

1) a. Transitive: S (The sun) – V (melted) – O (the snow).

<agent> <target>

b. Unaccusative: S (_____) – V (melted) – O (the snow).

S' (The snow) – V (melted).

<target>

(This sentence has been adopted from Park and Lakshmanan, 2007)

By contrast, a noun phrase (agent) and verb (NP-V) structure, typical of unergatives, has no NP-movement of the subject (S), as shown in (2).

2) Unergative: S (The boy) – V (jumped).

<agent>

(This sentence has been adopted from Oshita, 2001)

Since unaccusative verbs can be further divided into two types, depending on the existence of transitive counterparts, there are three kinds of intransitives: alternating unaccusatives with transitive counterparts (3a), non-alternating unaccusatives without transitive counterparts (3b), and unergatives only with intransitives (3c).

3) a. Alternating unaccusative: “The snow melted” (Park and Lakshmanan, 2007)

(Counterpart: “The snow was melted by the sun”)

b. Non-alternating unaccusative: “The guest arrived” (Oshita, 2001)

(No counterpart: *“(The guest was arrived)”)

c. Unergative: “The boy jumped” (Oshita, 2001)

(No counterpart: *“(The boy was jumped)”)

Unaccusative intransitive verbs cannot be passivized even though they have a patient or target subject; an example is “arrive” in *“(The letters were arrived yesterday)” (Can, 2000, quoted in Oshita, 2002, p. 49).

As Park and Lakshmanan (2007) found, overpassivized sentences are commonly used with unaccusative verbs by English as a second language (ESL) and English as a foreign language (EFL) learners, regardless of their native language. Because of the different thematic roles of the subject, unaccusative verbs are reportedly overpassivized more often than unergative verbs, while learners tend to use the active voice

with unergatives and the passive voice with unaccusatives. Often, EFL learners misunderstand the target subject to be the object of the sentence and utilize the same nouns to create passive sentences with these subjects. In this study, the term overpassivization does not refer to the overuse of passive forms; rather, it indicates the error of passivizing intransitive verbs instead of transitive verbs. Unaccusative verbs and unergative verbs are both intransitive and cannot be passivized in English. Despite this, overpassivization errors using unaccusative verbs are common among ESL and EFL learners of various native languages.

1.2 Overpassivization Errors and the Unaccusative Trap Hypothesis

Overpassivization, or the overuse of passive forms with intransitive verbs, as in *‘‘The letter was arrived,’’ has attracted the attention of researchers as a common error among ESL and EFL learners with different native languages. Previous studies have reported that overpassivization errors made by ESL and EFL learners occur most often with unaccusative verbs (Deguchi & Oshita, 2004; Kondo, 2005; No & Chung, 2006; Oshita, 2002). Thus, Oshita (2001) proposed the unaccusative trap hypothesis (UTH), which posits that learners begin to overpassivize unaccusatives at the intermediate learning stage after they have become aware of the distinction between unaccusative and unergative verbs. The five predictions of the UTH are as follows:

1. *Common syntactic behavior:*

Learners at low and even intermediate levels of proficiency will use one-argument verbs (i.e., unaccusatives and unergatives) in the same syntactic environments.

2. *Unique syntactic errors:*

If some syntactic error uniquely afflicts either unaccusatives or unergatives, it is more likely to affect the former, which are misanalyzed initially and may undergo reanalysis later.

3. *Timing of the appearance of unique syntactic errors:*

Syntactic errors exclusively observed with unaccusatives should become apparent only after this verb class is correctly distinguished from the unergative class in the IL [interlanguage] lexicon.

4. *Attainment of unaccusative-specific target syntactic structures:*

Similarly, the target syntactic structures possible only with unaccusatives (e.g., the *there*-insertion structure) can be fully acquired only after the two classes of intransitives are correctly differentiated in the IL [interlanguage] lexicon.

5. *Characteristic developmental patterns:*

With respect to particular target syntactic structures, U-shaped developmental patterns may emerge.

(Oshita, 2001, p. 293)

The UTH’s key principle is that intermediate learners’ imperfect understanding of the distinction between unaccusatives and unergatives causes overpassivization. Learners in the early stages of language development passivize neither type of intransitive verbs without realizing the distinction. According to

this theory, as language proficiency grows, overpassivization errors occur, accompanied by the realization of the distinction; eventually, the errors disappear due to learners' complete mastery of the distinction. However, studies examining the UTH have found inconclusive results (Oshita, 2014).

Another doubt should be considered related to the UTH, whose main theme is that passivized errors with unaccusatives become apparent only after this verb class is correctly distinguished from the unergative class in the learners' interlanguage. However, it is difficult to tell whether learners are really aware of the distinction between the two types of intransitives when they make these errors. They may not realize the distinction when they make overpassivization errors, while they may realize the distinction when they accurately use the active forms for unaccusative verbs.

1.3 Overpassivization Errors and Subject Animacy

Verb class distinctions are accompanied by different relations with different thematic roles of nouns (e.g., agent-patient, target-experiencer, and experiencer-target) (Shin, 2011). Because unaccusative verbs and unergative verbs are differentiated by the functions and animacy of the subjects, it can be difficult for Japanese high school students to capture the nuances of these verb structures. These differences are not explicitly taught in Japanese high schools because the Course of Study (a nationwide curriculum enforced by the Ministry of Education, Culture, Sports, Science and Technology) does not require teachers to include this grammatical point in their instruction. As a result, Japanese students do not generally learn about the difference between unaccusatives and unergatives in high school English classes. Therefore, students must learn implicitly not only the thematic relations between nouns and individual verbs but also the choice of voice with alternating unaccusative verbs. Additionally, they must judge that choice based on the existence of external agents, such as the noun phrases following the preposition "by" in passive forms.

Many researchers (e.g., Hinkel, 2002; No & Chung, 2006; Pae et al., 2014) have indicated that learners of English who are native speakers of Asian languages tend to overpassivize sentences with inanimate subjects, while others have reported the influence of learners' various native languages (L1), in the preference for animate subjects over inanimate ones. Hinkel (2002, p. 233) reported that Japanese speakers of English prefer to use active verbs with an animate subject because sentence construction in Japanese favors the animate noun and active verb pair. Thus, overall, there is a possibility that an EFL learner's syntactic choice, including their overpassivization errors, will be influenced by the animacy of the sentence's subject.

In contrast, Aissen (1999) reported that the association of the agentive role with a person/animate subject is the most robust generalization in syntactic markedness. In other words, the most popular semantic sentence construction in many languages is the actor-action sentence structure where an agent is the animate subject (Ootuka et al., 1988). According to Ferreira (1994), an agent is the voluntary cause of an action; therefore, it tends to be animate. Accordingly, the agent typically takes the earlier position in an active sentence while "with a theme-experiencer verb [inanimate subjects and verbs] ..., subjects should have some tendency to produce passive sentences" (Ferreira, 1994, p. 728). This leads to the observation that subject animacy will be a cause for overpassivization errors with unaccusatives by Japanese EFL learners.

This research strand focuses not only on the particular characteristics of learners' L1 but also on universal linguistic features. It also suggests that the agent tends to be animate (Aissen, 1999), that the first noun tends to be the agent (VanPatten, 1996), and that the agent tends to be positioned as sentence subject (Jackendoff, 2002). All of these factors should be considered when investigating ESL or EFL learners' overpassivization errors in producing intransitives.

2. English Essay Writing

According to the U-shape developmental stages of the UTH, early-stage learners are not expected to produce any overpassivized sentences with either unaccusative or unergative verbs. This is because these learners lack knowledge of the distinction between unaccusatives and unergatives; they tend to use simple constructions with only one-argument verbs, a tendency that Ortega (2009) refers to as "simplification" (p. 116). This begs the question of whether learners passivize these sentences with unaccusative and unergative verbs when they are forced to produce passive forms.

Previous studies with Japanese high school students have not conducted sufficient production task research to determine whether their results support the UTH. Therefore, this study seeks to analyze high school students' overpassivization of sentences when writing English-language essays and to clarify which type(s) of intransitive verbs they tend to overpassivize. As such, the study will aim to test the UTH.

In this study, which entailed an essay-writing task, participants were provided with writing themes and were instructed to use certain grammatical points or sentence structures (see Appendix 1). Data were analyzed depending on the tasks' instructions, but the frequency of overpassivization errors with intransitive verbs was examined using all essays, including those with instructions calling for the use of passive voice. The verb classes overpassivized due to the instruction to use passive sentences were also investigated, as were the effects of subject animacy on overpassivized sentences.

To accomplish the purpose of this study, two research questions were established:

Research Question 1: Do intransitive verbs' class distinctions affect errors involving passivized sentences written by Japanese high school students?

Research Question 2: Does the animacy of the subject affect errors involving passivized sentences written by Japanese high school students?

To answer these research questions, the research method, results, and discussion will be presented in sections 3, 4, and 5, respectively.

3. Research Method

3.1 Participants

The participants in this study were 208 second-year high school students (men \approx 50%; age = 16–17 years) belonging to six groups in a public high school in Japan. Both the students and their parents signed consent forms, which included information on ethical considerations regarding anonymity, confidentiality, and the appropriate handling of personal data by the researcher. Since none of the candidates had experience

studying or living in an English-speaking country, none of the candidates were excluded from participation. Data on candidates' nationalities were not collected. However, judging by their family names, the sample may have included Chinese, Japanese Brazilian, and Peruvian individuals.

3.2 Data Collection

Data were collected during the 2016 high school academic year from the English Expression II class on examination days in mid-May, late June, mid-October, late November, and late February. All participants were given the same essay theme at each examination—five themes in total. They were instructed to write more than 60 words using the essay writing techniques or grammatical points they had learned in that term to obtain the full 10 points possible for the assignment. Appendix 1 shows the five themes and instructions written in Japanese in each examination.

The theme of the first essay was related to Japanese annual events; students were instructed to use the words “people” and “we” as sentence subjects. The third essay theme was related to students' favorite book or movie; they were instructed to use passive sentences. Since these themes and sentence structures might cause specific verbs to be used with animate subjects and also to be passivized, the results related to overpassivization errors and subject animacy may differ from those for essays given without these instructions.

3.3 Target Verbs and Extracting Method

In previous studies (e.g., Deguchi & Oshita, 2004; Granger, 2013; No & Chung, 2006; Shin, 2011), three to ten verbs in each category were chosen as target verbs, based on their verb class distinctions. Oshita (2000, p. 309) reported that overpassivization errors decreased when the number of target verbs was low, as observed in a corpus study with limited tokens and uncontrolled number of specific types of verbs. Accordingly, this makes it difficult to judge whether the said study's findings are owed to the specific verb classes or the characteristics of each verb. Further, previous studies with undergraduate or graduate students contained target verbs unlikely to be produced by high school learners. To conduct a conclusive analysis, this study increased the number of target verbs to 45 (15 alternating unaccusative verbs, 15 non-alternating unaccusative verbs, and 15 unergative verbs). Moreover, it included most of the target verbs analyzed by Deguchi and Oshita (2004), Granger (2013), Kondo (2005), Nakano et al. (2005), No and Chung (2006), Oshita (2000, 2002), and Shin (2011). Table 1 lists the verbs analyzed in this study.

To build a corpus, the method of extraction for the sentences with the target verbs was as follows: First, the handwritten essays were digitalized into text files. Then, the identification codes of the exam, theme, ID number, and gender of the participant were added for each sentence. Next, the data were arranged by correcting misspelled words and putting the original misspelled words in parentheses, and sentences with the target verbs were extracted using text edition software. Finally, the numbers and ratios of these sentences were calculated according to verb class, voice, grammaticality, and subject animacy.

Table 1*Classifications of Verbs Used in This Study*

	Verb class	Target verbs (Total number)
A	Alternating unaccusative	<i>boil, break, burn, change, close, continue, decrease, dry, freeze, grow, improve, increase, melt, shatter, suffer</i> (15)
B	Non-alternating unaccusative	<i>happen, arrive, appear, disappear, become, die, emerge, fall, remain, rise, seem, arise, exist, occur, vanish</i> (15)
C	Unergative	<i>jump, run, swim, cry, dance, laugh, smile, walk, work, cough, joke, shout, speak, talk, fight</i> (15)

3.4 Criteria to Extract Target Verbs and Their Voices

Although, in theory, there should have been 5 essays from each of the 208 participants (1,040 essays in total), this was not the case, as some students were absent from the term examinations. Further, participants who left the essay task blank were excluded from the total number of participants for each essay. Conversely, participants who wrote at least one word were included, in case that word was a target verb used as an imperative sentence. Subsequently, 978 essays were collected. Table 2 shows the total number of participants and word tokens.

Table 2*Total Number of Essays and Word Tokens for Each Essay*

Examination	First	Second	Third	Fourth	Fifth	Total
Essay (<i>N</i>)	193	200	197	197	191	978
Token	10,566	12,316	11,974	12,406	12,093	59,355

In this study, overpassivization focuses mainly on voice forms having the basic form of passives: “be + past participle.” The subject role (e.g., patient or target) was not considered because it is difficult to correctly identify this role without knowing the writer’s intended meaning. Oshita (2000) states that most passivized unaccusatives appear without having an agentive “by” phrase, which complicates the interpretation of these errors as semantically genuine passives. Further, because high school students are still in the process of learning passive forms, and because they may make mistakes when trying to use the correct form of the past participle, the “be + base form” was judged to have a passive form.

The participants of this study were ordinary high school students from a public school; they produced few English sentences with a wide range of grammatical errors. For this reason, in this study, the criteria to extract the target verbs and their voices to judge overpassivization were determined as follows:

- 1) Non-finite (such as to-infinitives, gerunds, and participles) and finite verbs were analyzed.

e.g., “I want to see my friends smile” / “I want her smiling face.”

- 2) Sentences containing errors related to word order and sentence structure were analyzed.

e.g., “We counts is change day” (→“We count until the days change”).

“This story is changed bodies by man and woman” (→“This story is about the changed bodies of a man and a woman”).

- 3) Verb phrases, such as “be” + base form and past participle + “by” without “be,” were classified

as passive.

e.g., “School and company are close” (in this context, “close” is used as a verb, not as an adjective).

4) Target words used as another part of speech were excluded.

e.g., “I take the dog for a walk” / “Making box lunch is hard work.”

3.5 Classification Criteria for Subject Animacy

To clearly distinguish between animacy and inanimacy, inanimate subjects included subjects “other than human beings and animals,” following *Sogo Eigo Forest* (Ishiguro, 2013), which is “one of the most published English grammar reference books” (Aizawa & Harada, 2015, p. 35). Further, in line with Kunihiro’s (1967, p. 150) criteria, inanimate subjects included “parts of the body of living things.” Therefore, in this study, animacy was defined as follows:

1) Animate subjects are mainly human beings and animals, including characters in novels, comic books, etc.

e.g., “They [= Orihime and Hikoboshi] (were) loved (by) the Japanese people.”

2) Inanimate subjects are mainly physical objects, parts of the body of living things, natural phenomena, and plants, including the titles of novels and comic books.

e.g., “Harry Potter is became a movie.”

4. Results

Regarding individual participants’ contributions to the total number of overpassivization errors, seven participants made two overpassivization errors with the target verbs in their essays (two made errors with the same unergatives twice, two made errors with two different unergatives, and three made errors with one alternating unaccusative and one unergative each). Where multiple errors were made by the same participant, none of the data were excluded, as no excessive use of overpassivization was observed from particular participants. This follows Tono (2007), who included all data from the participants in his study on a learners’ corpus. In addition, to examine the effect of the essay themes on overpassivization errors, the verbs in the first exam (animate subjects: “people” and “we”) and the third exam (passive sentences) are shown in Table 4.

These results for the two types of essays indicate that both the essay themes and the grammatical instructions affected overpassivization errors. The ungrammatical intransitive verbs accounted for 19 (3 of the first exam and 16 of the third exam; 82.6%) of the 23 animate subjects, as well as 11 (5 of the first exam and 6 of the third exam; 73.3%) of the 15 inanimate subjects. This revealed that the effects of the essay themes and the grammatical instructions might have caused unbalanced error rates for the five essays, which is discussed in the next section in more detail.

Table 3*Number of Extracted Verbs from All Five Exams*

Verb class	Target verb	All five exams				Total
		Grammatical		Ungrammatical		
		Active		Passive		
		Animate	Inanimate	Animate	Inanimate	
A	<i>break</i>		1		2	3
	<i>change</i>	1	3		7	11
	<i>close</i>		1		1	2
	<i>continue</i>		2			2
	<i>decrease</i>		7			7
	<i>grow</i>	6	2			8
	<i>increase</i>	1	1	1		3
	<i>melt</i>		1			1
Total of verb A		8	18	1	10	37
B	<i>appear</i>	6	3	2		11
	<i>arrive</i>	1		1		2
	<i>become</i>	31	30		1	63
	<i>die</i>	8		3		11
	<i>disappear</i>		1			1
	<i>fall</i>	2		1		3
	<i>happen</i>		4			3
	<i>remain</i>		2			2
	<i>rise</i>		2			2
	<i>seem</i>	1	6			7
Total of verb B		49	48	7	1	105
C	<i>cry</i>	12		7	2	21
	<i>dance</i>	5				5
	<i>laugh</i>	1	1	2		4
	<i>run</i>	3				3
	<i>smile</i>	9		2	1	12
	<i>swim</i>		1			1
	<i>walk</i>	10				10
	<i>work</i>	5		1		6
	<i>shout</i>	7		1		8
	<i>speak</i>	7	2	1		10
	<i>talk</i>	26				26
	<i>fight</i>	11		2		13
Total of verb C		96	4	16	3	119
Total		153	70	24	14	261

Note. verb A = alternating unaccusatives, verb B = non-alternating unaccusatives, verb C = unergatives. Target verbs that did not appear in the participants' essays (*emerge, freeze, improve, shatter, arise, exist, occur, suffer, vanish, jump, cough, and joke*) were excluded from the table.

Table 4

Number of Extracted Verbs from the First and the Third Exams

Verb class	Target verb	First exam				Total	Third exam				Total
		Grammat-ical		Ungrammat-ical			Grammat-ical		Ungrammat-ical		
		Active		Passive			Active		Passive		
		Ani	Ina	Ani	Ina		Ani	Ina	Ani	Ina	
A	<i>break</i>								1	1	
	<i>change</i>		1		3	4	1		3	4	
	<i>close</i>				1	1					
	<i>continue</i>							2		2	
	<i>decrease</i>		3			3					
	<i>grow</i>	1				1	1	1		2	
	<i>increase</i>		1			1					
Total of verb A		1	5		4	10	2	3	4	9	
B	<i>appear</i>						6	2	2	10	
	<i>become</i>	3	3			6	10	13		23	
	<i>die</i>						6		2	8	
	<i>fall</i>						2		1	3	
	<i>happen</i>		1			1		3		3	
	<i>rise</i>		2			2					
	<i>seem</i>		1			1					
Total of verb B		3	7			10	24	18	5	47	
C	<i>cry</i>			1		1	8		5	2	15
	<i>dance</i>	2				2	1				1
	<i>laugh</i>			1		1		1	1		2
	<i>smile</i>				1	1			1		1
	<i>swim</i>		1			1					
	<i>walk</i>						1				1
	<i>work</i>	1				1			1		1
	<i>shout</i>	5		1		6					
	<i>speak</i>	4	2			6			1		1
	<i>talk</i>	4				4	1				1
	<i>fight</i>						10		2		12
Total of verb C		16	3	3	1	23	21	1	11	2	35
Total		20	15	3	5	43	47	22	16	6	89

Note. verb A = alternating unaccusatives, verb B = non-alternating unaccusatives, verb C = unergatives, Ani = animate subject, Ina = inanimate subject. Target verbs that did not appear in the participants' essays (*emerge, freeze, improve, shatter, arise, exist, occur, suffer, vanish, jump, cough, and joke*) were excluded from the table.

5. Discussion

5.1 Production of Overpassivized Sentences and Verb Class Distinctions

This study aimed to discover whether high school students produce more overpassivized sentences with unaccusatives than with unergative verbs. Tables 3 and 4 show that alternating unaccusatives (A) were overpassivized in 7 of 38 instances (18.4%) in essays that did not include a specific instruction on the use of passive forms, whereas overpassivization increased to 11 of 37 instances (29.7%) when essays encouraged students to use passive forms. Overpassivization errors occurred in 3 of 58 instances (5.2%) for non-alternating unaccusatives (B) when a specific instruction was not included; however, errors increased to 8 of 105 instances (7.6%) when essays contained specific instructions. The difference in overpassivization errors between alternating and non-alternating unaccusatives suggests that high school students are aware that alternating unaccusatives can be used as transitive verbs and in passive forms. However, these students are not yet aware of the different thematic roles of transitive and unaccusative verbs: namely, that the subjects of transitive verbs are agents and that the verb can be passivized when the patient/experiencer object is placed in the subject position. Meanwhile, the subjects of unaccusative verbs serve as themes or experiencers without an external agent, which means they cannot be passivized.

According to earlier studies with only Japanese EFL learners or those with a mix of Japanese learners and learners with other native languages (Kondo, 2005; Oshita, 2000; Owada, 2013), unergative verbs are rarely overpassivized, regardless of the learner's developmental stage. However, the present study found a 7.1% (6 of 84 instances) rate of passive unergative errors for essays with no specific instructions regarding the use of passive forms, and 16.0% (19 of 119 instances) for essays that instructed students to use passive forms within a particular essay theme. Some examples of unergative errors include the following:

- (a) "This movie is cried by many people."
- (b) "She is worked Sentou."
- (c) "Gai and Nobita are fight every day."

During the third exam, participants produced most of the overpassivized sentences with animate subjects (16/23), followed by inanimate subjects (6/15), as shown in Table 4. The rate of overpassivization errors with unergatives was 16.8%, higher than that for errors with unaccusatives. This result is thought to be influenced by the specific exam instructions and seven error sentences with the verb *cry*. The fact that instructions calling for the use of passive sentences caused participants to overpassivize both unaccusatives and unergatives may mean that they do not understand the differences between the two verb classes.

The UTH predicts that unaccusatives will induce more errors than unergatives, which is supported by previous studies with university students (e.g., Deguchi & Oshita, 2004; Granger, 2013; No & Chung, 2006; Shin, 2011). In contrast, the present study with high school students found many overpassivization errors for unergatives. In fact, the sentence structures judged as errors in this study varied widely. Example (a) is a genuine overpassivization error in which the target or patient is located in the position of the subject, while the agent is expressed after "by." Example (b) shows the passive form of "be + past

participle,” even though the writer’s intention was unclear as to whether the subject was used as an agent (indicating “She worked”) or as a patient (indicating “She was made to work”). Example (c) shows that the subject is an agent and takes the form of “be + base form.” The sentence structure in example (c) was judged as an overpassivization error in this study. It is possible that these errors are not the result of such a sentence as (c) being used as genuine passives with patients or targets as the subject, but instead may simply be caused by the overuse of “be.” To examine this possibility, the error rates of “be + base form” and overpassivization (excluding this type of error) were recalculated in the next section, in which the discussion focuses on learners’ developmental stages.

5.2 Overuse of the Copula “Be”

The results of the present study differ from those of previous studies using a learners’ corpus (Oshita, 2000; Owada, 2013; Shin, 2011) in terms of the error rate of voice with non-alternating unaccusatives and unergatives. Previous studies may not have considered the structure “be + base form” as an overpassivization error. Disregarding this structure as a research target of overpassivization in her own study, Granger (2013, p. 12) suggested that this kind of error should be considered as underpassivization: that is, as the lack of a passive morpheme. Therefore, in the next step of the present study, the structure “be + base form” was excluded from analysis, while the overpassivization error rate was recalculated, as shown in Table 4. Consequently, the error rate of all three types of intransitives decreased drastically: alternating unaccusatives (A) decreased from 29.7% to 13.5%, non-alternating unaccusatives (B) decreased from 7.6% to 2.9%, and unergatives (C) decreased from 16.0% to 6.7%. Again, the data do not reflect students’ spontaneous output because some verbs were purposely biased toward passive forms.

Table 5

Numbers of Errors for “Be + Base Form”

Verb class	Total	GS	UGS						Total	Rate of UGS	Rate of UGS, excluding <i>be</i> + base form
			Passive			Subtotal					
			Ani	Ina							
A	15	26	1	(0)	10	(6)	11	(6)	37	29.7%	13.5%
B	15	97	7	(4)	1	(1)	8	(5)	105	7.6%	2.9%
C	15	100	16	(10)	3	(1)	19	(11)	119	16.0%	6.7%
Total	45	223	24	(14)	14	(8)	38	(22)	261	13.8%	6.1%

Note. A = alternating unaccusatives, B = non-alternating unaccusatives, C = unergatives, GS = grammatical sentence, UGS = ungrammatical sentence, Ani = animate subject, Ina = inanimate subject.

- 1) Since no active errors appeared in the essays, none are shown in the table.
- 2) The numbers in parentheses indicate those of the structures “*be* + base form.”

Table 5 shows there are more errors with the “be + base form” than with the “be + past participle form” for all three types of verbs. The examples shown below indicate the mixture of errors with past participles and base forms after “be” for both unaccusatives and unergatives.

Examples with the non-alternating unaccusatives (B):

- (d) “His friends very interesting, but recently I don’t know a friend is die.”
- (e) “This girl is died at ending.”

Examples with the unergatives (C):

- (f) “I was cry very much when I was watch the movie.”
- (g) “I was cried to see the movie.”

Further, five examples with “be + third person singular present-tense forms” and “be + past tense forms” were produced but not included as overpassivized sentences. The examples include all three verb classes with two alternating unaccusatives (A), two non-alternating unaccusatives (B), and one unergative (C):

Examples with alternating unaccusatives (A):

- (h) “Many accident (accident) was grows there (thir).”
- (i) “Our communication is increases (increasies).”

Examples with the non-alternating unaccusatives (B):

- (j) “This story is Chihiro’s family were became Buta.” (= The story is that ...)
- (k) “*Harry Potter* is became a movie.”

Examples with the unergatives (C):

- (l) “They are always runs.” (They = hamsters)

Since various verb inflections (such as base forms, third person singular present-tense forms, past-tense forms, and past participles) follow “be,” these errors could be considered as an overuse of “be,” not as overpassivization. Describing the errors made by his own university students, Tagawa (2008) stated that “the cause of these errors might have been their misunderstanding that Japanese topic marking participles ‘wa’ and ‘ga’ correspond to *be* since they first encountered English in their junior high school textbooks” (p. 269). Quoting Matsui (1992), Shirai (2012) also explains that “Since *be* is first taught in the junior high school textbooks and the patterns like ‘I’m’ and ‘You’re’ are practiced repeatedly to become quite familiar, [Japanese EFL learners] make it a habit to use those patterns” (p. 128). Matsui (1992) categorizes this type of “be” overuse as a so-called “conditioned response type of error” (p. 159). However, if an overuse of “be” is the cause of these errors, the error should be observed with transitive verbs as well. This insight has led to a precise observation of the data in this study concerning the transitive verbs “read”

and “love,” which are among the five transitive verbs (“break,” “change,” “close,” “read,” and “love”) listed as transitives in No and Chung (2006). The other three verbs (“break,” “change,” and “close”) can also be used as intransitives and were already analyzed when used only as alternating unaccusatives. The results of the present study showed that the error rate of the use of “be” before “read” and “love” (e.g., “My friends was read this book”) occurred only in 3 of 169 instances (1.8%). More transitive verbs must be analyzed before concluding that the overuse of “be” occurs only with intransitives, especially with unergatives.

Table 4 presents the results of the first (animate subject, “people” and “we”) and third exams (passive sentences). Of the nine errors in all exams, seven of the overpassivized sentences with the unergative “cry” were evident in the third exam (passive sentences). Compared with the results in Table 3, Table 4 clearly shows that Japanese high school students produced 69.6% of overpassivized sentences with animate subjects (16/23) and 40.0% with inanimate subjects (6/15) in the third exam.

5.3 Subject Animacy

The overpassivization rate of animate and inanimate subjects differed according to intransitive verbs’ classification. For non-alternating unaccusatives, the number of overpassivized target verbs with animate subjects was 7 of 56 (13%), while there was only one (2%) with inanimate subjects of the 49 that were possible. Based on this result, it seems that the participants in this study tended to overpassivize animate subjects more frequently, compared with inanimate ones.

However, for alternating unaccusatives, the overpassivized target verbs with animate subjects were 1 of 9 (11%), whereas those with inanimate subjects were 10 of 28 (36%). Seven of the 10 overpassivization errors with inanimate subjects occurred with the verb “change,” suggesting that errors were specific to certain verbs, rather than a generalized tendency. As shown below, since all errors with an inanimate subject and the verb “change” had the structure “be + base form,” they are more likely to be either a case of the overuse of “be” (as discussed in section 3.4) or a case where “change” was used as a noun or an adjective.

(m) “Setubun day is change by the year.”

(n) “We counts is change day.” [=until the day changes (into a New Year’s Day).]

(o) “New year’s day is change the year.” [=The year changes on a New Year’s Day.]

(p) “School lunch is change menu every day.”

[=The school lunch menu changes every day.]

Since unergatives take an agent as the subject, there were more sentences with animate subjects, compared with those with inanimate subjects. Among the 112 sentences with animate subjects, 16 (14.2%) were overpassivized. In contrast, there were seven sentences with inanimate subjects, of which three (42.9%) were overpassivized:

- (q) “It [= the movie] is very moving and cried [= is cried].”
- (r) “This movie is cried by many people.”
- (s) “The culture is wonderful culture to can be smile everyone [= that can be smiled by].”

Here, again, only two verbs (“cry” and “smile”) were used in their passive form with an inanimate subject, and “smile” was used in its base form, which does not suggest a tendency regarding the verb class. In addition, six passive forms of “cry” with animate subjects occurred, one in the first exam (which instructed students to use animate subjects) and five in the third (which instructed students to use the passive form) out of seven overpassivized sentences in all the exams. The passive form of “smile” was only used once in the third exam, which suggested the instruction calling for the use of animate subjects had little effect. The proportion of target verb errors that could be collected from essay writing was limited, while the proportion of animate and inanimate subjects could not be controlled. Therefore, the data did not provide sufficient information to determine the causes of overpassivization errors. The finding that non-alternating unaccusatives exhibited a higher percentage of overpassivization errors (87.5% = 7/8) with animate subjects may be noteworthy; however, since previous studies on subject animacy were conducted only with grammaticality judgment tasks, this finding cannot be directly compared with prior research. Nonetheless, No and Chung’s (2006) research with grammaticality judgment tests targeting Korean learners of English attained different results, compared with the present study; they found more overpassivization errors with inanimate subjects for unaccusatives. Thus, additional research using a grammaticality judgment task with Japanese EFL learners is required to clarify whether this contrast stems from differences in participants’ native languages or from data collection methods.

6. Conclusions and Future Implications

In this study, the sentences in the essays written by 208 second-year students at a public high school were collected and analyzed to determine whether Japanese high school students could correctly distinguish the three types of intransitive verbs: 15 alternating unaccusatives, 15 non-alternating unaccusatives, and 15 unergatives. Without conducting oral interviews, this study’s results did not clarify whether students were aware of the differences in the thematic roles of transitive, unaccusative, and unergative verbs (i.e., that the subjects of transitive verbs are agents and that the verb can be passivized when the patient/experiencer object is placed in the subject position). In addition, the rate of overpassivization errors with unergatives was 16.0%, much higher than that for non-alternating unaccusatives (7.6%), while participants tended to overpassivize animate subjects more frequently, compared with inanimate ones. However, during the third exam, when students were instructed to use passive sentences, they produced most of the overpassivized sentences with animate subjects (69.6%) and less than half of those with inanimate subjects (40.0%).

This study also discussed the effects of subject animacy on the production of overpassivized sentences, while simultaneously exploring other possible causes, such as learners’ misunderstanding of the “be” copula due to its association with the Japanese topic marking particles “wa” and “ga.” Additionally, difficulties related to this study’s research procedures were also discussed, such as the themes and instructions in

essay-writing tasks, especially in the first (using the animate subjects “people” and “we”) and third (using passive sentences) tests. Another difficulty was the limited number of target verbs appearing in the essays, which made it difficult to determine the cause of overpassivization errors: that is, whether they were caused by verb classes or by subject animacy.

The results of the corpus data from the essay-writing task revealed that this study had a few significant limitations. First, a few target verbs appeared in the essays because of the small size of the data set. Second, the unbalanced number of target verbs made it difficult to analyze the effects of intransitive verbs’ class distinctions. Third, the ratio of sentences with animate subjects to those with inanimate subjects was also somewhat unbalanced. Fourth, the free writing essay tasks made it difficult for the researcher to decipher the subject function as either an agent or a target in the extracted sentences. Finally, both the essay writing assignment based on given themes and instructions to use specific grammatical categories might have affected the results. Specifically, the first exam instructed students to write about a Japanese annual event, emphasizing the use of animate subjects such as “people” or “we,” whereas the third exam instructed students to use passive forms in their essay. Table 3 and Appendix 2 show the extracted target verbs and the frequency of their appearance according to the classifications of grammaticality, voice, and animacy.

The present study’s results have several implications for future research; specifically, they open the possibility for three studies. First, by applying Hirakawa’s (2001) grammaticality judgment tasks containing unaccusative and unergative verbs in Japanese to native speakers of English, English sentence production tasks showing key words or pictures should be conducted so that the research participants use the target verbs and increase research data. Second, the results of this study could be compared with data from a larger Japanese EFL learner corpus that is publicly available to further investigate the influence of essay themes, instructions related to voice forms, or subject animacy on overpassivization errors. Third, since the limitation of the learner corpus is that EFL learners’ grammatical knowledge cannot be reflected in the produced sentences, grammaticality judgment tasks, which are supposed to directly elicit the use of learners’ grammatical knowledge, will be conducted simultaneously with sentence production tasks. This is expected to lead to a conclusive analysis of overpassivization among Japanese high school students.

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Appendices

Appendix 1

Five Themes and Directions (Written in Japanese)

No. 1:

Choose a Japanese annual event such as New Year’s, Setsubun (around the beginning of February), or the Star Festival and explain the event in English using 60 words or more.

Directions: Use sentences including “people” or “we” as the subjects in your essay.

No. 2:

Your friend Sam is coming to Japan from Australia. Using 60 words or more, in English, explain the place you want to show Sam the most.

Directions: Write your essay in the style of an e-mail.

No. 3:

Choose one of your favorite books or movies and explain it in English using 60 words or more.

Directions: Use some sentences with the passive voice in your essay.

No. 4:

Using 60 words or more, in English, explain whether you are for or against school-provided lunches in senior high schools.

Directions: Write the reasons for your opinion following the outline by listing them using words such as “First,” “Second,” and “Finally.”

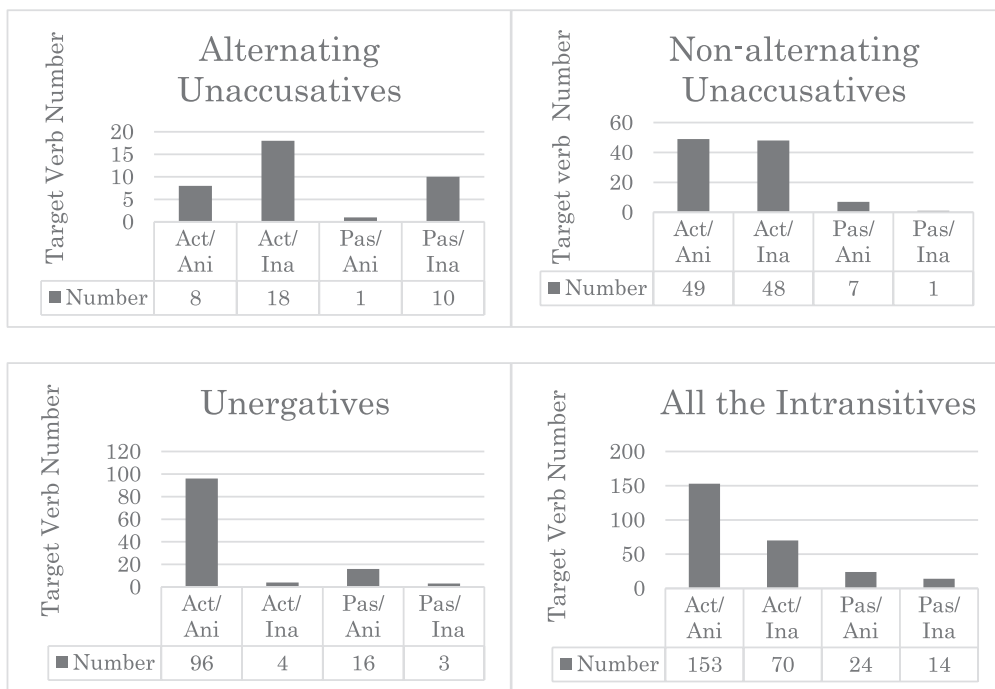
No. 5:

Using 60 words or more, in English, describe the most memorable present you have ever been given.

Directions: Create sentences that express the superlative ideas using two or more different “contents” and “grammatical expressions” using positive, comparative, or superlative degrees.

Appendix 2

Numbers of the Target Verbs Extracted from the Essay Writing Corpus



Note. Act/Ani = active voices with animate subjects, which use a grammatical voice form, Act/Ina = active voices with inanimate subjects, which use a grammatical voice form, Pas/Ani = passive voices with animate subjects, which use an ungrammatical voice form, Pas/Ina = passive voices with inanimate subjects, which use an ungrammatical voice form, Target Verb Number = number of task sentences, either grammatical or ungrammatical.