SSLA, **23**, 279–304. Printed in the United States of America.

THE UNACCUSATIVE TRAP IN SECOND LANGUAGE ACQUISITION

Hiroyuki Oshita
Ohio University

The distinction of two types of intransitive verbs—unergatives (with underlying subjects) and unaccusatives (with underlying objects)—may not exist at early stages of L2 acquisition, both being syntactically represented as unergatives. This idea, referred to here as the Unaccusative Trap Hypothesis, provides an elegant developmental account for a variety of seemingly unrelated syntactic phenomena in L2 English, Japanese, and Chinese. Target language input, structural constraints on natural language linking rules, and linguistic properties of a learner's L1s shape stages in the reorganization of the lexical and syntactic components of interlanguage grammars. Although nonnative grammars may initially override the structural constraints postulated as the Unaccusative Hypothesis (Burzio, 1986; Perlmutter, 1978) and the Uniformity of Theta Assignment Hypothesis (Baker, 1988), at later developmental stages some may still achieve conformity with the norms of natural languages.

One of the controversies concerning grammatical development in adult L2 acquisition has been the manner and degree of UG accessibility (e.g., Bley-Vroman, 1989; Clahsen & Muysken, 1986; Epstein, Flynn, & Martohardjono, 1996; Schachter, 1988; White, 1989, 1996). Although a parameterized syntax has always been the center of debate, the issue has also been investigated with respect to the acquisition of syntactic options, such as the English dative

An earlier version of this paper was presented at the 19th Second Language Research Forum at the University of Minnesota, Twin Cities, in September, 1999. My thanks go to Bill Rutherford, Liang Tao, Boping Yuan, Maria Luisa Zubizarreta, Karen Schmitt and, especially, Silvina Montrul for their help and encouragement. I also thank three *SSLA* anonymous reviewers for their invaluable comments, suggestions, and corrections. Remaining errors and shortcomings are solely my own.

Address correspondence to: Hiroyuki Oshita, Department of Linguistics, Gordy Hall 373, Ohio University, Athens, OH 45701; e-mail: oshita@oak.cats.ohiou.edu.

© 2001 Cambridge University Press 0272-2631/01 $9.50

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

alternation, whose grammaticality crucially depends on the lexico-semantic properties of verbs (e.g., Bley-Vroman & Yoshinaga, 1991; Inagaki, 1997). Recently, Juffs (1996) and Montrul (1997) have added new perspectives to the nonnative acquisition of verbs with a special focus on language-particular lexicalization patterns and crosslinguistic lexico-syntactic classes. In this emerging trend of expanding theory-based inquiry into the L2 lexicon and semantics-syntax interface issues, what has attracted the attention of many researchers is a class of verbs known as unaccusatives (e.g., Balcom, 1995, 1997; Han, 1998; Hirakawa, 1995, 1997, 1999; Hwang, 1997; Ju, 2000; Juffs, 1996; Montrul, 1997, 1999; Oshita, 1997, 1998, 2000b; Sorace, 1993a, 1993b, 1995; Yip, 1995; Zobl, 1989).

Unaccusatives (e.g., *fall*, *arrive*, *happen*) are one of the two major subclasses of intransitive verbs and contrast with unergatives (e.g., *laugh*, *swim*, *talk*). Perlmutter (1978) was the first to propose a distinction between the two, known as the Unaccusative Hypothesis. Perlmutter argued that the distinction is determined semantically (see discussion on linking rules below) but manifested syntactically (see also Burzio, 1986; Levin & Rappaport Hovav, 1995). The distinct properties of the two classes of intransitive verbs become very clear when they are compared to transitive causative verbs (e.g., *crush*) because the single argument of an unaccusative exhibits the same characteristics as the object of a causative, whereas that of an unergative behaves like the subject. Thus, at the argument-structure level, where the syntactically relevant properties of predicates are represented, each verb class can be characterized as in (1).

(1) a. Causative argument structure: (x <y>)
b. Unaccusative argument structure: <y>
c. Unergative argument structure: (x)

In (1), (x) and <y> stand for the external and direct internal arguments, respectively, which are linked with the initial syntactic subject and object. Furthermore, some alternating unaccusatives such as *break* and *melt*, which have the dyadic argument structure of (1a) in addition to the monadic (1b), exhibit causative as well as unaccusative syntactic behaviors. They contrast with nonalternating unaccusatives such as *appear* and *exist*, which have only the monadic argument structure of (1b) and normally do not behave like causative verbs.

The distinction between unaccusatives and unergatives, however, is not immediately obvious because both routinely appear in superficially identical syntactic environments (see [2]).

(2) a. Unaccusative: *The guest arrived.*
b. Unergative: *The boy jumped.*

Nonetheless, there is a critical structural difference between (2a) and (2b). *The guest* in (2a) is initially projected in the verb's object position and moves

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

to subject position (in the manner assumed for the standard object-to-subject movement analysis of the subject of a passive sentence). *The boy* in (2b), in contrast, starts out as the subject and remains as such throughout the syntactic derivation. Examples (3a) and (3b) illustrate their difference in a clear, though very simplified, way.

(3) a. Unaccusative: the guest$_i$ [$_{VP}$ arrived t_i]
b. Unergative: the boy [$_{VP}$ jumped]

The unaccusative-unergative distinction has offered many theoretically important questions for L2 researchers. For example, Sorace (1993a, 1993b, 1995) investigated auxiliary selection in L2 Italian and French and Montrul (1997, 1999) researched the nontarget lexical causativization of intransitives in L2 English, Spanish, and Turkish. Still others (e.g., Balcom, 1995, 1997; Hirakawa, 1995; Hwang, 1997; Ju, 2000; Oshita, 2000b; Yip, 1995) focused their attention on the contextually inappropriate or structurally ungrammatical passivization of unaccusative verbs.[1] In the current paper, I try to account for a variety of seemingly unrelated target and nontarget syntactic phenomena observed with intransitive verbs within interlanguage grammars, that is, one-argument verbs used as such by nonnative speakers. (For L2 learners' transitive use of intransitive verbs, see Montrul, 1997, 1999.)

The rest of the paper is organized as follows. First, I review the literature for unaccusative-related phenomena in L2 English, which are normally dealt with as questions unrelated to one another. Next, I show that these diverse phenomena can be seen as manifestations of the same problems inherent in the L2 acquisition of unaccusatives if a perspective called the Unaccusative Trap Hypothesis is adopted as a framework of analysis. This hypothesis accounts for the phenomena as the consequences of reorganizations that take place in the lexical and syntactic components of the developing L2 English grammar. Then, I present a list of general predictions made by this hypothesis and show that they actually play a role in some aspects of the L2 acquisition of Japanese and Chinese as well.

THE UNACCUSATIVE TRAP HYPOTHESIS

Unaccusative-Related IL Phenomena in L2 English

Recent studies have shed light on interesting L2 English phenomena, which might not have come to our attention without the theoretical perspective offered by the Unaccusative Hypothesis. For example:

1. Ungrammatical and contextually inappropriate passive unaccusatives (e.g., *An accident was happened* for "An accident happened" and *The ice was melted* for "The ice melted") are produced and judged as acceptable by learners from various L1 backgrounds (Balcom, 1995, 1997; Hirakawa, 1995; Hubbard, 1994; Hwang, 1997; Ju, 2000; Oshita, 2000b; Yip, 1995; Zobl, 1989).

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

2. Reluctance to accept unaccusatives in the canonical NP-V order is observed in experimental settings (Hirakawa, 1995; Kellerman, 1978, 1979; Oshita, 1997; Yip, 1995).
3. Nontarget postverbal NP structures—with or without a nontarget expletive subject *it*—are produced with some unaccusatives (Zobl, 1989), often by Italian and Spanish speakers but rarely by Korean or Japanese speakers (Oshita, 1997).
4. Nontarget phenomena are particularly noticeable among upper-intermediate, advanced, and even higher proficiency learners (Balcom, 1995, 1997; Han, 1998; Hubbard & Hix, 1988; Ju, 2000; Kellerman, 1979; Yip, 1995).
5. There is a clear contrast in the ways unaccusatives and unergatives are used and perceived by learners. Specifically, unlike unaccusatives, unergatives are rarely passivized (Hubbard, 1994), or used in postverbal NP structures, or judged as ungrammatical in the NP-V order (Oshita, 1997).
6. Despite phenomena 1–5, the majority of unaccusatives are used correctly in the target NP-V order (Hirakawa, 1995; Oshita, 1997; Zobl, 1989).
7. A U-shaped development is observed in the acquisition of unaccusatives, notably, with respect to the reluctance phenomenon (see phenomenon 2 above) (Kellerman, 1978, 1979, 1983, 1985; Sharwood Smith & Kellerman, 1989).

Phenomenon 1, the passive unaccusative, is well known. It was noticed as early as the 1970s (e.g., Burt & Kiparsky, 1972; Richards, 1973; Schachter & Hart, 1979) and identified later as an unaccusative-related phenomenon by Hubbard (1983). The learners' L1s reported in the literature included Arabic (Schachter & Hart, 1979; Zobl, 1989), Acadian French (Balcom, 1995), Chinese (Balcom, 1997; Han, 1998; Ju, 2000; Schachter & Hart, 1979; Yip 1995), Dutch (Kellerman, 1978), Italian (Oshita, 1997), Japanese (Hirakawa, 1995; Oshita, 1997; Schachter & Hart, 1979; Zobl, 1989), Korean (Hwang, 1997; Oshita, 1997), Persian (Schachter & Hart, 1979), Spanish (Oshita, 1997; Schachter & Hart, 1979), Thai (Zobl, 1989), and Turkish (Can, 2000). Yip considered this structure from the learnability perspective and speculated that once internalized, contextually inappropriate passives of alternating unaccusatives would be harder to expunge than ungrammatical passives of nonalternating unaccusatives because the former, unlike the latter, have grammatical passives of identical forms. Thus, learners ready to expunge the inappropriate passives may be discouraged to do so by the existence of such grammatical passives in the input.

Phenomenon 2, the reluctance to accept unaccusatives in experimental settings, is often overlooked because phenomenon 1, which is preferred by learners as an alternative to the NP-V, tends to divert researchers' attention. Although it is reminiscent of Schachter's (1974) avoidance phenomenon, the two are completely different. Unlike avoidance, which affects learners' performance because of the difficulty of target structures, reluctance is only observed in their grammatical judgment on the presumably easy NP-V order. In fact, the learners who exhibit reluctance do use the NP-V in their performance, showing no sign of difficulty. The phenomenon was found by Kellerman (1978), who was studying 291 Dutch speakers' judgments on the

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

transferability of various meanings of Dutch *breken* to English *break*. He observed a clear but quite unexpected tendency to reject the possibility of translating *Het kopje brak* as *The cup broke*. The same observation was also made with 25 of the 32 Dutch college students reported by Kellerman (1979). In subsequent work (Kellerman, 1983, 1985; Sharwood Smith & Kellerman, 1989), he adopted McCawley's (1978) pragmatic theory on the transitive and intransitive usage of alternating unaccusatives in attributing the results of the tests to the lack of proper contextual information, which would have helped the subjects to choose the intransitive *break*. He reported that given such a context, 66 out of 70 Dutch subjects in another experiment had correctly produced *break* in the NP-V order. However, Kellerman's account of reluctance cannot be the whole story because in Oshita's (1997) grammaticality judgment test with 64 Italian and 168 Japanese subjects, reluctance turned out to be as strong with nonalternating unaccusatives as with alternating ones.

The existence of nontarget postverbal NP structures described in phenomenon 3 was first reported by Zobl (1989). He studied essays written by 114 English learners (90 of whom were Japanese) and found clauses such as *I was just patient until dried my clothes* (for "I was just patient until my clothes had dried" [L1 Japanese]). Oshita (1997) searched a corpus of 3,362 essays written by Italian, Spanish, Japanese, and Korean speakers and found 33 postverbal NP sentences on 10 preselected nonalternating unaccusatives. Twenty-eight of them were the products of Italian and Spanish speakers whereas only 5 were produced by Japanese and Koreans. Additionally, Oshita noticed that the ungrammatical *it*-V-NP and ø-V-NP structures were used far more often than the grammatical *there*-V-NP structure.[2] Although only 4 out of the 33 token sentences were instances of the grammatical *there*-V-NP structure, the *it*-V-NP and ø-V-NP structures had 13 and 16 instances, respectively.

As described in phenomenon 4, many researchers have noted that unaccusative-related L2 phenomena are surprisingly prevalent among high-proficiency learners. Concerning the passive unaccusative structure of phenomenon 1, for instance, Hubbard and Hix (1988, p. 93) found that the great majority of such errors appeared in the writings of advanced learners. Their impressionistic statement receives substantial support in the profiles of the learners studied by others. The 31 Chinese subjects discussed by Ju (2000) were in the 550–575 score range on TOEFL. Similarly, the 38 Chinese subjects in Balcom's (1997) study had a mean TOEFL score of 578.9. The two Chinese subjects in Han's (1998) longitudinal study were both educated professionals with two years' working experience in an English-speaking country and had had TOEFL scores of over 600 nearly 10 years before the study. Finally, the 42 French-speaking subjects in Balcom (1995) were students at a bilingual university in Canada, who were considered advanced or near native because of their excellent oral and writing proficiency.

The unaccusative-unergative distinction is a fundamental theoretical assumption for L2 researchers currently working on related topics. Therefore, when these verbs behave in contrastive ways in nonnative English, as stated

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

in 5, the phenomena are simply taken for granted. To my knowledge, however, it was Hubbard (1983) who first noted that the majority of passive intransitive errors in nonnative English (more than 90% of his data) involve unaccusatives. Hubbard's observation was supported by Oshita (1997), who found 37 passive nonalternating unaccusatives but only 1 passive unergative, and 33 unaccusatives but no unergatives in postverbal NP structures in his research corpus. Oshita also found statistically significant differences between unergatives and unaccusatives with respect to the reluctance phenomenon described in 2 among Italian and Japanese subjects. Both groups exhibited reluctance in accepting both alternating and nonalternating unaccusatives in the NP-V order, but not unergatives.

Unlike the eye-catching nontarget phenomena, the mundane fact stated in phenomenon 6—that most unaccusatives are used grammatically in the NP-V order—seldom receives the attention it deserves. Oshita (1997), however, reported that out of 941 tokens obtained on 10 preselected nonalternating unaccusatives in his corpus, 851 (or 90.4%) were in the NP-V order. The question of why this group of verbs, which exhibits many unusual phenomena, is used so normally most of the time is highly significant but rarely addressed in the literature. A notable exception in this respect is Zobl (1989), who attributed the large number of NP-V sentences with unaccusatives to the learners' initial adoption of lexical NP movement.

The U-shaped development of phenomenon 7 was found by Kellerman (1978, 1979), who analyzed the transferability judgments on *The cup broke* by 210 Dutch speakers, ranging in age from 13 to 23 years, divided into eight groups according to the number of years they had studied English. He noted that the transferability rate, which stayed at 100% from age 14 to 17, started to decline, bottoming out among the 20-year-old group at 64%, then rose again to 80% for the most advanced group. Kellerman (1983, 1985; also Sharwood Smith & Kellerman, 1989) interpreted this U-shaped curve as demonstrating a developing sensitivity to a pragmatic distinction between transitive and intransitive meanings of an alternating unaccusative.

Seen in this way, phenomena 1–7 resemble a complex puzzle made of many small pieces. However, most research to date has not looked at the phenomena as potentially related to each other, perhaps owing to their disparate nature. Still, each observation alone presents a challenge to anyone who tries to account for it. The passive unaccusative structure of phenomenon 1, for instance, has produced at least half a dozen accounts (see Oshita, 2000b, and references cited therein). For example, the lexical causativization analysis (e.g., Balcom, 1995, 1997), one of the most popular explanations, regards passive unaccusatives as genuine verbal passives of either causative versions of alternating unaccusatives or of nonce causatives created from nonalternating ones. However, even this promising analysis has raised further questions, such as why passive unaccusatives appear much more often in actual L2 English than presumed nonce causatives—37 versus 12 tokens in Oshita's (1997)

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

research corpus, for instance—and why, even without potential causative entities in discourse, L2 learners accept ungrammatical as well as inappropriate passives (19% and 18% in Ju's [2000] experiment, for example).

Now, if we try to deal with the entire puzzle, the task becomes even more daunting. For instance, it is not even clear (and researchers do not agree) whether unaccusatives in English are difficult for nonnative speakers to acquire. On the one hand, phenomenon 6 seems to suggest that they are not particularly difficult, at least as far as the canonical NP-V order is concerned. Hirakawa (1995), for instance, concluded that the object-to-subject NP movement involved in the derivation of the NP-V structure presents very little difficulty for Japanese learners of English. Rosen (1991) went even further by arguing that the acquisition of unaccusatives is virtually error-free because the unaccusative-unergative distinction is presumably universal; there is nothing new about the target NP-V structure for learners to acquire. However, if the acquisition of the NP-V order with unaccusatives is so easy, or is given as a default from the beginning, why do some learners show reluctance to judge it as grammatical? And, after all, doesn't everything in the phenomena (all except phenomenon 6) suggest that English unaccusatives are difficult for nonnative speakers? Otherwise, why do "even the most advanced learners," as Yip (1995, p. 142) put it, fall victim to such an obvious error as passive unaccusatives? Or, is it rather that there is something about these verbs that makes their acquisition difficult, not *even*, but *especially* for advanced learners? I explore this possibility with respect to the way linking rules may work at the semantics-syntax interface of the interlanguage system.

The Single-Argument Linking Rule

Semantically, intransitive verbs may be grouped in various types. Some denote an internally initiated activity. Others express an entity's existence or state. Still others describe change of state, appearance, disappearance, and so on. According to Levin and Rappaport Hovav (1995), these semantic characteristics of verbs are described in their Lexico-Semantic Representation (LSR) and mapped to their Argument Structure Representation (ASR) by a set of linking rules.

For example, the argument of an unergative is projected to its proper position in ASR by the Immediate Cause Linking Rule in (4).

(4) *Immediate Cause Linking Rule* (Levin & Rappaport Hovav, 1995, p. 135): The argument of a verb that denotes the immediate cause of the eventuality described by that verb is its external argument.

Example (5) illustrates how the LSR of the unergative verb *laugh* is linked to its ASR by this linking rule. The entity *x* is immediately responsible for the "laughing" event and, therefore, becomes the verb's external argument (x).

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

(5) <Unergatives>
LSR: [*x LAUGH*]
↓← *Immediate Cause Linking Rule*
ASR: (x)

In contrast, the argument of an unaccusative such as *fall* is projected to its position in ASR by the Directed Change Linking Rule in (6).

(6) *Directed Change Linking Rule* (Levin & Rappaport Hovav, 1995, p. 146): The argument of a verb that corresponds to the entity undergoing the directed change described by that verb is its direct internal argument.

This rule maps the verb's LSR to its ASR as in (7). The entity *y* is projected as the direct internal argument <y> because it is not the causer of "falling" but simply undergoes the inherently directed motion.

(7) <Unaccusatives (directed change)>
LSR: [*y FALL*]
↓← *Directed Change Linking Rule*
ASR: <y>

Furthermore, unaccusative verbs of existence and appearance or disappearance, which may be represented as in (8),[3] project their syntactic arguments by the Existence Linking Rule in (9).

(8) a. <Unaccusatives (existence)>
LSR: [*y* BE (P_{LOC} *z*)]
b. <Unaccusatives (appearance/disappearance)>
LSR: [*y* BECOME (not) (P_{LOC} *z*)]

(9) *Existence Linking Rule* (Levin & Rappaport Hovav, 1995, p. 153): The argument of a verb whose existence is asserted or denied is its direct internal argument.

Incidentally, it should be noted that these linking rules are sensitive not to specific verb classes but to semantic notions such as immediate causation and directed change. Therefore, they also link the LSRs of many transitive verbs (e.g., *twist* and *create*) to their ASR.

Because of its presumed universality, the unaccusative-unergative distinction at the argument structure level in L2 grammars is tacitly accepted by researchers who focus their attention on the acquisition of syntactic properties that manifest the contrast between them (Balcom, 1995, 1997; Hirakawa, 1995, 1997, 1999; Yuan, 1999; Zobl, 1989). This assumption, however, makes it extremely difficult to account for the observations of phenomena 1–7 in a coherent manner.

The basic idea behind the Unaccusative Trap Hypothesis is that L2 learners of English fail to distinguish unaccusatives and unergatives as distinct lexico-syntactic classes because of the saliency of the NP-V word order in which most tokens of intransitive verbs appear in the input. Technically, this situa-

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

tion can be described as the learners' reliance on a simple but nontarget linking rule in (10), which I call the Single-Argument Linking Rule.

(10) *Single-Argument Linking Rule* (Hypothetical): The single obligatory nominal argument of a verb is its external argument.

Examples (11) and (12) illustrate how the Single-Argument Linking Rule projects the ASRs of unergatives and unaccusatives, using *laugh* and *fall* as examples.

(11) <Unergatives>
LSR: [*x LAUGH*]
↓← **Single-Argument Linking Rule*
ASR: (x)

(12) <Unaccusative>
LSR: [*y FALL*]
↓← **Single-Argument Linking Rule*
ASR: *(y)

When compared with example (5), it is clear that the projection of the ASR for unergatives is virtually unaffected in (11). In contrast, the ASR for unaccusatives in (12) is critically different from (7) because what should be the verb's direct internal argument is realized as its external argument. In other words, the Single-Argument Linking Rule subsumes unaccusatives under unergatives at the argument structure level by projecting virtually identical (unergative) ASRs for both.[4]

Three Stages of the Unaccusative Trap in L2 English

I propose three developmental stages in the L2 acquisition of English unaccusative verbs.[5] At the first stage, because of the nontarget Single-Argument Linking Rule, the IL grammar fails to syntactically differentiate unaccusatives from unergatives. Example (13) illustrates the IL grammar at this first stage, which I refer to as the *unergative stage*.

(13) The Unaccusative Trap in L2 English: First Stage
LSR ..... Target
↓ ←**Single-Argument Linking Rule*
ASR ..... Nontarget
||
DSR ..... Nontarget
↓
SSR ..... Nontarget (superficially targetlike NP-V order)

The nontarget ASR affects the subsequent syntactic derivation. The sentence's D-Structure representation (DSR) and S-Structure representation (SSR) are

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

both nontarget because what should be projected as the verb's object at DS is represented as its subject, and there is no trace in the object position at SS (cf. examples [3a] and [3b]). Thus, such a sentence is structurally ungrammatical in the native grammar. Paradoxically, however, thanks to this misrepresentation, the learner's grammar at this stage achieves a limited observational adequacy because it exclusively generates seemingly grammatical NP-V sentences. This state of affairs must contribute to the view of some L2 researchers that the acquisition of NP movement underlying the canonical subject-verb order with unaccusatives is easy or virtually error-free. The Unaccusative Trap Hypothesis suggests, however, that this apparent ease is the result of a misanalysis rather than the successful acquisition of target representations. Thus, this hypothesis provides a natural account for the scarcity of errors in the use of unaccusatives noted in phenomenon 6.

If all learners remain at this unergative stage of the unaccusative trap, we should not witness IL phenomena such as nontarget passives, reluctance to accept the NP-V order, and the use of (*it*-)V-NP sentences. The fact that these phenomena do appear indicates that some learners eventually proceed beyond the initial stage and reach the next stage, in which, the Single-Argument Linking Rule is replaced by targetlike rules (see [14]). My contention is that it is precisely at this point that the unaccusative-related IL phenomena start appearing as syntactic consequences of the reorganization of the IL lexicon.

(14) The Unaccusative Trap in L2 English: Second Stage
LSR ..... Target
↓ ←*Target Linking Rules*
ASR ..... Target
| |
DSR ..... Target
↓ (*no target NP movement*)
SSR ..... Nontarget

Example (14) predicts ungrammatical passive unaccusatives and (*it*-)V-NP structures, as well as a reluctance to accept NP-V word order. Moreover, it shows how correcting the initial lexical misanalysis leads to a new syntactic challenge for learners. The question is how to map DSRs with an object but no subject to plausible SSRs when the target English clearly requires a subject in every finite clause. I believe that the nontarget phenomena emerge as the learners' solutions to this syntactic problem.

The passive unaccusative structure of phenomenon 1, for example, can be seen as an overt marker of NP movement overgeneralized on the salient passive morphosyntax of *be* + past participle, which is a prototypical object-to-subject movement structure in English (Oshita, 2000b; Zobl, 1989; for different interpretations of passive unaccusatives, see, e.g., Balcom, 1995, 1997; Hubbard & Hix, 1988; Ju, 2000; Yip, 1995; among others). This analysis stresses only the syntactic significance of the passive unaccusative structure, without assuming nontarget lexical causativization behind it. Thus, it can explain why nonce causatives were not necessarily more frequent than passive unaccusa-

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

tives in Oshita's (1997) data as well as why Ju's (2000) subjects accepted passives of nonalternating unaccusatives as much as those of alternating ones even in discourse contexts with no potential causative agents.

Reluctance to accept the canonical NP-V order of phenomenon 2 may be caused by the learners' strong association of a direct internal argument with the verb's object position. In the face of the overwhelming NP-V pattern in the input and demand for communication, the association may be overridden in performance but becomes apparent when linguistic intuition is solicited as a grammaticality judgment. This analysis is preferable to the pragmatic explanation given by Kellerman (1983, 1985; Sharwood Smith & Kellerman, 1989) because it can account for reluctance involving nonalternating unaccusatives, which cannot be explained as a result of preference for the verb's (nonexistent) causative usage over its unaccusative usage.

The observation about nontarget V-NP sentences in phenomenon 3 is potentially significant for the question of the psychological reality of null expletives (Oshita, 2000a). According to Kuroda (1988), "forced-agreement" languages such as English require pleonastic elements (e.g., *there* and *it*) in the surface subject position when a thematic NP does not occupy that position. For this reason, the existence of phonetically null expletives is commonly assumed for *pro*-drop languages such as Spanish and Italian as well (e.g., Borer, 1986; Burzio, 1986). In contrast, Japanese and Korean, both "nonforced-agreement" languages, not only lack overt expletives but have no theoretical raison d'être for null expletives either (see also Fukui, 1987; Kim, 1988; Lee 1990), although their existence is predicted by Jaeggli and Safir (1989) and assumed by Nishigauchi (1992). If the observed prevalence of nontarget V-NP sentences in the L2 English of Italian and Spanish speakers indicates transfer of null expletives from their L1s, then the relative scarcity of similar errors among Japanese and Korean speakers may suggest that these languages in fact lack not only overt but also null expletives.

It is also natural that all these errors tend to afflict learners who cluster at higher proficiency levels as stated in phenomenon 4 because they should not be made unless the IL grammar attains this second stage of development.

Now, in theory, learners achieve a native grammar when they unlearn the nontarget syntactic operations and incorporate object-to-subject NP movement *without* the ungrammatical use of the passive morphosyntax. This final stage of the unaccusative trap is illustrated in (15), which shows that the IL grammar at this stage may also incorporate the *there*-insertion structure.

(15) The Unaccusative Trap in L2 English: Final Stage

LSR ..... Target
↓←*Target Linking Rules*
ASR ..... Target
||
DSR ..... Target
↓←*Target NP movement*
SSR ..... Target (also, *there*-insertion)

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

Notice that if this three-stage scenario of the Unaccusative Trap Hypothesis is on the right track, it can give an elegant account for the U-shaped pattern of phenomenon 7 observed in L1 Dutch speakers' reluctance to accept *The cup broke*. At the first stage, when the unaccusative *break* is subsumed under unergatives, the learner's grammar only generates NP-V sentences, exhibiting superficial targetlike behavior. When it is correctly reanalyzed as an unaccusative at the second stage, it becomes subject to the reluctance phenomenon. At the final stage, however, the reorganization of the syntactic component of the IL grammar is completed and, thanks to object-to-subject movement, the NP-V order is accepted once again.

Finally, the Unaccusative Trap Hypothesis can explain not only why unaccusatives cause the learning problems they do, but also why unergatives do not, as noted in phenomenon 5. This is because unaccusatives are subject to the lexical reanalysis that reclassifies their lexico-syntactic class; unergatives remain as such throughout the grammatical development of L2 English.

Factors Involved in the Internal Reorganization of IL Grammars

If the L2 acquisition of English unaccusative verbs can be characterized along the lines of the three-stage model proposed above, what factors drive the internal reorganization of the IL grammar from one stage to the next? I consider this theoretically significant question in this section.

The First Stage. Notice that the Single-Argument Linking Rule in (10) is clearly outside the norms of natural language rules. First, unlike its counterparts in (4), (6), and (9), it only applies to one general class of verbs (i.e., intransitives). Second, it is utterly indifferent to the building blocks of natural language linking rules, namely, syntactically relevant semantic notions such as immediate causation and directed change (Levin & Rappaport Hovav, 1995; see also Kageyama, 1996; Randall, van Hout, Weissenborn, & Baayen, 1994). The rule projects, for example, the sole argument of the unaccusative *break* as an underlying subject, although the thematically equivalent argument of the causative *break* is an underlying object. Needless to say, this is a blatant violation of Baker's (1988) Uniformity of Theta Assignment Hypothesis, which stipulates "identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure" (p. 46).

Why is such a rule entertained at the beginning of adult English acquisition? I think it is due to the canonical NP-V order in the input, which overwhelmingly suggests that there is only one class of intransitives. As noted in the literature (Ard & Gass, 1987; see also Al-Kasey & Pérez-Leroux, 1998; Yuan, 1999), surface syntactic characteristics of a target language can exert strong influence on the initial development of IL grammars. Considering that most adults (with the possible exception of theoretical linguists) view language as

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

primarily a tool for communication, it is no surprise that L2 learners adopt the Single-Argument Linking Rule because of its utility and simplicity. In this limited sense, I would say, the rule is arguably the most natural one for the learners at this stage.

Accordingly, once internalized, the Single-Argument Linking Rule may be quite hard to expunge in L2 English. One reason is the lack of salient phenomena of unaccusativity exhibited by high-frequency verbs. Suppose, for comparison's sake, that L2 learners of Italian also start with a wrong assumption that all intransitives are unergatives. Their misanalysis will be seriously challenged as soon as they start acquiring the composite past-perfective system that selects *essere* "be" over *avere* "have" as an auxiliary verb when the main verb is an unaccusative. Change-of-location verbs such as *andare* "go" and *venire* "come" take *essere* and, because of their high frequency in the input, may accelerate the ensuing reorganization of the IL lexicon. In contrast, English *go* and *come* exhibit little by way of linguistic patterns unique to their unaccusativity and thus may hold learners back even if they come close to expunging the unnatural Single-Argument Linking Rule from the IL grammar. If this unergative stage in L2 English lasts for an extended period as speculated here, it serves as a further explanation for the overall scarcity of errors involving unaccusatives noted in phenomenon 6.

The Second Stage. The transition to the second stage of the unaccusative trap is achieved when learners replace the Single-Argument Linking Rule with targetlike rules sensitive to syntactically relevant semantic notions. How can this be done? One possibility is that the transition is effected by some regularities in the input that learners come to sense and exploit. The relevant input should indicate that the surface subject of an unaccusative verb is an internal argument analogous to the object of a transitive verb. Is there positive evidence of this kind in the target English? In fact, such evidence is abundant in the case of alternating unaccusatives. Given that thematically identical NPs appear either as the subject or the object in active sentences, noticing this regularity may help the learners to dissociate the sentential subject position from the external argument position in argument structure. In contrast, in the case of nonalternating unaccusatives, evidence of this kind is limited to verbs of existence and appearance, which may appear in the *there*-insertion structure. Generally speaking, however, this structural possibility is not utilized by L2 learners of English (Oshita, 1997), suggesting that their awareness of it comes, if it does, only sometime after the correct reanalysis of unaccusatives.[6]

Considering that both reluctance and passive unaccusatives are as prevalent with nonalternating verbs as with alternating ones (Ju, 2000; Oshita, 1997), the transition to the second stage is more likely to be driven internally. In fact, I believe this is a more plausible scenario given Sorace's research (1993a, 1993b, 1995) showing that L2 learners' formulation of IL linking rules are both facilitated and constrained by the particular instantiations of natural linking rules manifested in their L1s.

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

The Final Stage. The transition from the second to the final stage is achieved by expunging nontarget syntactic phenomena from the IL grammar. I consider how this feat may be accomplished, at least in theory, in the case of the passive unaccusative structure and the reluctance phenomenon.

Recall that the lexical causativization analysis regards passive unaccusatives as verbal passives of actual or nonce causatives. The nontarget causativization is in fact one of the four cases discussed as Baker's Paradox by Pinker (1989) or as the Productivity Problem by C. L. Baker himself (1992). Let us assume, for the sake of argument, that negative evidence is available in adult L2 acquisition, for example, as corrections of errors provided by teachers. What kind of information must the negative evidence about passive unaccusatives contain to be useful to learners? I believe it needs to contain, minimally: (a) passives of alternating verbs are pragmatically or stylistically inappropriate in certain contexts, and (b) passives of nonalternating verbs are ungrammatical and nonexistent in the target English. In other words, with regard to alternating verbs, the learners have to understand it is the inappropriate use of the passive structure that has to be avoided, not the structure itself. Otherwise, they will end up eliminating the appropriate use of grammatical passives of regular transitives as well. At the same time, with regard to nonalternating verbs, they have to understand it is not only the use but also—and more importantly—the form that has to be expunged from their grammar. Now, here is the problem: Because there is no distinction, from the learners' point of view, between alternating and nonalternating unaccusatives under the causativization analysis (cf. Yip, 1995), providing the two-part information above in a way helpful to them appears to be extremely difficult even for a most competent language teacher. That is, corrections of passive unaccusatives may be available but not in the form of usable negative evidence (Pinker, 1989). Consequently, in this theoretical scenario, the learners will never be able to reach the final stage.[7]

Next, consider the movement-marker analysis. In this scenario, the learners mark the object-to-subject movement of NPs wrongly (and unnecessarily) with the passive morphosyntax when they use unaccusatives (both alternating and nonalternating) as one-argument verbs with inchoative meaning. The problem is not about an overgenerating grammar as with Baker's (1992) Productivity Problem, but more about overgeneralization of a form's function, which is analogous to the overgeneralization of past-tense morphology observed in child English. According to Pinker (1989), this type of problem can be solved by the Uniqueness Principle (i.e., a one-to-one correspondence postulated between form and function that exists in language acquisition). For the L2 English learners, therefore, seeing the target NP-V order repeatedly in contexts in which they would feel urged to use the passive structure will be sufficient evidence to expunge the latter from their IL grammar. Occasional error corrections may be available and would help, of course, but the reorganization of their IL grammar does not crucially hinge on availability of well articulated negative evidence in this scenario.

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

The reluctance to accept the NP-V order is another interesting case that is relevant to the question of negative evidence and its role in L2 grammar development. Because the phenomenon is completely hidden from normal observation, there is no way the learners can get any negative evidence about it. The U-shaped pattern noticed by Kellerman, however, is testimony to the fact that it can disappear from IL grammar without any external intervention. If the analysis in this paper is correct, the phenomenon is purely syntactic (as in the case of passive unaccusatives under the movement-marker analysis), and, therefore, repeated exposure to the target NP-V structure may be sufficient for learners to recover from it. If so, it is a clear example of a nontarget phenomenon that may be expunged from IL grammar without any negative evidence.

THE UNACCUSATIVE TRAP AND ITS GENERAL PREDICTIONS

The Unaccusative Trap Hypothesis offers general predictions about the grammatical development of IL systems:

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 lexicon.
4. *Attainment of unaccusative-specific target syntactic structures*: Similarly, the target syntactic structures possible only with unaccusatives, for example, the *there*-insertion structure, can be fully acquired only after the two classes of intransitives are correctly differentiated in the IL lexicon.
5. *Characteristic developmental patterns*: With respect to particular target syntactic structures, U-shaped developmental patterns may emerge.

In the following sections, I investigate how these predictions fare in existing data on nonnative Japanese and Chinese.

CASE-MARKING ERRORS IN THE L2 ACQUISITION OF JAPANESE

Japanese, an S(O)V language, case-marks the surface subject with the nominative particle *ga* and the object with the accusative particle *o*. The case particles, however, may be omitted, especially in speech, in a phenomenon known as Case Marker Drop (CMD) (Kageyama, 1993; Saito, 1983). CMD affects the subject of unaccusatives and the object of transitives but not the subject of unergatives or that of transitives. Although the canonical word order makes it difficult to determine the syntactic position of the sole argument of an unaccu-

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

sative in a sentence, an array of syntactic and semantic tests, involving phenomena such as floating numeral quantifiers, quantifier scope, arbitrary PRO, indirect passive constructions, and passive causative constructions, show that the *ga*-marked subject of an unaccusative can remain in object position at S-Structure (Nakayama & Koizumi, 1991; Nishigauchi, 1992; Tsujimura, 1996; Yatsushiro, 1996). CMD, therefore, can be syntactically characterized as a process that applies to NPs in object position.

With this background, let us analyze the L2 Japanese data in Kageyama (1993). The examples in (16)-(18) below are excerpts from the 65 examples (approximately 20 for each type) that originally came from Teramura (1990). The learners' countries of origin included Taiwan, China, Hong Kong, Korea, India, Malaysia, Thailand, Brazil, Finland, the USA, Indonesia, Iran, Spain, Nigeria, and Australia.

First, there is evidence that these learners were sensitive not only to the unaccusative-unergative distinction but also to the syntactic condition of CMD. The accusative *o* for the objects of transitives and the nominative *ga* for the subjects of unaccusatives were found to be omitted, though no example of omission of *ga* for the subject of an unergative was found (see [16]) (Kageyama, 1993, p. 63). TOP, NUM, ACC, LOC, and CPL stand for topic, nominative, accusative, locative, and copula, respectively. The gloss and translations are mine.

(16) a. Taiwanese learner:
Daigaku (*o*) *sotugyoo-sita* [*sic*] *kara* . . .
college (ACC) graduated since
"Since one graduated from college . . ."

b. Korean learner:
Wagakuni wa mada seeji (*ga*) *antee-site inai jootai desu.*
our-nation TOP yet politics (NOM) stabilize not condition CPL
"Our nation is still in a politically unstable condition."

The learners' awareness that NPs in object position can be marked with the nominative *ga* (in the case of unaccusatives) is also apparent in the pattern of errors in (17), where the nominative *ga* erroneously replaced the accusative *o* for the objects of transitives (Kageyama, 1993, p. 65):

(17) a. Iranian learner:
*Soko de senpuuki *ga kau tumori desu.*
there LOC electric-fan NOM buy intention CPL
"One intends to buy an electric fan there."

b. Nigerian learner:
*Nihon de wa noogyookikai *ga yoku tukau.*
Japan LOC TOP agricultural-machinery NOM often use
"In Japan people often use agricultural machines."

In the reverse manner, the accusative *o* erroneously replaced the nominative *ga* for the subjects of unaccusatives in (18).

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

(18) a. Hong Kong learner:
*Kono dooro wa kuruma *o takusan toorimasu ga . . .*
this road TOP car ACC a-lot go-by but
"A lot of cars go by on this road, but . . . "
b. Malaysian learner:
*Kuararunpuuru de ima totemo nihonseehin *o hayatteimasu.*
Kuala Lumpur LOC now very Japanese-goods ACC become-popular
"Japanese goods are currently popular in Kuala Lumpur."

Because no example of erroneous marking of the subject of an unergative with *o* was observed in the database (Kageyama, 1993, p. 64), the learners appear to have selectively (and mistakenly) extended the case marking with the accusative *o* to the subjects of unaccusatives because of their syntactic position.

In sum, the L2 Japanese errors presented by Kageyama (1993) are not random but highly systematic. Unaccusatives are affected but unergatives are not. Therefore, this overall finding clearly matches the second prediction on patterns of syntactic errors. Additionally, though Kageyama does not discuss the proficiency levels of the learners in question, the examples themselves suggest that they were clearly beyond the elementary phase of acquisition and actually quite advanced in some cases—thus, probably above the initial unergative stage of the unaccusative trap. If so, then the third prediction on the timing of unique syntactic errors is also, though tentatively, supported. Therefore, I take these data as an indication that some conditions predicted by the Unaccusative Trap Hypothesis exist in L2 Japanese as well.

V-NP WORD ORDER IN THE L2 ACQUISITION OF CHINESE

Data from Yuan (1999)

Chinese is an SV(O) language in which intransitive verbs most commonly appear in the NP-V order. The V-NP sequence, however, is also grammatical in some contexts. See the patterns in (19) based on Yuan (1999, pp. 283–284), where *break*, *come*, and *jump* stand for verbs of external causation (unaccusatives), verbs of inherently directed motion (unaccusatives), and verbs of internal causation (unergatives), respectively.

(19) a. PP *break* + indef-NP
b. PP *come* + indef-NP
c. PP *jump* + *direction* + indef-NP
d. *PP *jump* + indef-NP
e. *PP *break* + def-NP

The contrast between (19a–b) and (19d–e) show that the V-NP order is acceptable when an unaccusative verb is followed by an indefinite NP argument—a linguistic condition known as the Definiteness Effect (e.g., Belletti, 1988), which is also manifested in the *there*-insertion structure in English. In such contexts, the argument NP is analyzed to stay in object position, where

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

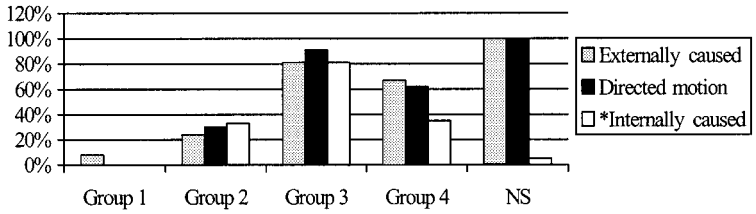


Figure 1. Percentage of V-NP production on the picture description task (based on Table 3 in Yuan, 1999, p. 285).

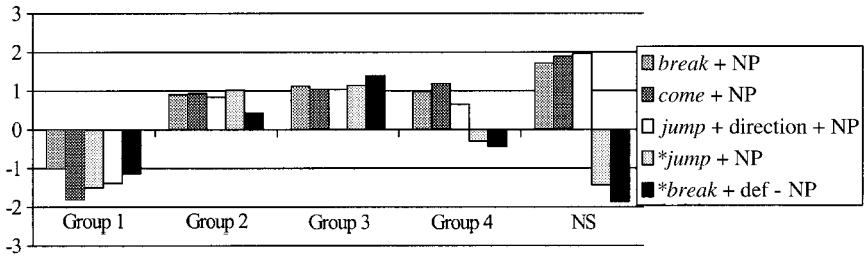


Figure 2. V-NP Acceptance on the grammaticality judgment task (based on Tables 4, 5, and 6 in Yuan, 1999, p. 286).

it is assigned Partitive Case (Yuan, 1999). Furthermore, as indicated by (19c), unergatives behave like unaccusatives when a sense of directionality is added by a morpheme such as *lai* "come," a phenomenon reminiscent of those observed in Dutch and Italian as well (Randall et al., 1994; Rosen, 1984).

Yuan (1999) investigated the acquisition of the grammatical V-NP patterns, using oral picture-description and grammaticality judgment tasks. His subjects were 14 native Chinese speakers (NS) and 48 English-speaking learners of Chinese, including 8 first-year students (G1 for "Group 1"), 11 second-year students (G2), 7 fourth-year students (G3), and 22 advanced learners (G4). I summarize Yuan's findings, using figures created based on the data in his paper.

Figure 1 shows the use of V-NP order in the description of pictures related to unaccusative verbs of external causation and directed motion as well as unergative verbs of internal causation. Notice that G1 hardly used V-NP sentences but G2 and G3 produced them in increasing proportions; the trend was reversed in G4. In contrast, all groups used NP-V order for all verbs.

Figure 2 shows the judgments of V-NP order on a scale of –2 (completely unacceptable) to 2 (completely acceptable). G1's tendency to reject all V-NP sentences and G2 and G3's propensity to accept them are both very clear. G4 managed to distinguish grammatical and ungrammatical patterns but not as

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

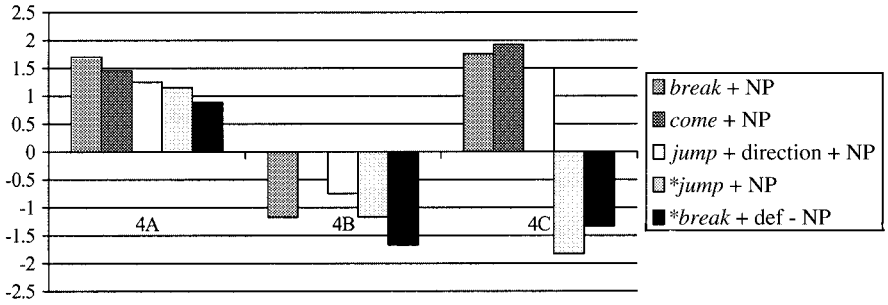


Figure 3. Group 4 subgroups: V-NP acceptance on the grammaticality judgment task (based on Table 7 in Yuan, 1999, p. 288).

clearly as native speakers did. In contrast, all groups overwhelmingly judged the NP-V sentences based on (19a–b, d) as grammatical.

Yuan's (1999) analysis of G4's grammaticality judgments further revealed that this group could be separated into three subgroups (see Figure 3): G4A ($n = 10$), G4B ($n = 6$), and G4C ($n = 6$). (The validity of this subgrouping was also supported by a reanalysis of G4's picture description data.) Although, generally speaking, G4A accepted and G4B rejected all the V-NP sentence types, G4C correctly distinguished the grammatical from the ungrammatical patterns. In other words, G4A behaved very much like G2 and G3, and G4B like G1. With these subgroups removed, G4C's judgments patterned closely with those of the native speakers.

Three Stages of the Unaccusative Trap in L2 Chinese

All the groups, except G4C and NS, failed to distinguish unaccusatives and unergatives, thus matching the first general prediction of the Unaccusative Trap Hypothesis. The finding strongly suggests that the Single-Argument Linking Rule in (10) is in operation; unaccusatives are initially misanalyzed as unergatives in L2 Chinese as well (see [20]).

(20) The Unaccusative Trap in L2 Chinese: First Stage
LSR ..... Target
↓ ←**Single-Argument Linking Rule*
ASR ..... Nontarget
||
DSR ..... Nontarget
↓
SSR ..... Nontarget (no V-NP generated)

By assuming that G1 is at this stage of grammatical development, in which the IL grammar generates only the unergative NP-V structure, we can easily ac-

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

count for their production and acceptance of NP-V but of no V-NP irrespective of verb class and sentence type.

Similarly, G2 and G3 produced and accepted grammatical NP-V sentences with all verbs. However, unlike G1, they also produced and accepted V-NP sentences irrespective of their grammaticality, a fact that needs to be accounted for. Because nothing suggests that G2 and G3 were sensitive to the unaccusative-unergative distinction, their IL grammar must have incorporated, with the Single-Argument Linking Rule intact, an additional syntactic measure that accommodates the V-NP word order of Chinese. I hypothesize that this measure is analogous to the locative inversion construction in English (e.g., Levin, 1993; Levin & Rappaport Hovav, 1995), as exemplified in (21) (from Levin & Rappaport Hovav, 1995, pp. 225–226).

(21) a. In the hall TICKED the long-case clock that had been a wedding present from her parents.
b. Back across the clouds FLAPPED the cormorant, screaming as it plummeted downward and disappeared into the wood.

Unlike the Chinese V-NP order and the English *there*-insertion structure, the locative inversion construction hosts unergatives as well as unaccusatives and exhibits no Definiteness Effect.[8] Yuan's (1999) experimental subjects being L1 English speakers, their association of the Chinese V-NP order with the locative inversion construction is quite likely. The fact that both appear in the PP-V-NP sequence, as in (19) and (21), may also have led them to such an assumption and the structural transfer. This analysis can clearly account for the fact that G2 and G3 were insensitive not only to the unaccusative-unergative distinction but also to a violation of the Definiteness Effect. This second developmental stage can be schematized as in (22).

(22) The Unaccusative Trap in L2 Chinese: Second Stage
LSR ..... Target
↓ ←**Single-Argument Linking Rule*
ASR ..... Nontarget
||
DSR ..... Nontarget
↓ ←**English-type locative inversion*
SSR ..... Nontarget (superficially target-like V-NP)

Clearly, with respect to the target V-NP order, G4C is the only group who went beyond the 2nd stage in (22) and attained a grammar equivalent to a native speaker's. Unlike G4B and G4A, who apparently remained at the first and second stages of the unaccusative trap, G4C showed evidence of both the unaccusative-unergative distinction and the Definiteness Effect in their grammar. I propose that this developmental change takes place when learners at the second stage come to a point where the lexicon of their developing grammar undergoes an internal reorganization that results in the correct classification of unaccusatives and unergatives. Now the arguments of unaccusatives

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

are projected into object position whereas those of unergatives are in subject position as before. This new structural contrast should make the learners sensitive to the fact that the verbs appearing in the target V-NP input exclusively belong to the unaccusative class. This, in turn, leads to replacement of the locative inversion construction with one analogous to the *there*-insertion structure in English, which also exclusively hosts unaccusatives. Because the *there*-insertion structure manifests the Definiteness Effect, this linguistic constraint immediately becomes part of their IL grammar. In fact, this idea draws additional support from the fact that Yuan (1999) identified no subjects who produced and accepted V-NP sentences only with unaccusatives, regardless of the definite-indefinite contrast of arguments. In this way, Yuan's data support the fourth general prediction of the Unaccusative Trap Hypothesis: The full acquisition of an unaccusative-specific target syntactic structure is possible only after the correct differentiation of unaccusatives from unergatives. This final stage of the unaccusative trap in L2 Chinese is shown in (23).

(23) The Unaccusative Trap in L2 Chinese: Final Stage

LSR ..... Target
↓←*Target Linking Rules*
ASR ..... Target
||
DSR ..... Target
↓
SSR ..... Target (NP in situ)

When Yuan's (1999) data are examined this way, it becomes very clear that they also support the fifth general prediction of the unaccusative trap, that of a U-shaped developmental pattern. Consider the ungrammatical V-NP sentences like (19d,e). G1 and G4B (presumably at the first stage of the unaccusative trap) neither produced nor accepted them, showing superficially nativelike performance. G2, G3, and G4A (at the second stage) mistakenly produced and judged them as grammatical. G4C (at the final stage) reversed the trend and neither produced nor accepted them, exhibiting truly nativelike performance.

SUMMARY

White (1989) noted a paradox in L2 acquisition: Whereas most learners' efforts to master a foreign language end up with a lack of success, general failure, variation in attainment, fossilization, and so forth (Bley-Vroman, 1989), some learners do attain nativelike complex and subtle linguistic knowledge. Therefore, an attempt to construct a model of L2 acquisition, even of a small aspect of the target language, faces a dual challenge: It has to be a model of potential success, but at the same time—and more importantly—it must be a model of failure. I have attempted, in this paper, to construct such a model, which can characterize both transitional grammatical states and a path to the full mastery of a target feature.

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

The model I have proposed is a developmental account for a variety of nontarget phenomena observed with unaccusative verbs in L2 contexts. The basic idea is that adult language learners initially misrepresent the lexico-syntactic properties of unaccusatives as unergatives and that the targetlike grammar becomes attainable only after they correct this misanalysis and its syntactic consequences. I have suggested that the initial misanalysis at the lower proficiency end is due to the strong influence of salient syntactic characteristics in the input; the subsequent reanalysis at a higher level is possible because of the learners' awakened sensitivity to the norms of natural linking rules instantiated in their L1s. I have also argued that the entire developmental sequence must be viewed as the result of interactions among factors such as the target language input, universal constraints on linking rules, and linguistic properties of the learner's L1 (e.g., existence of null expletives and locative inversion), all of which may influence different aspects of IL grammar at different phases of acquisition.

With data from L2 English, Japanese, and Chinese, I have demonstrated the usefulness of the Unaccusative Trap Hypothesis as a research framework. The hypothesis has made it possible to deal with seemingly unrelated phenomena not as something unique to a particular L2 or linguistic construction but rather as manifestations of more general problems inherent in the nonnative acquisition of intransitives crosslinguistically and across proficiency levels. Furthermore, it has proved its potential to discern subtle but significant developmental and structural differences in apparently identical syntactic structures. Recall, for example, that the (*it*-)V-NP structures in L2 English are regarded as a *post-unergative stage* phenomenon despite their obvious ungrammaticality whereas the V-NP word order in the L2 Chinese of G2, G3, and G4A is analyzed as an *unergative stage* phenomenon despite being superficially targetlike.

Admittedly, considering the diversity of issues raised by the Unaccusative Trap Hypothesis, my discussion in this paper is very limited. Ideally, the analyses of some phenomena I have presented should be supported with stronger evidence. Clearly, the structural, developmental, and crosslinguistic ramifications of the hypothesis, to name a few, must be investigated further with more extensive data from a wide range of L2s. The lack of data relevant to particular issues, however, does not diminish but actually highlights the potential significance of the hypothesis because it clearly shows that traditional research in this area has lacked a perspective with far-reaching implications such as the one presented in this work. My hope is that the proposed preliminary characterization of the Unaccusative Trap Hypothesis, inadequate though it may be, will serve as a useful frame of reference in the expanding research on the nonnative acquisition of syntactic properties of verbs.

NOTES

1. For simplicity's sake, I refer to these errors as passive unaccusatives in this paper, though I suspect the phenomenon has little to do with the active-passive alternation (Oshita, 2000b).

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

2. The *there*-insertion structure is grammatical when a verb of existence or appearance (both unaccusatives) takes an indefinite NP argument, as in (i) (from Levin, 1993, pp. 250, 258).

(i) a. There exists a solution to this problem.
b. There appeared a ship on the horizon.

The scarcity of the *there*-insertion structure with unaccusatives in Oshita's database may be due to its relative infrequency in the input and the learners' strong association of the expletive *there* with the presentational *there-be*-NP-PP construction.

3. The representations in (8a,b) are not those of Levin and Rappaport Hovav (1995) but rather my own creation based on their theory. The letter *z* is a nonobligatory argument for a spatial or temporal location.

4. Borer and Wexler (1987) attributed late acquisition of the full passive structure in L1 English to maturation of the A-chain, which amounts to the initial representation of unaccusatives as unergatives, too. The similarity between their theory and the idea presented here, however, is only superficial because L2 English learners who produce nontarget unaccusative structures have usually acquired the regular passive structure (e.g., Ju, 2000). In fact, there is some reason to suspect that the unaccusative trap does not exist in child L1 acquisition, at least in the way it does in adult L2 learning (Oshita, 1998).

5. Clarification of terminology may be in order at this juncture. First, the choice of the term *the unaccusative trap* (over its logical alternative *the unergative trap*) is not completely arbitrary. After all, I believe it is the inconspicuous nature of unaccusative verbs that makes learners adopt a nontarget linking rule and then pits them against a host of complications in their subsequent grammatical development. Second, I use the term *the unaccusative trap* to refer to (a) the learner's adoption of the Single-Argument Linking Rule in place of target rules and (b) the whole developmental sequence involved in the L2 acquisition of intransitive verbs.

6. If the scenario in this paragraph is correct, alternating unaccusatives are likely to undergo lexical reanalysis before nonalternating ones. Consequently, we may observe the emergence of nontarget phenomena with alternating unaccusatives earlier than those with nonalternating ones, as I once speculated (Oshita, 1997). Although I am now somewhat skeptical of this prediction, it is still an empirical question worth examining.

7. Note that I am not presenting this learnability question as an argument against the causativization analysis. Considering that some learners exhibit the passive unaccusative phenomenon well into their L2 development (e.g., Han, 1998), the learnability argument may actually work as its support. I believe the causativization analysis has to be rejected for other reasons (Oshita, 2000b).

8. Levin and Rappaport Hovav (1995) explain this fact by assuming VP-adjunction à la Belletti (1988), which moves NPs rightward. Instead, I am assuming leftward movement of V and PP to the head and Spec of a functional category above IP, following the Split CP Hypothesis, which suggests that the traditional CP may in fact contain categories such as Topic and Focus (e.g., Haegeman & Guéron, 1999; Zubizarreta, 1998).

REFERENCES

Al-Kasey, T., & Pérez-Leroux, A. T. (1998). Second language acquisition of Spanish null subjects. In S. Flynn, G. Martohardjono, & W. O'Neil (Eds.), *The generative study of second language acquisition* (pp. 161–185). Mahwah, NJ: Erlbaum.

Ard, J., & Gass, S. M. (1987). Lexical constraints on syntactic acquisition. *Studies in Second Language Acquisition*, *9*, 233–252.

Baker, C. L. (1992). [Review of the book *Learnability and cognition: The acquisition of argument structure*]. *Language*, *68*, 402–413.

Baker, M. C. (1988). *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.

Balcom, P. (1995). Argument structure and multicompetence. *Linguistica Atlantica 17*, 1–17.

Balcom, P. (1997). Why is this happened? Passive morphology and unaccusativity. *Second Language Research*, *13*, 1–9.

Belletti, A. (1988). The case of unaccusative verbs. *Linguistic Inquiry*, *19*, 1–34.

Bley-Vroman, R. (1989). What is the logical problem of foreign language learning? In S. Gass & J.

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

Schachter (Eds.), *Linguistic perspectives on second language acquisition* (pp. 41–68). New York: Cambridge University Press.
Bley-Vroman, R., & Yoshinaga, N. (1991). Broad and narrow constraints on the English dative alternation: Some fundamental differences between native speakers and foreign language learners. *University of Hawai'i Working Papers in ESL*, *11*, 157–199.
Borer, H. (1986). I-subjects. *Linguistic Inquiry*, *17*, 375–416.
Borer, H., & Wexler, K. (1987). *The maturation of syntax*. In T. Roeper & E. Williams (Eds.), Parameter setting (pp. 123–172). Dordrecht: Reidel.
Burt, M. K., & Kiparsky, C. (1972). *The gooficon: A repair manual for English*. Rowley, MA: Newbury House.
Burzio, L. (1986). *Italian syntax*. Dordrecht: Reidel.
Can, A. (2000). *The use of ergative verbs by Turkish learners of English*. Unpublished master's thesis, Anadolu University, Eskisehir, Turkey.
Clahsen, H., & Muysken, P. (1986). The availability of universal grammar to adult and child learners: A study of the acquisition of German word order. *Second Language Research*, *2*, 93–119.
Epstein, S. D., Flynn, S., & Martohardjono, G. (1996). Second language acquisition: Theoretical and experimental issues in contemporary research. *Behavioral and Brain Sciences*, *19*, 677–758.
Fukui, N. (1987). Spec, agreement, and the comparative syntax of English and Japanese. *Proceedings of the Northeastern Linguistics Society*, *17*, 193–210.
Haegeman, L., & Guéron, J. (1999). *English grammar: A generative perspective*. Oxford: Blackwell.
Han, Z.-H. (1998). *Fossilization: An investigation into advanced L2 learning of a typologically distant language*. Unpublished doctoral dissertation, Birkbeck College, University of London.
Hirakawa, M. (1995). L2 acquisition of English unaccusative constructions. *Proceedings of the Boston University Conference on Language Development*, *19*, 291–302.
Hirakawa, M. (1997). Deep versus surface unaccusativity in L2 Japanese. *McGill Working Papers in Linguistics*, *13*, 61–71.
Hirakawa, M. (1999). L2 acquisition of Japanese unaccusative verbs by speakers of English and Chinese. In K. Kanno (Ed.), *The acquisition of Japanese as a second language* (pp. 89–113). Amsterdam: Benjamins.
Hubbard, P. L. (1983, October). *Relational grammar and language teaching*. Paper presented at the Midwest Regional TESOL Convention, Minneapolis, MN.
Hubbard, P. L. (1994). Nontransformational theories of grammar: Implications for language teaching. In T. Odlin (Ed.), *Perspectives on pedagogical grammar*, (pp. 49–71). New York: Cambridge University Press.
Hubbard, P. L., & Hix, D. (1988). Where vocabulary meets grammar: Verb subcategorization errors in ESL writers. *California TESOL Journal*, *1*, 89–100.
Hwang, J.-B. (1997). *Implicit and explicit instruction for the L2 acquisition of English unaccusative verbs*. Unpublished manuscript, University of Oregon at Eugene.
Inagaki, S. (1997). Japanese and Chinese learners' acquisition of the narrow-range rules for the dative alternation in English. *Language Learning*, *47*, 637–669.
Jaeggli, O., & Safir, K. J. (1989). The null subject parameter and parametric theory. In O. Jaeggli & K. J. Safir (Eds.), *The null subject parameter* (pp. 1–44). Dordrecht: Kluwer.
Ju, M.-K. (2000). Overpassivization errors by second language learners: The effect of conceptualizable agents in discourse. *Studies in Second Language Acquisition*, *22*, 85–111.
Juffs, A. (1996). *Learnability and the lexicon: Theories and second language acquisition research*. Amsterdam: Benjamins.
Kageyama, T. (1993). *Bunpoo to gokeisei* [Grammar and word formation]. Kasugabe, Japan: Hitsuji Shobo.
Kageyama, T. (1996). *Dooshi imi-ron* [Semantics of verbs]. Tokyo: Kuroshio Shuppan.
Kellerman, E. (1978). Giving learners a break: Native language intuitions as a source of predictions about transferability. *Working Papers on Bilingualism*, *15*, 59–92.
Kellerman, E. (1979). The problem with difficulty. *Interlanguage Studies Bulletin*, *4*, 27–48.
Kellerman, E. (1983). Now you see it, now you don't. In S. M. Gass & L. Selinker (Eds.), *Language transfer in language learning* (pp. 112–134). Rowley, MA: Newbury House.
Kellerman, E. (1985). If at first you do succeed. . . . In S. M. Gass & C. G. Maddens (Eds.), *Input in second language acquisition* (pp. 345–353). Rowley, MA: Newbury House.
Kim, Y. S. 1988. *Licensing principles and phrase structure*. Unpublished doctoral dissertation, University of Wisconsin, Madison.
Kuroda, S.-Y. (1988). Whether we agree or not: A comparative syntax of English and Japanese. In W.

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

J. Posner (Ed.), *Papers from the Second International Workshop in Japanese Syntax* (pp.103–143). Stanford, CA: CSLI Publications.
Lee, Y.-S. (1990). Is Infl universal? A case study of Korean. *Proceedings of the Eastern States Conference on Linguistics*, *7*, 204–214.
Levin, B. (1993). *English verb classes and alternations: A preliminary investigation*. Chicago: University of Chicago Press.
Levin, B., & Rappaport Hovav, M. (1995). *Unaccusativity: At the syntax lexical semantics interface*. Cambridge, MA: MIT Press.
McCawley, J. D. (1978). Conversational implicature and the lexicon. P. Cole (Ed.), *Syntax and semantics, Vol. 9. Pragmatics* (pp. 245–259). New York: Academic Press.
Montrul, S. A. (1997). *Transitivity alternations in second language acquisition: A crosslinguistic study of English, Spanish, and Turkish*. Unpublished doctoral dissertation, McGill University, Montreal.
Montrul, S. A. (1999). Causative errors with unaccusative verbs in Spanish as a second language. *Second Language Research*, *15*, 191–219.
Nakayama, M., & Koizumi, M. (1991). Remarks on Japanese subjects. *Lingua*, *85*, 303–319.
Nishigauchi, T. (1992). Nihongo no hi-taikaku koobun to seeta riron [The unaccusative construction in Japanese and θ theory]. *Osaka Daigaku Gengobunka-gaku*, *1*, 41–52.
Oshita, H. (1997). *"The unaccusative trap": L2 acquisition of English intransitive verbs*. Unpublished doctoral dissertation, University of Southern California, Los Angeles.
Oshita, H. (1998). The unaccusative trap and the development of L2 lexicon. *Proceedings from the Panels of the Chicago Linguistic Society's Thirty-fourth Meeting*, *34*, 493–510. Chicago: Chicago Linguistic Society, University of Chicago.
Oshita, H. (2000a, March). *On psychological reality of null expletives*. Paper presented at the AAAL 2000 Conference, Vancouver, BC.
Oshita, H. (2000b). What is happened may not be what appears to be happening: A corpus study of "passive" unaccusatives in L2 English. *Second Language Research*, *16*, 293–324.
Perlmutter, D. M. (1978). Impersonal passives and the unaccusative hypothesis. *Proceedings of the Berkeley Linguistics Society*, *4*, 157–189.
Pinker, S. (1989). *Learnability and cognition: The acquisition of argument structure*. Cambridge, MA: MIT Press.
Randall, J., van Hout, A., Weissenborn, J., & Baayen, H. (1994, January). Approaching linking. Paper presented at the Boston University Conference on Language Development, Boston, MA.
Richards, J. C. (1973). A noncontrastive approach to error analysis. In J. W. Oller, Jr., & J. C. Richards (Eds.), *Focus on the learner: Pragmatic perspectives for the language teacher* (pp. 96–113). Rowley, MA: Newbury House.
Rosen, C. G. (1984). The interface between semantic roles and initial grammatical relations. In D. M. Perlmutter & C. G. Rosen (Eds.), *Studies in relational grammar 2* (pp. 38–77). Chicago, IL: University of Chicago Press.
Rosen, C. G. (1991). Relational grammar: L2 learning and the components of L1 knowledge. In T. Huebner & C. A. Ferguson (Eds.), *Crosscurrents in second language acquisition and linguistic theories* (pp. 123–142). Amsterdam: Benjamins.
Saito, M. (1983). Case and government in Japanese. *Proceedings of West Coast Conference in Formal Linguistics 2*, 247–259.
Schachter, J. (1974). An error in error analysis. *Language Learning*, *24*, 205–214.
Schachter, J. (1988). Second language acquisition and its relationship to universal grammar. *Applied Linguistics*, *9*, 219–235.
Schachter, J. E., & Hart, B. K. (1979). An analysis of learner production of English structures. *Georgetown University Papers on Languages and Linguistics*, *15*, 18–75.
Sharwood Smith, M., & Kellerman, E. (1989). The interpretation of second language output. In H. W. Dechert, & M. Paupach (Eds.), *Transfer in language production* (pp. 217–235). Norwood, NJ: Ablex.
Sorace, A. (1993a). Incomplete vs. divergent representations of unaccusativity in nonnative grammars of Italian. *Second Language Research*, *9*, 22–47.
Sorace, A. (1993b). Unaccusativity and auxiliary choice in non-native grammars of Italian and French: Asymmetries and predictable indeterminacy. *French Language Studies*, *3*, 71–93.
Sorace, A. (1995). Acquiring linking rules and argument structures in a second language. In L. Eubank, L. Selinker, & M. Sharwood Smith (Eds.), *The current state of interlanguage: Studies in honor of William E. Rutherford* (pp. 153–175). Amsterdam: Benjamins.
Teramura, H. (1990). *Gaikokujin gakushuusha-no nihongo goyoorei-shuu* [Collection of errors in Japanese by foreign learners]. Research report, Osaka University, Japan.

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press

Tsujimura, N. (1996). *An introduction to Japanese linguistics*. Cambridge, MA: Blackwell.
White, L. (1989). *Universal Grammar and second language acquisition*. Amsterdam: Benjamins.
White, L. (1996). The tale of the ugly duckling (or the coming of age of second language acquisition research). *Proceedings of the Boston University Conference on Language Development*, *20*, 1–17.
Yatsushiro, K. (1996). Case, scope, and feature movement. *MIT Working Papers in Linguistics*, *29*, 319–335.
Yip, V. (1995). *Interlanguage and learnability: From Chinese to English*. Amsterdam: Benjamins.
Yuan, B. (1999). Acquiring the unaccusative/unergative distinction in a second language: Evidence from English-speaking learners of L2 Chinese. *Linguistics*, *37*, 275–296.
Zobl, H. (1989). Canonical typological structures and ergativity in English L2 acquisition. In S. M. Gass, & J. Schachter (Eds.), *Linguistic perspectives on second language acquisition* (pp. 203–221). New York: Cambridge University Press.
Zubizarreta, M. L. (1998). *Prosody, focus, and word order*. Cambridge, MA: MIT Press.

https://doi.org/10.1017/S0272263101002078 Published online by Cambridge University Press