

ACQUISITION OF TENSE AND ASPECT IN *TOKI* 'WHEN' CLAUSES IN
JAPANESE AS A SECOND/ FOREIGN LANGUAGE

DISSERTATION

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By

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ABSTRACT

This study examined the acquisition of tense-aspect in *toki* ‘when’ clauses in Japanese among adult learners of Japanese as a second or foreign language. The objective of the study was to investigate if native languages (Language Transfer Hypothesis) and/or inherent semantic characteristics of verbs (Aspect Hypothesis) play a role in the selection of the *-ru/-ta* endings in *toki* ‘when’ clauses. The experimental study was conducted with 37 participants in Experiment 1 (with Achievement verbs in the *toki* clause position) and 34 participants in Experiment 2 (with Accomplishment, Activity and Stative verbs in the *toki* clause position). The research instrument consisted of a written version of the Truth Value Judgment Task in which the participants were asked to judge whether a sentence written in Japanese matched the content of a story that preceded it.

The experimental results suggest that the Language Transfer Hypothesis seems to be working independently for the Durative verbs (Experiment 2) category, while the Aspect Hypothesis seems to be independently working for the Achievement verbs (Experiment 1) category. That is, both these hypotheses seem to be working partially for the two categories of verbs (Achievements and Duratives).

There were two sets of results obtained that were not predicted by the two hypotheses. The Language Transfer Hypothesis does not predict the good performances

of the Chinese and English speakers for the S1 *ru toki* S2 *ta* pattern in the Durative category, while the Aspect Hypothesis does not predict the absence of over-use of *-ta* with Accomplishment verbs in the present study. The first unpredicted result can possibly be explained by offering another hypothesis, that learners are also sensitive to the durative semantic aspect (or lack thereof) of the verbs in question. That is, their choice of the *-ru/-ta* morpheme in *toki* clauses is also influenced by the issue of whether the verb in question represents an event that has a certain length of duration or if it occurs momentarily. For verbs that express a duration-like Accomplishment, Stativity or Activity, the learners associate the *-ru* with the duration of the verb and are able to select the morpheme correctly. As for the second result that deviated from the predictions, that Accomplishment verbs are not showing errors with over-use of *-ta*, it can be conjectured that learners are not focusing on the end-point of the Accomplishment verbs, and are treating them as Activity verbs with a finite duration.

Thus, from this study it seems that besides telicity, another semantic feature, namely, the durative versus instantaneous character of the verb is also playing an important role in the choice of the *-ru/-ta* morphemes in *toki* clauses. These results have important pedagogical implications in that it may be useful to introduce the inherent semantic characteristics of the verbs such as durativity, telicity and punctuality in the Japanese language classroom and teaching materials. Since the learners seem to be

naturally sensitive to these characteristics, introducing them in the classroom will assist them in their internal processing as well as production of the time expressions in Japanese.

Dedicated to my family

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FIELDS OF STUDY

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LIST OF ABBREVIATIONS

ACC	Accusative Case
CLSF	Classifier
COMP	Complementizer
COP	Copula
DAT	Dative Case
INSTR	Instrumental Case
LOC	Locative Case
NOM	Nominative Case
Q	Interrogative Marker
TOP	Topic Marker

CHAPTER 1

INTRODUCTION

1.1 Goals of the Study

The acquisition of tense and aspect is a crucial phenomenon recognized in the field of Second Language Acquisition (SLA). Researchers have extensively investigated the development of temporality as a multifaceted, complex phenomenon. Most of the previous studies, in the first as well as second languages, in the tense-aspect acquisition field have followed two approaches – a form-oriented approach and a meaning-oriented approach. The form-oriented studies follow a particular form and ask how and where it is used by learners, thus determining what it means in the system (Sato, 1990). Meaning-oriented studies investigate a particular concept and ask how it is expressed. The present work examines temporality in terms of both form and meaning-oriented approaches.

Before describing the goals of this study, the Japanese tense-aspect system will be briefly introduced. The verbal endings in Japanese are denoted by *-ru*¹ and *-ta* and these mark both tense (=a relative time, e.g. before or after now) as well as aspect (=a temporal quality, e.g. finished, ongoing etc.). In other words, a marker (*-ru* or *-ta*) elsewhere used with a tense value (e.g. non-past or past) is chosen for its aspectual value (e.g. realized [perfective] or unrealized [imperfective]) to mark the aspect of the verbs explicitly. *-Ta* is

¹ Throughout this dissertation, the verbal ending *-ru* includes its allomorph *-u*.

often considered to have the sense of “perfect” or “perfective” because it is still in the process of grammaticizing from a perfect marker into a perfective aspect marker and then into a simple past tense marker (Horie, 1997). Due to this transitional nature of the past form, there have been disagreements on whether *-ta* is an aspect marker or a tense marker (Takahashi, 1976, Hasegawa, 1999). For example, in the sentence *Taroo wa kinoo gakkoo e itta* ‘Taroo went to school yesterday’ *-ta* in *itta* ‘went’ indicates that the ‘going’ is realized (perfective aspect), and places this realization before speech time (past tense). The non-past form *-ru* normally refers to present state with stative verbs, and to future action or habitual action with dynamic verbs. The status of *-ru* as an aspectual marker has also been brought into active debate (Kudo, 1989, 1992).

Let us take a look at some examples to show the tense and aspectual usage of *-ru* and *-ta* endings.

- (1) Asita kooen-de hasiru.
Tomorrow park-Loc run
‘I’ll run in the park tomorrow.’
- (2) Kinoo kooen-de hasitta.
Yesterday park-Loc ran
‘I ran in the park yesterday’

As the translations in (1) and (2) suggest, (1) is in the non-past tense (future) and (2) is in the past tense. In (1) *-ru* in *hasiru* ‘run’ expresses non-past (future) as does the temporal adverbial *asita* ‘tomorrow’ while in (2) *-ta* in *hasitta* ‘ran’ expresses past tense, along with the temporal adverbial *kinoo* ‘yesterday’.

However, *-ru* and *-ta* are not always necessarily associated with non-past and past tense respectively. Let us look at the next two examples.

- (3) Hanako-ga kuru mae ni Taroo-wa kooen-de hasitta.
 Hanako-Nom come before Taroo-Top park-Loc ran
 ‘Taroo ran in the park before Hanako came.’
- (4) Hanako-ga kita ato de Taroo-ga hasiru yotee da.
 Hanako-Nom came after Taroo-Nom run plan Cop
 ‘Taroo plans to run after Hanako comes.’

As can be seen from the translations, (3) is in the past tense, while (4) is in the non-past tense (future). However, the verb in the subordinate clause in (3) *kuru* ‘come’ takes the *-ru* ending, while the verb in the subordinate clause in (4) *kita* ‘came’ takes the *-ta* ending. *-Ta* and *-ru* in the subordinate verb positions of these sentences do not express simple past or non-past tenses, rather they index a tense relative to the event expressed in the main clause. In (3), *Taroo wa hasitta* ‘Taroo ran’ (main clause event) occurs **before** *Hanako ga kuru* ‘Hanako will come’ (subordinate clause event). The **before** reading is marked by *-ru* in *kuru* + *mae*. In (4), *Taroo ga hasiru* ‘Taroo will run’ (main clause event) occurs **after** *Hanako ga kita* ‘Hanako came’ (subordinate clause event). The **after** reading is marked by *-ta* in *kita* + *ato*.

The same before/after interpretations can also be observed in the following two sentences with the *toki* ‘when’ clause in the subordinate clause position.

- (5) Ie-ni hairu toki neko-o mita.
 House-Loc enter when cat-Acc saw
 ‘I saw a cat just before I entered the house.’
- (6) Ie-ni haitta toki neko-o mita.
 House-Loc entered when cat-Acc saw
 ‘I saw a cat just after I entered the house.’

As the translations suggest, although both (5) and (6) are in the past tense, both *-ru* in (5) and *-ta* in (6) are used in the subordinate position. This is possible because in such sentences the *-ru/-ta* are not indexing simple non-past or past, but rather a sequential

(before/after) tense relative to the main clause event. In (5), *neko o mita* ‘I saw the cat’ (main clause event) occurs **before** *ie ni hairu* ‘I enter the house’ (subordinate clause event). The **before** reading is given by *-ru toki*. In (6), *neko o mita* ‘I saw the cat’ (main clause event) occurs **after** *ie ni haitta* ‘I entered the house’ (subordinate clause event). The **after** reading is given by *-ta toki*. Note that the event referred to with the verb *hairu/haitta* ‘enter’ in the *toki* clause is instantaneous and occurs in a moment.

Interestingly, if the verb in the *toki* clause is changed to one which expresses duration, such as *iru* ‘to be’, then the interpretation changes yet again. Let us take a look at the following pair of examples.

- (7) Nihon-ni iru toki Suzuki san-ni atta.
Japan-Loc be when, Suzuki-Mr-Dat met
‘I met Mr. Suzuki when I was in Japan.’
- (8) Nihon-ni ita toki Suzuki san-ni atta.
Japan-Loc was when Suzuki-Mr-Dat met
‘I met Mr. Suzuki when I was in Japan.’

As indicated by the translations in (7) and (8), *-ru/-ta* with the subordinate clause verb shows a simultaneous relation and not a sequential relation as in (5) and (6). In both sentences, *Suzuki san ni atta* ‘I met Mr. Suzuki’ (main clause event) occurs **while** *Nihon ni iru/ita* ‘I was in Japan’ (subordinate clause event). The *-ru/-ta + toki* has an aspectual usage in these sentences.

Hence, it can be seen that *-ru/-ta* is interpreted as both tense as well as aspectual markers. This fact, as interesting as it may be, could also be potentially very confusing for learners of Japanese who may not have been exposed to such a variety of tense-aspect usages for the same pair of verb morphemes. And as expected learners of Japanese do make frequent errors in their choice of *-ru/-ta* verb endings as will be described below.

The goal of this study is to pinpoint the causes of errors learners of Japanese make in their choice of the verbal endings in *toki* ‘when’ clauses in Japanese and to offer suggestions for better systematizing the teaching of Japanese tense-aspect. This study sets out to investigate the motivations for the learners of Japanese to choose one ending over the other (*-ru* or *-ta*) in case of *toki* clauses following a form-oriented approach first. Then in order to explain the motivations for the choice of the endings, the study will tie in a meaning-based approach by utilizing the concepts of linguistic transfer and association of the verbs with their inherent semantic aspects.

As illustrated above, *toki* clauses present a unique case that allows both the *-ru* and *-ta* endings with or without a change in the meanings. Some restrictions on *-ru/-ta* selection will be summarized below using the following examples. First, whether one uses *-ru* or *-ta* makes for a difference in meaning:

- (9) Ie-o deru toki denwa-ga kakatte kita.
 house-Acc leave TOKI phone-Nom rang came
 ‘The phone rang when (before) I left the house.’
- (10) Ie-o deta toki denwa-ga kakatte kita.
 house-Acc left TOKI phone-Nom rang came
 ‘The phone rang when (after) I left the house.’

But it is also possible to use *-ru* or *-ta* without a change in acceptability:

- (11) Kyooto-ni ita toki itumo noo-o mi ni itta.
 Kyoto-Loc was TOKI always Noh play-Acc see for went
 ‘I always went to see Noh plays when I was in Kyoto.’
- (12) Kyooto-ni iru toki itumo noo-o mi ni itta.
 Kyoto-Loc am TOKI always Noh play-Acc see for went
 ‘I always went to see Noh plays when I was in Kyoto.’

As opposed to *toki* clauses, *mae* ‘before’ or *ato* ‘after’ allow either *-ru* or *-ta* and never both.

- (13) Taroo-ga neru/*neta mae ni ha-o migaita.
 Taroo-Nom sleep before teeth-Acc brushed
 ‘Taroo brushed his teeth before going to bed.’
- (14) Taroo-ga ha-o migaita/*migaku ato de neta.
 Taroo-Nom teeth-Acc brushed after slept
 ‘Taroo slept after brushing his teeth.’

While the *-ru/-ta* endings in *mae* and *ato* represent relative tense (giving the before and after readings in (13) and (14) respectively), the same *-ru/-ta* endings in *toki* represent both relative tense (as in (9) and (10) showing the before-after readings) as well as aspect (as in (11) and (12) showing the simultaneous reading). In language classrooms it is almost always the case that these tense-aspect distinctions are not explained this way, which leads to students making the following kinds of production errors. (13a) is from Netsu (1984) while (14a) is from a students’ classroom production data. The (a) sentences here are erroneous, the (b) versions are correct.

- (13a) *Kuruma-ga kosyoo suru toki, Taroo-ni naosite morau.
 Car-Nom break down-NON-PAST when Taroo-Dat repair receive-NON-PAST
 ‘I’ll have Taroo fix my car, when it breaks down.’
- (13b) Kuruma-ga kosyoo sita toki, Taroo-ni naosite morau.
 Car-Nom break down-PAST when Taroo-Dat repair receive-NON-PAST
 ‘I’ll have Taroo fix my car, when it breaks down.’
- (14a) *Nihon-e itta toki, JAL-de iku.
 Japan-Loc go-PAST when, JAL-Instr go-NON-PAST
 ‘When I go to Japan, I’ll go by JAL.’
- (14b) Nihon-e iku toki, JAL-de iku.
 Japan-Loc go-NON-PAST when, JAL-Instr go-NON-PAST
 ‘When I go to Japan, I’ll go by JAL.’

In (13a) the choice of the *-ru* marker in *kosyoo suru* ‘break down’ makes the sentence unacceptable, while in (14a), the choice of the *-ta* marker in *itta* ‘went’ is inappropriate. Sentences (13b) and (14b) are the correct versions.

In order to explain these kinds of errors, I will use two hypotheses, namely (i) Language Transfer Hypothesis and (ii) Aspect Hypothesis in this study.

(i) Language Transfer Hypothesis

The Language Transfer Hypothesis predicts that non-native learners of a language are likely to be influenced by the language transfer process either from their mother tongue or other previously learned language/s.

(ii) Aspect Hypothesis

The Aspect Hypothesis predicts that the learners’ selection of the tense endings is influenced by universal principles relating them to the inherent semantic aspect of verbs (aspectual features that come with the verb’s meaning) that contain those tense endings.

In order to test the validity of these two hypotheses for explaining the choice of the *-ru/-ta* endings that learners make in case of *toki* clauses, a set of two experiments, based on a written-version of the Truth Value Judgment Task, were conducted with adult learners of Japanese as a foreign or second language.

Besides looking into how learners acquire the tense-aspect endings, it is also important to investigate how the materials used to teach Japanese are presenting time expressions. Therefore, a part of this study also presents an analysis of textbooks that was done to reveal how time expressions (specifically tense and aspect concepts) are presented in popularly used textbooks in the U.S. and Japan.

In the remainder of this chapter, a brief description will be presented on studies done on temporality using form and meaning-oriented theories, mainly in Indo-European languages. Previous studies on tense-aspect acquisition in Japanese will be presented in Chapter 2, the Literature Review.

1.2 Meaning-Oriented Studies

This approach examines the range of linguistic devices that speakers use to express a particular concept, such as temporality. The meaning-oriented studies consider the role of time adverbials, calendric expressions, discourse organization and morphology as well as their interaction (Bardovi-Harlig, 1992b; Dietrich et al., 1995). Due to a large number of cross-linguistic studies, a wide variety of Indo-European target languages, such as Spanish, Italian, French, etc., have been investigated. The studies are mostly longitudinal, deal mostly with untutored learners and use elicitation techniques such as conversational interviews, film retell tasks, etc. The studies have mainly focused on reference to something in the past, which requires displacement from the time of speaking (that is, requires marking), occur early enough (in the beginning stages) in interlanguage development, and can be studied for most learners. The main research questions addressed in these studies are: (i) How do learners express temporality at a given stage of their acquisition process? (ii) How does temporal reference change for them over time? (iii) What are the explanatory factors that can account for the development from one stage to another, including target-like usage? The linguistic devices that learners use to express temporality are pragmatic, lexical, and morphological means, which are associated with different stages of development, as outlined below:

1.2.1 Pragmatic Means

In the earliest stage, there is no systematic use of tense-aspect morphology, so learners establish temporal relations in four ways: (a) by relying on the contribution of their fellow speakers (scaffolded discourse), (b) through reference inferred from a particular context (implicit reference), (c) by contrasting events, and (d) by following chronological order in narration. (Meisel, 1987).

1.2.2 Lexical Means

In the next stage, reference to the past is first made through the use of time-adverbial expressions and connectives. At this stage, the verbs still appear in morphologically unmarked forms. The reliance on time adverbials may stem in part because of the difficulty that learners experience in comprehending verbal morphology (Brindley, 1987) and the adverbials are acquired as lexical items. Studies on input processing have shown that learners process for meaning before form and they process content words first. Also they prefer to process lexical items over grammatical items for semantic information (VanPatten, 1996). It has been revealed in learners of Spanish, French and Italian that they scored higher in assigning temporal reference on recall tasks at both sentence and discourse levels when adverbs were present than when verbal morphology occurred alone (VanPatten, 1996).

1.2.3 Morphological Means

Verbal morphology appears following the adverbial-only stage. The reliance on the adverbials is more at the lower levels than at the higher levels. High levels of

appropriate use of verbal morphology seem to be more common among tutored learners than untutored learners, although appropriate use is not guaranteed by instruction. Bhardwaj et al. (1988) have reported that differences in acquisition is attributed not only to non-uniform instructional practices but also diverse levels of learners' education, literacy, social network and socio-economic status, which influence both the quantity and quality of the target language input and subsequently production, both oral and written. Once the learners acquire the past-tense verbal morphology, they begin to make references to anterior events, reporting events out of the chronological order (Bardovi-Harlig, 1994b). At this stage again, the learners continue to rely on adverbials. According to the reverse-order reports by Bardovi-Harlig (1994b) adverbs are the most common markers of anteriority with nearly half of the reverse order reports that are not marked by verbal contrasts, are marked by time adverbials; roughly half of those show single adverbials and the other half show two adverbials. However, with the emergence of verbal contrasts, the number of adverbials used drops drastically, especially, in the case of two adverbials usage.

1.3 Form-Oriented Studies

The form-oriented studies, or form-to-function studies (Sato, 1990) are mainly concerned with the emergence of temporally relevant morphology. Several researchers have claimed that the development of tense-aspect morphology in first language (L1) acquisition of various languages is strongly influenced by the inherent semantic aspect of the verbs to which the inflections are attached (Shirai, 1993). The same tendency has been observed in second language (L2) acquisition studies, especially in English, Spanish

and French (Bardovi-Harlig & Reynolds, 1995; Andersen, 1991). This universal tendency of associating the verbal morphology with their inherent semantic aspect is termed as the Aspect Hypothesis. In the most current postulation, Andersen & Shirai (1994) do not explicitly set aspectual influence in opposition to encoding tense or grammatical aspect (as done by some other stronger versions of this hypothesis); however, they still maintain the idea of the initial influence of inherent semantic aspect.

Every aspect study in this vein aims to determine if the verbal morphology shows differential distribution across the aspectual categories (Bardovi-Harlig, 1999). In other words, they all aim to examine if the choice of verbal morphology is distributed across the aspectual categories of verbs according to any set pattern. There are two main kinds of questions addressed in these kinds of studies:

- (i) Where do various tense/aspect morphemes occur?
- (ii) How is each of the lexical aspectual categories marked by learners?

A universal tendency observed in the acquisition of tense-aspect morphology, summarized in what is known as the Aspect Hypothesis (Andersen & Shirai, 1994; Bardovi-Harlig, 2000) claims that learners create restricted form-meaning relationships at the early stages of acquiring L1 tense-aspect morphology. Specifically, learners strongly associate past tense and perfective aspect forms with punctual verbs (verbs that express an event that occurs in a moment, e.g. *recognize*) and telic verbs (verbs that have natural endpoints, e.g. *wake up*), imperfective aspect forms with atelic verbs (verbs that do not have an inherent endpoint, e.g. *swim*), and progressive aspect forms with activity verbs (e.g. *write*). The four main claims of the Aspect Hypothesis are listed below (Andersen & Shirai, 1994). In the current study, the first claim of the Aspect Hypothesis will be tested

in relation to the choice of tense-aspect endings in verbs in *toki* ‘when’ clauses in Japanese.

- (a) Learners first use (perfective) past marking on Achievements and Accomplishments, eventually extending use to Activities and Statives.
- (b) In languages that encode the perfective/imperfective distinction, imperfective past appears later than perfective past, and imperfect past marking begins with Statives, extending next to Activities, then to Accomplishments, and finally to Achievements.
- (c) In languages that have progressive aspect, progressive marking begins with Activities and then extends to Accomplishments and Achievements.
- (d) Progressive markings are not incorrectly overextended to Statives.

More details on studies done on each of the claims of the Aspect Hypothesis will be presented in Chapter 2.

While there has been extensive research done on aspect studies, fewer studies have been done on inflection marking for tense. Some selected studies in inflection marking for tense will be summarized in the next section.

1.4 Studies on Inflections Marking for Tense

Although, overall the emergence of tense marking has been overshadowed by the studies on influence of lexical aspect on the distribution of verbal morphology, nevertheless, some studies address the acquisition of tense. Robison (1995) observed that, even though the correlation of morphology with lexical aspectual categories strengthens with the level of proficiency, tense also develops. Third-person impersonal narratives also show similar patterns of tense developing along with aspect (Bardovi-Harlig & Bergstrom, 1996). Housen (1994) investigated the acquisition of tense in Dutch as a

second language. One English learner of Dutch initially used past tense forms predominantly for past time contexts, but used present tense forms for both past and present tense contexts. But later (after more exposure), the learner largely restricted her use of present tense forms to present-time contexts. As reported by Bardovi-Harlig (1992a), the use of past progressive with Activities (where the native speakers provided a simple past) shows target-like tense use; however use of progressive with Activities shows the continued influence of lexical aspect (Robison, 1995). Buczowska & Weist (1991) claim that tense is acquired before grammatical aspect (that is, aspectual distinctions marked by linguistic devices, usually inflections or auxiliaries). A comprehension test completed by 60 adult Polish learners of English suggests that learners can more accurately identify contrasts in tense than in aspect. However, it must be noted that they used test pairs like jumped/will jump (that is, simple past/modal future) rather than the more authentic past/present combination (Buczowska & Weist, 1991). Dietrich (1995), however used natural production data (hence avoiding the use of forced combinations), but concluded in agreement with Buczowska & Weist (1991) that tense preceded aspect in acquisition.

To summarize, the purpose of this chapter was to highlight the goals and hypotheses of the present study and introduce selected research done in Indo-European languages on form-meaning based approaches (upon which the proposed hypotheses are based) in tense-aspect acquisition studies. Research related to acquisition of the expression of temporality in Japanese will be presented in the next chapter.

The organization of the chapters that follow this one is as follows. Chapter 2 introduces basic terms, concepts and hypotheses used in this study as well as a

comprehensive review of the acquisition studies done in the area of Japanese tense and aspect. Chapter 3 presents an experimental analysis to investigate the acquisition of tense-aspect in *toki* ‘when’ clauses in Japanese among adult learners of Japanese as a second or foreign language. Chapter 4 presents a pedagogical analysis done with some popularly used Japanese textbooks in the U.S. and Japan to examine the presentation of time expressions in them. Chapter 5 will present the conclusions including the pedagogical implications of this study.

CHAPTER 2

LITERATURE REVIEW

Although extensive research has been done on the acquisition of tense-aspect morphology on various Indo-European languages, studies on the acquisition of tense-aspect in Japanese as a second language (JSLA) have been fairly recent. The first systematic study to investigate the effect of verb semantics in L2 acquisition of tense-aspect in Japanese was done in Kurono (1994). From past literature it is evident that while the focus of the JSLA studies has been on form-based theories and specifically examining the claims of the Aspect Hypothesis with focus on the relation of *-ta* with Achievement verbs and *-te i-* with Activity verbs, there have been no studies reported on meaning-based theories. This chapter will focus on presenting previous literature on acquisition of tense-aspect in Japanese. Section 2.1 of this chapter will delineate some basic definitions and theories about tense-aspect in general followed by the workings of the tense-aspect systems in Chinese, Japanese, Korean and English, in particular, in Section 2.2. In Section 2.3, a review of the two proposed hypotheses (namely, the Language Transfer Hypothesis and the Aspect Hypothesis) will be presented. In Section 2.4, a literature review will be presented of the acquisition studies done on tense and aspect in Japanese in general, and of studies done on the tensed and/or aspectual

nature of the *-ru/-ta* endings in Japanese. How tense and aspect has been viewed to work on *toki* ‘when’ subordinate clauses in Japanese will be presented in Section 2.5.

2.1 General Concepts, Terms, and Definitions

2.1.1 Tense and Aspect

The notion of temporality in language is subdivided into the grammatical categories of tense and aspect. Both tense and aspect are concerned with time, but in ways quite different from each other.

Tense locates a situation in time (“reference time”) with respect to some base reference point (such as the speech time) and looks at relative sequential ordering between the two time points (Comrie, 1976). Thus, it enables the hearer to reconstruct the chronological relations among the situations in a text and is a category of “temporal deixis” (Comrie, 1976). Tense is usually divided into “absolute tense” and “relative tense”. Absolute tense is when the anchoring point of a particular situation is the speech time. For example, in the sentence, *I ran in the park yesterday*, the reference time of *ran in the park* is in relation (prior) to the anchoring point of reference, the speech time, and hence this sentence is in the past tense. Relative tense is when the anchoring reference point against which a particular situation is placed in time is not the speech time, but some other event time. For example, in the sentence, *When I went home yesterday, he had already arrived*, the event *he had arrived* is situated prior to the anchoring time of *I went home*, which in turn is situated prior to the anchoring ground of the speech time. Therefore, *arrived* is indicating relative tense because it is placed relative to another

event in the sentence, *I went home*, while *went* indicates absolute tense, since it is placed relative to the speech time.

Aspect, on the other hand, is defined as “different ways of viewing the internal temporal constituency of a situation” (Comrie, 1976, p.3). Unlike tense, aspect does not relate the situation to any other particular time span (that is, it is non-deictic) but is confined to the temporal structure of one situation (Chung & Timberlake, 1985).

The difference between *he is eating* and *he was eating* is that of tense, since the *is/was* contrast signifies the difference between the two in relation to the speech time. The difference between *he ate bread* and *he was eating bread*, however, is one of aspect, since the difference is about how the action of eating is viewed by the speaker; the former views the situation in its entirety (external view), while the latter views the situation as consisting of phases (internal view) (Comrie, 1976).

Aspect is typically distinguished into two types: grammatical and inherent lexical aspect. Grammatical aspect, also known as “viewpoint aspect” (Smith, 1983, 1991), refers to aspectual distinctions marked explicitly by linguistic devices, usually auxiliaries or inflections, as in (1)

- (1) I slept. (simple past)
- (2) I was sleeping. (past progressive)

Inherent lexical aspect (Andersen, 1986, 1999), or also known as “situation aspect” (Smith, 1983, 1991) or semantic aspect (Comrie, 1976), refers to what is inherent in the lexical items that describe the situation. In (1) *sleep* has intrinsic duration whether in simple past or past progressive. These inherent distinctions are noted by Vendler’s (1967) framework of lexical aspects, which consists of States, Activities,

Accomplishments and Achievements (Smith, 1983). These four lexical classes can be distinguished by three features: Dynamicity, Telicity, and Punctuality (Andersen, 1991; Chung & Timberlake, 1985; Comrie, 1976). “Dynamicity” distinguishes dynamic events from states. States (e.g. sleep) exhibit little or no change over time, whereas a dynamic event (e.g. eat) describes a process that changes. “Telicity” refers to whether an action has a naturally defined endpoint such that the action is completed and cannot continue once that endpoint is reached. Telic predicates exhibit processes with an inherent limit (e.g. run a mile), whereas atelic predicates reveal processes without limit (e.g. run in the park). “Punctuality” distinguishes durative from punctual predicates. Durative events take place over a certain period of time (e.g. make a chair), whereas punctual events take place instantly (e.g. recognize). In the next two sections, classification of verbs based on their inherent semantic characteristics as introduced by Vendler and Kindaichi will be discussed.

2.1.2 Vendler’s Classification

The four-way distinction, based on temporal properties of verbs (or verb phrases) that was introduced by Vendler (1967) and elaborated by several linguists (e.g. Kenny, 1969; Dowty, 1979) is described below and summarized in Table 2.1.

Achievement or punctual predicates are telic and punctual, and capture the beginning or the end of an action (Lee, 1999). These take place instantaneously, and can be reduced to a single point in time (Shirai, 1995). Examples: *arrive, leave, notice, recognize*.

Accomplishment or telic predicates are telic and non-punctual, and thus have some duration, but with a single clear inherent endpoint. In English, these are often phrasal.

Examples: *build a house, make a chair, write a letter, paint a painting*.

Activity are atelic and thus do not assume a natural or inherent endpoint. They have inherent duration in that they involve a span of time. Examples: *rain, write, read, swim, play*.

State are non-dynamic and persist over time without change. Examples: *have, believe, think, know, love*.

	Dynamicity	Telicity	Punctuality
Achievement	+	+	-
Accomplishment	+	+	+
Activity	+	-	+
State	-	-	+

Table 2.1: Vendler's Classification

Smith (1991) modified Vendler's system and added a fifth category, Semelfactives (e.g. cough, knock), which would belong to Achievement in Vendler's classification. Semelfactive is similar to Achievement in that it is dynamic and punctual, but different in that it does not involve an inherent endpoint that denotes a change of state. This difference can be observed with progressive markers. In English, for example, when used with a progressive marker, Semelfactive can denote an iterative action in progress (e.g., *Ken is knocking on the door*), whereas Achievement indicates a preliminary stage of an event (e.g., *John is dying*).

Besides the inherent aspectual differences that these four classes of verbs and verb phrases display, as Dowty (1979) shows, they exhibit diverse distributions in various linguistic environments. First, all the classes except States appear in the progressive form as in:

- (3) a. *John is loving Mary. (State)
- b. John is running. (Activity)
- c. John is painting a picture. (Accomplishment)
- d. John is reaching the summit. (Achievement)

Second, adverbials that indicate the duration of time, such as, *for an hour*, can co-occur with Activities but not with Accomplishments, whereas adverbials referring to a point in time such as *in an hour* can appear with Accomplishments but not with Activities.

Consider the following contrasts:

- (4) a. John swam for an hour. (Activity)
- b. *John swam in an hour.
- (5) a. Mary made a chair in a week. (Accomplishment)
- b. *Mary made a chair for a week.

Third, Accomplishments can follow the verb *finish* while Achievements cannot.

- (6) a. Bill finished making a chair. (Accomplishment)
- b. *Bill finished finding his wallet. (Achievement)

Hence, the verbal classification based on aspectual properties is well motivated by the range of data given in (3) – (6).

2.1.3 Kindaichi's Classification

A similar verbal classification to the one for English introduced above was proposed for Japanese by Kindaichi (1976). Kindaichi categorizes Japanese verbs into

four classes¹ – Stative, Continuative, Instantaneous and Type 4 (English terms for these are from Jacobsen (1992). Examples of each class are given below:

Stative: *aru* ‘be’, *dekiru* ‘can do’, *hanaseru* ‘can speak’.

Continuative: *yomu* ‘read’, *kaku* ‘write’.

Instantaneous: *sinu* ‘die’, *kieru* ‘turn off’, *sawaru* ‘touch’

Type 4: *sobieru* ‘tower/ rise’, *sugureru* ‘be outstanding’, *zubanukeru* ‘be outstanding’, *arihureru* ‘be common’.

The Statives, Continuatives, and Instantaneous classes are equivalent to the States, Activities and Achievements of Vendler’s classification of English verb phrases respectively, but Type 4 does not find its equivalent. It is clear that like the Vendler/Dowty-style classification, Kindaichi’s classification is also based on the aspectual properties of the verbs. Unlike Vendler’s classification, which is motivated by a range of diagnostic tests as shown in (3) – (6), the distinction among the four classes of Japanese verbs that Kindaichi proposes relies solely on the interpretation that arises in the construction consisting of the verbal-gerund in *-te/de* and the auxiliary *iru*. This construction is the non-finite gerund form of the verb, immediately followed by the stative auxiliary verb *iru* ‘be’.

- (7) Inu-ga sinde iru.
dog-Nom dead
‘A dog has died/is dead.’

- (8) Tanaka-san-wa gengogaku no hon-o kaite iru.
Tanaka-Top linguistics of book-Acc writing
‘Mr. Tanaka is writing/has written a book on linguistics.’

¹ The original Japanese terms given by Kindaichi (1976) are *zyootai doosi* ‘Statives’, *keezoku doosi* ‘Continuatives’, *syunkan doosi* ‘Instantaneous’, *daiyonsyu no doosi* ‘Type 4’.

With Activity verbs, verbal-gerund *-te/de iru* construction can yield either a progressive reading, or a resultative state reading as in (8) *kaite iru* ‘is writing/ has written’. With Achievement verbs, it takes the resultative reading only as in (7) *sinde iru* ‘has died’.

Kindaichi observed that the four classes of verbs described above display different patterns in the *-te/de iru* construction with respect to their interpretations.

First, Stative verbs never appear in the *-te/de iru* construction.

- (9a) *Koko kara umi ga miete iru.
Here from ocean-Nom see
‘We can see the ocean from here.’

- (9b) Koko kara umi-ga mieru.
Here from ocean-Nom see
‘We can see the ocean from here.’

- (10a²) *Taroo-wa suugaku-ga yoku dekite iru.
Taroo-Top Math-Nom well able
‘Taroo is very good in math.’

- (10b) Taroo-wa suugaku-ga yoku dekiru.
Taroo-Top Math-Nom well able
‘Taroo is very good in math.’

Second, Continuative verbs such as *yomu* ‘read’ and *kaku* ‘write’ can appear in the *-te/de iru* construction, and receive the progressive interpretation.

- (11) Taroo-wa ima zassi-o yonde iru.
Taroo-Top now magazine-Acc reading
‘Taroo is reading a magazine now.’

Third, verbs belonging to the Instantaneous class (examples, *sinu* ‘die’, *hajimaru* ‘begin’) take the *-te/de iru* construction and give a resultative/perfect interpretation rather than progressive. That is, they denote the state of affairs that result from the instantaneous events.

² This sentence is acceptable if it means that his math test was done well.

- (12) Kaeru-ga sinde iru.
frog-Nom dead
'The frog is dead.'
- (13) Zyugyoo-ga moo hazimatte iru.
Class-Nom already started
'The class has already begun.'

Type 4 verbs are unique in that they must appear in the *-te/de iru* construction, namely the opposite of what we find for the Stative class.

- (14a) Tanaka-san no musuko-san-wa totemo sugurete iru soo da.
Tanaka of son-Nom very outstanding hearsay Cop
'I hear that Mr. Tanaka's son is outstanding.'
- (14b) *Tanaka-san no musuko-san wa totemo sugureru.
Tanaka of son-Nom very outstanding
'I hear that Mr. Tanaka's son is outstanding.'
- (15a) Kono syu no seihin-wa arihurete iru.
This type of merchandise-Top common
'This type of merchandise is common.'
- (15b) *Kono syu-no seihin-wa arihureru.
This type of merchandise-Top common
'This type of merchandise is common.'

In summary, the inherent aspectual properties of individual verbs together with the (mostly semantic) contribution of the *-te/de iru* construction has led Kindaichi to the four-way classification of verbs.

Next, some salient features about the tense and aspect system in Chinese, Korean, English and Japanese, in particular, will be discussed.

2.2 Tense and Aspect Systems

In this section, some important features about the tense and aspect system in Chinese, Korean, English and Japanese will be described.

2.2.1 Aspect in Chinese³

Unlike English, which is a tense language, Chinese is an aspect-prominent language. Its deictic temporal relations are expressed through temporal adverbials rather than verb inflections.

With regard to situation aspect, Chinese instantiates all the Vendlerian categories. In addition, Chinese has two special classes of verbs, RVCs and MSTs. RVC stands for Resultative Verb Compounds (Li & Thompson, 1981) or Resultative Verb Complements (Smith, 1997). An RVC is a verb compound that can take the form of V+Adj as in (16a) or V+V as in (16b).

(16a) xi ganjing ‘wash clean’

(16b) xuehui ‘study-know’

The uniqueness of these predicates is that although they are composed of an Activity verb and a resultative complement, they do not depict a process with an inherent endpoint as Accomplishments. Rather they present the result of a process and, consequently behave like Achievements.

The other group is called Mixed Stative-Telic Verbs (MSTs) by Li (1990).

(17) chuan ‘put on/wear’

The uniqueness of these verbs is that they can describe both the action, punctual or durative, and the stative result of the action. Therefore, they have different meanings when they are combined with the progressive marker *zai* and the durative marker *zhe* as in (18).

(18a) Ta **zai** chuan pi xie.
‘She/ he puts on leather shoe.’

³ This section is based on Jin & Hendricks (2003)

- (18b) Ta chuan **zhe** pi xie.
'She/he wears leather shoe.

The Chinese viewpoint aspect is expressed through a small group of aspect markers, with *le*, *guo*, *zhe* and *zai* as the most important ones. These markers are not obligatory like the English tense-markers. *Le* and *guo* are perfective markers and can appear in verb final (19a) or sentence final (19b) positions.

- (19a) Wo kan-**le** zhege dianying.
'I saw this film.'

- (19b) Wo chiwan fan **le**.
'I have eaten.'

The difference between verb final *le* (VF-*le*) and sentence final *le* (SF-*le*) lies in that sentences like (19a) express a past event whereas in (19b), the *le* relates the past event to the present (Chao, 1968; Li & Thompson, 1981) or any reference time in a way similar to the English perfect (Smith, 1997).

Generally, when the predicate represents an Accomplishment or an Achievement, the sentence with SF-*le* expresses the resultative state after the attainment of the goal as in (19b). When the predicate represents unbounded situations such as States and Activities, SF-*le* will yield an inchoative⁴ reading, which presents either the coming about of the situation or the realization by the speaker of the coming about of the situation as in (20).

- (20a) Ni shi daxuesheng **le**. (States)
You be college student LE
'You are now a college student.'

⁴ Cf. Smith (1997) for discussion on the inchoative readings.

- (20b) Ta chi rou **le**. (Activity)
 He/she eat meat LE
 ‘He/she now eats meat.’

Guo is an existential or experiential marker. It simply means “having the experience of doing something at least once in the past”. The important difference between VF-*le* and *guo* is that *guo* requires discontinuation of the situation into the present. Sentence (21a) makes clear that Mary is now in the U.S. or at least on the way to the U.S. While (21b) only makes the proposition that Mary has the experience of going to the U.S. in the past although this does not exclude the possibility of her being in the U.S. now on another visit.

- (21a) Mali qu meiguo **le**.
 ‘Mary has gone to the US.’
- (21b) Mali qu **guo** meiguo.
 ‘Mary has been to the US.’

Consequently *guo* can only be used with repeatable situations.

The imperfective markers in Chinese are *zhe*, which appears after verbs, and *zai*, which is used before the verb. *Zai*, considered as the progressive marker, presents an internal interval of a durative but non-stative event and, consequently, States and Achievements with the progressive are ungrammatical, as in (22).

- (22a) *Wo **zai** xihuan Jianqiao. (State)
 I ZAI like Cambridge.
 ‘I am liking Cambridge.’
- (22b) Wo **zai** youyong. (Activity)
 I ZAI swim.
 ‘I am swimming.’

(22c) Wo **zai** kan yi ben shu. (Accomplishment)
I ZAI read one Clsf book
'I am reading a book.'

(22d) *Wo **zai** xiul hao zixingche. (Achievement)
I ZAI repair ready bicycle
'I am having repaired the bicycle.'

The other imperfective marker, *zhe*, presents a situation as continuous and stable. It is often called the durative marker (Li, 1990; Lee, 1996) because it represents a resultative state rather than the subinterval of a dynamic event as in (23a) and (23b). However, it cannot be associated with Achievement predicates, as (23c) shows.

(23a) Zheli zhu **zhe** yi ge waiguo ren. (State)
Here live ZHE one Clsf foreign person
'There is a foreigner living here.'

(23b) Ta chang **zhe** ge zoujin jiaoshi. (Activity)
He/she sing ZHE song walk into classroom
'He/she walked into the classroom singing.'

(23c) *Ta si **zhe**. (Achievement)
He/she die ZHE.
'He/she is dying.'

The difference between these two imperfective markers, namely *zhe* and *zai*, can be illustrated more clearly with the MSTs as in (18), given again below.

(18a) Ta **zai** chuan pi xie.
'She/ he puts on leather shoe.'

(18b) Ta chuan **zhe** pi xie.
'She/he wears leather shoe.'

Since the MSTs depict both the action and its resultative state, when they occur with *zai*, the activity part is presented, and when they are followed by *zhe*, the resultative state is portrayed.

2.2.2. Tense and Aspect in Korean

2.2.2.1. Complex Predicates⁵

In Korean (as also in Japanese) when the anchoring or reference time is the same as the utterance time, we refer to absolute tense-aspect. There are two inflectional suffix slots that are relevant to tense and aspect. One or both may be filled with *-(e/a)ss* whose basic meaning is past but may also express perfect. If only one slot is filled it refers to simple past or present perfect, depending on the co-occurring time adverbials such as *eccey* ‘yesterday’, *cikum* ‘now’, etc. If both slots are filled, they denote either past past or past perfect. If no slot is filled, it is non-past, i.e. (generic) present, present progressive, or future, the interpretation of which again depends on time adverbials or discourse contexts. Refer to examples below (24) for further illustration.

- (24a) Mia ka eccey Mikwuk ulo **ttena-ss-e** yo (simple past)
‘Mia left for America yesterday.’
- (24b) Pom i ka ko icey yelu i **w-ass-e**. (present perfect)
‘Spring went and now summer has set in.’
- (24c) Nay ka **cenhwahay-ss-ul ttay** Mia nun imi Mikwuk ulo **ttena-ss-ess-e**.
(simple past)
‘When I called, Mia had already left for America.’
- (24d) Ku ttay Milan.i ka mak **w-ass-ess-e**. (past perfect)
‘At that time, Milan had just come.’
- (24e) Wuli ye-tongsayng un yeyp-e. (generic present)
‘My younger sister is pretty.’
- (24f) Cihwan i nun ceki onta. (present progressive)
‘Cihwan is coming over there.’
- (24g) Apenim un nayil Ilpon ulo ttena-sey-yo. (future)
‘My father will leave for Japan tomorrow.’

⁵ This section is based on Sohn (1999).

The suffix *-(e/a)ss* historically derived from the resultative state *-e/a issta* ‘be in the state of...’ denotes resultative state when it occurs with ‘resultative’ verbs such as *talmta* ‘take after’, *ipta* ‘wear’, *nulkta* ‘get old’. To indicate past in such cases, doubling of the suffix is necessary.

- (25a) Hyeng un apeci lul **talm-ass-e**.
‘My brother takes after my father.’
- (25b) Ne coh-un o **sip-ess-kwun-a**.
‘You are wearing a beautiful dress!’
- (25c) Na nun **ely-ess-ul ttay** emeni lul **talm-ass-ess-e**.
‘When I was young, I took after my mother.’

When the reference time, that is, the time at which a situation is placed, is not the same as the utterance time, we refer to relative tense-aspect, because the event time is not independently relative to the utterance time, but to a time that precedes or follows the utterance time. This is the case with many complex sentence constructions where the reference time of the embedded tense is the time denoted by the main clause tense.

- (26a) Tongsayng un pap ul an mekko hakkyo ey **ka-ss-ta**.
‘My sister did not eat her meal and went to school.’
- (26b) Ecey pam nwun i o-nu-n kes **kath-ass-e.yo**.
‘Last night, it seemed that it was snowing.’

In the above examples, the embedded tense is non-past, yet the embedded event took place in the past. The embedded event time takes the main clause event time, not the utterance time as the reference point, hence the absence of the past tense suffix in the embedded clauses. Not all embedded clauses are required to have relative tense-aspect. For instance, co-ordinate clauses frequently manifest absolute tense-aspect in that they refer to the utterance time.

(27a) Milan i nun **ca-ss-ko** Tongmin.i nun **kongpuhay-ss-e.yo**.
'Milan slept and Tongmin studied.'

(27b) Na nun ku cha ka **coh-ass-una** sa-ci **an-h-ass-ta**.
'I liked the car but didn't buy it.'

While most complement clauses are subject to relative tense-aspect, relative and nominalized clauses are subject to both absolute and relative tense-aspect. The embedded tense in the following relative sentence may be interpreted as either absolute (i) or relative (ii).

(28) Hyengsa ka pa eyse nolayha-nu n yeca lul **chayphohay-ss-ta**.

(i) The police detective arrested a woman who sings in a bar.

(ii) The police detective arrested a woman who sang in a bar.

The embedded clauses that require relative tense-aspect are of two general types: (a) those structurally not allowing any tense other than non-past tense, and (b) those that allow either past or non-past tense. In both types, the embedded event may occur prior to, simultaneously with, or after the main clause event.

The first type includes those embedded clauses which end in suffixes such as *-e/a* (infinitive), *-key* 'so that', *-tolok* 'to the point where', *-ca-macca* 'as soon as', *-ese/-ase* 'as, since'. When predicates are multiply embedded, as in (29a), only the tense of the last or main predicate is the reference point.

(29a) Nam-un pap ul mek-e chiw-e **pely-ess-ni**?
'Did (you) finish up eating the left over rice?'

(29b) Tongsayng un nalssi ka kayi-ca-maca **naka-ss-ta**.
'My younger brother went out as soon as it cleared up.'

The second type includes those embedded clauses which end in conjunctive suffixes such as *-(u)myense* 'while' and *-taka* 'and then', nominalizers such as *-(u)m* and *-ki*, defective

nouns such as *kes* ‘fact’, *tus* ‘as if’, and *chey/chek* ‘pretence’, and the quotative particle *ko*.

(30a) Mia nun manh i **ca-ss-umyense** phikonhay **hay-ss-e**.
‘Mia felt tired even though she had slept a lot.’

(30b) Na nun Mia ka **ttena-ss-um** ul **al-ass-ta**.
‘I knew that Mia had left.’

(30c) Milan i nun **aph-ass-ta** ko **hay-ss-ta**.
‘Milan said that she had been sick.’

In the above constructions (30a) – (30c), the embedded past tense suffix occurs only when the embedded clause event takes place prior to the matrix clause event.

2.2.2.2. Lexical Aspect⁶

Lexical aspects in Korean include auxiliary verbs that express aspectual distinctions, such as *-ki sicakha-* (inchoative), *-e iss-* (perfective), *-e tay-* (iterative), and *-ko iss-* (progressive).

Lexical perfectivity in Korean is expressed by the auxiliary verb construction *-e iss-*. Compare (31a) where a suffixal perfective occurs, with (31b) where a lexical perfective occurs.

(31a) John-i cip-ey **ka-ss-taka** wa-ss-ta.
‘John went home and came back.’

(31b) John-I cip-ey **ka-a iss-taka** wa-ss-ta.
‘John had been home and came back.’

As the English translations in (31a) and (31b) indicate, both *-e iss-* and *-ess-* are used to refer to the completion of ‘going home’. Yet their aspectual implications are not precisely

⁶ This section is based on Sohn (1995).

the same, *-e iss-* (31b) puts the emphasis on the final stage of the situation, while *-ess-* (31a) emphasizes its totality.

The progressive aspect is denoted by *-ko iss-*. This occurs only with an action verb and expresses a progressive event or action.

- (32) John i cip-ul cis-**ko iss-ta**.
'John is building a house.'

Now, let us compare the progressive *-ko-iss-* with the perfective *-e iss-*.

- (33a) John un cip-ey **ka-a iss-ta**.
'John is at home.'

- (33b) John un cip-ey **ka-ko iss-ta**.
'John is going home.'

The progressive *-ko-iss-* and the perfective *-e iss-* resemble each other in that both consist of a complementizer followed by the existential verb *-iss-*. However *-ko iss-* occurs with intransitive or transitive verbs freely, while *-e iss-* occurs only with a limited number of intransitive verbs.

- (34a) *John i chayk-ul **teph-e iss-ta**.
'John is closing the book.'

- (34b) John i chayk-ul **teph-ko iss-ta**.
'John is closing the book.'

Although *-ko iss-* carries progressive aspect, with the meaning 'be in the process of', its function differs from that of the progressive *be + ing*.

- (35a) I chayk-ul **ilk-ko iss-ta**.
'I am reading this book.'

- (35b) I chayk-ul **ilk-ko iss-kela**.
'??Be reading this book.'

While Korean allows the progressive aspect to freely occur in an imperative sentence, English allows it only rarely. In addition, *-ko iss-* can occur with State verbs, such as *alta* ‘know’, *mitta* ‘believe’. In English, on the other hand, these verbs do not occur in the progressive form.

- (36) Na nun chayk-ul **kaci-ko iss-ta**.
 ‘*I am having a book.’

Furthermore, *-ko iss-* represents stativity as well as progressivity.

- (37) John i pwulk-un os-ul **ip-ko iss-ta**
- i. John is in the process of putting on red clothes.
 - ii. John is in the state of wearing red clothes.

Sentence in (37) is ambiguous between two interpretations: progressive and stative. The verb *ip-* ‘wear’ is an action verb and not state. But when it is combined with *-ko iss-*, it can refer to a stative situation (in the state of V-ing) (37ii) as well as a progressive action (37i). From this perspective, the two lexical aspects, *-ko iss-* and *-e iss-* share the sense of a resulting state. It is interesting that *-e iss-* is not acceptable in environments where *-ko iss-* can have the stative meaning, as shown in (38).

- (38a) John un pwulk-un os-ul **ip-ko iss-ta**.
- (i) John is in the process of putting on red clothes.
 - (ii) John is in the state of wearing red clothes.

- (38b) * John un pwulk-un os-ul **ip-e iss-ta**.

- (38c) John un pwulk-un os-ul **ip-ess-ta**.

Note that (38b) is ungrammatical, while (38c) is acceptable. Although the ungrammaticality of (38b) may be due to the constraint that *-e iss-* cannot occur with a transitive verb, in many cases, the perfective suffix *-ess* and the lexical perfective *-e iss-*

are in complementary distribution, that is, *-e iss-* can be used in situations where *-ess-* cannot be used and vice-versa.

2.2.3 Aspect in English

According to Jin & Hendricks (2003), in English, the imperfective is expressed through the progressive suffix *-ing* as in *We're chatting* whereas the perfective (e.g. *we have chatted*) is inferred from the past tense *-ed* and the past participle *-en*. The progressive suffix associates mainly with Activities and Accomplishments, but can also be used with the states of postures, such as *stand*, *sit*, and Achievements. When it interacts with an Achievement predicate, it presents the preparatory stage leading to the punctual and telic situation as in *We're reaching the top of the hill*.

According to Shirai & Kuroono (1998), in English, the progressive marking *be-ing* normally has the following meanings when combined with different types of inherent aspect.

- (i) Activity: Action in progress (He's running)
- (ii) Accomplishment: Action in progress (He's running a mile)
- (iii) Achievement:
 - a. Process leading up to the endpoint (He's reaching the summit)
 - b. Iterative action in progress (He's jumping)
 - c. Anomalous: *I am noticing an error.
- (iv) State:
 - a. Vividness: temporariness (I am liking it!; I am thinking that he might be sick)
 - b. Anomalous: (*I am owning a car).

In (iii a), it is the process leading up to the punctual point that is focused upon. In (iii b), since a single punctual action cannot have duration, it finds duration through repetition. In (iii c), it is impossible to impose a duration and anomaly results. Finally States cannot have an ‘action in progress’ meaning, since State is non-dynamic, and does not constitute an “action” and therefore progressive is anomalous as in (iv b). However, when progressive marking is possible, the meaning obtained is “state viewed as a dynamic event” (Smith, 1983, 1991) as in (iv a), by dint of the dynamic meaning of the progressive marking. The workings of tense in English will be discussed in the next section in comparison with Japanese.

2.2.4. Tense-Aspect System in Japanese (with reference to English)

Japanese is often said to have a past (*-ta*) and a non-past (*-ru*) tense marker. Although the past tense marker can be attached to any verb without any systematic restriction, it is often considered to have a sense of “perfect” or “perfective”. See example (39) below. This may be because it is still in the process of grammaticizing from a perfect marker into a perfective aspect marker and then into a simple past tense marker (Horie, 1997). Due to this transitional nature of the Japanese past tense marker, there have been disagreements on whether the past tense marker *-ta* is an aspect marker or a tense marker (Takahashi, 1976; Hasegawa, 1999). In (39), for example, *-ta* indicates that the ‘going’ is realized (perfective), and places this realization before speech time (past tense).

- (39) Taroo-wa kinoo gakkoo-e itta. (past/ perfective)
 Taroo-Top yesterday school-Loc went
 ‘Taroo went to school yesterday.’

The non-past form *-ru* normally refers to present state with stative verbs, and to future action or habitual action with dynamic verbs.

- (40) Taroo-wa mainiti gakkoo-e iku. (habitual)
 Taroo-Top everyday school-Loc go
 'Taroo goes to school everyday.'

- (41) Taroo-wa asita gakkoo-e iku. (future)
 Taroo-Top tomorrow school-Loc go
 'Taroo will go to school tomorrow.'

With regard to aspect, Japanese has an obligatory durative imperfective aspect construction *-te i-* which must be used if referring to action in progress at the reference time. However, the unique feature of *-te i-* is that it combines the notion of perfective and imperfective. That is, when it is attached to durative verbs, it denotes a progressive reading (42), which is a type of imperfective, but when it is attached to punctual verbs, it denotes a resultative (43) which is closely associated with perfective (Shirai & Kurono, 1998). Also as can be seen from the examples (47, 48) below, *-te i-* can give resultative readings with duratives as well. Because of these unique features of *-te i-*, it has become the central issue of investigation in most JSLA studies.

- (42) Kinoo kuzi-ni gohan-o tabete ita. (progressive)
 Yesterday 9'o clock-Loc food-Acc eating was
 'Yesterday at 9'o clock, I was eating food.'
- (43) Kinoo kuzi-ni Taroo-ga tuite ita. (resultative)
 Yesterday 9'o clock-Loc Taroo-Nom had reached
 'Yesterday at 9'o clock Taroo had reached (somewhere).'

Besides the resultative and progressive readings, another reading of *-ta* and *-te i-* studied recently (Shirai, 2002) is habituality. A habituality reading is possible with both

past tense (44) and progressive/ durative marking (45) in Japanese. Examples (44) and (45) are taken from (Shirai & Kurono, 1998):

- (44) Ken-wa mainiti hasitta. (habitual)
Ken-Nom everyday ran
'Ken ran everyday.'
- (45) Ken-wa saikin hasitte iru. (habitual)
Ken-Top recently running
'Ken is running these days.'

Regarding lexical aspect types in studies of Japanese aspect, Vendler's four-way classification has often been followed (Vendler, 1967). As mentioned earlier, according to this classification, the verbs are divided into States, Achievement, Activity and Accomplishment verbs. States express stative verbs such as *aru* 'exist', *dekiru* 'be able', etc. Activities are dynamic, without a start and endpoint and are exemplified by verbs like *yomu* 'read', *kaku* 'write', *warau* 'laugh', etc. Achievements are instantaneous and expressed in verbs like *sinu* 'die', *kieru* 'vanish', *sawaru* 'touch', etc. Accomplishments are activities with endpoints, as in *isu o tukuru* 'make a chair', *nihon e iku* 'go to Japan', etc. There have been modified versions of Vendler's classification, like the one proposed by Kindaichi (1976), where, in addition to States, Activities and Achievements, a Type 4 verb class was included, which represented verbs like *arihureru* 'be common', *sobieru* 'rise', etc.

Most studies have examined the association of *-te i-* and *-ta* with specific kinds of inherent aspectual verbs, such as, Achievements and Accomplishments. Also, there is no restriction in the interaction between habituality and inherent aspect, that is, there are no classes of verbs that are incompatible with habitual interpretation including the stative verbs (Shirai, 2002).

The interaction of the *-te i-* construction with inherent aspect is illustrated in the following examples from Shirai & Kurono (1998).

(a) Activity: Action in progress

- (46) Ken-ga utatte iru.
Ken-Nom singing
'Ken is singing.'

(b) Activity: Resultative

- (47) Konogoro konpyuutaa-o tukatte iru.
These days computer-Acc using
'I am using computers these days.'

(a) Accomplishment: Action in progress

- (48) Ken-wa isu-o tukutte iru.
Ken-Top chair-Acc making
'Ken is making a chair.'

(b) Accomplishment: Resultative

- (49) Ken-wa Nihon-e itte iru.
Ken-Top Japan-Loc gone
'Ken has gone to Japan.'

(a) Achievement: Resultative

- (50) Booru-ga otite iru.
Ball-Nom fallen
'The ball has fallen.'

(b) Achievement: Iterative action-in-progress

- (51) Ken-wa doa-o tataite iru.
Ken-Top door-Acc banging
'Ken is banging on the door.'

(a) State: Vividness, temporariness

- (52) Huzisan-ga miete iru.
Mt. Fuji-Nom seen
'We can see Mt. Fuji at the moment.'

(b) State: Habitual

- (53) Koko kara tokidoki Huzisan-ga mieru.
Here from sometimes Mt. Fuji-Nom seen
'From here, we sometimes see Mt. Fuji.'

The interaction in Japanese and English is quite similar except that Japanese can refer to a resultative state using the imperfective *-te i-*, but not to process leading up to the endpoint. In imposing an internal view, English can focus on the process leading up to the punctual point of Achievement, whereas Japanese cannot; instead Japanese focuses on the duration of the resultative state that obtains as a result of the punctual action. Thus, the literal equivalent of *Ken is dying* in Japanese, *Ken wa sinde iru*, means 'Ken has died/is dead'.

Some Achievement verbs that are anomalous with progressive marking in English (e.g. notice, find) are compatible with *-te i-* in Japanese because their combinations refer to resultative states. For example, the direct translation of **Ken is noticing the picture* ('*Ken wa e ni kizuite iru*') is not anomalous, and means 'he is in the state of having already noticed' (the existence of the picture). Another related point is that the same notion is not always lexicalized with the same inherent aspectual value in different languages. Situations typically described by State verbs in English (e.g. *Ken knows John*) are often described in Japanese with Achievement verbs in the *-te i-* construction *Ken wa John o sitte iru*.

Japanese and English are similar in that progressive marking is obligatory in both. Unlike Romance and other languages, English and Japanese cannot use a simple unmarked present form to refer to action in progress at speech time (e.g. **Nihongo o narau* '*I learn Japanese'). Only State verbs can refer to an ongoing situation in simple

present/non-past form (e.g., *I love sushi*; *Nihon ni iru* ‘be in Japan’). This excludes special cases of present tense used in performatives such as, *I declare*, etc. The tense systems of English and Japanese are also similar in the sense that any finite indicative sentence has to be either past or non-past. Both in Japanese and English, the past-tense marker can be attached to any verb without any systematic restriction.

Before reviewing the literature on acquisition studies in Japanese, a brief review about the Language Transfer phenomenon and the Aspect Hypothesis will be presented in the next section. These two phenomena will be used to explain the acquisition of the verbal morphology in Japanese later in Chapter 3 of this study.

2.3 Hypotheses Background

2.3.1 Language Transfer⁷

2.3.1.1 Definition

The term “transfer” has traditionally been associated with behaviorism, implying that previous knowledge of the L1 influenced the second language (Alonso, 2002).

Contrastive linguists also assumed the behaviorist approach to have a central role in SLA, taking Contrastive Analysis as a basis for comparison between the native language and the foreign language. For instance, Lado (1957, p. 2) states:

Individuals tend to transfer the forms and meanings, and the distribution of forms and meanings of their native language and culture to the foreign language and culture – both productively attempting to speak the language and to act in the

⁷ This section is based on Alonso (2002).

culture and receptively when attempting to grasp and understand the language and the culture as predicted by the natives. (Lado, 1957, p.2)

Odlin's (1989) contribution sprung out of a non-behaviorist consideration of transfer.

Transfer is the influence resulting from the similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired. (Odlin, 1989, p. 27).

This definition makes clear that prior linguistic knowledge other than the native language can be transferred.

2.3.1.2 Approaches to Language Transfer

There have been at least four different approaches to language transfer, which can be summarized as follows:

A. Negative versus Positive Transfer

The influence of the first language (L1) on the second language (L2) is sometimes referred to in terms of the product, that is, the effects the L1 produces on the L2. Positive transfer is associated with a facilitative effect of the L1, while negative transfer, also called interference, produces errors in the L2.

B. Learning versus Production process

Kohn (1986) considers transfer as a process in which two aspects are distinguished: a learning process and a production process. According to this, the influence of the L1 on the L2 is not based on the final product. As Celaya (1992) points out, "The view of transfer as learning process implies the selection and remodeling of input structures on

the part of the learner to improve his/her interlanguage⁸ knowledge. Transfer is seen as a reduction process when the learner makes use of this knowledge.” (Celaya, 1992, p. 49).

C. Covert and Overt Transfer

Within this model, transfer is observed both at the production and comprehension levels. Covert transfer is found when the learner avoids rules, structures, etc., in the L2 because they are different from the one in L1. The learners do not perceive cross-linguistic similarity, rather they show gaps of knowledge which the students manifest mainly in avoidance. This lack of linguistic perception does not allow the learners to relate their knowledge to the L2, since they do not have a common reference frame.

However, cross-linguistic similarity is perceived in overt transfer. This happens when the learner uses L1 rules, structures and forms in the L2. It is divided into two subtypes: transfer and borrowing. The former implies that learners perceive similarity of pattern, that is, the L2 is considered similar to the L1 pattern. When the learners do not know something, they resort to knowledge-based procedures, thus relying on L1 patterns. On the other hand, borrowing is associated with lexis. It implies a perception of similarity of forms of lexical items, therefore the knowledge is unanalyzed. It shows lack of control, not lack of knowledge.

D. Borrowing versus Substratum Transfer

Odlin (1989) makes a distinction between borrowing and substratum transfer and says that the former corresponds to the influence that the L2 exerts on any previously acquired language while the latter refers to the influence of any prior linguistic knowledge on the

⁸ Language that the learner is still developing during his/her acquisition process of the target language.

L2. Borrowing generally starts “at the lexis”, that is, in vocabulary, while substratum transfer tends to be observed in pronunciation.

To sum up, four different approaches to transfer can be distinguished. The first one is based on the product achieved, either positive or negative. The second one concentrates on the notion of process. The third deals with the perception that the learner has of the similarity between languages. Finally, the fourth approach focuses on the direction of the transfer. In the next section, different kinds of manifestations of language transfer will be discussed.

2.3.1.3. The Treatment of Students’ Errors

This section will delineate four main manifestations of the transfer phenomenon, namely, errors, avoidance, over-use and under-use.

2.3.1.3.1. Errors

One of the ways transfer can be manifest is through the errors that are committed in the L2. In the process of error analysis, one of the steps, explanation step, accounts for the source of errors and it is based on the cognitive processes in the learners’ mind. Different typologies aiming at the analysis of the source of errors can be found in the literature. Richards (1971a) distinguishes three types.

- a) Interference errors: These errors are due to transfer from the L1. They imply the use of L1 elements when speaking the L2.

- b) Intralingual errors: This type is not traced to transfer from L1. They are related to faulty generalization, incomplete application of rules or unsuccessful learning of the conditions under which rules apply.
- c) Developmental errors: As well as intralingual errors, these are independent from the L1. They occur when the learner tries to construct hypotheses about the L2 based on limited experience.

A more exhaustive classification of intralingual and developmental errors is achieved in Richards (1971b) which will be outlined below.

- a) Overgeneralization: This happens when the learner creates a deviant structure based on his experience of other structures in the L2. It “generally involves the creation of one deviant structure in place of two regular structures. It may be the result of the learner reducing his linguistic burden.” (Richards, 1971b, p. 174).
- b) Ignorance of Rule Restrictions: This means that the student fails in observing the restrictions of existing structures. The learner applies the rules to contexts where they are not applicable. It can be considered as a type of generalization or transfer because the learner uses a previously acquired rule in a new situation.
- c) Incomplete Application of Rules: This comprises those structures where the L2 rules are not totally developed to produce acceptable utterances. This usually applies when the learner achieves communication without resorting to the L2 rule.
- d) False Concepts Hypothesized: This is a fourth class of developmental errors. It implies errors “which derive from faulty comprehension of distinctions in the target language. These are sometimes due to poor gradation of teaching terms.” (Richards, 1971b, p. 178)

Zobl (1980) presents three theses in connection with transfer and developmental errors. The first thesis maintains that formal properties in the L2 which cause developmental errors may also produce predispositions for L1 structural transfer. The second claims that when the L1 structure adapts better than the L2 to regular acquisition structures or processes, transfer is prompted. The third thesis states that, although the mechanism for transfer and developmental errors is the same, transfer errors may hinder subsequent restructuring. Evidence that L2 structures showing L1 influences tend to fossilize concludes his contribution, that is, they may be “more recalcitrant to restructuring.” (Zobl, 1980, pp. 476-477)

Lott (1983) constructs yet another classification centered around transfer errors which are described below.

- a) Overextension of Analogy: These happen when the student makes an error in a vocabulary item because it shares features which are either phonological, orthographic, semantic, or syntactic with an item in the L1.
- b) Transfer of Structure: These comprise grammar errors when the learner follows the L1 rules instead of the L2 rules.
- c) Interlingual/Intralingual Error: The learner makes an error of grammar or misuses a vocabulary item because a grammatical or lexical distinction, which exists in the L2, does not exist in the L1.

Dulay and Burt (1974) distinguish (i) interference errors, that is, those made due to L1 interference; (ii) developmental errors, which are proper to L1 acquisition, and (iii) ambiguous errors which would be halfway between interference and developmental errors. Finally (iv) unique errors are mentioned, which would not be the result of L1

structures. Induced errors, as Stenson (1974) puts, happen when the learners make errors due to the instruction they receive. Transfer of training constitutes another term for this type of deviant forms. Ellis (1994) summarizes the results of the research done on explanation of the source of errors as follows.

- a) A large number of errors are intralingual in origin.
- b) According to Taylor (1975) transfer errors are more common at elementary levels. Learners at intermediate and advanced levels produce more intralingual errors.
- c) The task used in the samples used as research instruments may condition the proportion of transfer and intralingual errors.
- d) The phonological and lexical levels tend to show more transfer errors and some areas of grammar are more likely to be influenced by the L1 than others.
- e) Adult learners commit more transfer errors.
- f) More than one source can be the cause of errors.

As can be seen, there can be a variety of sources from where the errors may originate. The difficult task is to match the errors with their accurate sources. What adds to the complexity is that, besides errors other factors such as avoidance, under-use and over-use of structures also appear as other manifestations of transfer. These will be discussed below.

2.3.1.3.2. Avoidance

L2 learners may avoid producing certain L2 structures because they are found to be too difficult. In a classic study, Schachter (1974) showed that Chinese L2 learners of English avoid using relative clauses due to their degree of difficulty, which proves that

the L1 speaker may avoid the use of some L2 structures when they are considered to be difficult.

Seliger's (1989) studies manifest that some kind of knowledge of the form under consideration is required to affirm that avoidance is taking place. If the learner does not know the form, it is obvious that he cannot avoid it. Moreover, evidence that native speakers of the L2 use the form in question in the context under analysis is necessary to consider that avoidance is taking place.

Kellerman (1992) distinguishes three conditions leading to avoidance:

- a) Learners know that there is a problem and have some idea about the L2 form.
- b) Learners know the L2 form but it is very difficult for them to use in certain contexts.
- c) Learners know what form to use but refuse to use it because it goes against their norms of behavior.

According to Kellerman (2000), learners tend to avoid structures in their L1 which they consider to be too similar to the L2, yet these structures are target-like.

2.3.1.3.3 Over-use

This occurs when L2 learners overgeneralize the use of L2 norms. Over-use can occur as a result of overgeneralization, either of rules or of context. The avoidance of certain structures may also result in the over-use of simpler ones. Olsthain (1983), in a study on apologies by American students learning Hebrew as L2, found out that the apologies American students used were more direct than the Hebrew ones and they were transferred to Hebrew.

2.3.1.3.4 Under-use

The same that applies to over-use can be observed in under-use of elements. L2 learners may underproduce certain structures because they find them difficult. The difference between avoidance and under-use lies in the fact that in the latter the elements are produced, but in a low percentage of occurrence. For instance, Beebe (1990) studying American learners of Japanese as L2, showed that the apology *I am sorry* was not frequently used by the students when speaking Japanese, this made them sound impolite to a Japanese speaker.

In sum, it can be said that avoidance, under-use and over-use prove that transfer can be manifest through different aspects, other than errors. However, deviant forms constitute the main manifestations of transfer. The explanation step of error analysis, in its turn, accounts for the source of errors. Furthermore, different classifications can be found in the literature, concerning both interlingual and intralingual errors. Nevertheless, assigning an error to a definite type is a difficult task because deviant forms tend to be multifactorial, that is, there may be several factors or variables responsible for them.

2.3.1.4 Developmental Factors Affecting Transfer

When does transfer affect the stages of development in the learning of the L2? The answer to this lies in developmental factors. According to “restructuring continuum” views, the L1 is the starting point for the L2, the process of acquisition gradually replaces the L1 by the L2, so the presence of transfer will be greater at the early stages of development. This view is supported by the studies of Taylor (1975) and Major (1986).

However, an opposing view suggests that some errors can be seen at later stages of development and transfer becomes more evident as the knowledge of the L2 improves. This point of view is supported by Kellerman (1983) and Klein (1986). A variation of this is mentioned in Odlin (1989) where he claims that positive transfer must also be taken into account and its effects are more evident in advanced learners.

Although developmental factors and the L1 are said to influence interlanguage, a series of natural principles may also affect L2 acquisition. Hatch (1983) claims that at the levels of syntax and discourse, naturalness influences more than L1 transfer. Ellis (1994) also maintains that the L1 may be facilitative when there is no correspondence between the native language pattern and a natural developmental pattern. Transfer and natural principles interact: “it can both retard and accelerate natural development” (Ellis, 1994, p. 335).

In the next section, a natural developmental pattern called the Aspect Hypothesis, which is being claimed (both in L1 and L2 acquisition studies) to be a universal tendency to associate verbal morphology with the inherent semantic characteristics of the verbs will be discussed in detail.

2.3.2 Aspect Hypothesis

The Aspect Hypothesis is based on a theory of lexical or inherent aspect and the studies in SLA have been related to research in child language acquisition (Antinucci & Miller, 1976). The current Aspect Hypothesis (Anderson & Shirai, 1996) has appeared under different names and formulations. For example, the Defective Tense Hypothesis (Anderson, 1986, 1991), states, that in the beginning stages of language acquisition only

inherent aspectual distinctions are encoded by verbal morphology, not tense or grammatical aspect. However, the counter arguments to this hypothesis posit it to be too strong a version (Robison, 1995). In the most current postulation, Anderson & Shirai (1996), do not explicitly set aspectual influence in opposition to encoding tense or grammatical aspect, however, they still maintain the idea of the initial influence of aspect. Untutored learners dominated early research on the Aspect Hypothesis, but recent studies have demonstrated the influence of lexical aspectual class on verbal morphology in instructed learners as well. The subjects include learners of French, Spanish in foreign (Bardovi-Harlig & Bergstrom, 1996) as well as host environments (Shirai, 1995) and bilingual environments (Collins, 1997). Elicitation tasks include oral and written personal and impersonal narratives, written cloze passages (Bardovi-Harlig & Reynolds, 1995) and judgment tasks (Shirai & Kurono, 1998). Also the range of both the target and first languages has diversified – Catalan, Dutch, English, French, Italian, Japanese and Spanish (Bardovi-Harlig, 1999).

Most early studies have based their findings on a binary division of inherent aspect such as stative/dynamic; punctual/non-punctual; telic/atelic predicates (Robison, 1990). Robison (1990) showed that an adult learner of English, generally used the regular or irregular past marker to mark punctual verbs and used -ing to mark durative verbs. Bayley (1994) showed that native speakers of Chinese learning English also showed a strong tendency of the learners to favorably choose perfective aspect for past tense marking and not for imperfective aspect – a finding that was found to be constant across proficiency levels and individuals.

In contrast to the binary studies, Anderson (1986, 1991) employed the four-way division based on the work of Vendler (1967), to distinguish the aspectual categories of States, Activities, Accomplishments, and Achievements. In the study of second language learners of Spanish, Andersen (1986) posited four stages each in the acquisition of perfective and imperfective past as follows:

Perfective past: Achievements → Accomplishments → Activities → States.

Imperfective past: States → Activities → Accomplishments → Achievements.

Andersen's use of Vendler's categories are widely in use today, and these categories seem to be much better than the binary division, because the States behave differently from dynamics and Activities are different from Achievements and Accomplishments.

As also introduced in Chapter 1, the Aspect Hypothesis has four claims. These will be again listed below. (Andersen & Shirai, 1994)

- (a) Learners first use (perfective) past marking on Achievements and Accomplishments, eventually extending its use to Activities and Statives.
- (b) In languages, that encode the perfective/imperfective distinction, imperfective past appears later than perfective past, and imperfect past marking begins with Statives, extending next to Activities, then to Accomplishments, and finally to Achievements.
- (c) In languages that have progressive aspect, progressive marking begins with Activities and then extends to Accomplishments and Achievements.
- (d) Progressive markings are not incorrectly overextended to Statives.

In what follows selected previous work done on each of these four claims will be discussed.

2.3.2.1 The Development of the (Perfective) Past

This is by far the most robustly attested claim in the distribution of verbal morphology in interlanguage systems. The reasons cited are first, there is a dominance of Achievements in narrative samples and, second, perfective past is the first past morpheme acquired and, thus, easily observed in the interlanguage system. Support for this has been found in English (Bardovi-Halig, 1998), Catalan, Dutch, French, Italian, Japanese (Shirai, 1995; Shirai & Kurono, 1998) and Spanish. The most convincing support is found in the acquisition of English (Robison, 1995), where he provided evidence for the distribution of tense-aspect morphology across temporal contexts, including cases in which learners have used the past with Achievements that denote a present or future event.

Bardovi-Harlig (1998) found a clear progression of past tense use from Achievements to Accomplishments to Activities in the data from oral narratives. However, the difference was not as apparent in the written narratives of the same study, in which Achievements and Accomplishments are grouped together as “Events” (Mourelatos, 1981) or in the written cloze passages (Bardovi-Harlig & Reynolds, 1995). The oral data support Andersen’s (1991) predictions, in which there are separate stages of development of Accomplishment and Achievement verbs. Rohde (1997) investigated acquisition of English by two German learners and the results show a distributional bias for both regular and irregular past inflection in the learners’ data. It was found that no class exceeds Achievements for the simple past inflection.

2.3.2.2 The Development of the Imperfect

The order of appearance of imperfect after the perfective past has been well-attested (Andersen, 1991). Hasbun (1995) found evidence for the hypothesized stages of the acquisition of the imperfect in 80 learners of Spanish from the first to the fourth year. The cross-sectional sample revealed the emergence of the imperfect in States (in the third year) and its spread to Activities in the fourth year. Kaplan (1987) observed that learners of French used a default present form in the environments of the imperfect before imperfect morphology was acquired. The use of present has also been observed with States in English and Dutch (Bardovi-Harlig & Reynolds, 1995; Robison, 1995). One important point is that the number of tokens to observe the morphological development on States is not as abundant as in the case of Achievement verbs.

2.3.2.3 The Development of the Progressive

In cross-sectional studies (studies involving observation of some subset of a population of items all at the same time as opposed to longitudinal studies that involve a series of measurements taken over a period of time) of English, the progressive associates quite robustly with Activities in written cloze passages (Bardovi-Harlig & Reynolds, 1995), as well as in written and oral narratives (Bardovi-Harlig, 1998). Robison (1995) found that the affiliation of progressive marking with Activities strengthens with proficiency level, even as the association of inflections with tense increased with level. Shirai's (1995) study of three Chinese learners of Japanese as a second language also supports the Aspect Hypothesis; these learners showed a dominant use of *-te i-* (imperfective construction) with Activities (55% of all uses of *-te i-* occur with

Activities). In another study, a judgment task administered to 17 tutored Chinese learners of Japanese showed that learners found it easier to recognize the correctness of *-te i-* with Activity verbs than with the Achievement verbs (Shirai & Kurono, 1998).

2.3.2.4 Overgeneralization of Progressive in States

Robison (1990) reported nearly 22% use of progressive with States by an untutored learner of English. In contrast none of the 3 learners (L1 Russian) studied by Flashner (1989), with limited instruction used progressive with States. Neither have the tutored learners of English in both oral and written tests showed the over extension of progressive to States (Robison, 1995). Shirai (1995) found that 2% of progressives, (*-te i-*) occurred in the interlanguage of three tutored Chinese learners of Japanese. Thus, it appears that most adult second language learners rarely overextend the use of progressives. Task type may influence the rates of use, but the role of instruction has been unclear in all the studies mentioned so far.

2.3.2.5. Counter Evidence to the Aspect Hypothesis

A clear example that challenges the hypothesis in its entirety would exhibit equal distribution of verbal morphology in all categories – that is States, Activities, Accomplishments, and Achievements. However, according to Bardovi-Harlig (1998), no such study has been reported. Instead potential counter evidence seems to address individual effects of the Aspect Hypothesis. One such example was found in the interlanguage of a single Japanese learner of English, who showed almost no verbal morphology except on States (Kumh, 1984). A reanalysis of the experimental data

showed that the learner may have been at too low a level to show productive use of the verbal morphology. Another counter evidence was shown by Rohde (1996), where the progressive form does not show a distributional bias, appearing with both Activities and Achievements. The 6-year old showed increasing use of -ing with Achievements from May to July and then in August showed an equal number of types for both Activities and Achievements. Rohde (1996) attributed some of the progressive use to the children's future uses of -ing, which are target-like. Even in mature target languages, future uses are allowed with volitional Achievements, such as *He's arriving at noon tomorrow*. This analysis needs further research. Another use of -ing with future Achievements (...is going to sleep) was also found by Robison (1995), but was not considered as a counter example. These cases stress the importance of investigating text types and topics that have the potential to elicit broader range of reference for the learners (Noyau, 1990).

2.4 Tense-Aspect Acquisition Studies in Japanese and -ru/-ta Controversy Revisited

2.4.1 Tense-Aspect Acquisition Studies in Japanese

The research on the acquisition of tense-aspect phenomenon in Japanese started in the early 1980s (Li & Shirai, 2000). The interest in this area has been growing both in the fields of L1 and L2 acquisition since then. Most of the L2 studies have had a direct impact from the early L1 studies in terms of the theoretical issues that were involved. Additionally, the interest was also fuelled by the vast amount of research in tense-aspect already underway both in L1 and L2 in European languages such as English, Spanish, Polish, French, Italian and Dutch.

An extensively investigated issue of tense-aspect development in JSLA studies is the acquisition of tense-aspect morphology. This issue has shown an interesting universal pattern in both L1 and L2 acquisition studies (Andersen, 1996). Several researchers have claimed that the development of tense-aspect morphology in L1 acquisition of various languages is strongly influenced by the inherent semantic aspect of the verbs to which the inflections are attached (Andersen, 1996; Shirai, 1993). The same tendency has been observed in L2 acquisition, especially in English, Spanish and French (Bardovi-Harlig, 1995; Andersen, 1991). Limited studies have been done on non-Indo European languages, including Japanese (Shirai & Kurono, 1998).

In this section a brief summary of the previous studies done in JSLA in the area of tense-aspect acquisition will be presented. Most studies in JSLA of tense-aspect phenomenon have involved instructed learners. There are only two studies on untutored learners (Li & Shirai, 2000).

Kurono (1994) was the first to examine the effect of the semantics of the verbs in the JSLA of tense-aspect. Results of a grammaticality judgment task to 14 instructed learners (mixed L1), showed that the resultative meaning of *-te i-* (Achievement + *-te i-*) were more difficult to be correctly accepted or rejected than their progressive meaning (Activity + *-te i-*).

Shirai (1995) showed that there were strong associations between *-ta* and Achievement verbs and *-te i-* and Activity verbs in the data obtained from conversational interviews from three Chinese learners of Japanese, when compared to native speakers' speech.

Sheu (1997) examined two groups of Chinese learners of Japanese in Japanese as a second language and Japanese as a foreign language environments⁹. She did an analysis of *-te i-* marker using a picture-description task, and a paper-pencil test requiring the participants to provide appropriate verb forms in context. The first task showed that the progressive use of *-te i-* was easier than its resultative use. The paper-pencil task also yielded the same results. Sheu concluded that there was a strong influence of L1 because when the participants' correct answers were analysed, she found that the easier items corresponded to a usage of *-zhe* (durative imperfect marker in Chinese), while the difficult items could not be mapped with *-zhe* but rather with the perfective marker *-le* in Chinese. Sheu suggested that since the participants closely associated *-le* with *-ta*, they had difficulty using *-te i-* when the resultative use of *-te i-* involves Chinese equivalents that are associated with the use of perfective marker *-le*. Most of the errors involved over-use of *-ta*, that is they used *-ta* when *-te i-* was obligatory. Also, the learners in JSL environment outperformed learners in JFL environment suggesting the added advantage of a naturalistic environment with ample exposure to input and output opportunities. Nishikawa (1998) reported data that supports the claims made by Sheu (1997). She administered both written and oral elicitation tasks to 18 learners whose L1 was Chinese, Korean, English and Spanish.

Koyama (1998) conducted a cross-sectional study with Korean and Chinese learners of Japanese using grammaticality judgment test and found results similar to Sheu (1997) and Nishikawa (1998). In addition, he found that Chinese have more difficulty

⁹ Second Language environment: Learning of the L2 occurs in the community where the L2 is spoken as a native language. For example, Japan is a second language environment for Japanese.
Foreign Language environment: Learning of the L2 occurs outside the community where the L2 is spoken as a native language. For example, U.S. is a foreign language environment for Japanese.

with *-te i-* attached to Achievement verbs than Korean learners. He attributed this to L1 transfer. Korean appears to correspond more closely to Japanese in that the semantic space covered by the Korean resultative marker *-o iss-* is quite similar to that of *-te i-* in Japanese. Chinese does not have such a close correspondence. Koyama reported learners' accuracy order for three types of progressive use, namely, present progressive, past progressive and future progressive in that order.

Shibata (1999) analyzed a frog-story narrative, elicited from four learners of Japanese. She found a strong correlation between past tense *-ta* and the Achievement verbs. The association between *-te i-* and Achievement verbs was higher than *-te i-* and Activities. She attributed the results to L1 transfer.

Sugaya & Shirai (2007) examined the influence of inherent aspect and learners' L1 on the acquisition of Japanese imperfective aspect by using two tasks – an acceptability judgment test and an oral picture-description task with native speakers of English (that has obligatory progressive), German and Slavic languages (has no obligatory progressive marking). The results from the acceptability judgment test shows that regardless of L1, the imperfective marker *-te i-* was strongly associated with Activity verbs for lower proficiency learners. However, the oral task did not show any such preference with the lower proficiency L1 nonprogressive learners.

Sugaya (2003) longitudinally investigated a native speaker of Russian (L1 nonprogressive) and native speaker of Telugu (L1 progressive). The analysis of the interview data revealed that the L1 Telugu learner used progressive meaning earlier than resultative meaning, whereas the L1 Russian learner showed no such preference and used both meanings frequently early in the language learning process.

Uozumi (1998) analyzed longitudinal oral production data from a Russian learner enrolled in a six month intensive Japanese program. The data (interview, story telling, and role-plays) were collected three months after the learner completed the program and every three months after that, for a total of six times. The results were ambiguous. In terms of the emergence of *-te i-*, progressive meaning emerged earlier (one token at time 1 and five tokens at time 2) than the resultative, which only appeared at time 3 (10 tokens). However, across all six times, progressive and resultative showed similar tendencies both in terms of raw frequency and accuracy of use.

A recent study by Ishida (2004) analyzed conversational data from four L2 learners of Japanese (L1 English and Chinese), reported higher accuracy for the resultative use of *-te i-* over its progressive use, which goes completely against most previous studies. As Ishida suggested, this can be attributed to instructional factors – more specifically the order of presentation.

There have been two studies with naturalistic (untutored) learners. Kurono (1998) analyzed speech samples of eight factory workers whose L1 was Brazilian Portuguese. The results showed a correlation of *-ta* with Achievement verbs consistently. Regarding the *-te i-* construction, the results were inconclusive. Shibata (1998) analyzed a one-hour interview with a factory worker (L1 Portuguese). She reported that there was no correlation observed between *-ta* and Achievements and *-te i-* and Activities. However, a re-analyses of the data by Li & Shirai (2000), yielded the correlations in accordance with the Aspect Hypothesis. Shibata also observed the correlation between *-ru* and State verbs.

Shirai (2002) investigated how the feature of habituality interacts with lexical aspect, by analyzing conversational data from three Chinese learners acquiring Japanese.

All finite verb forms with past tense *-ta* and durative *-te i-* were coded for two semantic features namely, inherent aspect (State, Activity, Accomplishment, Achievement) and habituality. The results showed a strong correlation between past tense *-ta* and Achievement, and durative aspect *-te i-* and Activities. Trend for habitual reference for *-ta* marker was largely similar to the overall trend except that the Stative verbs do not exist with *-ta*, but this was because of the general incompatibility of Statives with habituality. The Achievement verbs were used almost 70% of the times in the habitual interpretation by the learners. While for the native speakers, habituality was associated 54% of the times with the Activity verbs and 38% with the Achievement verbs. Learners' use of *-te i-* in habitual situations was marked by 74% being attached to the Activity verbs. For native speakers too, the association with the Activity verbs was 66%, which was much higher than that seen in the general trend (37%). The results indicated that learners are sensitive to the feature of habituality, suggesting that inherent aspect was not the sole predictor of tense-aspect acquisition.

Most of the studies summarized above have based their conclusions in support of the claims of the Aspect Hypothesis. This is particularly interesting because in native Japanese speech the association is not simple, in that Achievement is associated with both past and durative imperfective morphology. Shirai (1995) showed that L2 learners follow the Aspect Hypothesis, predominantly using the past tense form *-ta* for Achievements and the imperfective form *-te i-* for Activities. The study also showed that native speakers associate *-ta* with Achievements, but not as strongly as L2 learners because they have more flexibility in using verb morphology. L2 learners also show much stronger association of *-te i-* with Activities than native speakers do; that is, learners follow the

prediction of the Aspect Hypothesis more closely (Li & Shirai, 2000). Kurono (1994) showed that the progressive meaning of *-te i-*, which the Aspect Hypothesis predicates will be acquired earlier, is accepted more easily by learners than the resultative meaning in their obligatory contexts. While bulk of the studies confirmed that the resultative meaning is more difficult for learners than the progressive meaning, supporting the Aspect Hypothesis (Sheu, 1997; Nishikawa, 1998; Koyama, 1998), Ishida (2004) however has presented counter evidence to this claim. In order to explain these results, it has been suggested that a strong effect of L1 transfer is seen in the acquisition of Japanese by Chinese, Korean, and English speakers (Sheu, 1997; Koyama, 1998; Shibata, 1999). In particular, Sheu showed a strong influence of L1 in Chinese learners' production of *-te i-* when referring to resultative state: the learners had much more difficulty in producing the correct form when the L1 equivalent is not expressed by the imperfective marker *-zhe*. However, the results from Sugaya & Shirai (2007) suggest that L1 plays a limited role in the formation of the acquisition pattern predicted by the Aspect Hypothesis. Given the complex interaction with task types and proficiency, L1 transfer cannot be the sole reason for the predicted association in the acquisition of Japanese *-te i-*. It is argued that multiple factors are at work when learners create the form-meaning associations predicted by the Aspect Hypothesis.

Besides transfer from L1, previous studies in JSLA have attributed the findings to several other factors as well. One argument proposes that the learners get their prototypes (of attaching *-ta* to Achievements and *-te i-* to Activities) from the input data. However, this argument may not be tenable for Japanese, since Shirai reveals that in the native speech *-te i-* is more frequently attached to Achievement verbs than to Activity verbs

(Shirai, 1995). That is to say the learners' use of morphemes is seen restricted to the prototypical usages (perfective with punctual and imperfective with durative) when compared to that of natives speakers, who are capable of using the morphology in a more flexible, non-prototypical ways. This casts doubt on the universality of the distributional bias in the input as one of the causal explanation for the Aspect Hypothesis. Besides that, the effect of instruction has also been taken into account. Considering that Kurono's (1998) learners had not studied *-te i-* forms at the time of the first test and still found the resultative interpretation of Achievement + *-te i-* more difficult than the progressive reading of Activity + *-te i-* verbs, the effect of instruction was ruled out. However, Ishida's (2004) study has attributed the higher accuracy for the resultative *-te i-* over progressive to instructional factors. Whereas the progressive meaning is usually introduced earlier than resultative state in Japanese language textbooks, Ishida's learners of Japanese were taught the resultative meaning in the second semester, four months earlier than the progressive meaning. It appears that initial exposure exclusively to the resultative meaning and deprivation of the progressive meaning for four months can result in more accurate production of the resultative meaning even long after the progressive meaning is introduced.

Other factors that may contribute to the acquisitional patterns observed overlap with those seen for L1 acquisition, namely, an *apriori* conceptual/ linguistic predisposition on the part of the learner to map morphology in the direction of Process/ Event, rather than of State, possibly because of the higher salience of something dynamic than something which is static. This is congruent with Slobin's (1985) Basic Child Grammar Hypothesis that process and result are two conceptual primes to be given

grammatical marking early in the acquisition of verbal morphology. Another factor is the initial mapping of *-te i-* with Activity to the alternative form *-ta* for referring to resultative state. By assigning the *-te i-* to Activity, the learner might be saving *-te i-* for action in progress rather than for result state. And as a result of the blocking out of *-te i-*, the only remaining alternative *-ta* is used for result state (Shirai, 1993).

Next, the significance of these previous studies in the field of tense-aspect acquisition in JSLA will be discussed. First of all, the area of tense-aspect acquisition is a recently developed field and had received little attention until the mid 1980s. Japanese has many linguistic features (such as the unique nature of the imperfective marker *-te i-*) that are not found in the European languages that are more commonly the subject of research on SLA. Japanese offers researchers unique opportunities to extend the range of their theories and to test hypotheses that could not otherwise be tested (Kanno, 1999). Aspect stands at the interface between lexicon and grammar. Lexical aspect contains information about the semantic properties of the lexical items, and grammatical aspect conveys information usually expressed by morphological devices, about grammatical categories (Li & Shirai, 2000). Therefore, a study on the acquisition of tense and aspect in Japanese will provide significant insights into how adult L2 learners acquire one of the central conceptual domains of the language, the expression of temporal notions through lexical and morphological structures and also shed light into the psycholinguistic mechanisms underlying the acquisition process.

One of the most significant contributions of the previous studies summarized above is that they offer a platform on which to test a number of influential theories of language acquisition. The Aspect Hypothesis, which is a set of claims associating the

inherent semantic aspect of verbs to the verbal morphology, is on its way to gain universal status. It has already been widely accepted in L1 acquisition studies and has its roots in the prototype theory based explanations. The prototype theory claims that L2 learners acquire a linguistic category starting with the prototype of the category and later expanding its application to the less prototypical cases (Slabakova, 2002). In line with the claims of the Aspect Hypothesis, the prototype of the past tense is argued to be restricted to verbal predicates exhibiting [telic], [result] and [punctual] features – all characteristics of the Achievement class of verbs, and the best exemplar for the category of progressive can be characterized by action in progress. Hence this explains the early use of *-ta* (perfective marker) with Achievement verbs and *-te i-* with Activities, which is also confirmed in the previous studies. The previous studies make it possible to check the validity of the Distributional Bias Hypothesis (Andersen, 1988), which states that standard associations of inherent aspect and morphology in general input is marked by high frequency of Achievements with past inflections, high frequency of Activities with progressive inflections and, very low frequency of Stative progressives (Andersen, 1996). This theory, although it seems to be applicable to the use of *-ta* with Achievements and *-te i-* with progressives, cannot be the causal factor for the observations, as pointed out by Shirai, since natives use the morphemes in less than prototypical ways. The learners are not getting the prototypes from the input only. The nature of Japanese aspectual system will potentially be a problem for the Redundant Marking Hypothesis (Shirai, 1993), which states that learners initially use the past tense marker not to encode its pastness, but rather to redundantly encode the inherent aspect of the verb, which is already marked by

the lexical items. Due to the idiosyncrasy of Japanese, Achievement verbs can be associated both with *-ta* and *-te i-* as in:

(54) Ken-ga doa o tataita.
Ken-Nom door-Acc banged
'Ken banged the door.'

(55) Ken-ga doa-o tataite ita.
Ken-Nom door-Acc was banging
'Ken was banging on the door.'

Hence, the Achievement is associated both with punctual and durative, which is not predicted by Redundant Marking Hypothesis. However, as seen from the results of the previous studies, learners do not assign the double reading to Achievement verbs. Rather, they assign *-ta* to Achievement and *-te i-* to Activities by a clear margin and so the previous studies support the Redundant Marking Hypothesis.

Results from most of the previous studies have been in line with the claims of the Aspect Hypothesis, hence making it eligible to compete for the status of a universal. The compatibility of certain grammatical tense-aspect morphology with certain lexical aspect categories on semantic and pragmatic grounds are also accounted for by the "Naturalness of Combinations" principle, suggested by Comrie (1985). According to Comrie, some aspect morphemes combine more naturally with some verb types than with others. For example, perfective but not imperfective aspect markers combine naturally with punctual verbs because the former present a situation as a single whole without reference to its internal structure, and punctual verbs denote a single point lacking structure. Hopper suggested that such co-occurrence correlations may have a universal linguistic basis (Hopper, 1979). He gave examples of Swahili and Old English, whereby such a tendency was found. However, a few cross-linguistic differences have also been observed. While

Japanese and Chinese seem to be following the general association claimed by the Aspect Hypothesis in L2 studies, English does not (Li & Shirai, 2000). More empirical studies thus, need to be conducted in order to check if the Aspect Hypothesis can be given a universal status at all.

Another significant discussion on the results of the previous studies has been that learners found it easier to acquire the progressive meaning of *-te i-* than to acquire the resultative meaning of this form. The reason was attributed to the influence of L1 because most of the learners in these studies had productive progressive markers in their native language to which they presumably map the Japanese durative aspect marker *-te i-*. The L1 transfer hypothesis is a very popular theory in the SLA studies as it can be a window to the psychological mechanism going on in the minds of the learners involving the interaction between their native language and the foreign language.

In sum, it can be seen that results from the previous studies on tense-aspect acquisition in Japanese have a significant contribution in the field of JSLA. Apart from providing insights into one of the most crucial phenomena of temporal expressions, these studies provide a way to test some of the popular theories already existing in the field, namely Redundant Marking Hypothesis and Distributional Bias Hypothesis. Additionally, the results support the claims of the Aspect Hypothesis (based on prototype hypothesis) which, because of its cross-linguistic validity is being considered for a universal status. Also, the results validate the proposition of the L1 Transfer Hypothesis, which already has wide recognition in the field.

Despite the robust findings of the previous studies in line with the Aspect Hypothesis, they are not totally without limitations. For example, Shibata (1998) reported

no correlations as predicted by the Aspect Hypothesis. Her data was re-analyzed by Li & Shirai (2000) and the results consequently complied with the Aspect Hypothesis. The reason for different results in Shibata's study was attributed to a different system of classifying the verbs used by her. This also happens to be another limitation of this genre of study – that is, there needs to be a consistent way to classify the verbs. Any difference in the classification of verbs might lead to a difference in the results. For example, some researchers choose to use the Vendler's classification of verbs, while some choose binary classifications (stative versus dynamic; telic versus atelic etc). The use of binary classification may be problematic since it does not bring out the finer distinctions in each category. For example, both Accomplishment and Activities are durative but the former is telic, while the latter is not. Similarly, Accomplishment and Achievement are telic but the former has duration while the latter is punctual. Hence, a finer division within the binary categories (as in Vendler's classification) can avoid some of the confusion. Sometimes it is hard to classify individual verbs into the aspectual categories. For example, *wakaru* can be used and classified as Achievement verb as well as Stative.

- (56) A, wakatta! (Achievement)
 Ah understood
 'Ah, I got it.'
- (57) Sensee no otaku-e no miti wakarimasu ka? (Stative)
 Teacher of house-Loc way understand Q
 'Do you know the way to the teacher's house?'

Also there may be cross-linguistic ideosyncracies which can be problematic. For example, there may not be a one-to-one mapping between given types of situations and given types of lexical items. Japanese, for example, does not have a Stative verb corresponding to English, *know*. To express, *I know him*, Japanese uses *shitte iru* (resultative state after

coming to know him). In Japanese, *siru* ‘find out, come to know’ is an Achievement verb. Thus, this shows that verbs in different languages may differ with respect to their lexical characteristics even though they refer to similar situations. This may pose problems in studies where English learners perceive the verb *know* as Stative, while the Japanese language classifies it as Achievement.

Although Li & Shirai (2000) rule out any significant influence of instruction based on Kurono’s (1998) study that was done with learners who hadn’t received instruction on the *-te i-* forms when they were tested, Ishida (2004) suggests that instruction may have a role to play in the association of *-te i-* with progressive and resultative readings.

Another relevant limitation that has been pointed out by Slabakova is the unclear mapping of the basic concepts of temporal contrasts in most previous studies, not only in Japanese but overall across the board (Slabakova, 2002). Amongst the temporal contrasts of past versus present; perfective versus imperfective; grammatical aspect and lexical aspect distinctions, none of the studies clearly state what maps on to what. For example, Bloom (1980) states that children initially map aspect onto tense, that is, they use aspect to learn tense. Olsen (1997) however considers the initial mapping to be that of lexical aspect onto grammatical aspect. Wagner (2001) argues for a third type, namely that of grammatical aspect onto tense. This kind of terminology confusion often leads to multiple interpretations and hence absence of coherence in results. Slabakova (2002) suggests that teasing out the specific mappings in languages like Japanese (that has a separate past-tense morpheme and some aspect marking) will benefit in the fine tuning of the claims made by the Aspect Hypothesis.

All these limitations notwithstanding, the study of tense-aspect acquisition has become an intriguing field and has been attracting the attention of more and more researchers over the years. Another area in Japanese tense-aspect that has accumulated much attention and controversy is the debate regarding the status of the Japanese verb endings *-ru* and *-ta* and their status as tense and/ or aspect markers. This issue will be discussed in detail in the next section.

2.4.2 The *-ru/-ta* Controversy Revisited

There has been a long-standing debate concerning the status of Japanese tense and aspect and the role of the morphemes *-ta* (past/perfective) and *-ru* (non-past/imperfective) that express and index them. The confusion arises mainly because of the fact that both of the endings *-ta* and *-ru* in Japanese are used to refer to a situation in past, present or future time. Consider the following examples:

Past

- (58a) Kinoo zisin-ga atta.
Yesterday earthquake-Nom was be
'Yesterday there was an earthquake.'
- (58b) Ame-ga huru mae-ni kaetta.
Rain-Nom fall before-Loc returned
'I returned before it started raining.'

Present

- (59a) Aa, nodo-ga kawaita.
Oh throat-Nom dried
'Oh, I am thirsty.'
- (59b) Koko-ni isu-ga aru.
Here-Loc chair-Nom be
'There is a chair here.'

Future

- (60a) Asita kita gakusee-ni kore-o agete kudasai.
Tomorrow came students-Dat this-Acc give give
'Please give this to the students who'll come tomorrow.'
- (60b) Asita osoku made gakko-ni iru.
Tomorrow late until school-Loc be
'I will stay until late in school tomorrow.'

In spite of the overlapping usage of *-ta* and *-ru* to denote past, present and future time as seen in the examples above, *-ta* is often glossed as past-tense marker and *-ru* as the non-past tense marker by those who advocate that *-ta* and *-ru* mark the past and non-past tenses respectively. Researchers who oppose this kind of mapping often claim that *-ta* and *-ru* are aspectual markers, and that tense interpretation emerges as a derivative from the aspectual meanings (Hasegawa, 1999). Soga (1983) has given two reasons for this kind of view. First, in Japanese conversations and narratives, there appears to be no consistency concerning the occurrences of *-ta* and *-ru*, which may occur even alternately, and second, the so-called tense agreement does not exist, that is *-ta* and *-ru* are not necessarily tied to the time points of past or non-past, but to the meaning of completion or incompleteness. Commenting on the Japanese past marker, Horie (1997) states that the Japanese past-tense marker is often considered to have the sense of "perfect" or "perfective" because it is still in the process of grammaticizing from perfect marker into a perfective aspect marker and then into a simple past tense marker. Due to this transitional nature of the Japanese past tense marker, there have been disagreements on whether the past-tense marker *-ta* is an aspect marker or a tense marker (Takahashi, 1976; Hasegawa, 1999). It is because of these competing analyses about assigning a tensed or aspectual

status to *-ta* and *-ru* morphemes that make them ambiguous and hence problematic in placing them in either of the categories of tense or aspect markers.

2.4.2.1 Common uses of *-ta* and *-ru* in Independent Sentences

2.4.2.1.1 *V-ta* Forms in Independent Sentences

The *V-ta* form in an independent sentence normally expresses an event that has been completed earlier than the moment of speech. The kinds of events that may be expressed by *V-ta* forms are listed by Kunihiro (1967). Examples (64) - (69) are from Kunihiro (1967).

(a) To express an action completed in the past or a state that lasted for a certain length of time in the past.

- (61) Kinoo zisin-ga atta.
Yesterday earthquake-Nom was be
'Yesterday there was an earthquake.'

(b) To express habitual repetition in the past.

- (62) Mae-wa yoku benkyoo sita.
Before-Top well study did
'I used to study well.'

(c) To express an event that occurred under certain circumstances in the past.

- (63) Uti-e kaettara, haha-ga gohan-o tukutte kureta.
Home-Loc return when mother-Nom meal-Acc make gave
'When I returned home, my mother made a meal for me.'

(d) To express a state that materialized in the past and still exists.

- (64) Aa, hara-ga hetta naa.
Oh stomach-Nom reduced SFP
'Oh, I am hungry.'

(e) To express the sudden discovery that a certain state has continuously existed (the so-called *V-ta* form of discovery) or that something has already happened.

(65) Atta, atta... (used by a person who has been looking for something and just found it).

Was be
'Here it is!'

(f) To express the sudden recalling of a future event or plan that the speaker once knew as definite.

(66) A, simatta! Asita-wa yakusoku-ga atta.
Oh darn tomorrow-Top promise-Nom was be
'Heavens! I have (lit. had) an appointment tomorrow.'

(g) To ask the hearer's confirmation of a fact that has always been true while indicating that the speaker (or the hearer) knows that it is true (normally occurs only in questions).

(67) Kimi-wa okaasan-ga ita ne?
You-Top mother-Nom was be SFP
'You have (lit. had) a mother, don't you?'

(h) To declare or concede in advance the realization of an action or a state which has not been realized.

(68) Yoshi, katta!
Ok bought
'Ok, I'll buy it.' (to express one's decision to buy something, say, at an auction)

(i) To express commands that are somewhat crude, though more indirect than imperative forms would be.

(69) Doita, doita!
Stepped back
'Step back! Step back!' (Lit. You've stepped back)

As can be seen from the above examples, V-ta forms can be used to refer to situations in the past, present and future in independent sentences. Next, V-ta forms will be presented in independent sentences.

2.4.2.1.2 V-ru forms in Independent Sentences

V-ru form in an independent sentence normally expresses an event not completed earlier than the moment of speech. The kinds of events expressed by V-ru forms in independent sentences are listed by Kunihiro (1967) as follows:

(j) To express present facts or states.

- (70) Kyoo-wa nitiyoobi da.
Today-Top Sunday Cop
'Today is Sunday.'

(k) To express present psychological states.

- (71) Hara-ga tatu.
Stomach-Nom rise
'I am angry.'

(l) To express a speech act (*hatsugen-genzai* 'the utterance present', that is when utterance themselves are realization of the actions expressed by verbs of saying such as *tanomu* 'request', *mitomeru* 'recognize', *sansee suru* 'agree')

- (72) Onegai suru.
Wish do
'I request you.'

(m) To express actions occurring in front of one's eyes.

- (73) A, okane-ga otiru.
Oh money-Nom fall
'Oh, the money is fallen.'

(n) To express states and actions that are certain to occur in the future.

- (74) Asita-wa getuyoobi da.
Tomorrow-Top Monday Cop
'Tomorrow is Monday.'

(o) To express the speaker's present intention or plan as something that is certain to materialize.

- (75) Rainen Nihon-ni iku.
Next year Japan-Loc go
'Next year, I will go to Japan.'

(p) To reminisce about an immediate past event.

- (76) Omae-wa hontoo ni ore-o baka-ni suru ne. [from (Kunihiro, 1967)]
You-Nom really I-Acc stupid-Dat do SFP
'You really make fun of me, don't you?' (Said to someone who has just made fun of the speaker).

(q) To express habitual repetition.

- (77) Itumo asa 6 zi ni okiru.
Always morning 6'o clock at wake up
'I always wake up at 6'o clock.'

(r) To show a certain procedure step by step (e.g. in recipes).

- (78) Tugi ni osatoo-o ireru.
Next to sugar-Acc put
'Add sugar next.'

(s) To show events that regularly occur under certain conditions.

- (79) Botan-o osu to tama-ga deru.
Button-Acc push if coin-Nom come out
'If you push the button, a coin will pop out.'

(t) To describe characteristics and, general truths.

- (80) Ano ko-wa yoku asobu.
That kid-Top a lot play
'That kid plays a lot.'

(u) To express commands more indirectly than would imperative forms.

(81) Kaku!
Write
'Write!'

In sum, both V-*ta* form and V-*ru* form can be used to refer to situations in the past, present and future in independent sentences. In the above categories (a-c) in section 2.4.2.1.1, events/states are completed by the moment of speech. In categories (e-i), though the events and states are not completed before the moment of speech, they express in one way or another, the speaker's mental relation with the past. Thus it represents subjective use of *-ta* (Miura, 1974). According to Miura (1976), all the usages, except (p) in section 2.4.2.1.2, suggest that events are not over at the moment of speech. Example (p) is a special case, where *-ru* is used to denote a series of statements about the past events. When a person makes a single statement about an event, *-ta* is used, as in example (a). However, (p) is not a case of a single act rather it is more like a habitual action (of continuously making a fool of the speaker).

2.4.2.2. Competing Analyses of *~ru/~ta* in Previous Studies:

In this section some competing analyses on *-ru/-ta* from previous studies will be delineated. Broadly, *-ru* and *-ta* morphemes have been assigned as tense or aspect or both tense and aspect or neither tense nor aspect markers by various researchers. Each of these categories will be discussed in detail below.

2.4.2.2.1 Tense Markers

Those who consider *-ta* and *-ru* to be primarily tense markers, state that they refer to past or non-past time in mono-clausal sentences in isolation (Hasegawa, 1999).

(82) Kinoo gakko-ni itta/*iku.
Yesterday school-Loc went/*go
'Yesterday, I went/*go to school.'

(83) Asita gakko-ni iku/*itta.
Tomorrow school-Loc go/*went
'Tomorrow I'll go/*went to school.'

This theory, however, has limited validity due to several reasons. First, isolated mono-clausal sentences to which these morphemes add in the role of tense markers are rare as compared to mono-clausal sentences in connected discourses or multi-clausal sentences. Second, the fact that *-ta* and *-ru* frequently alternate even in written and spoken discourse poses a problem to the tense analysis (Hasegawa, 1999). For example, in the following utterance from Hasegawa (1999), taken from Natsume Soseki's *Sanshiro*, *-ru* form in {b}, *motte iru* 'possess' is actually denoting past-tense.

(84) {a} Hirota-san-wa hige no sita kara ha-o dasite waratta.
Mr. Hirota-Top moustache of under from teeth-Acc take out laughed
'Mr. Hirota smiled showing his teeth below his moustache.'

{b} Wariai kireina ha-o *motte iru*/?*motte ita*.
Quite beautiful teeth-Acc has/ ?? had
'He'd got good looking teeth.'

Takakura (1990) gives an explanation for this kind of alternation exemplified by (84){b}, by stating that sentences representing perception normally occur with *-ru*, but they permit the *-ta/-ru* alternation. When *-ta* is used, the percipient disappears from the narrative, and the described fact is perceived in the voice of the narrator (Takakura, 1990). Soga (1983) also defending a similar view says that there are cases in which the point of view from

which the speaker sees events may shift, resulting in the so-called “historical present”. Depending on the speaker or writer, the shift of deictic point may be fairly frequent. This phenomenon, according to Soga, does not claim that Japanese has no tense, or that the Japanese tense system is irregular. It simply indicates that Japanese is a language in which the shift is freer than in some other languages.

Another problem with assigning *-ta* and *-ru* as tense markers, identified by Hasegawa (1999) and Soga (1983) is the grammatical restrictions on the usage of *-ta* and *-ru*. In some subordinate constructions, only the non-past tense form *-ru* occurs, regardless of whether the action or event described by the verb is in the past or the future. For example, non-past *-ru* comes regularly before *gurai* while the past *-ta* comes before *ato de*.

(85a) Kono kabin-ga otiru gurai ie-ga yureta.
 This vase-Nom fall extent house-Nom shook
 ‘The house shook to the extent that this vase fell/almost fell down.’

(85b) Kinoo Taroo-wa huro ni haitta ato de, toko ni tuita.
 Yesterday Taroo-Top bath in enter after bed in enter
 ‘Yesterday, Taroo went to bed after he had his bath.’

Hasegawa (1999) states that unless an explanation as to why some connectives require specific tense is provided, the claim of *-ta* and *-ru* as primarily tense markers cannot be upheld. Soga (1983) however, defending his position in assigning the tense categories to *-ta* and *-ru*, states that the above example must be examined both from the perspectives of tense (with respect to the anteriority and posteriority of the events: before and after the moment of speech) and aspect (with respect to completion or incompleteness).

A theory known as the Time-Relationship analysis (T-R) (Miura, 1974), which supports the tensal categorization of *-ru* and *-ta* indicating an alignment of Event Time

(ET) and Reference Time (RT), has been supported by researchers like Ota (1972). Ota (1972) contends that Japanese encodes a T-R theory in which *-ta* indicates ET being prior to RT, and *-ru* otherwise. If no reference is specified, Speech Time (ST) serves as RT, making *-ta* and *-ru* resemble deictic tenses. Miura (1974) points out that the so-called tense markers in Japanese indicate a T-R between two events/ states rather than an absolute time. That is to say, that while the English past-tense indicates that an event or a state occurred at some point in the past, *-ta* in Japanese merely indicates that an event is completed before or “earlier than” some other event. Some other event could either be the moment of speech or another event. Following illustrations are from McGloin’s (1989) study guide.

(86) Kinoo gakkoo-e kita.
Yesterday school-Loc came
‘Yesterday, I came to school.’

(87) Asita asa gakkoo-e kita hito-ni agemasu.
Tomorrow morning school-Loc came people-Dat give
‘I’ll give it to those who (will have) come tomorrow.’

In (86), *-ta* indicates that someone’s coming to school took place earlier than the moment of speech. In (87), however, someone’s coming to school has not happened yet, it will happen in the future. *-Ta* is used here to indicate that coming to school will be completed before the action of giving. *-Ru* on the other hand, indicates that an event or a state is not completed or **not earlier than** either the moment of speech or another event/state.

Consider the following examples for *-ru* constructions also from McGloin (1989).

(88) Asita gakkoo-e iku.
Tomorrow school-Loc go
‘I’ll go to school tomorrow.’

- (89) Kinoo gakkoo-e iku hito-o mita.
 Yesterday school-Loc go people-Acc saw
 ‘Yesterday I saw the people who were going to school.’
- (90) Asoko hito-ga iru.
 There people-Nom be
 ‘There are people over there.’
- (91) Kinoo kimono-o kiteiru hito-ni atta.
 Yesterday kimono-Acc wear person-Dat met
 ‘Yesterday I met a person who had a kimono on.’

In (88), the *-u* indicates that the action of going to school has not happened at the moment of uttering this sentence, that is, not earlier than the moment of speech (in Miura’s terms). Example (89) indicates that an action of someone’s going to school was not completed at the time the speaker saw those people, that is, **not earlier than** the main event of seeing. Sentences (90) and (91) contain Stative verbs such as *iru* ‘be’ and *kite iru* ‘have come’. When *-ru* occurs with Stative verbs, the **not earlier than** should be interpreted as simultaneous. Thus, in (90), the state of someone’s existence is simultaneous with the moment of speech. In (91), the person’s having a kimono on was simultaneous with the speaker’s meeting with this person.

Restating Miura’s (1974) claim, for independent (simple) sentences, the reference time is the speech time and hence the time point of the event in the main clause is decided with reference to the speech time. For tenses in dependent (complex) constructions, there are three possibilities: First, the subordinate clause and the main clause may have independent temporal references. For example, sentences with connectors such as *no de* ‘causal’, *no ni* ‘concessive’, etc. (as in (*Ototoi denwa sita node, kyoo aini kita* ‘I came to meet you today because you called day before yesterday.’)). Second, there are adverbial connectors which have fixed tenses, irrespective of what tense the main clause has. For

example, *mae ni* ‘before’, *ato de* ‘after’ (as in *Gakkoo ni kuru mae ni undoo sita* ‘I exercised before coming to school.’) Third, for those connectors like *toki* ‘time when’, where the matrix verb becomes the point of reference, the time of the subordinate verb is decided with respect to the matrix verb – hence giving the anteriority and posteriority or simultaneity reading (as in *Nihon ni itta toki keetai o katta* ‘I bought a cell phone when I went to Japan.’). Also Miura (1974) adds that in dependent constructions, the speech time and not the matrix clause time can act as the reference time. Let us take a look at an example from Miura (1974).

- (92) Sumisu-san-wa gohan-o tabeta toki oisi soo ni tabeta.
 Smith Mr.-Top meal-Acc ate when tasty as if ate
 ‘Mr. Smith ate with gusto when he ate the meal.’

This is a clear example that the *-ta* preceding *toki* designates the event in the subordinate clause as earlier than the moment of speech, but not necessarily earlier than the verb in the matrix clause.

In (93), also from Miura (1974), either the matrix verb time or moment of speech can be the reference time. In one reading, the flowers were arranged before speech time, and in the other, they will be arranged before the exhibition, but not before speech time. In either case, *-ta* indicates anteriority.

- (93) Kanai-no iketa hana-ga asita no tenrankai-ni deru.
 My wife-Nom arranged flowers-Nom tomorrow of exhibition-Loc appear
 ‘Flowers that my wife has arranged/will arrange will be displayed in tomorrow’s exhibition.’

Soga (1983) as one of the main proponents of the tense analysis states that for the majority of the cases, *-ta* indicates that a situation is relevant to the past or to the anteriority in relation to a specific time point, whether in speech time or some other

reference time. And, *-ru* indicates that a situation is relevant to the present or future, or to simultaneity or posteriority in relation to a chosen time point. In view of the time points being discussed here, Soga emphasizes that the idea that Japanese has no tense system at all, is untenable.

However, the following sentences are problematic to this Time-Relationship (T-R) view as pointed out by Hasegawa (1999) and also observed by Ota (1972). The *-ru* marked events in the following sentences have to be understood as occurred and completed before the reference time. While the past tense marker inherently satisfies the condition of completion, *-ru* does not:

(94) Mado-o *aketa/akeru to, tori-ga haitte kita.
Window-Acc open when bird-Nom entered
'When I opened the window, a bird flew in.'

(95) Naite tanomu kara kane-o kasite yatta no da. [Onoe, 1995]
cry request because money-Acc lent gave Nom Cop
'Because you implored me, I lent you the money.'

In both (94) and (95), the *-ru* event has clearly occurred and completed before the matrix clause *-ta* event. The T-R analysis predicts that the *-ru* event has occurred before the *-ta* event which cannot happen in the T-R theory. However the sentences with *-ru* are perfectly grammatical.

2.4.2.2.2 Aspectual Markers

Miller (1975) claims that *-ta* and *-ru* are aspect, not tense markers of perfective and imperfective, respectively. He defines these notions as follows.

'Tense' is a grammatical term that is generally reserved for the verb systems of languages in which the different forms of the verbs are

essentially, or mainly, concerned with identifying, marking, or ... 'expressing' differences in time, indicating when the action or event to which the verb has reference took place. ... 'Aspect' is a grammatical term that is generally reserved for the verb systems of languages in which the different forms of the verb are concerned not with *when* something was done, but *how*, particularly and typically (e.g. the Slavic languages) with whether or not a given action was or is completed (over and done with) or was or is still continuing (not over and done with, uncompleted or incomplete). (Miller, 1975, pp. 3-4)

Using *Kusamakura* by Natsume Soseki, Miller (1975) provides numerous convincing examples. (The free translation is from Turney (1965).

(96){a} ... rokuzyoo hodo no tiisana zasiki-ni irerareta.
 6 zyoo about of small room-Loc shown in
 ... 'I was eventually shown into a small room about twelve feet by nine.'

{b} mukasi kita toki to-wa maru de kentoo-ga tigau.
 Last time came when with-Top totally guess-Nom different
 'This was not at all as I had remembered the place from the last time I was there.'

In (96), the verb {a} *irerareta* 'be shown into + *ta*' is perfective, whereas {b} *tigau* 'be different + *ru*' is imperfective wherein the perfective indicates a completion of action while imperfective indicates incompleteness.

One difficulty in this analysis, as pointed out by Bybee et al. (1994), is that if a given language has both perfective and imperfective aspects, they must contrast and should be mutually exclusive (Turney, 1965). Japanese has the *-te i-* form, a well-agreed-

upon imperfective morpheme, and it freely co-occurs with either *-ta* or *-ru*, as shown in (97).

(97){a} Akiko-ga kita.
Akiko-Nom came
'Akiko came.'

{b} Aikawarazu kuroi huku-o kiteita/kiteiru.
As usual black dress-Acc was wearing/is wearing
'As usual, she was wearing a black dress.'

This implies either *-ta* or *-ru* are not genuine (or typical) aspect markers, or that they mark a different kind of aspect from the *-te i* form.

Miller's response to this point departs from the traditional perfective-imperfective analysis. He considers the Japanese aspect system to reflect not the completion or incompleteness of a given situation, but, rather, the encoder's rhetorical intention of the statement (Hasegawa, 1999). That is to say, aspect denotes the speaker's viewpoint about the status of events.

Another problem with the aspect analysis is that sentences like (98) below cannot be regarded as perfective (Bybee et al., 1994).

(98) Kinoo tomatta ryokan-ni-wa niwa-ni ookina matu no ki-ga atta.
yesterday stayed inn-Loc-Top garden-Loc big pine of tree-Nom was
'The inn I stayed at yesterday had a big pine tree in the garden.'

The aspect analysis predicts that the garden no longer exists, which is improbable. And the narrator is likely to continue talking about events in which the garden plays some significant role. Thus the narrator's rhetorical intention should select *-ru*, but (98) sounds perfectly natural with *-ta* (Bybee et al., 1994).

2.4.2.2.3 Both Tense and Aspectual Markers

The proposition that *-ta* and *-ru* can indicate both tense and aspect is corroborated by Teramura (1971). He contrasts imperfective with perfect, rather than perfective and says that the difference in *-ta* meanings depends on whether the negative answer to the question is marked by the resultative auxiliary verb *-te iru* (containing the imperfective morpheme *-te i-*) or by *-ta*. An interrogative sentence is perfect if it is responded to in the negative by a sentence marked by *-te iru*. An interrogative sentence indicates the past tense if it evokes a *-ta* marked negative answer with past information. He considers the following example. To answer question (99), (100) with *-ta* is selected to negate the past-tense reading or (101) with *-te iru* to negate the perfect reading:

(99) Hirumesi-o tabeta ka.
Lunch-Acc ate Q
'Did you eat lunch?' or 'Have you eaten lunch?'

(100) Iya, tabenakatta.
No, did not eat
'No, I didn't eat lunch.'

(101) Iya, tabete inai.
No haven't eaten
'No, I haven't eaten lunch.'

Although this looks like a convincing theory, nevertheless counter-arguments have been offered by Yoshimoto (2000) on at least two fronts. Firstly, the argument doesn't seem to be applicable to sentences other than interrogatives. Secondly, an evidently past tense question can often be replied to by an answer with *-te iru*. Examples (102 a, b) are from Yoshimoto (2000).

(102a) Anata-wa 1963 nen 11 gatu 21 niti-ni Kennedy-o korosimasita ka.
You-Top 1963 year November 21st day-Loc Kennedy-Acc killed Q
'Did you kill John. F. Kennedy on November 21st, 1963?'

- (102b) Iya, korosite inai.
 No kill not
 'No, I haven't done it.'

From this example it is clear that a negative *-te iru* form answer is not always elicited by a perfect question, and accordingly, Teramura's argument is unsatisfactory.

Like Teramura, Nakau (1976) considers that *-ta* and *-ru* primarily indicate tense but they also signify aspects. His argument is that, in an adverbial clause, they designate either tense or aspect, depending on the nature of the clause connective. For example, with *no ni* 'concessive', they mark tense, whereas with *toki* 'when', they mark aspect. In (103a) and (104a) with *no ni*, the connected clauses can carry different time adverbials, but in (104) with *toki*, they cannot. Examples are from Nakau (1976).

- (103a) Kinoo ame-ga hutta no ni, kyoo-wa atui.
 Yesterday rain-Nom pour although, today-Top hot
 'Although it rained yesterday, it's hot today.'

- (103b) *Kinoo ame-ga hutta toki (wa), kyoo wa atui.
 Yesterday rain-Nom pour when (Top), today-Top hot
 'When it rained yesterday, it's hot today.'

(Intended; this is impossible in both Japanese and English.)

- (104a) Ame-ga hutta no ni, atui.
 Rain-Nom pour although hot
 'Although it rained, it is hot.'

- (104b) Ame-ga hutta toki-wa atui.
 Rain-Nom pour when-Top hot
 'It is hot when it has rained.'

Nakau (1976) explains that in (103a) and (104a), both *-ta* and *-ru* function as tense markers, that is, the two clauses have different tenses, and, consequently, two time adverbials are permitted. In (103b) and (104b), by contrast, because *-ta* is an aspect

marker, the entire sentence has only one tense encoded by the matrix clause *-ru*, and thus the sentence can take only one adverbial. Now again consider examples (104a) and (104b). The *-i* form (in *atui* ‘hot’) of the main clause in (104a) describes the present state of affairs, while the same form in (104b) describes a general state that can be recurrent in the future without particular relevance to the present state of affairs. The important point however is that the *-i* form of the main clause in either sentence has its own time referent, that is, reference to non-past time. On the other hand, the *-ta* forms of the subordinate clauses in these two sentences contrast sharply with each other. In (104a), the *-ta* form indicates an event that occurred in the past, thus involving reference to past time independently of the tense of the main clause. By contrast, in (104b), the *-ta* form is interpreted as indicating an event that will occur in the future, and thus its reference to future time is not independent of, but under the control of the tense of the main clause (Nakau, 1976).

Kunihiro (1980) disagrees with Nakau, however, by suggesting that recognition of the aspect-marking function alone is sufficient to account for the difference between (103a), (103b) and (104a), (104b). The reason that *-ta* is interpreted as referring to a past situation in (103a) has nothing to do with the tense-aspect distinction; rather, it is due to the nature of the concessive *no ni*, which requires the presupposition of the referent of the *no ni* clause. Hasegawa (1999) also does not readily accept this theory based on the idea of Occam’s razor, that is, if a uni-functional analysis can account for the usage of *-ta* and *-ru*, it is not necessary to posit two equally-weighted functions.

2.4.2.2.4 Neither Tense nor Aspectual Markers

Kunihiro (1967) considers that neither *-ta* nor *-ru* encodes tense proper. Instead, he argues that *-ta* indicates an *objective* judgment made by an unspecified person of the situation having been materialized at a certain point in time, and that *-ru* indicates an unspecified person's *subjective* judgment regarding the realization of the situation, that is, the person is certain about the realization of the situation, but does not assert that it has already materialized. However, as pointed out by Hasegawa (1999), one problem with this perspective analysis of objective *-ta* and subjective *-ru* is that, when both *-ta* and the *-te iru* refer to a past situation, a salient difference between them is that *-ta* implies subjectivity, and *-te iru* objectivity - contrary to Kunihiro. Inoue (1978) argues that the *-te iru* construction marks evidentiality, that is, the described situation is not part of the speaker's direct experience. She refers to this function as *reportative*, since it is frequently found in journalistic writing conveying objectivity and availability of evidence. Comparing the sentences in (105-106), Inoue concludes that *-ta* lacks this reportative sense. (Grammaticality judgments are Inoue's.)

(105) Zyōn-wa 10-nen mae ni zyeneraru mootaa-zu-o yamesaserareteiru/ ?yamesaserareta.
John-Top 10 years ago General Motors-Acc laid off
'John was laid off by General Motors ten years ago.'

(106) Watasi-wa onazi tosi-ni kuraisuraa-o *yamesaserareteiru/yamesaserareta.
I-Top same year-Loc Chrysler-Acc laid off
'I was laid off by Chrysler in the same year.'

Inoue (1978) explains that the use of *-te iru* in (106) is anomalous because it implies that the speaker has forgotten about the lay-off s/he personally suffered, and hence must check some document regarding his/her own past employment -- an unlikely situation.

While some native speakers may disagree with Inoue's grammaticality/appropriateness

judgments, it is true that *-te iru* frequently conveys the idea that the asserted situation is not part of the speaker's direct experience.

Onoe (1995) also claims that Japanese has neither tense nor aspect as a morpho-syntactic category, and that the contrast between *-ta* and *-ru* cannot be expressed in terms of tense or aspect. Rather, he advocates that provision of the characteristics of *-ta*, *-ru*, *-te iru*, and *-te ita* as predicative forms and clarification of their mutual relationships are essential. He argues that the contrast between *-ta* and *-ru* does not involve a tense opposition because *-ta* need not refer to past time, and *-ru* need not refer to non-past time. Between *-ru* and *-te iru*, the opposition cannot be perfective versus imperfective, respectively, because the latter can also be perfective, as shown in (105).

- (107) Sono koro made ni-wa kono koozi-wa owatteiru.
That time until-Top this construction-Top finished
'The construction will be finished by that time.'

He characterizes *-ta* as the form to describe a situation in relation to the point in time at which the speaker recognizes it to have already happened. When *-ta* appears in the matrix clause, this time point is normally speech time. *-te iru* marks either the perfect or the progressive. Since in terms of aspect, the notion of perfect corresponds to the perfective, and the progressive to the imperfective, and because *-te iru* covers both, Onoe (1995) concludes that Japanese does not have an aspectual system.

The problem with Onoe's analysis, according to Hasegawa (1999) is that it is difficult to apply it straightforwardly to investigation of narratives. For example, in the passage in (108) four situations are narrated (Tatsuzo Ishikawa, *Seishun no satetsu*): (108a) the character could not recall happiness as something spectacular (*-ta*), (108b) she poured hot water into a foot warmer (*-ru*), (108c) she slipped into a bed (*-ru*), and (108d)

she thought about happiness again until she fell asleep (-*ta*). It is not clear in what sense (108a) and (108d) are grounded, but (108b) and (108c) are not.

(108) {a} Siawase to-wa sono teido no mono da to sika, kangaerarenakatta.
Happiness Comp-Top that degree of thing Cop Comp only unable to think
'She couldn't recall happiness as anything more than such a trivial thing.'

{b} Tetubin no yu-o yutanpo-ni ireru.
Kettle of hot water-Acc foot warmer-Loc pour
'She poured hot-water into a foot warmer.'

{c} Sosite tumetai nedoko-ni hairu.
then cold bed-Loc enter
'And she slipped into a cold bed.'

{d} Netuku made no aida, kanozyo-wa karada-o tizimete,
fall asleep until of while she-Top body-Acc scrunch

mata atama no naka-de keisan-o site miru no datta.
again head of inside-Loc calculate-Acc do see Nom Cop Past

'Scrunching herself up, she thought about it again until she fell asleep.'

Kusanagi (1972) provides a viewpoint about the speaker's Focus to explain the Japanese tense system. According to him, Japanese tense system consistently indicates one kind of time relationship, that is, time-related (it indicates only the sequential ordering of two actions or states) as opposed to time-oriented in English (directly related to the real time). In other words, the completive tense indicates that the speaker's Focus precedes the speaking time or his Focus on the action on the dependent clause precedes the Focus on the action on the main clause. The non-completive tense indicates that the Focus coincides with or follows the speaking time, or that his Focus on the action on the dependent clause coincides with or follows the Focus on an action of the main clause. This view is quite close to Miura's T-R view based on the tense theory.

Having examined some of the analyses that are prevalent in the debate on assigning *-ta* and *-ru* as tense or aspect markers, it is evident that none of the analyses is without problems. This is the reason why, these verbal endings have not been described simply as one or the other. The problem with assigning them as tense markers is mainly the following: (i) In the narratives and spoken conversation, there doesn't seem to be a consistency in the occurrences of *-ta* and *-ru* with past and non-past tenses respectively. They may occur alternatively. (ii) The tense agreement does not occur sometimes, that is *-ta* can denote non-past and *-ru* can denote past tense. They seem to be tied not to the time points but to the meaning of completion or incompleteness. (iii) Regardless of event time, the question of why do some connectives require a particular tense cannot be explained. The T-R analysis has a wider validity as compared to the rest and explains (ii) by the anteriority/ posteriority concept and by shifting reference time. However it cannot explain (iii). Hence these analyses are inconclusive.

In the next section, interaction of tense-aspect and the role of *-ru/-ta* morphemes in case of *toki* subordinate clauses will be discussed.

2.5 Toki Subordinate Clauses

2.5.1 Interaction of Tense-Aspect in Subordinate Clauses

A complex sentence typically contains a subordinate clause and a main clause. For example, the *when* sentences in English are complex and can be represented as *When S1, S2.*, where S1 represents the subordinate clause and S2 represents the main clause as illustrated in (109) and (110) below:

(109) When Taroo entered school, he bought a car.

(109a) *When Taroo entered school, he buys a car.

(110) When Taroo enters school, he will buy a car.

(110a) *When Taroo enters school, he bought a car.

In (109), *Taroo entered school* is the subordinate clause and *he bought a car* is the main clause. In English complex sentences, the overall tense is decided by the tense of the main clause. And the tense of the subordinate clause is in agreement with that of the main clause as also evident in (109) and (110). Note that in case of when clauses in English, as in (109a) and (110a), disagreement in tenses between the subordinate and main clauses leads to ungrammaticality. The overall tense of (109) is past and that of (110) is future.

A Japanese complex sentence, similarly has a subordinate and main clause and an example of the *toki* ‘when’ clause would look like *S1 toki S2.*, where S1 is the subordinate clause and S2 is the main clause as illustrated in (111) below. In (111), *Taroo wa gakkoo ni hairu* ‘Taroo enters college’ is the subordinate clause, while *kuruma o katta* ‘bought a car’ is the main clause. In Japanese, the tense of the entire complex sentence is decided by the tense of the main clause, similar to English. However, the tense of the subordinate clause may or may not be in agreement with the tense of the main clause (different from English). For example:

(111) Taroo-wa daigaku-ni hairu toki kuruma-o katta. (past)
Taroo-Nom college-Loc enter TOKI car-Acc bought
‘When Taroo was about to enter college, he bought a car.’

(112) Taroo-wa daigaku-ni haitta toki kuruma-o katta. (past)
Taroo-Nom college-Loc entered TOKI car-Acc bought
‘When Taroo entered college, he bought a car.’

- (113) Taroo-wa daigaku-ni hairu toki kuruma-o kau. (future)
 Taroo-Nom college-Loc enter TOKI car-Acc buy
 ‘When Taroo is about to enter college, he will buy a car.’
- (114) Taroo-wa daigaku-ni haitta toki kuruma-o kau. (future)
 Taroo-Nom college-Loc entered TOKI car-Acc buy
 ‘When Taroo has entered college, he will buy a car.’

In (111) and (112), regardless of the *-ru* and *-ta* form of the verb in the subordinate clause, the sentences indicate past events (both *buying the car* and *entering college* takes place prior to the speech time) and this is determined by the tense in the main clause (*kuruma o katta* ‘bought a car’). By the same token, in (113) and (114), the sentences indicate future events (neither *entering the college* nor *buying the car* has taken place at the time of speech) and this is also determined by the tense of main clause (*kuruma o kau* ‘buy a car’). This is referred to as “absolute tense” and is similar in English and Japanese.

However, the tense of the main clause may be in agreement as in (112 and (113), similar to English, or may be in disagreement as in (111) and (114), different from English. In (111) and (114), the act of *buying the car* in the main clause takes place **prior** to *entering college* of the subordinate clause. On the other hand, in (112) and (114), the event of *buying the car* of the main clause takes place **after** the event of *entering college* of the subordinate clause. In other words, the tense of the subordinate clause event is relative to the main clause event and not to the speech time. This is “relative tense” and is different in English and Japanese.

In sum, in case of sentences with temporal connective *toki*, the temporal reference point of the subordinate verb generally shifts from the speech time to the time referred to by the main verb, while in English, the temporal reference point remains at the time of speech.

Apart from the differences arising due to temporal assignments in complex sentences, the Japanese *toki* clauses and English *when* clauses differ in several other respects. As accounted by Netsu (1984), several researchers have noted that *when* clauses in English denote either simultaneity or immediate succession in a particular context. Leech (1969) gives specific interpretations namely simultaneity or at the time at which and immediate succession or at the time immediately following the time at which an event occurs. Miller and Johnson-Laird interpret *When S1, S2.*, as once the state described in the *when* clause is realized, then the main clause is realized (Miller, 1976). This means, the state of the event in the *when* clause and the event of the main clause overlap in time. Isard (1974) and Smith (1980) observe *when* from a functional perspective and agree that the function of *when* is to provide referents for tenses. A key element in this view is that in *When S1, S2* sentence, tenses of S1 and S2 agree (as also illustrated above). Smith emphasizes that embedded adverbial sentences, which include *when* clauses, are generally interpreted as anchored to the time of utterance.

Netsu (1984) has perceived the difference between Japanese *toki* and English *when* sentences from another point of view. According to her, Japanese perceive the situations of S1 *toki* S2 both telescopically (that is, taken to be one time point in the stream of time, since *toki* clause provides a temporal referent for the tense in the main clause) and microscopically (that is, we see a range rather than a point). Within the range of the microscopic vision, temporal orders (sequential or simultaneous) are distinguished. In contrast, in English, only telescopic view is observed (that is, two events of the situations are perceived to be one point, namely simultaneous (overlapping) so that both S1 and S2 take the same tense markers). The sequential interpretation in English is not

signaled syntactically and overtly. In Japanese, there is distinction in the tense/aspect markers.

2.5.1.1 Tense interpretation of *toki* clauses (before, after and simultaneous)

In Japanese, the function of the *toki* ‘when’ clause is to provide temporal referents for tenses in the main clause which is the same as in English. Semantically, *toki* denotes, the time at which. In terms of *-ru/-ta* combination at S1 and S2 there are four combinations schematized below and illustrated by (115) – (119) (from (Lee, 1999).

Configuration	Temporal interpretation ¹⁰
S1 ru toki S2 ru	E2_E1, E1=E2
S1 ru toki S2 ta	E2_E1, E1=E2
S1 ta toki S2 ru	E1_E2, *E1=E2
S1 ta toki S2 ta	E1_E2, E1=E2

(115) Nihon-e iku toki kamera-o kau
 Japan-Loc go when camera-Acc buy
 ‘I’ll buy a camera when (before) I go to Japan.’

(116) Nihon-e itta toki kamera-o kau
 Japan-Loc went when camera-Acc buy
 ‘I’ll buy a camera when (after) I go to Japan.’

(117) Nihon-e itta toki kamera-o katta
 Japan-Loc went when camera-Acc bought
 ‘I’ll buy a camera when (after) I go to Japan.’

(118) Nihon-e iku toki kamera-o katta.
 Japan-Loc go when camera-Acc bought
 ‘I bought a camera when (before) I went to Japan.’

(119) Nihon-e iku/itta toki, kamera-o motte itta.
 Japan-Loc go/went when camera-Acc carried
 ‘I carried a camera, when I went to Japan.’

¹⁰ Key Used : E1_E2 → E1 prior to E2
 E2_E1 → E2 prior to E1
 E1=E2 → E1, E2 simultaneous

The four patterns given above present three possible temporal interpretations: the event in S1 (E1) is prior to event in S2 (E2) as in (116) and (117), or E2 is prior to E1 as in (115) and (118) or both are contemporaneous as in (119). These interpretations are explained on the basis of tense-aspect combinations between S1 and S2. With regard to the aspectual marker in S1, McGloin (1989) says that if S1 has *-ru*, S2 is prior to or simultaneous to S1 and if S1 has *-ta* marking, S2 follows S1 (or could be simultaneous in certain cases as pointed out by Lee , 1999).

It has generally been accepted that temporal specification of the *toki* clause is determined by the time indicated in the tense markers in the main clause. Miura (1974) however, noted that the perfect marker of S1 *-ta* is sometimes oriented not to the time specified in S2 but to the time of utterance. In these cases, *-ru/-ta* interchangeability is possible without any change in meaning.

In the next section, previous studies done on tense-aspect assignment to the *-ru/-ta* verb endings in *toki* subordinate clauses will be discussed.

2.5.2 Previous Studies on Tense-Aspect in *Toki* Subordinate Clauses

Takahashi (1978) states that *suru* and *sita* (referred to as *-ru/-ta* elsewhere in this study) in *toki* clauses denote relative tense (before/after), aspect (process/completion) as well as absolute tense.

Teramura (1981) also describes the *-ru/-ta* usage in *toki* clauses in terms of a mix of tense and aspectual terms. He states that tense either vanishes or merges with aspect in the *toki* clauses. He uses the term *kanryoo* ‘completion’ to denote aspect represented by *-ta* in *toki* clauses.

- (120) Kono mae Honkong-e iku toki, kono ryokoo kaban-o katta.
 Last time Hong Kong-Loc go TOKI, this trip bag-Acc bought
 ‘Last time when I went to Hongkong, I bought this trip bag.’
- (121) Kondo Hongkong-e itta toki, ryokoo kaban-o kaoo.
 Next time Hong Kong-Loc went TOKI trip bag-Acc buy let’s
 ‘Let’s buy a trip bag this time after we go to Hongkong.’

In (120) the act of buying the bag took place **before** reaching Hong Kong, while in (121) the act of going to Hong Kong got **completed** before buying the bag could take place. Teramura uses both aspectual terms (completion) and relative tense terms (before/after the event of the main clause verbs), thus pointing to the complexity of tense and aspect in *toki* clauses.

Kato & Fukuta (1989) follow Teramura (1984) and use the aspectual terms *mizen* ‘not happened’ and *kizen* ‘already happened’ to denote the *-ru/-ta* usage in subordinate clause events with respect to those in the main clauses. The examples used are:

- (122) Kanozyo to syokuzi-o suru (*sita) toki, sono hanasi-o suru tumori desu.
 She/her with meal-Acc do (*did) TOKI that story-Acc do intention Cop
 ‘I intend to talk about that story before having a meal with her.’
- (123) Kanozyo to syokuzi-o sita (*suru) toki, sono hanasi-o kiita.
 She/her with meal-Acc did (*do) TOKI that story-Acc do heard
 ‘I heard about that story after I had a meal with her.’

According to Kato & Fukuta (1989), in (122), *-ru* in the subordinate position denotes that the event of *syokuzi o suru* ‘eat food’ has not taken place yet at the time of the event in the main clause, that is *hanasi o suru tumori desu* ‘when I intend to talk about something’. That is the reason, *-ta* cannot be used in (122). The same way, *-ta* in (123) denotes that the event in the subordinate clause *syokuzi o sita* ‘ate food’ is completed at the time of the event of the main clause *hanasi o kiita* ‘heard that story’. That is why *-ru* cannot be used

in (123). Kato & Fukuta only associate the before/after readings with *-ru/-ta* and do not mention anything about the simultaneous readings that may also be possible in both (122) and (123).

Mihara (1991) discards both the tense-aspect interpretation for *toki* clauses and explains the *-ru/-ta* usage on the basis of their forms. He postulated the following two statements:

- (i) When the tense morphemes in the subordinate and main clauses are the same, then the reference point is the time of speech.
- (ii) When the tense morphemes in the subordinate and main clauses are different, then the reference point is the time of the main clause event.

Kusanagi (1983) explains the uses of *-ru/-ta* in *toki* clauses on the basis of relative tense only. He used the following examples to illustrate his point.

- (124) a. Amerika-e iku toki, boosi-o katta.
America-Loc go TOKI hat-Acc bought
'I bought a hat before going to America.
- b. Amerika-e itta toki, boosi-o katta.
America-Loc went TOKI hat-Acc bought
'I bought a hat after going to America.
- c. Amerika-e iku toki, boosi-o kau.
America-Loc go TOKI hat-Acc buy
'I will buy a hat before going to America.'
- d. Amerika-e itta toki, boosi-o kau.
America-Loc went TOKI hat-Acc buy
'I will buy a hat after going to America.'

The reference point in the above sentences is the event in the main clause and the *toki* clause verb, *iku* 'go' or *itta* 'went' is interpreted depending on the time of the main clause verb. In (a) and (c) *iku* takes place after *kau* or *katta* 'buy/bought'. In (b) and (d) *itta* takes

place before *kau* or *katta*. The problem with this theory is that it does not consider the case where the reference point shifts to the time of speech as in the following.

- (125) Kyonen sobietto-e itta toki-wa, Niigata kara no hune-o tukaimasita.
 Last year Russia-Loc went TOKI-Acc Niigata from of ship-Acc used
 ‘Last year when I went to Russia, I used the ship from Niigata.’

In (125) *-ta* of *itta* is making reference to the speech time and not the time of the event in the main clause.

Now the question that arises is if relative tense is enough to explain all occurrences of *toki* clauses. Let us take a look at the following sentences.

- (126) a. Watasi-ga tyuugoku-ni itta toki-ni-wa, kare-wa sude ni ni-ka getu
 I-Nom China-Loc went TOKI-Loc-Top he-Top already 2 months

mae-ni pekin-o hanareteita.
 before-Loc Beijing-Acc had left

‘When I went to China, he had already left Peking two months prior to that.’

- b. Watasi-ga tyuugoku-ni iku toki-ni-wa, kare-wa sude ni ni-ka getu
 I-Nom China-Loc go TOKI-Loc-Top he-Top already 2 months

mae-ni pekin-o hanareteita.
 before-Loc Beijing-Acc had left

‘When I was about to leave for China, he had already left Peking two months prior to that.’

In both (126 a, b) the *toki* clause verb *iku* ‘go’, *itta* ‘went’ takes place **after** the main clause verb *hanareteita* ‘had left’. That is, ‘his leaving for Peking’ took place before ‘my going to China’ (event in the subordinate clause) in both sentences. So this is not an instance of relative tense denoting the before/after dichotomy with *-ru/-ta* in *toki* clauses. This is in fact an aspectual difference – to see if the action in the subordinate clause is completed/ not-completed with respect to the main clause. In other words, the difference

lies in the state of the event in the subordinate clause. In (126a), the subordinate clause denotes that I had already gone to China, while (126b) denotes that either I was about to leave for China or was on the way to China. In either case, the main clause events had already happened at the time of the subordinate clause. This feature, where we look at and differentiate the internal constituency of an event (that is whether it is the beginning, middle or end of the duration of the event) is aspectual.

Nakau (1980) states that *-ta* either denotes past tense or completed aspect, while *-ru* denotes non-past tense or incomplete aspect. Now, which of the two is denoted in a particular sentence depends on the connective. For example, in case of *toki* clauses, it demands the completion/ non-completion interpretation while *no ni* ‘concessive’ connective demands tense. Nakau (1980) gives the following examples for *toki*.

- (127) Basu-o oriru toki kippu-o watasita.
 Bus-Acc get off TOKI ticket-Acc handed over
 ‘I handed the ticket before I got off the bus.’
 ‘I handed the ticket while getting off the bus.’

- (128) Basu-o orita toki kuruma ni hikareta.
 Bus-Acc got off TOKI car by hit
 ‘I got hit by a car after I got off the bus.’

According to Nakau (1980), *-ru/-ta* is denoting multiple interpretations in these sentences. In case of *-ru* (127) the two possible interpretations are **before** and **while**, that is the ticket was handed over before or while getting off the bus. With *-ta* (128), however, the interpretation is narrowed down to only the **after** reading, that is, I got hit by the car after I got off the bus.

This is illustrated by Tange (2004) using the following figures:

- (127) Basu o oriru toki kippu o watasita
 ‘I handed the ticket before I got off the bus.’
 ‘I handed the ticket while getting off the bus.’

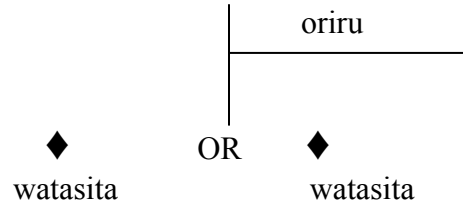


Figure 2.1: Basu o oriru toki kippu o watasita

- (128) Basu o orita toki kuruma ni hikareta.
 ‘I got hit by a car after I got off the bus.’

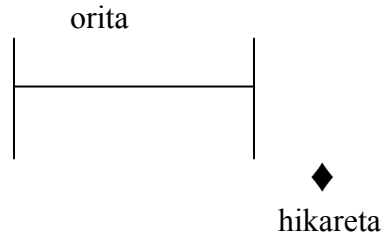


Figure 2.2: Basu o orita toki kuruma ni hikareta

Gengogaku kenkyuukai group (1989) state that the *suru/sita* (-ru/-ta) contrast is not based on tense but aspectual difference of completion/non-completion and emphasize on the telic properties of the verbs in the *toki* clause. The aspectual meaning of *suru toki* (129a, 129b) is imperfective (non-completion) irrespective of the telicity of the verb. That is,

disregarding the telic nature of the verb in the *toki* clause, the event in the *toki* clause is not completed.

Atelic verb in *toki* clause

- (129a) Syokuzi-o suru toki, sono hanasi-o suru tumori desu.
Meal-Acc do TOKI that story-Acc do intention Cop
'I intend to talk before/ while having the meal.' (non-completion)

Telic verb in *toki* clause

- (129b) Uti-e kaeru toki, biiru-o nomu.
House-Loc return TOKI beer-Acc drink
'I will drink beer before/while returning home.' (non-completion)

On the other hand, in case of *sita toki* (130), it provides different interpretations depending on the presence or absence of the end point in the verb. Change of state verbs + *toki* (that is, telic verbs) denote **completion** aspect of an event (130a) while in case of action verbs/stative verbs + *toki* (atelic verbs), which have a duration, it denotes **continuation** (130b). Moreover in transitive action verbs, *sita toki* may denote **completion** or **continuation** as depicted below in (130c).

Telic verb in *toki* clause

- (130a) Uti-ni kaetta toki kimono-ni kigaeru.
House-Loc return TOKI dress-Dat change
'I shall change into a (Japanese dress) after I return home.' (completion)

Atelic verbs in *toki* clause

- (130b) Nihon-ni ita toki Suzuki san-ni atta.
Japan-Loc was TOKI Suzuki Mr-Dat met
'I met Mr. Suzuki when I was in Japan.' (continuation)

Transitive verb in *toki* clause

(130c) Syokuzi-o sita toki, sono hanasi-o kiita.
Meal-Acc do TOKI that story-Acc do heard

‘I heard that story while having the meal.’ (continuation)

‘I heard that story after the meal.’ (completion)

(129a) and (130c) are illustrated schematically by Tange (2004) as follows.

(129a) Syokuzi o suru toki, sono hanasi o suru tumori desu.
‘I intend to talk before the meal.’ (non-completion)
‘I intend to talk while having the meal.’ (non-completion)

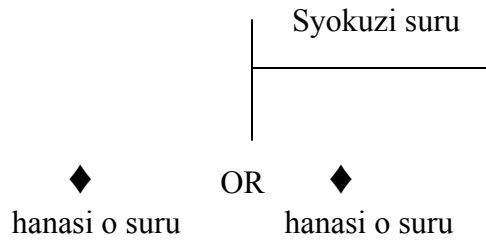


Figure 2.3: Syokuzi o suru toki, sono hanasi o suru tumori desu

(130c) Syokuzi o sita toki, sono hanasi o kiita.
‘I heard that story while having the meal.’ (continuation)
‘I heard that story after the meal.’ (completion)

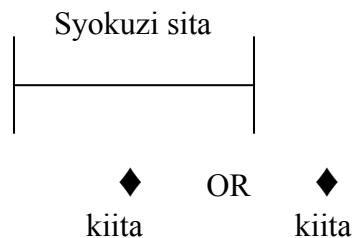


Figure 2.4: Syokuzi o sita toki, sono hanasi o kiita

Okuda (1988) also points to the association of the duration of verbs and their aspectual interpretation of reaching the end point (completion) or not reaching the end point (continuous). In action verbs like *to o simeru* ‘close the door’, *mado o akeru* ‘open the window’, *e o haru* ‘stick a picture’, *boosi o kaburu* ‘wear a hat’, the attainment of endpoint/ completion of the action is indicated. The time gap between the start of the action and change brought about by the action is short. However, verbal phrases like, *ki o kiru* ‘cut down a tree’, *sunayama o kuzusu* ‘crush a sand hill’, *kami o moyasu* ‘burn a paper’, *imo o taberu* ‘eat a potato’ often do not indicate the attainment of the endpoint. They indicate that action is in progress or still continuing.

Toyota (1977) delineates the difference of *-ru/-ta* in *toki* clauses involving multiple interpretations like Gengogakkai group (1989) with the verb *iku* ‘go’ as follows.

- (131) a. Osaka-e iku toki kaban-o kau.
 Osaka-Loc go TOKI bag-Acc buy
 ‘I’ll buy a bag before going to Osaka.’
 ‘I’ll buy a bag while going to Osaka.’
- b. Osaka-e iku toki kaban-o katta.
 Osaka-Loc go TOKI bag-Acc bought
 ‘I bought a bag before going to Osaka.’
 ‘I bought a bag while going to Osaka.’
- c. Osaka-e itta toki kaban-o kau.
 Osaka-Loc went TOKI bag-Acc buy
 ‘I’ll buy a bag after going to Osaka.’
- d. Osaka-e itta toki kaban-o katta.
 Osaka-Loc went TOKI bag-Acc bought
 ‘I’ll buy a bag before going to Osaka.’
 ‘I’ll buy a bag while going to Osaka.’
 ‘I’ll buy a bag after going to Osaka.’

(131 a, b) shows that the use of *u* in *iku toki* allows both the **before** and **while** interpretations, similar to (129). (131c) shows that *-ta* in *itta toki* allows the **after** interpretation similar to (128). And (131d) shows that *-ta* in *itta toki*, where there is also a *-ta* morpheme in the main clause, all three interpretations of **before**, **after** and **while** are possible. The **while** and **after** interpretation of *-ta toki* is also explained by (130), but the **before** interpretation is not explained there. The three interpretations for *toki* are tabulated in Table 2.2 below.

	Before	While	After
131a. Osaka e iku toki kaban o kau.	√	√	
131b. Osaka e iku toki kaban o katta.	√	√	
131c. Osaka e itta toki kaban o kau.			√
131d. Osaka e itta toki kaban o katta.	√	√	√

Table 2.2. Three interpretations of *toki* Clauses

Narita (1982) follows Nakau (1980) to explain the sequential relation between subordinate and main clause events using the following examples. Narita also mentions about the **before** reading in *-ta toki* clauses as illustrated in examples below.

- (132) a. Kawa-de oyogu toki-wa nen iri ni junbi undoo-o sita.
 River-Loc swim TOKI-Top carefully preparation exercise-Acc did
 ‘I did the preparatory exercises before swimming in the river.’

- b. Kawa-de oyoida toki-wa nen iri ni junbi undoo-o sita.
 River-Loc swam TOKI-Top carefully preparation exercise-Acc did
 ‘I did the preparatory exercises before swimming in the river.’

In (132 a, b) *toki* irrespective of *-ru* or *-ta* takes the **before** interpretation only in both cases, since the preparatory exercises can be done only before swimming not while swimming or after that. This is made clear from the *context* that is presented in these sentences.

Tange (2004) also cites the following examples to illustrate the before reading in *-ta toki* clauses.

- (133) a. Sarada-o tukuru toki tyanto te-o araimasita ka.
 Salad-Acc make TOKI properly hands-Acc washed Q
 ‘Did you wash your hands properly before making the salad?’
 b. Sarada-o tukutta toki tyanto te-o araimasita ka.
 Salad-Acc made TOKI properly hands-Acc washed Q
 ‘Did you wash your hand properly before (or after) making the salad?’

In (133a, b), again *toki* irrespective of *-ru* or *-ta* can take the *before* interpretation. *After* interpretation is also a possibility in (133b), but not in (133a). The ambiguity is removed by looking at the *context* in which these sentences are uttered.

Thus, the fact that is becoming clearer here is that *-ru toki* takes the **before** and **while** reading, while *-ta toki* is capable of taking **after**, **while** as well as **before** readings. The only way to explain the **before** reading for *-ta toki*, as offered by Tange (2004) is that in cases such as (131d), (132b), (133b) *-ta toki* is denoting absolute tense and not relative tense with respect to the main clause. In other words, the events in the subordinate and main clauses are prior with respect to the speech time and therefore only denote events simply before the time when they were uttered. Additionally and importantly, this is also made clear by the *context* used for these sentences.

The aspectual property in *toki* clauses is extensively dealt by Kudo (1989), (1992), which will be summarized next. Kudo described aspectual features in terms of simultaneity relations between *toki* clause event and main clause event. She also emphasizes that because of the simultaneous reading, *-ru/-ta* shows aspectual contrast and *-site iru (-te iru)* denotes relative tense contrast as illustrated below.

(134) Inaka-ni kaetta toki, guuzen kyuuyuu-ni atta. (=kaette iru toki)
 Hometown-Loc returned TOKI, by chance old friend-Dat met
 ‘I met my old friend by chance when I had returned home.’

(135) Sarada-o tukuru toki, hootyoo-de te-o kitta. (=tukutte iru toki)
 Salad-Acc make TOKI knife-Instr hand-Acc cut
 ‘I cut my hand with a knife when I was cutting salad.’

(136) Kinoo depaato-de kaimono-o site iru toki, saihiu-o torareta.
 Yesterday departmental store-Loc shopping-Acc doing TOKI wallet-Acc stolen
 ‘My wallet got stolen when I was shopping yesterday at the departmental store.’

In (134) and (135) both *-ru* and *-ta* can be replaced by the *-te iru* form, indicates that the *-ru/-ta* contrast is not that of tense, but in fact that of aspect. Moreover, the *-te iru* in the subordinate clause *kaimono o siteiru toki* ‘shopping at the departmental store’ in (136) is denoting simultaneous relative tense with respect to the main clause event *saihiu o torareta* ‘wallet got stolen’. The point that Kudo is making is that because of the simultaneity relations, *-ru/-ta* as in (134) and (135) lose the relative-tense based **before/after** interpretation and takes the aspectual interpretation. On the other hand, in (136) *-te iru* takes the relative tense interpretation on the basis of the subordinate event occurring simultaneously with the main clause event.

Kudo divides the simultaneity relation in *toki* subordinate clauses into three types, namely (i) Wholly Simultaneous (*Zentai teki doozisee*), (ii) Partially Simultaneous (*Bubun teki doozisee*), (iii) Sequentially Simultaneous (*Sessoku teki doozisee*). Wholly

Simultaneous relation is when the subordinate and main clauses overlap completely and occur concurrently as in (137). Partially Simultaneous is when one of the two events, either subordinate or main clause event occurs as a point happening while the other event is taking place. That is, one of the events has duration, while the other event is instantaneous and they occur in the same time frame as in (138). Sequentially Simultaneous events occur when both the subordinate and main clause event are instantaneous (momentary) and occur in a sequence one after another as in (139) and (140). Examples for the three simultaneity relation types are given below:

Wholly Simultaneous

- (137) Sensee no tokoro-ni iru toki, watasi-wa iti nin mae no onna desita.
 Teacher of place-Loc be TOKI I-Top independent of lady Cop-Past
 ‘While I was at my teacher’s place, I was an independent lady.’

Partially Simultaneous

- (138) Sarada-o tukutte iru toki hotyoo-de te-o kitte simatta.
 Salad-Acc making TOKI knife-Instr hand-Acc cut regret
 ‘I cut my hand with a knife (regretfully) while making salad.’

Sequentially Simultaneous

- (139) Sarada-o tukuru toki tyanto te-o araimasita ka.
 Salad-Acc make TOKI properly hands-Acc washed Q
 ‘Did you wash you hands before making salad?’
- (140) Sarada-o tukutta toki kiree ni osara-ni moritukemasita ka.
 Salad-Acc made TOKI neatly plate-Loc arranged Q
 ‘Did you arrange the salad neatly on the plate after you made it?’

In (137) both the main clause event *iti nin mae no onna desita* ‘was an independent lady’ and subordinate clause event *sensee no tokoro ni iru* ‘be at my teacher’s place’ are states/conditions and occur at the same time with completely overlapping time frames. In (138) the main clause event *hotyoo de te o kitte simatta* ‘cut my hand with a knife’ happens at

one moment when the main clause event *sarada o tukutte iru toki* ‘preparing salad’ was taking place. In other words, the time frame for the events in the main and subordinate clauses overlap at the point when the subordinate clause event is taking place. This is different from (137) in that the two events are of different time lengths.

In (139) and (140), the main clause and subordinate clause events do not have duration. They are said to be sequentially simultaneous, which means that they take place one after another and are not too far apart from one another. In (139) *te o araimasita* ‘washed hands’ in the main clause take place before the subordinate event *sarada o tukuru* ‘make the salad’, while in (140) main clause event *osara ni moritukemasita* ‘arranged the salad on the plate’ takes place after the subordinate event *sarada o tukutta* ‘made the salad’.

These simultaneity relations are further illustrated below diagrammatically adapted from Tange (2004).

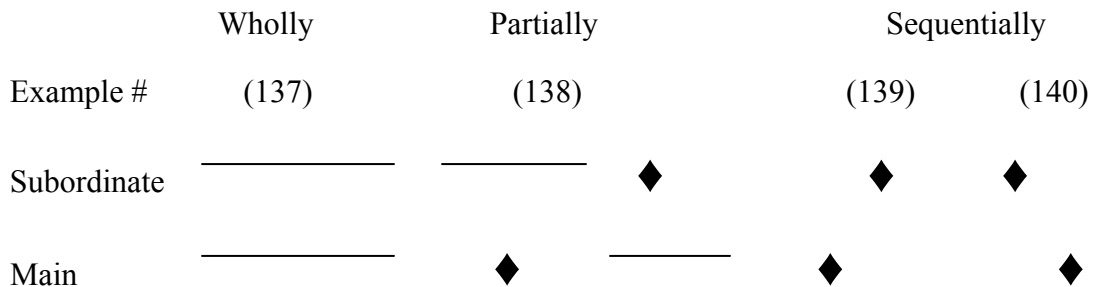


Figure 2.5: Simultaneity Relations in *toki* clauses

In order to explain the differences in the interpretations of *suru* and *sita* (-ru/-ta) in *toki* subordinate clauses, Kudo introduces the following terms and definitions.

Suru toki Interpretation

Unrealized (Syoozensee): This is a state when the action has not taken place completely or is on the verge of taking place. In this kind of a situation, the two events are construed as taking place sequentially in the same time frame.

「将然性」というのは運動はまだ完全に起こっていないまさに起こらんとする段階にあるのを示している。こういった段階におかれるということは同じ時間帯の中での＜後続 - 先行＞の時間関係をとらえることである。

- (141) Tobira-o osu toki, sasuga ni tameratta ga, gomen kudasai.
Door-Acc push TOKI instinctively hesitated but apology give
'I instinctively hesitated at the time of opening the door, I am sorry.'

In (141), *-u* is used in the subordinate position to denote that the action *tobira o osu* 'open the door' has not taken place completely at the time of the main clause event *tameratta* 'hesitated'.

Process (Kateesee): This is a state which shows that the action is in process and is undergoing a process of change. This only shows the process and does not denote any sequentiality.

「過程性」は運動はその動作・変化過程にあることを示している（過程だけを示しており後続 - 先行は示していない）。

- (142) Koko-e kuru toki, kuruma no naka-de kimi-wa soo itta n da ga, uso
Here-Loc come TOKI car of inside-Top you-Top that said but lie
datta n da na.
Cop past

'What you said in the car while coming here, was a lie, isn't it.'

In (142), *-ru* is used in the subordinate position to denote that the action *koko e kuru* ‘come here’ was in process at the time of the main clause event *soo itta n da* ‘you said so’. The two interpretations of *suru toki* (where the verbs do not have an inherent end-point), are depicted below.

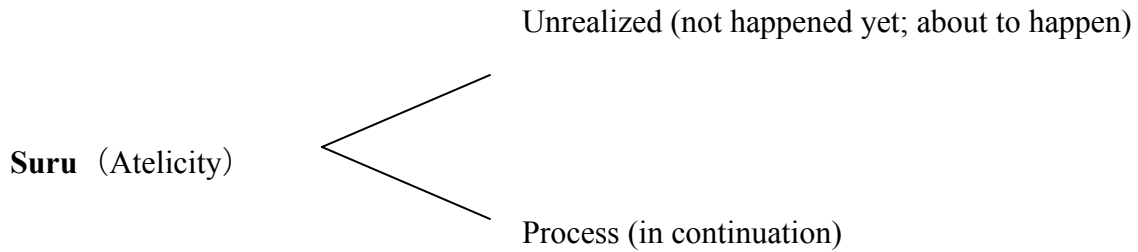


Figure 2.6: Two interpretations of *suru toki*

Sita toki Interpretation

Resultative: In case of telic verbs (that denote clear endpoints), the *sita* form denotes resultative state, that is attainment of the endpoint of the action as depicted in (143)

- (143) Sumisu huuhu-ga rainen nihon-ni tuita toki-ni au.
 Smith couple-Nom next year Japan-Loc reached TOKI-Loc meet
 ‘I will meet the Smith couple when after they reach Japan next year.’

In (143) the main clause event *au* ‘meet’ will take place at the point when the subordinate clause event *nihon ni tuita* ‘reached Japan’ would have been already realized and continues to remain in that realized state.

Action Realization: In case of atelic verbs (that do not denote clear endpoints), the *sita* form denotes the start point of an action or the realization state of the action that is yet to be completed as shown in (144).

- (144) Tugi ni kanozoyo to odotta toki-ni kare-wa kotosara dogitui kutyoo-de
 Next she with danced TOKI-Loc he-Top quite loud tone-Instr
 karakatta.
 teased
 ‘He teased me in a loud tone, when I began dancing with her next.’

In (144) the main clause event *karakatta* ‘he teased me’ happens at the point when the subordinate verb denotes an atelic verb *odoru* ‘dance’, has just begun (or has just realized, but not reached completion). The two interpretations of *sita toki* are depicted below.

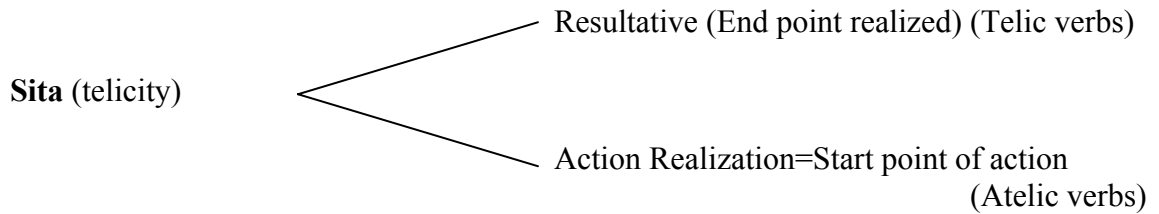


Figure 2.7: Two interpretations of *sita toki*

To sum up, *-ru* form of the verb is used to denote an event in a subordinate *toki* clause when the event is about to happen or is already in process (not reached its endpoint). While *-ta* form of the verb is used to denote the event in a subordinate *toki* clause when the event has reached its endpoint and is in a resultative state or in the case of atelic verbs, when the start point has already been realized but the endpoint has not been reached.

Consequently it can be said that the Process form (*kateesee*) of *suru*, that denotes a continuing process of an action, becomes comparable to the Action Realization state of *sita*, where the action has just begun. In both cases, the action is durative, and has not

attained completion. Thus, in these two situations, *suru* and *sita* can be interchanged. Refer to (145) and (146) below for examples.

Suru (Process) -----*Sita* (Action Realization)
Can be interchanged

(145) Boku-wa A-o yomi, tuduite B-o yonda toki-wa koe-ga tumatta.
I-Top A-Acc read continue B-Acc read TOKI-Top voice-Nom choked
'My voice got choked when I read A and then continued to read B.'

(146) Boku-wa A-o yomi, tuduite B-o yomu toki-wa koe-ga tumatta.
I-Top A-Acc read continue B-Acc read TOKI-Top voice-Nom choked
'My voice got choked when I read A and then continued to read B.'

In (145) *-ta* is used in the subordinate position to denote that the action *yonda* 'read' has been realized/ has begun, but not completed and hence is in the continuous state at the time of the main clause event *koe ga tumatta* 'voice choked'. In (146) *-ru* form is used in the subordinate position to denote that the action *yomu* 'read' is in progress at the time of the main clause event *koe ga tumatta* 'voice choked'.

In sum, it can be said that in order to explain the use of *-ru/-ta* in *toki* clause construction both tense (relative; absolute) as well as aspectual interpretation needs to be taken into account. Further, within the aspectual interpretation, telicity (presence or absence of endpoints) as well as durativity (if the verbs have a duration or not) play a key role in deciding which of the two endings *-ru* or *-ta* may be allowed with the subordinate verbs. This aspectual interpretation also helps in delineating the cases where *-ru/-ta* become interchangeable as well. Furthermore, context also plays an important role in disambiguating the various interpretations of *-ru/-ta* in *toki* clauses.

This chapter reviewed some basic concepts on tense-aspect, previous studies on the tense-aspect acquisition studies in Japanese, and studies on tense-aspect assignment to *-ru/-ta* endings in simple and complex sentences. The following chapter will look at the acquisition of the *-ru/-ta* endings in *toki* ‘when’ clauses in the case of foreign or second language learners of Japanese in the U.S. and Japan.

CHAPTER 3

EXPERIMENTS

3.1 The Problem

In Japanese language classrooms it is almost always the case that the tense-aspect distinctions are not explained adequately, which leads to students making the following kinds of production errors.

- (1a) * Kuruma-ga *kosyoo suru* toki, Taroo-ni naosite morau.
Car-Nom break down-NON-PAST when Taroo-Dat repair receive-NON-PAST
'I'll have Taroo fix my car, when it breaks down.'
- (1b) Kuruma ga *kosyoo sita* toki, Taroo-ni naosite morau.
Car-Nom break down-PAST when Taroo-Dat repair receive-NON-PAST
'I'll have Taroo fix my car, when it breaks down.'
- (2a) *Nihon-e itta toki, JAL-de iku.
Japan-Loc go-PAST when, JAL-Instr go-NON-PAST
'When I go to Japan, I'll go by JAL.'
- (2b) Nihon-e *iku* toki, JAL-de iku.
Japan-Loc go-NON PAST when, JAL-Instr go-NON-PAST
'When I go to Japan, I'll go by JAL.'

In (1a) the choice of the *-ru* marker in *kosyoo suru* 'break down' makes the sentence unacceptable, while in (2a), the choice of the *-ta* marker in *itta* 'went' is inappropriate. Sentences (1b) and (2b) are the corresponding correct versions respectively.

In order to explain these kinds of errors, I will use two hypotheses, namely (i) the Language Transfer Hypothesis and (ii) the Aspect Hypothesis. Errors like that in

(1a) can be explained on the basis of language transfer from the learner's native language. For instance, in English, the *when* clause shares the same tense as the main clause [as in the translation in (1a)]. According to the Language Transfer Hypothesis, learners whose native language is English are likely to transfer the tense agreement onto Japanese, thus yielding errors like in (1a). This has been attested by Netsu (1984). However, error types like (2a) are difficult to explain on the basis of this hypothesis because the learners should yield the correct sentence with the present tense *iku* 'go' in the *toki* clause as in example (2b) if the learners transferred the tense agreement from English onto Japanese.

On the other hand, the Aspect Hypothesis (Anderson & Shirai, 1994) which may explain (2a), states that learners acquire the use of perfective (past) marking first on Achievement/Accomplishment verbs and eventually extend this usage to Activity and Stative verbs. Verbs may usefully be divided into four types, Achievements, Accomplishments, Statives and Activities (Vendler, 1967). Achievement verbs (e.g. recognize) are identified as those that happen in an instant and have a clear point of realization. Accomplishment verb phrases (e.g. make a chair) take a while to be completed (unlike Achievement verbs) but still have a clear point of completion (similar to Achievement verbs). Stative verbs (e.g. know) describe static situations and do not involve any dynamic movement or change. Activity verbs (e.g., swim) involve dynamic movements but lack a clearly defined endpoint. The error in (8a) can be explained using the Aspect Hypothesis since *Nihon e iku* 'go to Japan' is an Accomplishment verb phrase (or Achievement, depending on the accompanying prepositional phrase), and therefore, the learners tend to use the past/perfective marking *-ta* with this verb to yield the ungrammatical sentence. This widely attested preference to attach perfective (past) aspect

endings to a particular class of verbs [such as Accomplishment in example (8a)], based on their inherent semantic aspect, could possibly be a guiding factor to explain error types.

The above two hypotheses, namely the Language Transfer Hypothesis and the Aspect Hypothesis, can account for the errors independently or interactively. Thus four possibilities of these hypotheses will be laid out to address the research questions that follow in the next section.

This chapter is organized as follows. Section 3.2 lays out the Hypotheses and Research Questions. Section 3.3 describes the Experimental Design and Procedures followed by Results and Discussion in Section 3.4.

3.2 Hypotheses and Research Questions

3.2.1. Hypotheses

There are four possibilities of the hypotheses that will be tested in this study in order to explain how learners make the selection of the tense-aspect morphology of *-ru/-ta* endings in *toki* subordinate clauses.

- I. Only the Language Transfer Hypothesis working.
- II. Only the Aspect Hypothesis working.
- III. Both the Language Transfer and the Aspect Hypothesis working.
- IV. Neither the Language Transfer nor the Aspect Hypothesis working.

I. Only the Language Transfer Hypothesis is working.

The Language Transfer Hypothesis predicts that non-native learners of a language are likely to be influenced by the language transfer¹ process either from their mother tongue or other previously learned language/s. The learners' responses will be guided only by the rules and structures of their mother tongues/previously learned languages and will not be affected by other factors such as proficiency level.

II. Only the Aspect Hypothesis is working.

The Aspect Hypothesis predicts that the learners' selection (in the early stages of their proficiency level) of the tense-aspect morphology is influenced by universal principles relating them to the inherent aspect of verbs (aspectual features that come with the verb's meaning) that contain those morphemes (Robison, 1995; Bardovi-Harlig & Bergstrom, 1996). The learners' responses in the early developmental stages of their learning are influenced by the inherent semantic properties of the verbs, that is, proficiency level plays a role in their selection of the tense-aspect morphology and are not affected by other factors such as their native language.

III. Both the Language Transfer and the Aspect Hypothesis are working.

The learners' responses will be influenced by both, transfer from the native language as well as the developmental pattern seen in early stages of their proficiency level associated with the inherent semantic properties of the verbs. In this case, both the hypotheses are interacting.

¹ Netsu (1984) terms this as interlingual transfer

IV. Neither the Language Transfer nor the Aspect Hypothesis is working.

In this case, neither of the two hypotheses is working. In other words, the learners' responses are not affected by either their native language or by the inherent semantic properties of the verbs at their developmental stages. This hypothesis would be possible if neither (I) or (II) above is true.

Four hypotheses were laid out to examine how the learners selection of the tense-aspect morphology of *-ru/-ta* endings in *toki* subordinate clauses are affected by either their native languages or proficiency levels or both. The following research questions are raised based on these hypotheses.

3.2.2. Research Questions

The following three research questions are posited so as to further clarify the possible roles that language transfer and inherent semantic aspect of the verb phrases might be playing in the learners' selection of *-ru/-ta* endings in *toki* clauses.

- a. Does the inherent aspect of the verb phrase play a role in the selection of the *-ru/-ta* endings in *toki* clauses?

This question puts forth the issue of whether the learners are guided by the early developmental patterns to attach a specific morpheme to particular kinds of verbs based on their semantic properties. The structure that is used to test this issue in this study is the subordinate *toki* 'when' clauses in Japanese, which takes both *-ru* (non-past/imperfective) as well as *-ta* (past/perfective) morphemes. Hypothesis II, which states that only the Aspect Hypothesis may be working in the learners' selection of the *-ru/-ta* endings, will be tested to answer this question.

- b. Does language transfer play a role in the selection of the *-ru/-ta* endings in *toki* clauses?

This question raises the issue of whether the learners are guided by their native languages to make their selections of the tense-aspect morphemes. This question will be answered by testing Hypothesis I, which states that only the Language Transfer Hypothesis may be working in the learners' selection of the *-ru/-ta* endings.

- c. In cases of *toki* clause usage where the *-ru/-ta* exchange is possible, is there a preference for a particular ending, and if so which one and why?

This question puts forth the issue of whether a combination of the Language Transfer and the Aspect Hypothesis may be at work (Hypothesis III) or neither of them may be at work (Hypothesis IV). In some cases of *toki* clauses (particularly with verbs that have a duration), the *-ru/-ta* morphemes can be used interchangeably. Therefore, what needs to be tested is which hypothesis would motivate the learners to select a particular morpheme over the other (either the Language Transfer or the Aspect Hypothesis or a combination of the two).

3.2.3. Predictions

Following are the predictions for each of the hypotheses given above.

Hypothesis (I) Only the Language Transfer Hypothesis is working.

If only the Language Transfer Hypothesis is working then those learners, whose native languages don't resemble Japanese, such as English and Chinese, will make the most errors. On the other hand, learners whose native languages resemble Japanese will not

make as many errors, such as Korean. Their responses will not be affected by their proficiency levels, that is, there should not be proficiency level differences.

Since Chinese language lacks tense (has only aspectual markers), Chinese learners are likely to make errors in both S1 *ru toki* S2 *ta* as well as S1 *ta toki* S2 *ta* patterns². Since English follows strict tense agreement between the subordinate and main clauses in *when* clauses, English learners are likely to make more errors in the S1 *ru toki* S2 *ta* kinds of patterns which is lacking in English.

Hypothesis (II) Only the Aspect Hypothesis is working.

If only the Aspect Hypothesis is working, then the intermediate level students will make more errors than advanced level students, irrespective of their native language background. This is because the tendency to attach the perfective/ past morpheme to Achievement and Accomplishment verbs (as predicted by the Aspect Hypothesis) is observed only during the beginning stages of acquisition. *Toki* subordinate clauses in complex sentences, are not introduced in the curriculum until late beginning or intermediate levels, therefore for this study, the intermediate students will be treated as beginning level for *toki* structures.

Additionally it can also be predicted that the intermediate level students will make more errors of the type S1 *ta toki* S2 *ta* due to the over-use of *-ta* with Achievement and Accomplishment verbs as compared to Stative and Activity verbs.

Hypothesis (III) Both the Language Transfer and the Aspect Hypothesis are working.

In the case where both the Language Transfer and the Aspect hypotheses may be working, the intermediate level Chinese and English learners are likely to make most errors, owing

² S1 and S2 are subordinate '*toki*' and main clauses respectively and *-ru/-ta* morphemes are attached to the subordinate and main verbs according to the patterns indicated.

to a combined effect of the Language Transfer and the Aspect Hypothesis, as compared to other groups such as advanced Chinese, English and Korean. It would be interesting to see how the intermediate Korean students perform with respect to their other intermediate counter-parts.

Hypothesis (IV) Neither the Language Transfer nor the Aspect Hypothesis is working.

The results not predicted by the above three hypotheses would fall into this category, that includes the case where neither of the hypotheses may be working, that is, none of the learner groups are likely to show any significant difference in their performances. In other words, their performances would be comparable to each other implying that neither the Language Transfer nor the Aspect Hypothesis is influencing their selections.

In order to test the validity of these four possibilities of the two hypotheses, two experiments with a Truth Value Judgment Task (TVJ 1 and TVJ 2) were designed and conducted with intermediate and advanced learners of Japanese whose native languages were Chinese, Korean or English. The two experiments tested how the learners made their selection of the *-ru/-ta* endings in *toki* ‘when’ clauses in Japanese.

3.3 Experimental Design and Procedure

3.3.1 Participants

The sample was drawn from a population that consisted of adult native speakers of English who have been studying Japanese as a foreign language at the intermediate and advanced levels³ at a Midwestern university in the U.S. and adult native speakers of

³ Intermediate and advanced students at the Midwestern U.S. university were studying in the fourth and fifth years respectively (who have completed 600 or more contact hours).

English, Chinese and Korean who have been studying Japanese as a second language at the intermediate and advanced levels⁴ at a large public and a large private university at Kyoto, Japan. The data were collected from 37 participants for TVJ 1 and 34 participants for TVJ 2. The participants for TVJ 1 and 2 were different sample groups but from the same population. Students in the U.S. used *Japanese: The Spoken Language* [Vol. 1-3] (Jorden & Noda, 1987, 1988, 1990) and *Japanese: The Written Language* [Vol. 1, 2] (Jorden & Noda, 1994, 1995) as the primary texts. The intermediate students at the public university in Kyoto used a variety of texts for Conversation, Listening, Composition, Grammar, and Reading. The advanced students used handouts and printed literature arranged by the instructor. See Appendix A for a list of printed material used by participants in the public university in Kyoto. The intermediate students at the private university in Kyoto used *New Approach Japanese Intermediate Course* (Oyanagi, 2003) and *New Approach Japanese Pre-Advanced Course* (Oyanagi, 2003). The advanced level students in the private university in Kyoto used *Jokyu de Manabu Nihongo* (Abe, 1994).

The experimenter contacted the Japanese language class instructors at the universities and asked if the students could be recruited for research on a voluntary basis. After gaining the approval of the instructors, the experimenter visited their classrooms and solicited participation for the study. The students were briefed about the goal of the study and the directions to do the written questionnaire both orally and through the written instructions. They were also told that their participation would take about an hour but they were free to take as much time as needed, and their participation would be

⁴ Intermediate and advanced students at both the universities in Kyoto were studying in the intermediate and advanced levels, decided on the basis of a placement test held at the beginning of the academic year. A more detailed break-down of various placement levels is given in Appendix B.

compensated (\$10 or ¥1000 per person). Those who agreed to participate were asked to write their names on a sign up sheet and were given the questionnaire at that point. They were asked to bring the completed questionnaire in a week's time.

The students were made aware that they would remain anonymous and their responses would be used only for research purposes and not used to evaluate their classroom performance. They were also informed that their refusal to participate or discontinuation of participation would never result in prejudice against them.

As a control group, 24 adult native speakers of Japanese in Kyoto participated in TVJ 1 and 22 participants in TVJ 2. TVJ 1 and 2 had different individuals from the public university in Kyoto and neighboring households in Kiyomizu michi area in Kyoto. They were also paid volunteers.

3.3.2. Experimental Design

This study employed a written version of the Truth Value Judgment Task⁵ (TVJ) following Kano & Nakayama (2004a, b). Crain & McKee (1985) introduced the Truth Value Judgment task for investigating the knowledge of backward anaphora among English-speaking children. The fundamental property of this task is that the participant makes a bipolar judgment about whether a statement accurately describes a particular situation alluded to in some context or preamble (Gordon, 1996). That is to say, the participant is given a story followed by a sentence that has to be judged. S/he reads the story and makes a True/False judgment about the meaning of the sentence by matching it

⁵ IRB Protocol # 2005B0158

with the content of the story above. (3) provides an example of the story and test sentence used in this study.

(3) Jiroo is a second-year college student in Nagoya and he loves listening to the radio. His favorite radio talk show is aired every Saturday at 6pm. He plays tennis with his friends from around 4-5:30pm. Yesterday (Saturday), when he came back home from his tennis session he switched on the radio even before turning on the lights of his room. Just as he switched on the radio, the clock on the wall also rang. Jiroo was happy to have made it on time. He then turned on the lights and continued to listen to his favorite program.

ラジオをつけたとき^{とけい}時計^なが鳴った。

True/False

razio o tuketa toki tokee ga natta.

(The clock rang when (after) he switched on the radio).

The test stimulus attempted to investigate whether or not the participants could interpret *tuketa toki* ‘when switched on’ as an event that took place before (and not after) *tokee ga natta* ‘the clock rang’. Here *tuketa* ‘switched on’ is an Achievement [+dynamic, +telic, -duration] verb according to Vendler’s classification. The Achievement verbs in the subordinate *toki* clause depending on which of the two *-ru/-ta* endings they take, give a sequential (before/after) reading with respect to the verb in the main clause. Thus, in the above example, *razio o tukeru toki tokee ga natta*, would be interpreted as ‘the clock rang before he switched on the radio’ and *razio o tuketa toki tokee ga natta* would be interpreted as ‘the clock rang after switched on the radio’. The before/after distinction comes from the *-ru/-ta* endings in the subordinate verb (*tukeru/tuketa*). The Durative verbs category (Accomplishment ([+dynamic, +telic, +duration]; e.g. *repooto o kaku* ‘write a paper’), Activity ([+dynamic, -telic, +duration]; e.g. *kaku* ‘write’), Stative ([-dynamic, -telic, +duration]; e.g. *aru* ‘be’)) does not make this sequential (before/after) distinction *with -ru/-ta* in the subordinate position. Rather they take a simultaneous

reading, where the two events of the subordinate and main clause overlap in time. For example, *Gohan o taberu toki ohasi o zyoozu ni tukatta* is interpreted as ‘He used chopsticks skillfully when he ate food’. The interpretation remains the same even with *tabeta* in the subordinate position. Here ‘eating’ and ‘using chopsticks’ overlap in time and do not occur sequentially.

This task attempted to test if the participants could correctly choose the *-ru/-ta* endings in *toki* clauses based on their understanding of the inherent types of verbs (Achievement, Accomplishment, Activity, Stative) to which those endings are attached. If the participant believed that the Japanese sentence written beneath the story matched the content of that story, s/he would choose True; if, on the other hand, s/he judged that the sentence failed to describe the situation, s/he would circle False.

By this technique it is possible to measure the interpretation of sentences and discourses without any demand on producing those sentences. If a sentence has more than one interpretation, one reading may strongly dominate over the other, and it is difficult to make the less preferred reading salient. Therefore, if a study uses a multiple-choice test that requires selecting only one best choice, the participants often mark the most preferred choice; thus, the multiple choice method does not give evidence for the alternative reading. Other tasks used in language acquisition studies, that require only a bipolar response such as the grammaticality judgment test or lexical decision task implicitly assume that the participant understands the notion of a sentence being “good” or “bad” as relating to intuitions about grammaticality. The TVJ task on the other hand, does not make such assumptions. Rather it assumes only that the participant has some conception of the notion of truth in the sense of correspondence between what is said in

the test sentence, and the situation referred to. All sentences presented are grammatical strings. This requires the participant to have an idea of what was said – that is, to construct a valid interpretation of the sentence via the parsing mechanisms, grammar, pragmatic assumptions, semantic entailments, and so on, that are available to them at that point. The advantage is that the task does not require the participant to bring any of these processes to the production level in any explicit way (Gordon, 1996).

This task has a few limitations as well. First, since the stories are long, and it is required to include the test sentences mixed with the distracters, the overall length of the test becomes considerably long. Second, since the test is in a True/False forced choice format, there is a possibility of a “Yes Bias”, that is, the participants are more likely to mark “True” for the cases they are not sure of. Third, it is important that the stories be presented in a language that the participants are most comfortable with, for example their mother tongue. If the stories are presented in any other language in which the participant is not very comfortable with, there arises a possibility that s/he might make a misjudgment due to their inability to understand the language of the story and not necessarily due to their lack of comprehension of the structure in the test item. For example, a Chinese native speaker learning Japanese might feel more comfortable to read the stories written in Chinese rather than English, if his or her English skills are not very good. If this participant is given the English version, it may lead to inaccuracies in the answers because of problems in understanding the English language and not necessarily the target structure in the test item.

In this study, two experiments were constructed with 24 stories as stimuli in each experiment. Of the 24 stories, 12 stories related to the interpretation of *toki* and the

remaining 12 stories were distracters. The stories used in the study were written in English and then translated into Korean, Chinese and Japanese so that the participants whose native languages were one of these four languages, would not have difficulty comprehending the situation depicted (Translations of the test stories in Chinese, Korean and Japanese are attached in Appendices E and F). The test sentences were written in standard, conventional script that used hiragana, katakana and kanji characters and were presented in a horizontal configuration. All kanji characters in the test were prescribed in hiragana above for ease of reading. Translations for the test sentences were not provided. The vocabulary used in the test sentences was limited to the words that are introduced in the three volumes of the textbook *Japanese: The Spoken Language* (Jorden & Noda, 1987, 1988, 1990). Since these textbooks covered all or most of the vocabulary items that were also covered in the materials used by the Japanese universities at the intermediate level, these textbooks were treated as a database for the vocabulary items used in the test.

The test sentences were distributed among two experiments. Truth Value Judgment Task 1 (TVJ 1) had only Achievement verbs in the subordinate clause position, while Truth Value Judgment Task 2 (TVJ 2) had Accomplishment, Activity and Stative (all Durative verbs) in the subordinate positions. The type of main clause verbs was not controlled in order to maintain the naturalness of the sentences. For all the categories of the verbs in the subordinate position, both the *-ru* and *-ta* tense endings were used, however, only the *-ta* ending was used for the main clause verbs. Thus, the two experiments in this study were able to test only two out of four possible combinations of *toki* clauses, namely, (i) S1 *ru toki* S2 *ta* and (ii) S1 *ta toki* S2 *ta*. The other two

combinations, namely, (iii) S1 *ru toki* S2 *ru* (iv) S1 *ta toki* S2 *ru* will be taken up in a future study. Examples of all types of sentences are given below:

A. Examples of the twelve sentences with Achievement verb in the subordinate position

(TVJ 1)

- i. Ie-o deru toki denwa-ga kakatte kita.
house-Acc leave TOKI phone-Nom rang came
‘The phone rang when (before) I left the house.’
- ii. Ie-o deta toki denwa-ga kakatte kita.
house-Acc left TOKI phone-Nom rang came
‘The phone rang when (after) I left the house.’

B. Examples of the four sentences with Accomplishment verb in the subordinate position (TVJ 2)

- i. Gohan-o taberu toki itumo ohasi-o zyoozu ni tukatta.
food-Acc eat TOKI always chopsticks-Acc skillfully used
‘He always used chopsticks skillfully, when he ate food.’
- ii. Gohan-o tabeta toki itumo ohasi-o zyoozu ni tukatta.
food-Acc ate TOKI always chopsticks-Acc skillfully used
‘He always used chopsticks skillfully, when he ate food.’

C. Examples of the four sentences with Activity verb in the subordinate position (TVJ 2)

- i. Basu tee-de matu toki itumo CD-o kiita.
Bus stop-Loc wait TOKI always CD-Acc listened
‘I always listened to the CD when I waited at the bus stop.’
- ii. Basu tee-de matta toki itumo CD-o kiita.
Bus stop-Loc waited TOKI always CD-Acc listened
‘I always listened to the CD when I waited at the bus stop.’

D. Examples of the four sentences with Stative verb in the subordinate position (TVJ 2)

- i. Kyoto-ni iru toki itumo noo-o mi ni itta.
Kyoto-Loc am TOKI always Noh play-Acc see for went
'I always went to see Noh play when I was in Kyoto. '
- ii. Kyoto-ni ita toki itumo noo-o mi ni itta.
Kyoto-Loc was TOKI always Noh play-Acc see for went
'I always went to see Noh play when I was in Kyoto. '

The test instruments for both TVJ 1 and 2 are appended in Appendices C and D respectively. As regarding the number of sentences for each verb type, there were 12 sentences for Achievement category (TVJ 1), while four each for Accomplishment, Activity and Stative (all Durative verbs) in TVJ 2. The reason for using more Achievement verbs is first, there are more of these available as compared to the Durative verbs, and second, there was a need to make sure that there were equal tokens of the Achievement type verbs involving **sequential** reading, as there were of the Durative type verbs involving the overlapping **simultaneous** reading. Since the verbs in the Durative category denote duration they can be interpreted in two ways: (a) one time event (b) a recurring event. For example, *Nihon ni ita toki noo o mi ni itta*, could mean (a) When I was in Japan, I went to see Noh once or (b) When I was in Japan, I went to see Noh several times. In order to avoid this ambiguity, all sentences were given the interpretation of habituality, by adding *itumo* 'always'. Therefore the sentence became, *Nihon ni ita toki itumo noo o mi ni itta* 'When I was in Japan, I always went to see Noh', thus rendering the sentence a repetitive, habitual reading. The experiments tested the *-ru/-ta* interpretation of all four verb types and the participants did not get to see both interpretations of the same verb in the same version of the experiment. In other words, if one version had the S1 *ru toki* S2 *ta* sentence for a particular verb, then it did not have the

S1 *ta toki* S2 *ta* pattern for the same verb. For example, *razio o tukeru toki tokee ga natta* and *razio o tuketa toki tokee ga natta* appeared in two different versions of the test. This was done to make sure that participants did not get to see the directly opposing alternatives of the same verb in the same test; otherwise that may affect their judgment in choosing their responses. The two versions were further divided to accommodate the four combinations of the story (Situation) and test sentence (Form) pairs. In TVJ 1 there were four versions of the test (the four possible combinations of Hit a, Hit b, Correct Rejection (CR) a and Correct Rejection (CR) b for each of the verbs were distributed amongst the four versions). A description about Hit and Correct Rejection (CR) responses appears later in this section.

TVJ 1 (Four versions had the following patterns for each verb)

Hit a: Situation (*ru—ta*) ---Form (*ru—ta*)
 Hit b: Situation (*ta—ta*) ---Form (*ta—ta*)
 CR a: Situation (*ta—ta*) ---Form (*ru—ta*)
 CR b: Situation (*ru—ta*) ---Form (*ta—ta*)

For TVJ 2 two versions were used (the two possible combinations of Hit a and Hit b were distributed between the two versions).

TVJ 2 (Two versions had the following patterns for each verb)

Hit a: Situation --- Form (*ru—ta*)
 Hit b: Situation --- Form (*ta—ta*)

The test sentences were mixed with 12 distracters such that no more than two test sentences containing *toki* or distracter sentences were presented consecutively. All the test sentences were mixed randomly with the distracters within the controlled parameters described above. Of the 24 stimuli, 12 were expected to yield True and 12 were expected to yield False responses respectively. In TVJ 1, of the 12 test sentences 6 were expected

to yield True and 6 were expected to yield False responses to keep a fifty-fifty balance between the true and false responses. In TVJ 2, all the 12 sentences were expected to yield True responses, while the remaining 12 distracters were expected to yield False responses in order to keep the fifty-fifty balance between the true and false responses. There was a Pre-test section that consisted of five stimuli and was presented just before the main section of the questionnaire. The Pre-test was designed to examine whether the subjects understood the task procedures, were able to process biclausal sentences, and knew the meaning of *toki* in a simple clause sentence.

Sample Pre-test sentences

- (4) Wakai toki yoku ryokoo sita. (meaning of *toki* in a simple sentence)
 Young TOKI often traveled
 'I traveled often when I was young.'
- (5) Yukio-ni denwa sita tokoro rusu datta. (biclausal sentence)
 Yukio-Dat phoned when was absent
 'When I called Yukio, he wasn't available.'

3.3.3 Procedure

The experimenter visited the Kyoto and U.S. based learner groups in their classrooms and after receiving verbal consent for voluntary participation, distributed the written questionnaire along with the written consent form and background questionnaire (copies of the consent form and background questionnaire are attached in Appendices G and H respectively). The experimenter then went over the directions for the test in person. The participants were asked to complete the consent form, background questionnaire and the test questionnaire and return them all one week later. The experimenter then collected all the materials the following week and handed over \$10 or ¥1000 per person as fees for

participation. Some participants were also contacted through email (personal communication). All the materials were sent to them via email attachments. The native participants (control group) in Kyoto were all contacted through personal communication and the materials were directly handed over and collected back.

The return rate of all the responses (natives and learners) was close to 95%. For both the experiments, the analysis was done by grouping the learners on the basis of their (a) proficiency level (b) native language. For this study only (i) S1 *ru toki* S2 *ta* and (ii) S1 *ta toki* S2 *ta* sentence patterns were investigated. Based on a 2 (Proficiency Level) x 3 (Native Language) model, statistical analyses were carried out.

The following key terms are used in the results. Correct Responses are the sum total of all the Hit responses and the Correct Rejection responses: [Correct Responses = Hits (a, b) + Correct Rejections (a, b)]. Hit responses are those in which learners give true responses to true statements. This means that the form of the sentence (S1 *ru toki* S2 *ta* or S1 *ta toki* S2 *ta*) corresponds to the form that is illustrated in the situation of the story. For example, if the situation illustrates *ru—ta* pattern and the sentence is also of the same *ru—ta* pattern, then that will be a Hit response. Similarly, if the situation illustrates a *ta---ta* pattern and the sentence is also of the same *ta—ta* pattern, then again it is a Hit response. The differentiation between the above two kinds of Hit responses will be made by adding “a” for the *ru—ta* pattern and “b” for the *ta—ta* pattern. Refer to Appendix I for examples. Summarizing this below:

(6) Hits (H): True responses to True statements
H a = Situation (*ru—ta*) -----Form (*ru—ta*)
H b = Situation (*ta---ta*) -----Form (*ta—ta*)

Correct Rejections are those in which learners give false responses to false statements. This means that the form of the sentence (S1 *ru toki* S2 *ta* or S1 *ta toki* S2 *ta*) does not correspond to the form that is illustrated in the situation of the story. For example, if the situation illustrates *ru—ta* pattern and the sentence is *ta—ta* pattern, then that will be a false response. And the participant, by choosing the false response will be correctly rejecting the statement. Similarly, if the situation illustrates a *ta—ta* pattern and the sentence is *ru—ta* pattern, then again this will require a false response from the participant to make it into a correct answer. In other words, it will be a correct rejection. The differentiation between the above two kinds of Correct Rejection responses will be made by adding “a” for the *ru—ta* pattern of the sentence form and “b” for the *ta—ta* pattern of the sentence form. Refer to Appendix J for examples. Summarizing this below:

(7) Correct Rejections (CR): False responses to False statements

CR a = Situation (*ta—ta*) -----Form (*ru—ta*)

CR b = Situation (*ru---ta*) -----Form (*ta—ta*)

In TVJ 2, since all responses are true (the situations are equally true for both the *ru—ta* as well as *ta—ta* forms of the sentences), there are only Hit responses available. Therefore Hit a corresponds to the sentence form (*ru—ta*), while Hit b corresponds to the sentence form (*ta—ta*). And both these forms were acceptable for any given situation.

(8) Hits (H): True responses to True statements

Hit a = Situation -----Form (*ru—ta*)

Hit b = Situation -----Form (*ta—ta*)

3.4 Experimental Results and Discussion

3.4.1. Results of TVJ 1

TVJ 1 utilized only Achievement verbs in the *toki* clauses. Also both the *-ru/-ta* forms of the verbs were used in the subordinate *toki* clause position, while only *-ta* form in the main clause verb position. The sentence patterns are given below:

(i) S1 *ru toki* S2 *ta* (ii) S1 *ta toki* S2 *ta*

The results for the percentage of correct responses by proficiency are shown in Table 3.1.

	Hit a	CR a	Hit b	CR b	Overall	Hit only	CR only
Control (n=24)	86	74	79	86	81	83	80
Intermediate (n=14)	83	31	69	40	56	76	36
Advanced (n=23)	83	42	89	71	71	85	57

Hit a: Situation (*ru—ta*) ---Form (*ru—ta*)

Hit b: Situation (*ta—ta*) ---Form (*ta—ta*)

CR a: Situation (*ta—ta*) ---Form (*ru—ta*)

CR b: Situation (*ru—ta*) ---Form (*ta—ta*)

Table 3.1: Percentage of Correct Responses by Proficiency Level (TVJ 1)

For the statistical analysis, one-way Analysis of Variance (ANOVA General Linear Model) was employed. On comparing the Intermediate and Advanced learners

groups, statistically it was found that there was a significant difference⁶ in the overall correct responses between the two groups [$F(1,35)=7.975$, $p=0.008^*$]. A break-down of the correct responses revealed that although there was no significant difference in the Hit responses (that is, True responses to True statements) [$p=0.115$], there was a significant difference in the Correct Rejection (CR) responses (that is, False responses to False statements) [$F(1,35)=4.489$, $p=0.041^*$].

A further break-down of the Hits and Correct Rejections showed that there was no significant difference between Intermediates and Advanced in the Hit a [that is, Situation ($ru-ta$) ---Form ($ru-ta$)] ($p=0.931$) ; as well as CR a [that is, Situation ($ta-ta$) ---Form ($ru-ta$)] ($p=0.331$); categories. However, there were significant differences in the Hit b [that is, Situation ($ta-ta$) ---Form ($ta-ta$)] ; [$F(1,35)=6.471$, $p=0.016^*$] as well as CR b [that is, Situation ($ru-ta$) ---Form ($ta-ta$)] ; [$F(1,35)=6.546$, $p=0.015^*$] categories.

Next, Table 3.2 shows the percentage of correct responses by native language.

	Hit a	CR a	Hit b	CR b	Overall	Hit only	CR only
Control (n=24)	86	74	79	86	81	83	80
Chinese (n=14)	86	38	69	62	64	77	50
Korean (n=6)	84	28	89	50	63	86	39
English (n=17)	80	41	88	61	68	84	51

Hit a: Situation ($ru-ta$) ---Form ($ru-ta$)

Hit b: Situation ($ta-ta$) ---Form ($ta-ta$)

CR a: Situation ($ta-ta$) ---Form ($ru-ta$)

CR b: Situation ($ru-ta$) ---Form ($ta-ta$)

Table 3.2: Percentage of Correct Responses by Native Language (TVJ 1)

⁶ Responses were significantly different statistically if $p^*<0.05$.

On comparing the learners groups classified on the basis of their native languages, Chinese, Korean and English, it was found that there was no statistical difference among them overall ($p=0.760$).

A break-down of the correct responses revealed that there was no significant difference in either the Hit responses (that is, True responses to True statements) [$p=0.450$] or Correct Rejection (CR) responses (that is, False responses to False statements) [$p=0.692$]. A further break-down of the Hits and Correct Rejections shows that there was no significant difference among the three groups in the Hit a [that is, Situation ($ru-ta$) ---Form ($ru-ta$)] ($p=0.839$) ; as well as CR a [that is, Situation ($ta-ta$) ---Form ($ru-ta$)] ($p=0.720$). Additionally, there were no significant differences in the Hit b [that is, Situation ($ta-ta$) ---Form ($ta-ta$)] ($p=0.058$) as well as CR b [that is, Situation ($ru-ta$) ---Form ($ta-ta$)] ($p=0.807$).

Next, Table 3.3 shows the interactions of the proficiency levels and native languages.

	Hit a	CR a	Hit b	CR b	Overall	Hit only	CR only
Control (n=24)	86	74	79	86	81	83	80
I*C (n=4)	84	33	33	50	50	59	42
A*C (n=10)	87	40	84	67	69	85	53
I*K (n=2)	100	50	84	33	67	92	42
A*K (n=4)	75	17	92	59	61	83	38
I*E (n=8)	79	25	83	38	56	81	31
A*E (n=9)	82	55	93	81	78	87	69

I*C: Intermediate Chinese, A*C: Advanced Chinese, I*K: Intermediate Korean
A*K: Advanced Korean, I*E: Intermediate English, A*E: Advanced English

Hit a: Situation (*ru—ta*) ---Form (*ru—ta*)
Hit b: Situation (*ta—ta*) ---Form (*ta—ta*)
CR a: Situation (*ta—ta*) ---Form (*ru—ta*)
CR b: Situation (*ru—ta*) ---Form (*ta—ta*)

Table 3.3: Percentage of Correct Responses by Proficiency Level X Native Language Interaction (TVJ 1)

Upon conducting the Proficiency Level*Native Language Interaction for the six sub-groups, I*C: Intermediate Chinese, A*C: Advanced Chinese, I*K: Intermediate Korean, A*K: Advanced Korean, I*E: Intermediate English, A*E: Advanced English, it was found that there was no statistical difference among them overall ($p=0.191$). A break-down of the correct responses revealed that there was no significant difference in either the Hit responses (that is, True responses to True statements) [$p=0.102$] or Correct Rejection (CR) responses (that is, False responses to False statements) [$p=0.281$]. A further break-down of the Hits and Correct Rejections shows that there was no significant difference among the six subgroups in the Hit a [that is, Situation (*ru—ta*) ---Form (*ru—ta*)] ($p=0.530$) as well as CR a [that is, Situation (*ta—ta*) ---Form (*ru—ta*)] ($p=0.162$). Although, there were no significant differences in the CR b [that is, Situation (*ru—ta*) ---

Form (*ta—ta*) ($p=0.609$), there was a significant difference in the Hit b [that is, Situation (*ta—ta*) ---Form (*ta—ta*)] [$F(2, 31)=4.917, p=0.014^*$]. The Post-Hoc Tukey test yielded a significantly different pair of Chinese-English with $p=0.017^*$, that is, the Chinese and English groups performed differently.

3.4.2 Results of TVJ 2

In TVJ 2, Accomplishment, Activity and Stative verbs are used in the *toki* clauses. Also, as in TVJ 1, both the *-ru/-ta* forms of the verbs were used in the *toki* clause position, while only *-ta* form in the main clause verb position. The sentence patterns are given below:

(i) S1 *ru toki* S2 *ta* (ii) S1 *ta toki* S2 *ta*

The following table shows the percentage correct responses by proficiency level.

	ACMPL			ACTVT			STAT			Overall
	Hit a	b	Average	Hit a	b	Average	Hit a	b	Average	
Control (n=22)	82	75	78	91	91	91	95	95	95	88
Intermediate (n=10)	75	65	70	90	85	88	90	95	93	83
Advanced (n=24)	73	60	67	77	77	77	81	88	85	77

Hit a = Situation -----Form (*ru—ta*)
Hit b = Situation -----Form (*ta—ta*)

Table 3.4: Percentage of Correct Responses by Proficiency Level (TVJ 2)

On comparing the Intermediate and Advanced learners groups in TVJ 2, statistically it was found that there was no significant difference in the overall correct

responses between the two groups ($p=0.327$). A break-down of the correct responses into the three durative verb types, namely, Accomplishments (ACMPL) [$p=0.750$], Activities (ACTVT) [$p=0.279$] and Statives (STAT) [$p=0.227$] revealed that there was no significant difference found between them. A further break-down of each of these three groups into ACMPL Hit a [that is, Situation -----Form (*ru—ta*)] ($p=0.870$); ACTVT Hit a ($p=0.262$) ; STAT Hit a ($p=0.393$) ; and ACMPL Hit b [that is, Situation -----Form (*ta—ta*)] ($p=0.716$); ACTVT Hit b ($p=0.530$); STAT Hit b ($p=0.413$) revealed that there was no significant difference among any of these groups for the Intermediate and Advanced learners.

Next, Table 3.5 shows the percentage of correct response by native language.

	ACMPL			ACTVT			STAT			Overall
	Hit a	b	Average	Hit a	b	Average	Hit a	b	Average	
Control (n=22)	82	75	78	91	91	91	95	95	95	88
Chinese (n=9)	56	56	56	83	72	78	89	72	83	71
Korean (n=9)	88	69	78	75	63	69	81	94	88	79
English (n=17)	76	62	69	82	91	87	82	97	90	82

Hit a = Situation -----Form (*ru—ta*)
Hit b = Situation -----Form (*ta—ta*)

Table 3.5: Percentage of Correct Responses by Native Language (TVJ 2)

On comparing the three L1 Chinese, Korean and English groups, it was found that there was no significant difference in the overall correct responses among these groups ($p=0.335$). A break-down of the correct responses into the three durative verb types, namely, Accomplishments (ACMPL) [$p=0.226$], Activities (ACTVT) [$p=0.242$] and

Statives (STAT) [p=0.618] also revealed that there was no statistically significant difference found among them.

A further break-down of each of these three groups into ACMPL Hit a [that is, Situation---Form (*ru—ta*)] (p=0.121); ACTVT Hit a (p=0.826); STAT Hit a (p=0.809); and ACMPL Hit b [that is, Situation ----- Form (*ta—ta*)] (p=0.721); ACTVT Hit b (p=0.091); STAT Hit b revealed that there was no significant difference among any of the groups except one (STAT Hit b) [F(2, 31)=3.903, p=0.031*]. Post-Hoc Tukey test revealed that the performance of the Chinese and English learners in the STAT Hit b category was statistically significant with p=0.027*.

Next, Table 3.6 shows the interaction of proficiency levels and native languages.

	AMPL			ACTVT			STAT		
	Hit a	b	Average	Hit a	b	Average	Hit a	b	Average
Control (n=22)	82	75	78	91	91	91	95	95	95
I*C (n=2)	25	75	50	75	75	75	100	75	88
A*C (n=7)	64	50	57	86	71	79	86	71	82
I*K (n=3)	100	50	75	83	67	75	100	100	100
A*K (n=5)	80	80	80	70	60	65	70	90	80
I*E (n=5)	80	70	75	100	100	100	80	100	90
A*E (n=12)	75	58	67	75	88	81	83	96	90

I*C: Intermediate Chinese, A*C: Advanced Chinese, I*K: Intermediate Korean

A*K: Advanced Korean , I*E: Intermediate English , A*E: Advanced English

Hit a = Situation -----Form (*ru—ta*)

Hit b = Situation -----Form (*ta—ta*)

Table 3.6: Percentage of Correct Responses by Proficiency Level X Native Language Interaction (TVJ 2)

In terms of the interactions of their Native Languages and Proficiency Levels, namely, I*C: Intermediate Chinese, A*C: Advanced Chinese, I*K: Intermediate Korean, A*K: Advanced Korean, I*E: Intermediate English, A*E: Advanced English, it was found that there was no statistical difference among them overall ($p=0.866$). A breakdown of the correct responses by the three durative verb types, namely, Accomplishments (ACMPL) [$p=0.795$], Activities (ACTVT) [$p=.655$] and Statives (STAT) [$p=0.388$] also revealed that there was no significant difference found among them. A further breakdown of each of these three categories into ACMPL Hit a [that is, Situation -----Form (*ru—ta*)] ($p=0.220$); ACTVT Hit a ($p=0.498$); STAT Hit a ($p=0.408$); and ACMPL Hit b [that is, Situation -----Form (*ta—ta*)] ($p=0.272$); ACTVT Hit b ($p=0.955$); STAT Hit b ($p=0.954$) revealed that there was no significant difference among any of these categories for the six learner subgroups. However, the Post-Hoc Tukey test showed one significantly different pair in STAT Hit b, Chinese-English, with $p=0.036^*$.

In sum, in TVJ 1, the intermediate learners showed a significantly different performance as compared to the advanced learners overall and in the Correct Rejections category. Looking further, this difference was narrowed down to the Hit b and CR b cases where the performance was significantly different for the two levels. In the Proficiency Level and Native Language interaction results, the Chinese learners performed significantly worse than the English learners in the Hit b category. As for TVJ 2, the Chinese learners performed significantly worse than the English learners in the STAT Hit b category, which is reflected in the Proficiency Level and Native Language interaction results as well.

Turning to the performance of the control group, this group got an average 81% correct response in the Achievement verbs category (TVJ 1) and 88% in the Durative verbs category (TVJ 2). The performance of the natives was particularly low on Version 3 of the test in TVJ 1. As mentioned earlier, in TVJ 1 there were four versions of the test (the four⁷ possible combinations of Hit a, Hit b, CR a and CR b for each of the verbs were distributed amongst the four versions), and in TVJ 2 there were two versions (the two possible combinations of Hit a and Hit b were distributed between the two versions).

3.4.3 Discussion

The results pertaining to each of the four possibilities of the hypotheses will be discussed in the order the hypotheses were introduced in the previous section. The predictions made for each of the hypotheses are repeated below.

Hypothesis (I) Only the Language Transfer Hypothesis is working.

It was predicted that if only the Language Transfer Hypothesis is working then those learners, whose native languages don't resemble Japanese, such as English and Chinese, will make the most errors. On the other hand, learners whose native languages resemble the Japanese tense-aspect system will not make as many errors, such as Korean. Furthermore, their responses will not be affected by their proficiency levels. Since Chinese language lacks tense (has only aspectual markers), Chinese learners are likely to

⁷ TVJ 1 (Four versions had the following patterns for each verb)
 Hit a: Situation (*ru—ta*) ---Form (*ru—ta*)
 Hit b: Situation (*ta—ta*) ---Form (*ta—ta*)
 CR a: Situation (*ta—ta*) ---Form (*ru—ta*)
 CR b: Situation (*ru—ta*) ---Form (*ta—ta*)
 TVJ 2 (Two versions had the following patterns for each verb)
 Hit a: Situation --- Form (*ru—ta*)
 Hit b: Situation --- Form (*ta—ta*)

make errors in both S1 *ru toki* S2 *ta* as well as S1 *ta toki* S2 *ta* patterns. Since English follows tense agreement between the subordinate and main clauses in when clauses, English learners are likely to make more errors in the S1 *ru toki* S2 *ta* kinds of patterns, which is lacking in English.

In TVJ 1 with Achievement verbs, there was no significant difference observed in the performance of the Chinese, Korean and English learner groups. Hence this hypothesis is ruled out for the Achievement verbs category.

In TVJ 2 with the Accomplishment, Activity and Stative verbs, there was a significant difference found in the Stative Hit b [Situation – Form (*ta—ta*)] case between Chinese and English learner groups, with Chinese performance being worse of the two. The poor performance by the Chinese in the S1 *ta toki* S2 *ta* pattern was predicted by this hypothesis. However, it is unable to explain the good performance by English and Chinese speakers in the S1 *ru toki* S2 *ta* pattern. Amongst the Stative verbs, the Chinese had the lowest response for *aru* ‘be’ (54%). The S1 *ta toki* S2 *ta* pattern was found to be difficult for the Chinese speakers possibly because they do not have a corresponding pattern in their native language. In case of Chinese *when* sentences (that is, those in which the subordinate clauses denote time using *de shi hou* ‘at the time when’) with Stative verbs that represent habituality, the perfective aspect is denoted by *yi qian* ‘before’ in the subordinate clause. There is no overt past/perfective marker in the main clause. Refer to (9) below. Also the verbs do not undergo any inflection to mark perfective aspect. Note that the perfective marker *le* is not used for sentences that have a habitual interpretation. Since TVJ 2 had test sentences only in the habitual reading⁸, *le*

⁸ Refer to Section 3.3.2 for the rationale to use habitual readings for verbs in TVJ 2.

was not used. The reading of Japanese *aru* in the test sentence is equivalent to ‘have’ (*zikan ga aru/atta* ‘I have/had time’) and this reading is also available in Chinese with *you* (*wo you shu* ‘I have books’). Therefore, the reason why *aru* evoked a low response rate cannot be its difference with the Chinese translation of *aru*.

- (9) Wo **yi qian** you kong **de shi hou** hui zai jia li zuo fan.
I before have free time when always, home, cook food
‘When I had time, I always cooked food at home.’

The Chinese learners made frequent errors particularly in the S1 *ta toki* S2 *ta* type pattern in Japanese possibly because they were trying to transfer the Chinese pattern of ‘no overt perfective marker’ in the subordinate clause onto Japanese.

Korean learners did not perform significantly different from the other learner groups.

Hypothesis (II) Only the Aspect Hypothesis is working.

If only the Aspect Hypothesis is working, then the intermediate level students will make more errors than advanced level students, irrespective of their native language background. This is because the tendency to attach the perfective/past morpheme to the Achievement and Accomplishment verbs (as predicted by the Aspect Hypothesis) is observed only during the beginning stages of acquisition. *Toki* subordinate clauses in complex sentences, are not introduced in the curriculum until late beginning or intermediate levels, therefore for this study, the intermediate students will be treated as beginning level for *toki* structures. Additionally, it can also be predicted that the intermediate level students will make more errors of the type S1 *ta toki* S2 *ta* due to the over-use of *-ta* with Achievement and Accomplishment verbs as compared to Stative and Activity verbs.

In TVJ 1 with the Achievement verbs, there was a significant difference found in Hit b (S1 *ta toki* S2 *ta*) and CR b (S1 *ta toki* S2 *ta*) performances between the Intermediate and Advanced groups. This was predicted by Hypothesis (II). According to the Aspect Hypothesis, in the earlier stages of language development, the *-ta* morpheme would be most attached to verbs with clearly marked endpoints, such as Achievements, which indicates the completion of the events in the verbs that have an instantaneous duration. This result seems to agree well with this hypothesis. Since intermediate students in their early developmental stages are more likely to attach the perfective marker *-ta* to denote completion with verb types that have an inherent endpoint, such as Achievements, it seems obvious why this verb type had significant difference in the S1 *ta toki* S2 *ta* pattern.

In TVJ 2 with Accomplishment, Activity and Stative verbs, there was no significant difference observed between the Intermediate and Advanced groups. Hence this hypothesis is ruled out for the Durative verbs.

Hypothesis (III) Both the Language Transfer and the Aspect Hypothesis are working.

In the case where both the Language Transfer and the Aspect hypothesis may be working, the intermediate level Chinese and English learners are likely to make most errors, owing to a combined effect of the Language Transfer and the Aspect Hypothesis, as compared to other groups such as advanced Chinese, English and Korean.

In TVJ 1 with Achievement verbs, there was a significant difference observed in the Hit b (S1 *ta toki* S2 *ta*) category and the Post-Hoc Tukey test yielded a significant difference within the Chinese-English pair ($p=0.017^*$). While Chinese learners' poor performance supports the Language Transfer hypothesis, English learners' good

performance for this particular pattern possibly implies that they were able to positively transfer S1 *ta toki* S2 *ta* pattern (similar to the English construction) from their native language.

In TVJ 2 with Accomplishment, Activity and Stative verbs, although the interactions did not yield any significant differences, the Post-Hoc Tukey test of STAT Hit b [Situation – Form (*ta—ta*)] yielded a significant difference within the Chinese-English pair ($p=0.036^*$). If this hypothesis were true, then Accomplishment should have evoked a significant difference, which is not seen here. So this hypothesis is ruled out for Accomplishment verbs. One way to explain this result is that since Accomplishment verb phrases are similar to Activity verbs with the exception of the presence of an endpoint in Accomplishment, there seems to be a possibility that the learners focused on the durative aspect of these verbs (not on the endpoints) and treated them the same way as Activity verbs. For example, Activity verb *matu* ‘wait’ and Accomplishment verb phrase *iti zikan matu* ‘wait for an hour’ are treated both as Activities by ignoring the endpoint ‘for an hour’ in the Accomplishment verb phrase. Therefore, the tendency to use *-ta* morpheme incorrectly with Accomplishment verbs was not seen in this study. However the incorrect usage of *-ta* with Statives poses another problem with the current hypothesis. This variation in the result can possibly be attributed to the effects of input and the dependency of the learners on rote memorized forms. It is possible that the learners accessed the previously learned high frequency tokens of *-ta* forms of Statives, without really knowing or controlling the semantics of the morphological forms associated with them thus leading to haphazard form-meaning associations. For example, *aru toki* is

memorized as a set phrase and produced in this form no matter what the required form (*aru* or *atta*) is in a particular context.

Hypothesis (IV) Neither the Language Transfer nor the Aspect Hypothesis is working.

The results not predicted by Hypotheses I - III would fall into this category including the case where neither of the hypotheses may be working and so none of the learner groups are likely to show any significant difference in their performances. That is, their performances would be comparable to each other implying that neither the Language Transfer nor the Aspect Hypothesis is influencing their selections. In the case where either one of the above hypothesis is working, Hypothesis IV is automatically ruled out.

The good performance by Chinese and English speakers in the S1 *ru toki* S2 *ta* pattern for the Durative category (Accomplishment, Activity and Stative) cannot be explained by Hypothesis I (Language Transfer only – although according to this hypothesis, it was predicted that English and Chinese speakers would perform poorly on this particular pattern due to the lack of transfer from English and Chinese respectively). In order to explain this it may be said that the learners were possibly connecting the *-ru* morpheme with duration and not necessarily with lack of endpoints. That is to say, they were making a distinction between the verbs that are instantaneous versus durative and assigning the *-ru/-ta* morphemes, not based on the endpoints but rather based on their punctuality.

The poor performance of the Chinese in TVJ 2 in the selection of *-ta* for Statives is a point in question that remains to be answered. Two out of four Stative verbs in this category were written in Japanese using Chinese characters (*iru* ‘need’ and *tigau* ‘be different’) as compared to the other two (*iru* ‘to be (animate)’ and *aru* ‘to be (inanimate)’

that were written in hiragana. All of the four Stative verbs are available in Chinese. It was the verb *aru* ‘to be (inanimate)’ that had the lowest correct response rate of 54% as compared to the other three that had high correct response rates. Learners producing incorrect rote memorized forms in case of Stative verbs could be a possible factor for this outcome.

The fact that Korean learners did not show a significant difference with any of the other learner groups was also an unexpected result. This result can be attributed to the low number of Korean participants. The experiments will need to be replicated with more Korean participants to confirm the results.

The control group got an average overall of 81% correct response in the Achievement verbs category (TVJ 1) and 88% in the Durative verbs category (TVJ 2). Following are the verbs that had 50% or less correct responses from the natives⁹:

TVJ 1: *dasu* ‘emerge’ (CR a) 50%, *hairu* ‘enter’ (Hit a) 50%, *tuku* ‘reach’ (Hit a) 33%, *renraku suru* ‘contact’ (Hit b) 20%, *kesu* ‘switch off’ (CR a) 50%, *kimeru* ‘decide’ (Hit b) 20%, *kiru* ‘cut’ (CR a) 50%.

TVJ 2: *nomu* ‘drink’ (Hit b) 45%.

Some of the reasons justifying their performance provided by the native respondents shed light on why certain verbs had lower correct response rates than others. Some Achievement verbs such as *kesu* ‘switch off’, *kiru* ‘cut’, *kimeru* ‘decide’ were

⁹ Version-wise break up:

TVJ 1:

V1: *dasu* ‘emerge’ (CR a) 50%

V2: *hairu* ‘enter’ (Hit a) 50%

V3: *tuku* ‘reach’ (Hit a) 33%, *renraku suru* ‘contact’ (Hit b) 20%, *kesu* ‘switch off’ (CR a) 50%

V4: *kimeru* ‘decide’ (Hit b) 20%, *kiru* ‘cut’ (CR a) 50%

TVJ 2:

nomu ‘drink’ (Hit b) 45%

being perceived (as commented by the participants) as not instantaneous but rather as having a duration during which another action was being performed simultaneously. So while Achievement verbs (in the subordinate verb) call for the main verb to take place shortly before or after the Achievement verb, that is sequential reading, the native respondents were interpreting them to take place simultaneously, that is the time frame for the two events overlapped with each other. For example, *kesu/kesita* ‘switch/switched off’, which is an Achievement verb, would most basically give a sequential reading with another verb such as *natta* ‘rang’ (*razio o kesu/kesita toki tokee ga natta* ‘The clock rang before/after I switched off the radio’). However some native speakers commented that the act of *switching off the radio* could sometimes take place simultaneously with the *clock ringing*, depending on the location of the clock, that is, if the clock is in front of the eyes, then simultaneous, if not, then sequential.

Finally, the research questions posed in the earlier section will again be addressed and answered below.

- a. Does the inherent aspect of the verb play a role in the selection of the *-ru/-ta* endings in *toki* clauses?

Yes, inherent aspect of the verb seems to be playing a role in the selection of the *-ru/-ta* endings in *toki* clauses, especially in the Achievement verb category, in the learners’ early developmental stages. As predicted by the Aspect Hypothesis, in the earlier stages of language development, the *-ta* morpheme would be most attached to verbs with clearly marked endpoints, such as Achievements, which indicates the completion of the events in the verbs instantaneously. This result seems to agree well with this hypothesis. Since intermediate students in their early developmental stages are

more likely to attach the perfective marker *-ta* to denote completion with verb types that have an inherent endpoint, such as Achievements, it seems obvious why this verb type had significant difference in the S1 *ta toki* S2 *ta* pattern.

- b. Does language transfer play a role in the selection of the *-ru/-ta* endings in *toki* clauses?

Yes, language transfer also seems to be playing a role in the selection of the *-ru/-ta* endings in *toki* clauses, especially in the Durative verbs (Accomplishment, Activity, Stative) category. Since Chinese does not have an overt perfective marking for temporal habitual constructions, the learners seem to transfer that to Japanese and therefore commit more errors for the S1 *ta toki* S2 *ta* pattern, as predicted. According to this same hypothesis, it was also predicted that English and Chinese learners would make more errors in the S1 *ru toki* S2 *ta* pattern, which however, was not found to be true. In order to explain this result, it can be hypothesized that learners are also guided by another semantic character of the verbs namely, the duration of the verbs, whereby they correctly attach the *-ru* morpheme to durative verbs based on the length of the event and not based on when the event ended.

- c. In cases, where the *-ru/-ta* exchange is possible, is there a preference for a particular ending, and if so which one and why?

Overall, it seems like the learners have a preference to use the *-ta* morpheme over the *-ru* morpheme in the subordinate *toki* clauses (when the matrix verb has *-ta* ending) owing to the influence from (i) native language transfer for Durative verbs and (ii) early developmental pattern to attach *-ta* to Achievement verbs. And therefore both hypotheses, namely the Language Transfer Hypothesis and the Aspect Hypothesis are working

partially in the two categories of Achievements on one hand, and Accomplishment, Stative and Activity on the other.

Besides L1 Transfer and the linguistic predisposition to associate past-tense and perfective aspect forms with punctual and telic verbs and imperfective aspect forms with atelic verbs as outlined by the Aspect Hypothesis, there may be some other external factors that could be contributing to the obtained results.

The L2 learners may have been influenced by the effects of input and instruction that they had received in the classroom. Learners may have overly relied on the tokens they received during instruction and consequently over-generalized them. In other words, learners rely on rote learned forms from their limited repertoire and recurrently used these memorized forms without really grasping the meaning. It has been said that in L1 and L2 acquisition, learners use both rote learning and analytic learning (Bloom et al., 1980). There have been some researchers who suggest that L2 learners with a high memory capacity tend to rely more on the data-driven, rote learning strategy in language acquisition (Hakuta, 1974; Huang & Hatch, 1978). In conversation and writing tasks for L2 learners where learners occasionally need to produce forms beyond their capacity, they sometimes access the form that is easily available to them (probably through rote memory). Thus L2 learners can easily produce inflected forms due to their higher memory capacity even when they are not sure about the semantics of the inflections (Shirai, 2004).

An additional factor of elicitation procedure (i.e. task) may also contribute to the results. It has been suggested (Shirai, 2004) that production data, whether they are free production or elicited production, often go against the Aspect Hypothesis, with learners

showing stronger prototypical association at later stages than early stages, whereas paper-pencil tests often show patterns consistent with the Aspect Hypothesis. Since this study was a paper-pencil test, the partial working of Aspect Hypothesis in Achievement verbs could possibly be explained because of the task type. However, since Accomplishment verbs did not show the prototypical tendency, it casts doubt if the elicitation task was the deciding factor for the results obtained.

Finally, individual learner differences should not be ruled out as a contributing factor to the results. Individual differences in past-tense acquisition in L1 are reported by Bloom and Harner (1989), where some children do not follow the path predicted by the Aspect Hypothesis. This is very likely to be true of L2 learners as well.

In sum, the Language Transfer Hypothesis seems to be working independently for the Durative verbs (TVJ 2) category, while the Aspect Hypothesis seems to be independently working for the Achievement verbs (TVJ 1) category. That is, both these hypotheses seem to be working partially for the two categories of verbs (Achievements and Duratives). The Language Transfer Hypothesis does not explain the good performances of the Chinese and English speakers for the S1 *ru toki* S2 *ta* pattern in the Durative category, while the Aspect Hypothesis does not explain the absence of over-use of *-ta* with Accomplishment verbs in the present study. The first result can possibly be explained by offering another hypothesis, that learners are also sensitive to the durative semantic aspect (or lack thereof) of the verbs in question. That is, their choice of the *-ru/-ta* morpheme in *toki* clauses is also influenced by a hypothesis that whether the verb in question has a certain length of duration or if it occurs momentarily. For verbs with duration like Accomplishment, Stative and Activity, the learners associate the *-ru* with

the duration of the verb and are able to select the morpheme correctly. As for the second result that deviated from the predicted outcome, that Accomplishment verbs are not showing errors with over use of *-ta*, it can be conjectured that learners are not focusing on the endpoint of the Accomplishment verbs and are treating them as Activity verbs with a finite duration. Thus, from the current study it seems that a semantic feature like the durative versus instantaneous character of the verb is playing an important role besides telicity, in the choice of the *-ru/-ta* morphemes in *toki* clauses. The incorrect use of *-ta* with Statives, particularly the verb *aru* ‘be’ by the Chinese learners, might be a fall out of relying on the rote memorized forms of *-ta* Statives that the learners received from their input in classrooms or other interactions. Additionally, the result leading to an absence of a significantly different performance between Koreans and other learner groups needs to be tested again with a larger subject group for Koreans.

The following chapter will discuss a pedagogical analysis done on various Japanese language textbooks used in the U.S. and Japan, to examine how time expressions, specifically the concepts of tense and aspect are presented in the teaching materials used to teach Japanese as a second or foreign language.

CHAPTER 4

PEDAGOGICAL ANALYSIS

Besides looking into how tense and aspect morphology is acquired by second and foreign language learners of Japanese, it is also essential to examine how these are presented in the teaching materials that are currently being used to teach Japanese. With this motivation, the current chapter will present an analysis of textbooks that reveals how time expressions (specifically tense and aspect concepts) are presented in popularly used textbooks in the U.S. and Japan.

The organization of this chapter is as follows. Section 4.1 presents the selection of textbooks used in this study. Section 4.2 lists the research questions and the motivation for choosing these questions. Section 4.3 addresses each of the research questions in detail by first giving the observations and then discussion of the issues presented in the research questions across the selected textbooks.

4.1 Textbook Selection

Three categories of textbooks were considered for the analysis. Category 1 comprises four sets of textbooks used to teach Japanese as a foreign language in the U.S. Category 2 comprises three sets of textbooks used to teach Japanese as a second language in Japan. The textbooks in these two categories are directed towards post-secondary level

learners of Japanese as a second or foreign language. Category 3 comprises two textbooks used to teach native Japanese middle school children in Japan (Native). Table 4.1 provides the names of the textbooks considered, authors as well as number of volumes and chapters in them. Henceforth, the abbreviations given in Table 4.1 will be used to refer to the particular textbooks.

U.S.	JAPAN	NATIVE
1. Japanese: The Spoken Language (3 Vols: 30 Chpts) [Jorden & Noda, 1988, 1989, 1990] JSP	1. Nagoya University Publication (4 Vols: 42 Chpts) [Japanese Language Group, 1983, 1989] NGY	1. Middle School grammar textbook [Middle School Book Series, 1999]
2. Nakama (2 Vols: 22 Chpts) [Makino et al., 1998, 2000] NKM	2. Situational Functional Japanese (3 Vols: 24 Chpts) [Tsukuba Language Group, 1991] SFJ	2. Instructor's manual to teaching Japanese grammar [Yamada, 2004]
3. Yookoso (2 Vols: 14 Chpts) [Tohsaku, 2004] YKS	3. Tokyo University of Foreign Studies Publication (2 Vols: 28 Chpts) [Tokyo University Language Group, 1990, 1994] TKY	
4. Genki (2 Vols: 23 Chpts) [Banno et al., 1999] GNK		

Table 4.1: Textbook Selection

While the common goal of these textbooks is to introduce Japanese language to learners who have little or no prior knowledge of the language, all categories of textbooks have some unique goals that show in the way they present the content. Amongst the textbooks in the U.S. category, GNK, for example, takes a comprehensive approach in developing all the four skills of listening, speaking, reading and writing to cultivate overall Japanese language ability. NKM is based on proficiency-oriented foreign language learning and

states that “at the end of Nakama 2, the successful learner’s proficiency should reach a basic survival level.” (Vol 2: xiv). JSP stresses on Japanese as it is spoken today in Japan with the goal of being able to successfully function in the Japanese society. JSP has an accompanying Reading and Writing component, which is not considered for this study. YKS focuses more on introducing extensive vocabulary than grammatical explanations. The rationale offered is that “making generalizations or guessing about grammatical rules will shorten the time it requires to acquire a new language.” (p. 53). The textbooks in the Japan category focus more on conversations and discourse strategies. Each chapter in SFJ, for example, is built around a function or situation (such as Introducing people, At the post office and so forth) and introduces scenarios, dialogs and drills related to that situation. NGY focuses on speaking and listening activities extensively in volumes 3 and 4, as it is intended for those learners who have some prior knowledge of Japanese and do not exactly know how to use that knowledge in real life situations. The focus of the middle school textbooks used by native school children in Japan seems to be more on forms than on functions. It is for this reason that these books lack in any kind of elaborate explanations of the grammatical structures introduced.

As is evident from above, the three categories of textbooks have different approaches to reaching the same goal of teaching Japanese. The different approaches however, should not affect the content of the material that is presented in them, albeit, their way of presentation may differ. In this study, time expressions in Japanese will be considered for the analysis. The research questions that follow in the next section will take a look at some selected issues in how these textbooks teach about time and time-related expressions.

4.2 Research Questions

The following is a list of the research questions that will be addressed in this section.

- Q1. When and how is the expression of time introduced in the textbooks?
- Q2. Are there any explicit explanations/definitions on tense-aspect concepts and terminologies used?
- Q3: What tense and aspectual expressions are included?
- Q4: How are *-ru/-ta* contrasts presented in complex sentences?
- Q5: How do the textbooks deal with seemingly similar temporal indicators, such as *~tara, tokoro, toki*?

The above five research questions encompass topics related to introduction, explanation and presentation of the various time-related concepts and expressions in the Japanese language textbooks. The concept of time can be expressed using a wide spectrum of expressions ranging from basic time-related adverbial nominals such as today, tomorrow, etc., time classifiers such as hour, minutes, etc., to more complex concepts involving tense and aspectual expressions. The objective of the first three research questions is to examine how the Japanese language textbooks handle this gradation in complexity in the introduction of time expressions. In Japanese, the fact that the verb endings *-ru* and *-ta* denote both tense (=a relative time, e.g. before or after now) as well as aspect (=a temporal quality, e.g. finished, ongoing etc.), makes it difficult to give a simple formula to explain the working of time. The fourth research question investigates this crucial issue of how the textbooks present the *-ru/-ta* contrasts in verbal phrases. While in English, *when* is the only temporal connective used to express ‘time when’, Japanese uses a variety of indicators, such as *~tara, toki, tokoro* to list a few.

There are cases where these indicators can be used interchangeably to denote ‘time when’, while in some other situations, they may not be interchanged. The last research question examines how the textbooks explain the similarities and differences among seemingly similar temporal indicators such as *~tara*, *toki*, *tokoro*.

Since the middle school textbooks did not provide explanations on grammatical structural patterns, observations and discussion of the research questions were done for Categories 1 and 2 only. However, some suggestions from the Native category of books will be offered in Section 4.4.

4.3 Research Questions: Observations and Discussion

4.3.1 Introduction to the Expressions of Time

4.3.1.1. Observations for Q1: When and how is the expression of time introduced in the textbooks?

In order to investigate this question, material from the first twelve chapters from each of the textbooks was considered. Since the amount of material covered in the first year differs from institution to institution as well as textbook to textbook, a list of basic time-related structures was constructed, such as predicate endings, nominal adverbials, time-related particles etc. and then cross checked in all of the textbooks to see where they appeared. They were covered within the first twelve chapters (roughly the first volume) in most textbooks.

The non-past/past¹ tense inflected forms are introduced in simple sentence predicates (V[erbal]., A[djectival]., N[ominal] (Cop)².) in particular sequences. Examples of these sentence predicates follow below:

Verbal. [V.]

- (1) Kyoo ikimasu.
'I'll go today.'
- (2) Kinoo ikimasita.
'I went yesterday.'

Adjectival. [A.]

- (3) Takai desu ne.
'It is expensive, isn't it!'
- (4) Takakatta desu ne.
'It was expensive, wasn't it?'

Nominal + Copula [N (Cop).]

- (5) Suzuki-san desu.
'It is Mr. Suzuki.'
- (6) Suzuki-san desita.
'It was Mr. Suzuki.'

JSP and NKM introduce them in the V. → A. → N (Cop). order for both past and non-past tenses, YKS follows the N (Cop). → A. → V. order for non-past and the V. → A. → N (Cop). order for past tense, and GNK follows N (Cop). → V. → A. order. JSP introduces the past/non-past inflected forms together in the same lesson for each of the V., A. and N (Cop). predicates while NKM, YKS and GNK introduce all the non-past forms first and

¹ In this section, the terms "Past" and "Non-Past" are used as labels to indicate tense of the inflected forms.

² The period indicates that each of these comprises a sentence; the parentheses enclosing "Cop" indicate that in nominal predicates, the copula is in some contexts obligatory, in others necessarily omitted, while in still others, optional.

then all the past forms in subsequent lesson/s. The inflected forms are introduced in polite³- style predicates first and then in plain-style predicates. All of them present most of the time-related nouns during the first year (approximately in the first twelve chapters), such as temporal adverbials (*kyoo* ‘today’, *asita* ‘tomorrow’, etc.), classifiers (*zi* ‘hours’, *hun* ‘minutes’, etc.), expressions used to refer to and count months and days of the month (*gatu* ‘month’, *niti* ‘date’, *yoobi* ‘day’, etc.), frequency adverbials (*yoku* ‘often’, *zenzen* ‘(not) at all’, etc.) and content interrogatives (*itu* ‘when’). The time particles (*ni* ‘in/at’, *kara* ‘from’, *made* ‘until/as far as’) that are important in specifying time are also introduced relatively early, together with the classifiers and the calendric expressions.

In the Japan category of textbooks, NGY and TKY follow the V.→ N (Cop).→ A. order while SFJ follows the V.→ A.→ N (Cop). order. All introduce past/non-past inflected forms together for each of the predicates in the polite-style first followed by plain-style. As in the U.S. publications, they introduce time adverbials, frequency adverbials, classifiers, calendric expressions and the content interrogatives in lessons likely to be covered during the first year. Regarding the order of appearance of time particles and time classifiers, while most textbooks introduce the particles and the classifiers concurrently in the same chapter, NGY introduces *ni* ‘in/at’ four chapters ahead of the classifiers.

In Japanese, the three particles *ni*, *kara* and *made* can be used to express the location of an entity in time as well as in space, that is, they can be used temporally and spatially. For example,

³ With the exception of JSP, all textbooks use the terms “polite” to indicate *desu/masu* forms and “plain” or “non-polite” to indicate the *dictionary forms*. JSL uses “distal” and “direct” for these terms. In this study “polite” and “plain” forms will be used.

Temporal usage

- (7) Suzuki san wa san-zi ni kimasu.
'Mr. Suzuki will come at 3 o' clock.'
- (8) Kono zyugyoo wa san-zi kara go zi made desu.
'This class is from 3 until 5 o' clock.'

Spatial Usage

- (9) Suzuki san wa ima Tookyo ni imasu.
'Mr. Suzuki is in Tokyo now'.
- (10) Hon wa tosyokan ni arimasu.
'The book is in the library.'
- (11) Kono densya wa Tookyoo kara Kyooto made desu.
'This train is from Tokyo up to Kyoto.'

In the selected textbooks, it was interesting to see that the majority of the textbooks present the spatial and temporal usages of *kara* and *made* together in the same chapter, whereas the two usages of *ni* are presented separately with a gap of one or two chapters. The lesson numbers for the appearance of each of the time-related structures is tabulated in Tables 4.2 and 4.3.

JSP	NKM	YKS	GNK
V.→ A.→ N (Cop). Polite (L1, 2) Plain (L 10) Non-Past / Past together	V.→ A.→ N (Cop). Polite (L5, 6) Plain (L7, 11) Non-Past (L5) Past (L6)	N (Cop).→ A.→ V. (Non-Past) V→ A→ N (Past) Polite (L1) Plain (L3) Non-Past (L1, 2, 3) Past (L3, 4)	N (Cop).→ V.→ A. Polite (L 2, 3, 4, 5) Plain (L 9) Non-Past (L3) Past (L4)

NGY	SFJ	TKY
V.→ N (Cop).→ A. Polite (L1, 2, 3) Non-Polite (L9) Non-Past/ Past together	V.→ A.→ N (Cop). Polite (Pre-session) Plain (L5) Non-Past/Past together	V.→N (Cop).→ A. Polite (L3, 4, 5) Plain (L1, 2) Non-Past/Past together

Table 4.2: Predicate Endings (V[erb]., A[djectival]., N[ominal] (Cop).)

ITEMS	EXAMPLES	JSP	NKM	YKS	GNK	NGY	SFJ	TKY
Nominal Adverbials	<i>kyoo, kinoo, ototoi, asatte</i>	L1, 3, 7, 8	L1-6	L3	L3, 4	L1	L3	L4
Frequency Adverbials	<i>yoku, amari, zenzen</i>	L1, 3	L5, 6	L1-3	L3	L12	L15	L3
Classifiers	<i>zi, hun, zikan</i>	L8	L5, 11	L2, 3	L1, 4	L6	L7, 9	L2, 5
Calendric expressions	<i>nen, gatu, syuu, yoobi, syuukan, niti</i>	L8	L11	L3	L4	L6	L5, 11	L5
Particles	<i>ni, kara, made</i>	L8	L5, 6	L3	L3, 6	L2, 5	L7	L3, 5

Table 4.3: Time related lexical items

4.3.1.2 Discussion for Q1: When and how is the expression of time introduced in the textbooks?

Across the textbooks examined, there was wide variation seen in the sequencing of tense-aspect endings presented in the verbal, adjectival and nominal predicates. In the U.S. category of textbooks, verbals are introduced first in two out of four books while nominal predicates are introduced first in the remaining two. Adjectivals come second in all but one textbook. The only criterion that may seem to be governing these random patterns of introduction of predicate inflections is the vocabulary that is introduced in that particular chapter. For example, if verbals are introduced before nominal predicates, then the inflection of verbals will precede the inflection of nominal predicates. In the Japan category, verbal inflections are introduced first in all books, followed by nominal predicates in two out of three, and adjectivals in one out of three books. In this category also, introducing the inflections for predicates seems to follow the introduction of the respective vocabulary items (for those predicates) in that chapter. Kanagy's (2001) findings regarding the sequencing of predicate inflections in negation can be used as a reference here. Kanagy (2001) reports her findings of the acquisition of Japanese negation among 34 adult L2 learners in the U.S. and concludes that "L2 learners from ten different backgrounds followed more or less common route of development in learning to express negation in Japanese, and [...] the order for predicate types was: Verbs and Nouns first, then Adjectives." (p. 62). In other words, L2 learners, irrespective of their varying backgrounds and instructional approaches followed a common developmental sequence in inflecting the predicates in the order V. /N (Cop).→ A. in case of negatives in Japanese. Since negatives (*tabena-i* 'not eat'; *tabena-katta* 'did not eat') inflect like

adjectivals (*huru-i* ‘old’; *huru-katta* ‘old-was’), her findings can be adapted to suggest a similar sequencing order for the tense-aspect endings in the three predicates as well. Since V. /N (Cop). → A. has been found to be a natural developmental order for negatives in L2 learners from Kanagy’s studies, paralleling this order in the instruction will “assist learners both in internal processing and in production of the forms in the classroom.” (Kanagy, 2001, p. 78). As for the non-past and past sequencing of the three predicates, in the U.S. category, majority of the textbooks introduce non-past before past, while in the Japan category all texts introduce them together in the same chapter. The rationale for introducing non-past and past one after the other in the U.S category of textbooks seems to be justified by the “divide and conquer” rule, in which the inflections are introduced in small portions so as to maximize the time spent on each part. Also, Kanagy (1991) has suggested a natural acquisition order of non-past → past for negative constructions in her study.

In the Japan category of textbooks, however, by introducing past and non-past at the same time, the emphasis seems to be on giving a big picture of all the inflections for the predicates in the same chapter.

All textbooks made a distinction between plain and polite forms with the plain followed by the polite with a considerable gap in between. This is crucial and must be maintained as it is. Introducing all endings for both styles at the same time would be too much at one time.

Particles used to indicate points in time (*ni*, *kara*, *made*) must be presented in conjunction with the classifiers and calendric expressions. All textbooks except NGY

introduced the particles and the classifiers and calendric expressions together or relatively close to one another.

NGY chose to introduce the particles first in Chapters 2 and 5 (both spatial and temporal interpretations). The temporal meanings are introduced using a few time words such as *san-zi* ‘3 o’ clock’ and *san-gatu* ‘March’, which at that point are introduced as lexical items. The classifiers and calendric expressions are introduced systematically not until Chapter 6. The justification for this could be that learners in Japanese are exposed to some basic vocabulary such as *san-zi* and *san-gatu* as lexical items to be memorized, rather than as numbers + classifiers at the beginning of the textbook. Later on in Chapter 6, when the classifiers are formally introduced, the initial lexical items that the learners had memorized get reinforced.

As regarding the introduction of time-related lexical items, such as nominal adverbials, frequency adverbials and so forth (refer to Table 4.3), the chapter-wise sequencing of lexical items is comparable among all textbooks and the items are covered early in the language curriculum. The only exception that stands out in Table 4.3 is the presentation of frequency adverbials like *yoku* ‘often’, *amari* ‘not so often’, *zenzen* ‘not at all’, which are not introduced in the Japan category of textbooks, especially, NGY and SFJ, until Chapters 12 and 15. For the remaining textbooks in the U.S. category, these are introduced within the first six chapters. The reason why the Japan category may be introducing the frequency adverbials later than other textbooks, could be that rather than associating them with time expressions, they are being treated as adverbial modifiers of verbs that proceed them. For example, *hayaku ikimasita* ‘went early’ and *yoku ikimasita* ‘went often’ are introduced together as they show similar inflections of adjectivals.

Adverbial modifiers are introduced relatively late as compared to time-related expressions in these textbooks. Thus, it seems that frequency adverbials are being treated in the category of adverbial modifiers rather than time-related expressions, which is causing them to appear later than the rest of the time-related lexical items in SFJ and NGY

4.3.2 Tense and Aspect concepts

4.3.2.1 Observations for Q2: Are there any explicit explanations/definitions on tense-aspect concepts and terminologies used?

JSP chooses aspectual terms such as “perfective” and “imperfective” rather than past/non-past to refer to *-ta* and *-ru*, but there is no reason given for making this choice. It does not mention anything about their tense usage. Also there is no explanation of the difference in the tense and aspect systems in Japanese and English. NKM uses “past” and “present” tense terminologies. There is no mention of the aspectual usages of the verbs, namely perfective and imperfective. YKS uses “past” and “non-past” and leaves out the aspectual terms. GNK defines only “present” and leaves out the explanations for past as well as aspect. NGY is the only textbook in both categories that offers explanations for both tense and aspect. SFJ introduces the inflectional endings *-ru* and *-ta* as non-past and past. There is no further explanation given about these or about the larger aspectual system. TKY does not have any grammar notes on this topic.

In sum, except for NGY, none of the textbooks addresses both tense and aspect as concepts. They either introduce only tense (NKM, YKS, GNK, SFJ) or only aspect (JSP). Table 4.4 gives the definitions for tense and/or aspect as found in the textbooks.

1. JSP
JSP (L1:32) states that “Finished vs unfinished is the significant contrast in Japanese, whereas English speakers tend to think in terms of three time distinction—past, present and future.”
2. NKM
NKM (L5:144) states that “Japanese verbs have only two tenses, past and present. The present tense indicates present or future time, depending on the context.” <i>No similar definition is offered for past.</i>
3. YKS
YKS (L3:187) states that “There are two basic tense – past and non-past. Past tense is used to express past actions or events. The non-past is used to express present, habitual and future actions.”
4. GNK
GNK (L3: p.60) states that “Present tense either means (1) that a person habitually or regularly engages in these activities or (2) that a person will, or is planning to perform these activities in the future.” <i>No similar definition is offered for past.</i>
5. NGY
NGY (Vol.3) gives a definition for tense (L1:10) as well as aspect (L3: 68). “There are two ways to denote tense, “ <i>ru</i> ” (denoting present and future) and “ <i>ta</i> ” (denoting past) in simple sentences. However in subordinate clauses, the two kinds of verb endings denote completion or incompleteness.”
6. SFJ
SFJ (Introduction:15) states that “A predicate inflects according to non-past and past.”
7. TKY
TKY does not have any notes on this topic.

Table 4.4: Definitions and Terminologies

4.3.2.2 Discussion for Q2: Are there any explicit explanations/definitions on tense-aspect concepts and terminologies used?

As for clear and succinct definitions for tense and aspect distinctions, except for NGY, none of the textbooks provide any. In the U.S. category, except for JSP, none of the textbooks refer to aspectual properties of *-ru/-ta*. The definitions provided (as shown in Table 4.4) are limited to defining past and non-past tenses only. JSP, however, uses finished and unfinished (aspectual terms) to explain the uses of *-ru/-ta* and warns the readers of their tendency to think in terms of past, present and future. This, no doubt,

tacitly begins to tease out the tense-aspect difference but the textbook does not go any further in explaining why this tendency of thinking in terms of tense should not be translated directly into Japanese grammar. In the Japan category, SFJ does not mention about any aspectual usages of *-ru/-ta*. In NGY, the title of the Section (Vol. 3, L1, p. 10) on tense is “Tense: Perfective and Imperfective”, which is misleading. Perfective and imperfective are aspectual categories and not tense categories as is implied. NGY also seems to imply that aspect occurs only in subordinate clauses and not in simple sentences, which is not accurate. Some examples of aspect in simple sentences are:

- (12) Moo gohan o tabeta?
‘Have you eaten food already?’
- (13) Basu ga kita.
‘Here comes the bus.’
- (14) Atta atta.
‘There it is!’

As regarding terminologies used in the definitions to explain about time, there were several variations found. NKM and GNK use “present” to indicate both present and future tenses. If using tense-related terminology, it may be more accurate to use “non-past” instead of “present” as “non-past” sounds more inclusive of present and future. Simple definitions to delineate the different tenses might be helpful as well. Using terminology such as past/non-past as a cover term when referring to both tense and aspect is also not accurate. The terms past/non-past do not include aspect. Therefore, perfective/imperfective or finished/unfinished or complete/incomplete (aspectual terms) might be a better choice because they can be interpreted to include the tense usages. *-Ta* ending that indicates perfective or finished aspectual feature can denote past if the action

was finished before now (see (15) below), or non-past if the action will be finished in the future (see (16) below). In both situations of past and future, *-ta* ending is used to indicate finished/completed action.

(15) Kinoo kita hito ni agemasita.
'I gave it to those who came yesterday.'

(16) Asita kita hito ni agemasu.
'I'll give it tomorrow to those who will have come tomorrow.'

There is a need to present clearer explanations, starting with simple definitions and examples of both the tense and aspect system in Japanese and its comparison with English or the base language. The choice for using aspectual terms over tense terms must be mentioned in the beginning, with a follow-up at the end of the first year/beginning second year level. The explanations must cover both simple and complex sentences (with embedded (noun-modifying) and subordinate clauses and main clauses).

4.3.3 Tense and Aspectual Expressions

4.3.3.1 Observations for Q3: What tense and aspectual expressions are included?

4.3.3.1.1 Tense-Relative Time Expressions:

Tense refers to a sequential relationship between the time an event occurs and some other point, which can be the time of utterance or time of another event. In other words, if time is illustrated using a time-line, then tense will place the time of a particular event before (past), after (future) or simultaneously (present) with respect to the reference point (speech time or time of another event). Based on this concept, three structures were selected namely, *~te kara* (after~), *~ru mae* (before~), *~ta ato* (after~) that denote relative tense in Japanese (that is tense relative to another reference point). For example,

- (17) Taberu mae ni iku.
'Go before eating.'

The event *taberu* 'eat' is placed after the event *iku* 'go'.

- (18) Tabeta ato de iku.
'Go after eating.'

The event *tabeta* 'ate' is placed before the event *iku* 'go'.

- (19) Tabete kara iku.
'Go after eating.'

The event in gerund form *tabete* 'eat' is placed before the event *iku* 'go'.

A habitual sentence represents a statement about someone or something that is true over a period of time (Iwasaki, 2002). A habitual sentence with the past form refers to repeated events that were true in the past, which do not occur now. For example:

- (20) Taroo wa (maitosi) Amerika e itta.
'Taroo used to go to America (every year).'

- (21) Nihon e (zyukkai mo) itta koto ga arimasu.
'I have been to Japan (as many as ten times).'

A habitual sentence with the non-past form refers to repeated events that are true now.

For example,

- (22) Taroo wa (maitosi) Amerika e iku.
'Taroo goes to America (every year).'

- (23) Maitosi Nihon e iku koto ga arimasu.
'I go to Japan every year.'

As shown in Table 4.5 (below), all textbooks cover most of the listed tense-relative time expressions that denote either relative-tense (*~ te kara*, *~ ru mae*, *~ ta ato*) or habitual activity (*~ru/~ta koto ga arimasu*).

Items	Examples	JSP	NKM	YKS	GNK	NGY	SFJ	TKY	Itemwise (%)
<i>~te kara</i>	<i>Tabete kara iku.</i>	√	√	√	√	√	√	√	100 7/7
<i>~ru mae</i>	<i>Taberu mae ni iku.</i>	√	√	√	√	√	√	√	100 7/7
<i>~ta ato</i>	<i>Tabeta ato de iku.</i>	√	√	√	-	√	√	√	87 6/7
<i>~ru/~ta koto ga aru</i>	<i>Taberu/ tabeta koto ga aru?</i>	√	√	√	√	√	√	-	87 6/7
% in Textbooks		100 4/4	100 4/4	100 4/4	75 3/4	100 4/4	100 4/4	75 3/4	

Table 4.5: Aspectually specified tense-relative time expressions

Item-wise more than 85% of these aspectually specified tense-relative time expressions appear in all textbooks. From the perspective of the textbooks, each one covers three or more out of four of these expressions (with five out of seven books covering 100% of the aspectually specified tense-relative time expressions).

4.3.3.1.2 Aspectual Expressions

Aspect refers to taking an internal view of an event, that is, to see if the event has just begun, is in progress or is close to finish. The list in Table 4.6 includes a selected list of examples of aspectual expressions that are based on the following internal views.

Expressions that refer to start of an event: Examples are verbal stem + *hazimeru/dasu* ‘start of the verbal action’ (*kakihazimeru* ‘to start writing’), *~yoo to suru* ‘about to begin’ (*tabeyoo to site iru* ‘I am about to begin eating’).

Expressions that refer to action in progress: Examples are *~te iru* ‘ongoing’ (*yonde iru* ‘I am reading’), *~tyuu* ‘middle of an activity’ (*benkyootyuu* ‘in the middle of studying’).

Expressions that refer to action towards the finish: Examples are *~te simau* ‘finished’ (*yonde simau* ‘finish reading’), verbal stem + *owaru* ‘finish the verbal action’ (*kakiowaru* ‘finish writing’).

Expressions that view an event after it is completed: Examples are *~te kuru* ‘(gradually) come to ~’ (*dandan wakatte kita* ‘gradually came to understand’), *~ku naru* ‘become’ (*kuraku natta* ‘became dark’).

Refer to Table 4.6 for a list of selected expressions that denote the above aspectual views.

Aspectual Expressions	EXAMPLES	JSP	NKM	YKS	GNK	NGY	SFJ	TKY	Item wise %
~yoo to suru	<i>Tabeyoo to site iru.</i>	√	-	√	-	√	-	-	43 (3/7)
Stem + hazimeru	<i>Kakihazimeru. Ugokidasu.</i>	√	-	-	-	-	-	-	14 (1/7)
~te iru	<i>Tabete iru.</i>	√	√	√	√	√	√	√	100 (7/7)
~te iru tokoro	<i>tukatte iru tokoro</i>	√	-	√	-	√	√	√	71 (5/7)
~te aru	<i>Tabete aru.</i>	√	√	√	√	√	√	√	100 (7/7)
~tyuu	<i>syokuzi tyuu</i>	√	-	√	-	√	√	√	71 (5/7)
~ ru aida/aida ni	<i>küite iru aida/aida ni</i>	√	-	-	√	√	-	√	57 (4/7)
~ru/~nai uti ni	<i>rensyuu site iru uti ni/ kaerana uti ni</i>	√	-	-	-	√	-	-	29 (2/9)
~nagara	<i>Kikinagara~</i>	√	√	√	√	√	√	√	100 (7/7)
Stem + owaru/ oeru	<i>Kakiowaru. Kakioeru.</i>	√	-	-	-	-	-	-	14 (1/7)
~te simau	<i>Tabete simau.</i>	√	√	√	√	√	√	√	100 (7/7)
~te oku	<i>Katte oku.</i>	√	√	√	√	√	√	√	100 (7/7)
Perfective in recall	<i>Asita datta?</i>	√	-	-	-	√	-	-	29 (2/7)
~tokoro da	<i>Iku/Itta tokoro da.</i>	√	-	√	-	√	√	√	71 (5/7)
~tara	<i>~tabetara</i>	√	√	√	√	√	√	√	100 (7/7)
to	<i>botan o osu to...</i>	√	√	√	√	√	√	√	100 (7/7)
toki	<i>iku/itta toki</i>	√	√	√	√	√	√	√	100 (7/7)
~ta mama	<i>haitta mama</i>	√	-	√	-	√	-	√	57 (4/7)
Time made/ made ni	<i>asita made/ made ni</i>	√	√	√	√	√	√	√	100 (7/7)
~ru made/ made ni	<i>kaeru made/made ni</i>	√	-	-	√	√	-	-	43 (3/7)
~te kuru/~te iku	<i>wakatte kuru/ huete iku</i>	√	-	√	-	√	-	√	57 (4/7)
~ku/ni naru	<i>ookiku naru/ kiree ni naru</i>	√	√	√	√	√	√	√	100 (7/7)
% in Textbooks		100 22/22	45 10/22	73 16/22	55 12/22	91 20/22	59 13/22	73 16/22	

Table 4.6: Selected Aspectual Expressions

	Less than 50%	More than 50%
Textbooks	3	4
Aspectual Expressions	6	16

Table 4.7: Percentage Appearance of Aspectual Expressions

As can be observed from Tables 4.6 and 4.7, the coverage of these basic aspectual expressions varies considerably. Three out of seven textbooks cover 13 or less out of 22 aspectual expressions and four out of seven cover 14 or more out of 22 aspectual expressions listed for this survey. As far as the appearance of individual aspectual expressions is concerned, there are six expressions (such as stem + *hazimeru/dasu*, etc.) that show up in less than three out of seven textbooks. 16 out of 22 expressions (such as *~te iru tokoro*, *~te iru*, etc.) show up in four or more out of seven books.

Regarding the *~te iru* aspectual usage, an interesting sequence of presentation was observed between its two interpretations that is, progressive versus resultative. In the case of Japanese, the *~te iru* aspectual ending of verbs denotes either a progressive, or a resultative state or condition. The difference is most generally brought out by the kind of verb used with *~te iru*. That is, if the verb is an activity verb, which indicates some duration such as *taberu* ‘eat’ or *tukau* ‘use’, then their *~te iru* forms will most basically denote a progressive “~ing” reading as with *tabete iru* ‘is/ are/will be eating’, *tukatte iru* ‘is/are/will be using’. However if *~te iru* is used with an instantaneous or change-of-state verb, then the reading changes to a resultative condition. For example with *deru* ‘emerge, come/go out’ we get *dete iru* ‘has/ will have emerged’, with *kekkon suru* ‘marry’ we get

kekkon site iru ‘has been/is married’, and so forth. Note that in the *-te iru* construction, activity verbs such as *taberu* ‘eat’ and *tukau* ‘use’ can have a resultative reading as well (as in *tabete iru* ‘have eaten’, *tukatte iru* ‘have used’), and that instantaneous verbs do not take a progressive reading, unless it is forced with an adverb and/or other device, such as *tokoro*, *saityuu*, ‘in the midst of’, etc. In the current set of textbooks, four present both the ongoing and resultative readings together in the same lesson, two introduce resultative first and progressive later and one textbook presents resultative first and progressive later. It was surprising to see such a wide variation in the order of the presentation of the two readings of *~te iru* in these textbooks.

4.3.3.2 Discussion for Q3: What tense and aspectual expressions are included?

All textbooks present the aspectually specified tense-relative time expressions sufficiently well but the coverage for aspectual expressions is not as comprehensive. There were at least six items out of 22 that were covered in less than three out of seven books. Additionally, there were at least three out of seven textbooks that presented 13 or less out of 22 aspectual features. On an average, the textbooks in the U.S and Japan categories presented comparable number of items in their textbooks (taken together). The textbooks in the U.S. category altogether presented 68% of the listed aspectual expressions in this survey (equivalent to 15 out of a total of 22 items). The textbooks in the Japan category altogether presented 74% of the listed aspectual expressions in this survey (equivalent to 16 out of 22 items). As is evident from these figures, there is still room for including more aspectual expressions in most textbooks. As for the order of presentation of the two readings, namely progressive and resultative of *~te iru* there is

again wide variation seen and no set order seems to be followed in the textbooks. On the basis of acquisition studies that have been done on *~te iru* in Japanese (Kurono, 1994; Sheu, 1997; Nishikawa, 1998), it has been seen that students find it easier to acquire the progressive reading as it is relatively easier to process as compared to the resultative reading. Therefore it may be suggested to introduce the *~te iru* in the order progressive → resultative, but still relatively close to each other.

4.3.4 Presentation of *~ru/~ta* contrasts

4.3.4.1 Observations for Q4: How are *-ru/-ta* contrasts presented in complex sentences?

Some of the syntactic contexts that reveal *~ru/~ta* contrasts are nominal modification (e.g. *tukau/ tukatta konpyuutaa* ‘a computer that I (will) use/ (have) used’), *~koto ga aru* (to express past experience/routine, as in *iku/itta koto ga aru* ‘there are occasions when [I] (will) go/have gone’, or *~no de* (causal circumstances, as in *iku/itta no de...* ‘Since[I] (will) go/have gone...’) and so forth. That is, certain expressions can take both the *-ru* as well as *-ta* morphemes to give perfectly grammatical strings. For example, *-u* and *-ta* attach to the verb *tuka-* ‘use’ to modify *konpyuutaa* ‘computer’ in a nominal modification as follows.

(24) Asita **tukau** **konpyuutaa** wa kore desu.
‘This is the computer I will use tomorrow’

(25) Kinoo **tukatta** **konpyuutaa** wa kore desu.
‘This is the computer I used yesterday.’

Refer to Table 4.8 for the complete list of 23 items identified.

ITEMS	EXAMPLES	JSP	NKM	YKS	GNK	NGY	SFJ	TKY	Itemwise %
Nominal Modifier	<i>tukau/tukatta konpyuutaa</i>	ru ta √ √	ru ta √ √	ru ta √ √	ru ta √ √	ru ta √ √	ru ta √ √	ru ta √ √	100 (7/7)
<i>toki</i>	<i>iku/itta toki</i>	√ √	√ √	√ √	√ √	√ √	√ √	√ √	100 (7/7)
<i>n da</i>	<i>Aru/Atta n da.</i>	√ √	√ √	√ √	√ √	√ √	√ √	√ √	100 (7/7)
<i>no (koto)</i>	<i>yomu/yonda no(koto)...</i>	√ √	√ √	√ √	√ -	√ √	√ √	√ √	86 (6/7)
<i>tokoro</i>	<i>taberu/tabeta tokoro</i>	√ √	- -	√ √	- -	√ √	√ √	√ √	71 (5/7)
<i>kara</i>	<i>iku/itta kara</i>	√ √	√ √	- √	√ -	√ √	√ √	√ √	71 (5/7)
<i>no ni</i>	<i>iku/itta no ni</i>	√ √	√ √	√ √	√ -	√ √	√ √	- √	71 (5/7)
<i>tame</i>	<i>naru/ natta tame</i>	√ √	√ √	√ √	- -	√ √	√ √	√ -	71 (5/7)
<i>rasii</i>	<i>wakaru/ wakatta rasii</i>	√ √	√ √	√ √	- -	√ √	√ √	Adj √	71 (5/7)
<i>kamosirenai</i>	<i>Iku/Itta kamosirenai.</i>	√ √	√ √	√ √	√ -	√ √	√ √	√ -	71 (5/7)
<i>hazu</i>	<i>iu/itta hazu</i>	√ √	√ √	√ -	√ -	√ √	√ √	√ -	57 (4/7)
<i>to omou</i>	<i>Taberu /Tabeta to omou.</i>	√ √	√ √	√ √	- -	√ √	√ -	- √	57 (4/7)
<i>mitai</i>	<i>yameru/yameta mitai</i>	√ √	√ √	√ √	√ √	- -	- -	- -	57 (4/7)
<i>koto ga aru</i>	<i>suru/sita koto ga aru</i>	√ √	- √	√ √	- √	√ √	- √	√ √	57 (4/7)
<i>soo da (hearsay)</i>	<i>Iku/Itta soo da.</i>	√ √	√ √	√ √	√ -	√ √	√ -	Adj √	57 (4/7)
<i>yoo da</i>	<i>Iku/Itta yoo da.</i>	√ -	√ √	√ √	- -	√ √	- -	√ √	57 (4/7)
<i>no de</i>	<i>iku/itta no de</i>	√ √	√ √	- √	√ √	- √	√ √	- √	43 (3/7)
<i>mono da</i>	<i>suru/sita mono da</i>	√ √	- -	√ √	- -	√ √	- -	- -	43 (3/7)
<i>desyoo</i>	<i>Iku/ Itta desyoo.</i>	√ -	√ √	√ √	√ -	√ -	√ √	√ -	43 (3/7)
<i>tumori</i>	<i>iu/itta tumori</i>	√ √	√ -	√ -	√ -	√ √	√ -	√ -	29 (2/7)
<i>dake</i>	<i>miru dake/ mita dake.</i>	√ √	- -	- √	- -	√ √	- -	- -	29 (2/7)
<i>hoo ga</i>	<i>iku/itta hoo ga</i>	√ √	Adj √	Adj √	Adj √	Adj √	Adj √	Adj √	14 (1/7)
<i>wake</i>	<i>iu/itta wake</i>	√ -	- -	√ √	- -	√ -	√ -	- -	14 (1/7)
% in Textbooks		83 (19/23)	70 (16/23)	74 (17/23)	22 (5/23)	78 (18/23)	57 (13/23)	35 (8/23)	

Table 4.8: ~ru/~ta contrasts

	Less than 50%	More than 50%
Textbooks	2	5
<i>~ru/~ta</i> features	7	16

Table 4.9: Percentage Appearance of *~ru/~ta* contrasts

As can be observed in Table 4.9, two out of seven textbooks cover 12 or less out of 23 items listed in this survey that display *~ru/~ta* contrasts, and five out of seven books cover 13 or more out of 23 items showing the *~ru/~ta* contrasts. Item-wise seven out of 23 (such as *~dake* ‘just/only’ *miru/mita dake* ‘[I] (will) only look./[I] only looked.’, *tumori* ‘intention’, e.g. *iu/itta tumori* ‘[I] intend to say [it]./ [I] intend [i.e. ‘meant’] to have said [it].’, and so forth) show up in less than three out of seven books, while 16 out of 23 items (such as *~hazu* ‘be supposed/ expected to~’ (e.g. *Iu/itta hazu da* ‘It’s to be expected that [someone] (will) say (s) [it]’ / ‘It’s expected that [someone] has said [it]’, *~toki* ‘time when~’, as in *iku/itta toki* ‘time when [I] (will) go / time when [I] went’) are covered in four or more out of seven books.

4.3.4.2 Discussion for Q4: How are *-ru/-ta* contrasts presented in complex sentences?

Since Japanese has the same endings *-ru* and *-ta* to denote both tense and aspect, students often find it difficult to make the correct choice of these endings in various usages that allow one or the other or both. It is therefore important to show ample examples and explanations of this dichotomy in the textbooks, especially with those structures that allow both the *-ru* and *-ta* forms.

As also mentioned in the observation section of this question, two out of seven textbooks cover 12 or less out of 23 items and five out of seven textbooks cover 13 or more items out of 23. On an average, in the U.S. category all textbooks taken together present 62% of the total number of items (equivalent to 14 out of 23 items). In the Japan category, all textbooks taken together present 57% of the total number of items (equivalent to 13 out of 23 items). Hence, the two categories of books present a comparable number of items in their textbooks taken together. Itemwise, seven out of 23 items show up in less than three out of seven textbooks, while 16 out of 23 items show up in four or more out of seven textbooks. The crucial point here is that most textbooks can still increase the number of examples of the *-ru/-ta*, which is the first step towards getting around the problem of students making errors in the *-ru/-ta* selection. Learners often make errors in their choices of *-ru/-ta* morphemes, among various reasons, due to influence from their native languages and/ or because of a natural development pattern to associate the inherent semantic aspects of the verbs with the *-ru/-ta* endings. As a next step, it can also be suggested that a note be included about the classification of verb phrase types based on their inherent semantic aspect. Inherent semantic aspect refers to the feature that is internal to the meaning of the verb phrase. For example, a verb like *deru* ‘emerge’, an instantaneous verb and *kekkon suru* ‘marry’, a change of state verb, happen in a moment and lack any duration. This is a feature that is inherent in these verbs. On the other hand, verbs like *taberu* ‘eat’ and *tukau* ‘use’ take some time to occur and possess a duration which is their inherent property. The instantaneous and change of state verbs, cause a before/after interpretation with *-ru/-ta* in the *toki* ‘when’ clauses, while the

activity and stative verbs (that possess a duration) do not show the before/after reading and can be interchangeably used. To illustrate this, consider the following examples.

- (26) Razio o tukeru toki tokee ga natta.
'The clock rang before he switched on the radio'
- (27) Razio o tuketa toki tokee ga natta.
'The clock rang after he switched on the radio'.

The before/after distinction in (26) and (27) comes from the *-ru/-ta* endings in the subordinate (change of state) verb *tukeru/tuketa* 'switch/switched on'. However, in case of activity verbs (that have duration), such as *taberu* 'eat', the before/after distinction is not seen. The events in the subordinate and main clauses in case of durative verbs occur simultaneously. Consider the following examples.

- (28) Gohan o taberu toki ohasi o zyoozu ni tukatta.
'He used chopsticks skillfully when he ate food'.
- (29) Gohan o tabeta toki ohasi o zyoozu ni tukatta.
'He used chopsticks skillfully when he ate food'.

The interpretation of (28) and (29) remains the same with either *taberu* 'eat' or *tabeta* 'ate' in the subordinate position. Here *eating food* and *using chopsticks* overlap in time and do not occur sequentially. Therefore the before/after reading is ruled out.

In addition to explaining the distinction in *-ru/-ta* usage in *toki* clauses, the inherent aspect-based verbal classification can also be used in explaining other aspectual usages of verbs such as *~te iru* 'ongoing/resultative/'), stem + *hajimeru/dasu* 'start of a verbal action', contrast between *made/made ni* 'until/by' etc., which also use the concept of durative/non-durative inherent aspect of the verbs to bring out their accurate interpretation.

4.3.5 Similar Temporal Indicators

4.3.5.1 Observations for Q5: How do the textbooks deal with seemingly similar temporal

indicators, such as *~tara*, *tokoro*, *toki*?

Japanese has a variety of temporal indicators that correspond in context to English “when” among them *toki*, *~tara* and *tokoro*. For non-native learners of Japanese, it would be difficult to intuitively figure out when and why one of these devices is used as opposed to others. Therefore, it is worth while for us to observe how their similarities and differences are handled in each textbook. A comparison of the textbooks’ presentations of these three indicators is shown in Table 4.10.

TEXT BOOKS	<i>toki</i>		<i>~tara</i>		<i>tokoro</i>				PAIRS		
					Ending		middle		<i>toki-tara</i>	<i>toki-tokoro</i>	<i>tara-tokoro</i>
	Exp	e.g	Exp	e.g	Exp	e.g	Exp	e.g			
JSP	-	√	√	√	√	√	√	√	√	√	-
NKM	√	√	√	√	-	-	-	-	-	-	-
YKS	√	√	√	√	√	√	-	-	-	-	-
GNK	√	√	√	√	-	-	-	-	-	-	-
NGY	√	√	√	√	√	√	√	√	√	-	-
SFJ	√	√	√	√	√	√	-	-	-	-	-
TKY	-	√	-	√	-	√	-	-	-	-	-

Exp: Explanations; e.g: Examples

Table 4.10: Temporal Indicators

While *toki* and *~tara* are covered by most textbooks, only four out of seven cover *tokoro* as well and focus mainly on its sentence-ending use. Of these four, only two give both the sentence-medial and sentence-ending uses. For example:

Sentence-medial use of *tokoro*

- (30) Sensee ni toiaiwaseto tokoro sassoku ohenzi o moraimasita.
'When I enquired to my teacher, I immediately got an answer.'

Sentence-ending use of *tokoro*

- (31) Ima gohan o tabete iru tokoro desu.
'I am (in the middle of) eating food now.'

While most books give both explanations and example sentences in presenting *~tara*, *toki* and *tokoro*, two out of seven textbooks leave out explanations and simply give example sentences with English equivalents. Most textbooks do not present any of them in pairs, so as, for example, to clearly show comparisons.

4.3.5.2 Discussion for Q5: How do the textbooks deal with seemingly similar temporal structures, such as *~tara*, *tokoro*, *toki*, (all roughly equivalent to 'when')?

While *toki* and *~tara* are covered by most textbooks, *tokoro* is left out by almost half the number of textbooks considered in this study. One possible rationale to exclude *tokoro* (especially its sentence-medial use) could be that it is not as frequently used as the other two by native speakers. However, since *tokoro* is another classic example of a device that links up both the spatial and temporal interpretation in the same lexicon (besides the particles *ni*, *kara*, *made* as discussed earlier), including both the temporal and spatial use of *tokoro* would be helpful in explaining how it is common for our ways of

talking about times to be based on the ways we talk about space⁴. While most textbooks include the spatial usage of *tokoro*, adding a note on the temporal use will help in teasing out the differences and similarities with other devices like *~tara* and *toki*. Leaving out a structure because it is less frequently used will only lead to students not learning about it at all. The idea must be to introduce it in relation to the other indicators that it may possibly be confused with, and then point out that it is less frequently used than others among native speakers.

When presenting temporal uses of *~tara*, *toki* and *tokoro*, it would be more effective to explicate the similarities and contrasts of the minimal pairs, for example, *~tara/tokoro* pair, *~tara/toki* pair, *tokoro/toki* pair. This is a useful way to avoid confusion about when to use and when not to use the connectives interchangeably. For example:

- (32) Okaasan ga akatyan ni kusuri o nomasetara netu ga sagatta.
'When the mother made the baby take the medicine, the fever subsided.'
- (33) Okaasan ga akatyan ni kusuri o nomaseta tokoro netu ga sagatta
'When the mother made the baby take the medicine, the fever subsided.'
- (34) Okaasan ga akatyan ni kusuri o nomaseta toki netu ga sagatta.
'When the mother made the baby take the medicine, the fever subsided.'

In the above sentences, the same “when” clause in English can be interpreted in Japanese using *~tara* (in 32), *tokoro* in (33) and *toki* in (34). It would be useful to show such similar temporal uses of these three indicators in the presence of each other in the textbooks so that students can make ready comparisons and think about the nuances involved.

⁴ Refer to Weist (1991) for more details on Spatial and Temporal location in L1 and L2 studies.

4.4 Textbooks for Native Japanese Middle School Children

As might be expected, the middle school Japanese grammar textbook (*Kokugo kyooosi ga sitte okitai Nihongo bunnpo* ‘Japanese grammar that Japanese language instructors must know’: Kuroshio Publications) for native Japanese school children does not give any explanations of the tense-aspect system or the *-ru/-ta* distinctions. The overall emphasis seems to be more on forms, rather than functions. However, the textbook does point out (p. 86) the different interpretations of *-ta* as indicating past, completion, resultative condition and perfective in recall “confirmation” functions. The accompanying exercise consists of a past narrative and questions based on it that require identifying the four types of *-ta* mentioned above. The Instructor’s Manual for teaching Japanese grammar to school children in Japan (this is a manual used nationally regardless of the textbook), makes an interesting point about the use of *-ru/-ta* in Japanese narratives (p. 109). It explains that Japanese narratives written as an account of the past often times employ non-past inflected forms in predicating main clauses, as a kind of historical present. The idea, they explain, is to make the reader feel as though the past episode is something that is happening just now. It makes the past event come alive. The authors of the manual state that this is a common feature in Japanese narratives and it may be useful to introduce this concept of historical present in the language textbooks with some explanation about the uses of *-ru/-ta* in the same narrative.

In sum, the analysis of seven popular Japanese language textbooks in second and foreign language environments has led to some interesting observations. First, it has become clear that most textbooks introduce time expressions during the beginning stages in a step-by-step fashion. However, what is still lacking are simple definitions and

explanations covering the basic concepts of tense and aspect. Most textbooks, at present, present either tense or aspect, but not both. Further, in most of the textbooks examined, more exemplars of aspectual expressions as well as usages that bring out the differences owing to the use of *-ru/-ta* morphemes in the same phrase or structure can be added. In case of devices which have overlapping uses in their temporal usage, such as *~tara*, *toki* and *tokoro*, it would be useful to introduce them as pairs or combinations and then delineate the differences and similarities for the ease of comparisons for the learners.

In this final section, suggestions for some choices of preferred defaults towards teaching tense and aspect in Japanese will be offered. As is also evident from the previous chapters, both the linguistic theory as well as teaching of tense and aspect phenomena in Japanese including the status of *-ru/-ta* as markers of tense and/ or aspect has been considerably ambiguous. Most textbooks that were considered for this study, have attempted to get around this ambiguity by way of talking about either tense or aspect but not both. This is a crucial and necessary decision. In designing the section of a textbook on time expressions in Japanese, either one of tense or aspectual terms can be used consistently throughout the textbook. However, it is important to introduce both the concepts (tense and aspect) at the beginning level before selecting one over the other for the rest of the textbook. As for the choice between aspectual versus temporal terms to use throughout the textbook, aspectual terms seem better because these can be used to include tense usage as well. For example, in *Asita kita hito ni ageru* ‘I will give (something) to the people who would have come tomorrow’ *-ta* of *kita* clearly refers to a realized event of the verb. On the other hand, in *Kinoo kita hito ni ageta* ‘I gave (something) to the people who had come yesterday’ *-ta* of *kita* can again refer to the realization of the event

in the verb *kita* ‘came’. Additionally it can also be labeled as a tense marker indexing the occurrence of the event in *kita* ‘came’ as something that happened before the reference time of the main clause event *ageta* ‘gave’ (relative tense) or prior to the anchoring point of speech time (absolute tense). In other words, *-ru* and *-ta* invariably denote the semantic states (aspect) of unrealized and realized events respectively, in all their uses, but additionally they may also be indexical in some of their uses, that is they may be placed in time (tense) by virtue of where they appear (most commonly main clauses). Thus, it would be useful to understand *-ru* and *-ta* in terms of aspect which also has tense values depending on the context and their place in the verb phrase. It is also equally important to explicitly and succinctly introduce both tense and aspect usages of *-ru/-ta* in the textbooks and then justify the use of aspectual terms for the remainder of the textbook. The reason why it is important to also talk about tense is because the adult learners who come to our classrooms are most familiar with generic terms related to time, such as past, present and future tenses. It would be rare that they would be familiar with aspectual concepts. Hence, it would be most effective to use the more inclusive aspectual terms consistently while also making reference to the already familiar tense terms by explaining why and how the tense usage can be incorporated within the aspectual usage.

CHAPTER 5

CONCLUSION

5.1 Overview of the Study

This study examined the acquisition of tense-aspect in *toki* ‘when’ clauses in Japanese among adult learners of Japanese as a second or foreign language. The objective of the study was to investigate if native languages (Language Transfer Hypothesis) and/or inherent semantic characteristics of verbs (Aspect Hypothesis) play a role in the selection of the *-ru/-ta* endings in *toki* ‘when’ clauses. The study was conducted with 37 participants in Experiment 1 (with Achievement verbs in the *toki* clause position) and 34 participants in Experiment 2 (with Accomplishment, Activity and Stative verbs in the *toki* clause position). The research instrument consisted of a written version of the Truth Value Judgment Task in which the participants were asked to judge whether a sentence written in Japanese matched the content of a story that preceded it. Participants were asked to mark ‘True’ if they thought the sentence matched the content presented in the story; they were asked to mark ‘False’ when they judged that the sentence did not accurately describe the situation. The instrument in each of the experiments contained five pre-test practice stimuli, 12 test sentences and 12 distractor sentences.

The experimental results suggest that the Language Transfer Hypothesis and the Aspect Hypothesis seem to be working partially for the two types of verbs

(Achievements and Duratives). However in the current study, there are two results that deviated from the predictions of the two hypotheses. The Language Transfer Hypothesis is unable to explain the good performances of the Chinese and English speakers for the S1 *ru toki* S2 *ta* pattern in the Durative verb category. This result can possibly be explained by offering another hypothesis, that learners are also sensitive to the durative semantic aspect (or lack thereof) of the verbs in question. In other words, the learners' choice of the *-ru/-ta* morpheme in *toki* clauses is also influenced by the question of whether the verb in the subordinate clause has a certain length of duration or if it occurs momentarily. For verbs with duration like Accomplishment, Stative and Activity, the learners associate the *-ru* with the duration of the verb and are able to select the morpheme correctly. As for the second set of unpredicted results, that Accomplishment verbs are not showing errors with over-use of *-ta*, the Aspect Hypothesis is unable to explain this outcome. In order to explain this, it can be conjectured that learners are not focusing on the endpoint of the Accomplishment verbs and as a result are treating them as Activity verbs with a finite duration. Thus, it seems that a semantic feature like durative versus instantaneous character of the verb is playing an important role besides, telicity, in the choice of the *-ru/-ta* morphemes in *toki* clauses.

Another part of this study also presented an analysis of JFL/ JSL/ middle school textbooks that was done to reveal how time expressions (specifically tense and aspect concepts) are presented. For this analysis, three categories of textbooks popularly used in the U.S. and Japan were considered. Category 1 comprises four sets of textbooks used to teach Japanese as a foreign language in the U.S. Category 2 comprises three sets of

textbooks used to teach Japanese as a second language in Japan. Category 3 comprises two textbooks used to teach native Japanese middle school children in Japan.

This analysis has led to some interesting observations. First, it has become clear that most textbooks introduce time expressions during the beginning stages in a step-by-step fashion. However what is still lacking are simple definitions and explanations covering the basic concepts of tense and aspect. Most textbooks, in this survey, cover one or the other. Further, in most of the textbooks examined, there is still room available to add more examples of aspectual expressions as well as usages that bring out the differences owing to the use of *-ru/-ta* morphemes in the same phrase or structure, such as nominal modifiers. Finally, in case of temporal expressions which behave alike, such as *~tara*, *toki* and *tokoro*, it would be useful to introduce them as pairs or combinations and then delineate the differences and similarities, so as to clearly show comparisons.

5.2 Pedagogical Implications

Based on the observations and results of the two studies mentioned above, the following suggestions can be offered for teaching time expressions in a Japanese language classroom.

Since both native languages and inherent characteristics of the verbs play a key role in the selection of *-ru/-ta* endings in verbs in *toki* ‘when’ clauses, it would be useful to introduce a verb classification based on the inherent semantic aspect of the verbs. For example, a verb like *deru* ‘emerge’, an instantaneous verb and *kekkon suru* ‘marry’, a change of state verb, happen in a moment and lack any duration. This is a feature that is inherent in these verbs. On the other hand, verbs like *taberu* ‘eat’ and *tukau* ‘use’ take

some time to occur and possess a duration which is their inherent property. These inherent aspects of verbs lead to different interpretations in sentences with *toki*. The instantaneous and change of state verbs, bring about a before/after (relative tense) interpretation between the subordinate and main clause events with *-ru/-ta* in the *toki* clauses, whereas in activity and stative verbs (that possess a duration), the morphemes do not bring about such a difference as they render a simultaneous reading between the subordinate and main clause events. This highlights their aspectual function. In other words, the behavior of *-ru/-ta* as tense morphemes is brought out with the instantaneous and change of state verb category, while their behavior as aspect morphemes is brought out with the durative verbs category.

In addition to explaining the differences in the *-ru/-ta* behavior in *toki* clauses, this inherent aspect-based verb classification can also be used in delineating other aspectual usages of verbs such as *~te iru* ‘ongoing/resultative’, stem + *hazimeru/dasu* ‘start of a verbal action’, contrast between *made/made ni* ‘until/by’ etc., which also use the concept of durative/non-durative aspect of the verbs to bring out their accurate interpretation.

From the experimental analysis it became clear that Chinese learners, whose native language does not have a similar aspect system as Japanese, make the most errors among the group of learners that was examined. Therefore, it would be useful for instructors to know that they need to be explicit about explaining the tense-aspect system in Japanese especially to learners of Chinese, whose native language does not contribute to any positive transfer.

From the analysis of the textbooks it has become evident that aspect-related concepts have not been adequately addressed in most of the popularly-used textbooks.

This is a crucial point because tense and aspect in Japanese are intertwined and cannot be presented separately. Since most learners are familiar only with generic terms related to time such as past, present and future tense, it is essential to introduce the conceptual differences between tense and aspect and then describe how they are different in Japanese as compared to the base language, say English. This will help, to a large extent, to avoid any pre-conceived assumptions about the use and misuse of the *-ru/-ta* endings as denoting “present tense” versus “past tense” only. It would be helpful in introducing simple and basic definitions of the concepts and comparisons in the beginning years so that learners move forward not with any preformed notions that they might find difficult to unlearn at a later stage.

5.3 Future Research

In this study, only two (*S1 ru toki S2 ta* and *S1 ta toki S2 ta*) of the four possible combinations of *-ru/-ta* endings in *toki* ‘when’ clauses were dealt with. The other two combinations (*S1 ru toki S2 ru* and *S1 ta toki S2 ru*) still need to be investigated. Also it is imperative to include the *-te iru/-te ita* aspectual endings in the *toki* clause to make a comprehensive conclusion about the results of the study. In the current study, the main clause verb was not controlled however it would be useful to see how the choice of the main clause verb with specific inherent properties might affect the selection of the endings in the *toki* subordinate clause.

Another trajectory that could follow from this study is to do a corpus analysis of native speakers’ discourse and conversations to examine how they attach the various

endings (*-ru/-ta/-te iru/-te ita*) to the verbs in *toki* clauses and if the inherent semantic aspect plays a role in their selection as well.

Further, this study can be extended to other temporal connectives that take multiple endings, such as *tokoro* and those that do not take multiple endings such as *~tara*, to investigate if the inherent semantic aspect of the verbs preceding these connectives have a role to play in the selection of the verb endings.

The results of this study reflect the participants' understanding in Japanese and not necessarily represent their production. A future study can be suggested to examine the participants' production in the acquisition of tense-aspect in *toki* 'when' clauses by using a different test instrument, such as oral interview tasks.

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APPENDIX A

LIST OF PRINTED MATERIAL USED BY PARTICIPANTS AT THE PUBLIC UNIVERSITY IN KYOTO

Intermediate Level	Course	Printed Material
1.	Reading	<i>Nihon tateyoko</i> (Japan as it is)
2.	Composition	<i>Nihongo sakubun no hoohoo</i> (How to write Japanese compositions) <i>Ryuugakusei no tame no ronritekina sakubun no kakikata</i> (Logical ways of writing compositions for foreign students).
3.	Grammar	<i>Donna toki doo tukau nihongo hyoogen bunkee 500</i> (Which Japanese expressions to use at what time 500).
4.	Listening	<i>Mainiti no kikitori</i> (Everyday listening) <i>Kiite oboeru hanasikata</i> (Listen and remember speech style) <i>Asahi sinbun no koe – nama tyuukee</i> (Voice of Asahi Newspaper—live broadcast)
5.	Conversation	<i>Kiite oboeru hanasikata</i> (Listen and remember speech style)

APPENDIX B
PARTICIPANT PLACEMENT LEVELS

Midwestern University in U.S.

Level	Year
Intermediate	Level 4 (Fourth year)
Advanced	Level 5 (Fifth year)

Public University in Kyoto, Japan

Placement test

Vocabulary: 20pts ; Grammar: 20 pts ; Reading: 28 pts ; Kanji: 20 pts ; Essay: 12 pts

Level	Points break up
Advanced	Above 70
Intermediate 3	50 ~ 70
Intermediate 2	30 ~ 50
Intermediate 1	15 ~ 30

Private University in Kyoto, Japan

Placement test

Reading ; Writing ; Listening ; Speaking (exact structure of the test was not available)

Level	Stage
Pre-Intermediate	Level 3
Intermediate	Level 4
Upper Intermediate	Level 5
Pre Advanced	Level 6
Advanced	Level 7
Upper Advanced	Level 8

APPENDIX C

TEST INSTRUMENT (TVJ 1)

Time Expressions in Japanese

Directions:

We would like to ask you to help us determine the winner of a Japanese language contest for American students who have been studying Japanese for a little over two years. These contestants were asked to view a videotape recording of a variety of situations and then they were required to write a sentence about each situation in Japanese. This year we had four contestants – John, Peter, Ruth and Jane. The scores for Peter, Ruth and Jane have already been entered, but we still need to know how well John performed. The winner of the contest will get a free two weeks stay in Japan including a free round trip airplane ticket. The videotaped dialogues have been transcribed for you. Your job is to read each story written in English and determine whether or not the Japanese sentence written below the story matches the content. Please mark “True” if you think the sentence matches the content of the story. If you believe John’s sentence does not match the content, please circle “False.” Note that his sentence does not have to describe everything in the story.

Please keep in mind that your performance on this task will not affect your grade in any way. Therefore, please do not share your responses with anyone.

To see how well you understand your task, we would like to begin this session with a warm-up exercise. Please work on the next five stories. At the end of the fifth story, you will see the words “End of Warm-Up.” Once you have completed the fifth story, please follow the instructions that are described on the following page.

1. Ken and Takao are brothers and seniors at college. They decided to spend their New Year holidays with their grandparents at their countryside house. Their grandparents were very happy to see the boys. One day after dinner they sat by the fireside and chatted for a long time. In between sometime their grandmother brought out her treasured family album. Takao saw one of his own photos as a five-year old on a bicycle. He remembered his first bike ride and how he fell and got injured and cried the whole day. He laughed and became nostalgic about his younger days. Ken then saw his high school graduation photo and smiled. Their grandparents said that they were very proud of the boys and smiled.

こども

子供のときがなつかしくなった。

True/False

2. Yoko and her friends were having a college reunion. Yoko was very happy to meet many of her classmates and seniors. Everyone had interesting stories to tell. Yoko’s best friend Sachiko got married to her high school sweet heart Masao two years after graduation. They had a cute one-year old son. Masao was Sachiko and Yoko’s senior at college and always wanted to be an actor. He joined the acting school after college and now works in television dramas. In college Yoko wanted to work as an OL in a big company after graduation. She joined a big automobile company shortly after graduation and still works there. She is being considered to be sent to America for a special training program by her company. She told her friends that she likes her job and wants to work there as long as she can.

いま かいしゃ き だいがく そつぎょう

今の会社に来たのは大学を卒業したばかりのときだった。

True/False

3. Michiko is a housewife and lives in an apartment in Tokyo with her husband and two kids. Last Sunday was her younger kid’s birthday. Michiko decided to bake special kind of cheese cake that her mother used to make for her when she was a kid. She knew she had kept the recipe somewhere but did not remember where. She searched for it everywhere – in her diary, in the drawers and cupboards but could not find it.

She decided to call her mother and ask her directly. It had been a while since Michiko's mother had made that cake, so she could not remember a few of the ingredients. She promised to check her recipe book and call back later.

はは き おし
母に聞いたらすぐ教えてくれた。

True/False

4. Kenichi is a high school student who loves painting. He has a great talent for painting portraits. He is the president of his school's art club and has won many prizes at art contests. However his weak point is math. He often struggles to do his homework and tests. His friend Yukio is good at math and often helps Kenichi with homework and test preparation. Kenichi in turn helps Yukio in all his art projects. Last Friday, Kenichi was trying to do his math homework when he got stuck as usual. He called Yukio but his mother answered the phone. She told him that Yukio had just stepped out to buy some bread. She promised to tell Yukio to call Kenichi as soon as he came back.

でんわ る す
ゆきおに電話したところ留守だった。

True/False

5. Mr. Kubota is about 70 years old. He likes visiting places. Now that he is retired he often goes on sightseeing trips with his wife. One day he told his friend that he gets tired very soon with all the traveling. He wished he had traveled more often when he was younger. However since he had been a salaried man he did not get much time to go on trips.

わか りょこう
若いときよく旅行した。

True/False

“End of Warm-Up”

If you have any questions or concerns about the task that you completed in the warm-up session, please write them in the Comments section below.

Comments

Please work on the next 24 stories and judge whether John's sentence is accurate for each story. Please circle “True” if you think the Japanese sentence John wrote matches the content presented in the story. If you believe his sentence does not match the content, please circle “False.” Please keep in mind that his sentence does not have to describe the entire story.

After you complete the 24 stories, please refer to the section titled “Who Is the Winner in 2005?” which is attached at the end of this document. Count the number of sentences you have marked “True” and enter that number in the corresponding bracket. Then write down the name of the contestant who won this year's prize. Please do not count any sentences that were included in the warm-up exercise.

Before you begin the main session, we would like to remind you that your responses on this task will not affect your grade in any way. Therefore, please do not share your responses with anyone. The responses you provide on this task must be entirely based on your own personal views.

Please start now.

Main session

1. Adam, Jason and Mike had been sharing a house together. One day, when Adam woke up in the morning, he noticed that there was a Japanese textbook on the table. He questioned Jason whether he studied Japanese the night before. Jason told him that he was watching a basketball game on TV and he thinks it was Mike who was studying Japanese. Mike woke up, came out of his room, and greeted his

housemates. Then, Jason asked whether Mike studied Japanese the night before. Mike answered: “Yes, I did. I stayed up very late last night to study for the Japanese exam.”

マイクが日本語を勉強した。

True/False

2. Hanako is a college student and waiting anxiously for her summer vacation. She is planning to go to Hawaii with her friends. The travel agent who was going to get tickets for Hanako and her friends promised to give a group discount. The agent said he would contact Hanako on the following Sunday morning to give more information about the discount. Hanako goes to the church every Sunday morning at 10am. She forgot to tell the agent earlier that she will not be available to take his call between 10am and noon on Sunday. On Sunday morning she waited until a few minutes before 10am and decided to leave. She thought that if the agent calls after she leaves, then she can let the answering machine take the message and she could call back later. As she was about to leave her house, the telephone rang and she picked up the receiver. It was the agent. Hanako told him that she was leaving for the church and that she will call him after she returns around noon. She kept the receiver down and left in a hurry.

家を出るとき電話がかかってきた。

True/False

3. While Ken, Eric and Tom were having lunch together in the cafeteria, Ken mentioned that someone had broken into Mariko’s house. Having been told about the incident by his friend just a few minutes earlier, Ken thought that Eric and Tom had not heard the news yet. They talked about the incident. Tom: “I was watching TV this morning, and they were airing that story. I hope they catch the guy real soon.”

Eric: “I read about that incident in the newspaper this morning. It said that the case could be related to a couple of other burglaries that have occurred in the last couple of months in the same area.”

トムが新聞を読んだ。

True/False

4. Ayako is a final-year college student who lives in a one-room apartment with a roommate. She is writing her thesis and had ordered a book on-line. She was told that she would get the book within a week and was expecting the book to arrive any day. Today after returning from college as she entered her room, she spotted a package on the table. Her roommate who was already in the room said she had received the pack from the postman for Ayako. Ayako thanked her roommate and began opening the parcel. It was the book she had ordered.

あやこが部屋に入るときパッケージを見つけた。

True/False

5. Chris ran into Bill on the way to the gym and asked how he had been doing. He told that the camera he made for the engineering class project broke down and Scott’s camera needed to be fixed as well. The night before he went to the engineering lab with Scott.

Chris: “Were you able to fix it?”

Bill: “Oh, well ... Scott was able to fix his camera in no time. His camera is a very simple one. But because I had installed so many features in my camera, I have yet to find out what caused the problem. While I was working on my camera, Jason came up to me and asked me if I could take a look at his camera. Because his camera was also very simple, I was able to repair it for him right away. Next time, I must make sure that I am not too ambitious with my classroom projects.”

ビルがジェーソンのカメラを直した。^{なお}

True/ False

6. Kimiko is an OL and works in Kyoto. Her parents live in Osaka. Kimiko's new boyfriend is a manager in the same company where she works. Kimiko decided to introduce her boyfriend to her parents. So they took a train from Kyoto to Osaka. Kimiko's parents were very anxious to meet Kimiko and her boyfriend so they asked her to call them before reaching Osaka station. Her parents lived close to the station and were planning to pick up both of them. When Kimiko and her boyfriend were about to reach the station that was one stop before Osaka, she decided to call her parents but realized that her cell phone had run out of batteries. So she waited till they reached the station. Once in Osaka, she quickly called her parents from the public phone.

えき つ りょうしん でんわ
駅に着いたとき両親に電話した。

True/False

7. Both Chris's and Alan's families owned two computers each. But Chris and Alan thought they did not need two computers in their households and were thinking about selling their own computers. One day, when Chris was working out in the gym, he ran into Alan and told him that he finally sold his computer. So he asked Alan if he sold his computer.

Alan: "Well ... I talked about it with my mother. We decided to sell my mother's computer and keep mine instead because my computer is still relatively new. Yesterday, a guy down the street bought my mother's computer, and I set my computer in the living room."

クリスがひとつのコンピューターを売った。^う

True/False

8. Taroo is a high school student and commutes to school everyday by bus. One morning when he was waiting for the bus, he saw a cyclist accidently hitting an old man who was crossing the street. Taroo rushed to help. The old man was only slightly injured but the cyclist decided to take him to the hospital. He asked Taroo to help. Taroo promptly went with them. After leaving the old man and the cyclist at the hospital, he rushed back to school. Fortunately he got a bus immediately. If he had missed this one, the next one was a few minutes later. His first class was mathematics. When he entered the class, he saw that the teacher was about to begin the class. He quietly went to his seat and sat down.

せんせい じゅぎょう はじ たろう はい
先生が授業を始めるとき太郎が入ってきた。

True/False

9. Mr. Nakano owns a bookshop in Tokyo. Every morning he goes to his shop at 8:30am, cleans it and opens it up for public at 9am. Yesterday just as he was about to leave for work, he got a telephone call from his daughter who is studying at a university in Nagoya. He talked with her and by the time the call ended, he realized it was already 9am. He rushed to his shop and started unlocking the shutters from outside the shop. While he was opening the shutter, he saw Mr. Suzuki, the neighboring shopkeeper and exchanged the usual greetings.

みせ あ すずき あ
店を開けたとき鈴木さんと会った。

True/False

10. Jonathan and Nick had been studying in the library. After a while they wanted to take a break and decided to go outside to have a cigarette. Jonathan usually smoked Marlboros, while New Port was Nick's

favorite. When they both were about to pull their cigarettes out of their pockets, they spotted Ben, who was holding an unfamiliar cigarette pack. Nick called to Ben, pointing to his cigarette pack, and asked him where he got it. Ben answered that he bought these when he went to China last month and asked if he would like to try one. Ben looked into the pack only to find that there were no cigarettes left.

Ben: "Nick, I am sorry. I am out of them."

Nick: "That's all right."

Nick then pulled his own New Port pack out of his pocket and smoked to his heart's content.

ニックが吸ったタバコは自分のものだった。

True/False

11. Suzuki, Kimura and Tanaka are colleagues at a small company. They have worked here for almost 5 years now. They conduct informal meetings once a month to discuss about various issues related to the work environment. These meetings have been very successful since they get a chance to voice their concerns as well as introduce new ideas in a relaxed atmosphere. Today at lunch time, the three of them met at Suzuki's office to decide about the day of the next meeting. They tentatively decided on Friday at lunch time. Just then Kimura remembered to invite Masako, Kimura's secretary as well since she had shown interest in attending the meetings. So he called Masako and had her come to Suzuki's office. Then they asked her if the decided day was suitable for her. Kimura apologized for not remembering to call her before they decided the day but she said the day was good for her and thanked them for inviting her.

会議の日を決めるときまさ子に来てもらった。

True/False

12. Richard was a graduate student who was studying chemistry. One day when he was walking the street near campus, he ran into Mark who had belonged to the same lab under the same advisor.

Richard: "Hi, Mark. Have you started doing research for your master's thesis yet?"

Mark: "Yes, I have. I finished grading students' papers last week, and now I have been focusing all my energy on finishing my project. How is yours going?"

Richard: "Unfortunately, I have not started the research for my thesis yet. Right now I am analyzing the data for Dr. Smith's research project. Hopefully, his project will be complete in two weeks and then I can start working on my research."

リチャードの研究が終わった。

True/ False

13. Mari was celebrating her eighth birthday and she was very excited about inviting her friends and cutting the cake. Her mother had baked a big chocolate cake for her and her father had a surprise gift for her, which he promised to give her at the time of cutting the cake. The much awaited moment came and Mari happily blew the candles and just as she cut the cake, the lights went off and came back again in a moment. Mari saw her father enter the room holding a big teddy bear toy that was singing the birthday song. She jumped with joy and ran to her father to give him a big hug.

パーティーでケーキを切ったとき電気が消えた。

True/False

14. Robert Johnson had just moved into a new house with his two sons, Eric and Jason. Since they had moved in only yesterday, there were still many pieces of furniture left in the living room that needed to be moved to other rooms. Robert asked his sons to help move his drawer into his bedroom. Jason went to the other side of the drawer and was ready to lift it with Robert. Eric, on the other hand, thought Robert and Jason could easily handle the drawer and went toward the chair that was sitting in the corner of the living room. Then Robert spoke to Eric.

Robert: "Eric, you don't have to move the chair because it is going to be used in the living room. Can you help us with this drawer, instead? It's kind of heavy for just two of us."

As soon as he heard Robert's request, Eric went to the drawer. The three of them lifted the drawer together and moved it to Robert's bedroom.

ロバートはたんす^{はこ}を運んだ。

True/False

15. Miki is a high school girl and very fond of her cat. She got this cat from her mother as a birthday present last month. Last week when Miki came back from school, she could not find her cat in the house. She became very anxious and started searching all over the place. When she couldn't find the cat in the house, she went out and searched the neighborhood. Even after two hours of search, the cat was still missing. Miki became sad and returned home. Just as she entered the house she heard a commotion in the room upstairs. She went up and checked all the rooms. She opened the closet door of her room but could not find anything. Then she heard a thud from behind her. But just as she was about to close the door, she heard the cat's meow from inside a closed box kept in the closet. She quickly opened the closet and found the cat inside a box. She was very relieved. She saw that her little sister had dropped her cereal bowl on the floor behind her which made the thud earlier and had probably woken up the cat.

ドアを閉めたとき猫^{ねこ}の^{こえ}声^きが聞こえた。

True/False

16. Bill had two children, Frank and Peter. One evening, when Bill asked his children what they wanted for dinner, both Frank and Peter said that they wanted to eat pizza. Bill called a local pizza shop and had one Family Special delivered to his home. Once the pizza was on the table, Bill and Frank started to eat immediately. After a while, Bill noticed that Peter had not touched the pizza yet and began to worry.

Bill: "Peter, are you O.K.? You are not eating."

Peter: "Well, I thought we were going to get a pizza without olives on it. I don't like olives."

Bill: "If you don't want to eat this pizza, there is fried rice in the refrigerator. If you want to eat fried rice, heat it in the microwave first."

Peter went to the refrigerator, pulled out the plate of fried rice, and put it in the microwave. When it was fully heated, Peter brought it to the table and ate it. He enjoyed the rice.

だれもピザ^たを食べ^たなかった。

True/False

17. David, Eric and Charles were brothers. After dinner one evening, Eric wanted to watch a movie video and wondered if David and Charles wanted to watch it as well.

Eric: "I am going to watch the video in the living room. Do you want to watch it together?"

Charles: "Sure. Let's go."

Eric then turned to David, who kept quiet.

Eric: "Are you going to watch, too, David?"

David: "Well ... I need to finish my math assignment tonight. So I'm going to go to my room and work on the assignment."

Eric: "Are you sure? It is the movie Matrix."

David could not resist the invitation.

David: "O.K. I will do the assignment after watching Matrix."

David, Eric and Charles went to the living room and watched the video together.

デビッドがビデオを見る前に食事をした。

True/False

18. Yuka and her classmates decided to organize a class picnic. They met at Yuka's place to make plans. They discussed about things like place, day and time for the picnic. Then they made a list of people who were likely to attend the event. They decided to invite two of their teachers. Yuka and her friend Tamami took charge of contacting them. Just before Yuka contacted the first of the two teachers, she checked the telephone number and told Tamami who she was calling, so that Tamami could call the other teacher at the same time using her cell phone. After they were done with the teachers, they contacted the rest of the classmates.

ゆがが連絡するとき電話番号を調べた。

True/False

19. Jiroo is a second-year college student in Nagoya and he loves listening to the radio. His favorite radio talk show is aired every Saturday at 6pm. He plays tennis with his friends from around 4-5:30pm. Yesterday (Saturday), when he came back home from his tennis session he switched on the radio even before turning on the lights of his room. Just as he switched on the radio, the clock on the wall also rang. Jiroo was happy to have made it on time. He then turned on the lights and continued to listen to his favorite program.

ラジオをつけたとき時計が鳴った。

True/False

20. Joe invited Jeremy, Brian and Matt for a party at his house. When they had all arrived and had finally settled down, Joe asked each of them if they cared for a Sapporo beer.

Jeremy: "Why not? Sapporo is my favorite."

Brian: "Well ... No."

Matt: "No. But thanks anyway."

Joe handed a bottle of Sapporo to Jeremy, who drank it up in several gulps. Joe opened another bottle of Sapporo for himself and had a sip of it. Then he realized that he also had Budweiser and wondered if Brian and Matt cared for the American brand.

Joe: "Do you guys want Budweiser?"

Brian: "Yeah, I love Budweiser."

Matt: "Sorry, I can't drink beer. Do you have sake?"

Joe: "Sure."

Joe went to the kitchen and opened the refrigerator. He picked a can of Budweiser from the first shelf. He also pulled a bottle of sake from the refrigerator in the living room he gave the Budweiser to Brian and handed the sake to Matt. Matt didn't drink the sake immediately, though he was thirsty. Brian opened the Budweiser and sipped it while listening to Jeremy's story.

みんなはビールを飲んだが酒は飲まなかった。

True/False

21. Masao is a first year college student and had been working on writing a report for his English language class. This was the first report he was writing in English since he entered college and so he was careful about all the important points his teacher had pointed out in class. On the day of the submission, he got his report together, stapled it and took it to the front of the class to turn it in, like everyone else. He was amongst the first ones to turn in as others were still stapling their reports. But as soon as he had turned in the report to the teacher, he remembered that he had forgotten to attach the reference list in the end, which the teacher had specifically pointed out earlier. He told the teacher about the miss and asked if he could

turn in the reference list separately the next day. The teacher agreed but told him to be more careful in future.

レポートを出すとき大切なポイントを思い出した。

True/False

22. Adam, Bill, Jeremy and Paul were taking the same math class together, and the final exam was scheduled for the following week. The instructor was allowing the students to bring their notebooks to the exam, but he would not allow them to bring their textbooks. Since Adam, Bill, Jeremy and Paul were very sneaky, they decided to copy their textbooks and put the copies in their notebooks. When they got to Kinko's, there were only two copiers available. Adam told Bill that he did not understand why the instructor would not let them bring their textbooks to the exam. Then he pulled his textbook from his sack, which was blue, and copied several pages. Bill, too, picked his textbook from his sack, which was red, and made copies of certain pages. When they finished making copies they left Kinko's, telling Jeremy and Paul that they (Adam and Bill) were heading to the gym to work out. While Jeremy was copying his textbook, he looked at Paul and noticed that the pages of Paul's textbook were filled with markings and notes. Jeremy wondered whether Paul would be able to make clear copies.

Jeremy: "You can copy my textbook if you want."

Paul: "No, thanks. I think I understand most of the textbook. But I want to make copies of the notes I wrote in the book during the lecture."

Paul then proceeded to make several copies from his own textbook. When both Jeremy and Paul finished making copies, they headed back to their dorm.

ポールがジェレミーの教科書をコピーした。

True/ False

23. Saburo is a second-year student at a university in Japan. He returns from college everyday at about 7pm. After having dinner he usually does his homework and watches TV. Last night he was watching a Japanese movie until late. After the movie was over, he got up to switch off the TV. Just before he switched it off, he heard the clock and noticed the time to be 1am. He had an early class next day, so he promptly switched the TV off and went to sleep.

テレビを消したとき時間に気付いた。

True/False

24. Larry had three sons, Eric, Mike and Ted. One day, he decided to clean the house. He began with the kitchen. After a while, he saw Eric and Mike watching TV in the living room and wondered if they could help him.

Larry: "I am doing the house-cleaning right now. I wonder if you guys could help me with that."

Eric: "Sure, Dad. Anytime you want."

Mike: "I am going to meet my friend at 2:00. I think I can help you for about twenty minutes or so."

Eric then vacuumed the floor in the living room while Mike took the kitchen garbage to the trash. While Larry was wiping off the kitchen table, he saw Ted walking toward the entrance.

Larry: "Ted, could you help us?"

Ted: "Dad, I want to meet my friend."

Larry: "All right. You must be back before 5:00."

Ted: "O.K."

Ted rode his bike to meet his friend while the rest of the family cleaned the house together.

テッドは掃除^{そうじ}しなかった。

True/False

“End of Main session”

Who Is the Winner in 2005?

1) Indicate the number of “True” responses for each contestant:

Name	Number of True Responses
Peter	(14)
Ruth	(18)
Jane	(15)
John	()

2) Write down the name of the contestant who won this year’s prize:

The winner for this year is ()!

This is all. Thank you very much for your time.

APPENDIX D

TEST INSTRUMENT (TVJ 2)

Time Expressions in Japanese

Directions:

We would like to ask you to help us determine the winner of a Japanese language contest for American students who have been studying Japanese for a little over two years. These contestants were asked to view a videotape recording of a variety of situations and then they were required to write a sentence about each situation in Japanese. This year we had four contestants – John, Peter, Ruth and Jane. The scores for Peter, Ruth and Jane have already been entered, but we still need to know how well John performed. The winner of the contest will get a free two weeks stay in Japan including a free round trip airplane ticket. The videotaped dialogues have been transcribed for you. Your job is to read each story written in English and determine whether or not the Japanese sentence written below the story matches the content. Please mark “True” if you think the sentence matches the content of the story. If you believe John’s sentence does not match the content, please circle “False.” Note that his sentence does not have to describe everything in the story.

Please keep in mind that your performance on this task will not affect your grade in any way. Therefore, please do not share your responses with anyone.

To see how well you understand your task, we would like to begin this session with a warm-up exercise. Please work on the next five stories. At the end of the fifth story, you will see the words “End of Warm-Up.” Once you have completed the fifth story, please follow the instructions that are described on the following page.

1. Ken and Takao are brothers and seniors at college. They decided to spend their New Year holidays with their grandparents at their countryside house. Their grandparents were very happy to see the boys. One day after dinner they sat by the fireside and chatted for a long time. In between sometime their grandmother brought out her treasured family album. Takao saw one of his own photos as a five-year old on a bicycle. He remembered his first bike ride and how he fell and got injured and cried the whole day. He laughed and became nostalgic about his younger days. Ken then saw his high school graduation photo and smiled. Their grandparents said that they were very proud of the boys and smiled.

こども

子供のときがなつかしくなった。

True/False

2. Yoko and her friends were having a college reunion. Yoko was very happy to meet many of her classmates and seniors. Everyone had interesting stories to tell. Yoko’s best friend Sachiko got married to her high school sweet heart Masao two years after graduation. They had a cute one-year old son. Masao was Sachiko and Yoko’s senior at college and always wanted to be an actor. He joined the acting school after college and now works in television dramas. In college Yoko wanted to work as an OL in a big company after graduation. She joined a big automobile company shortly after graduation and still works there. She is being considered to be sent to America for a special training program by her company. She told her friends that she likes her job and wants to work there as long as she can.

いま かいしゃ き だいがく そつぎょう

今の会社に来たのは大学を卒業したばかりのときだった。

True/False

3. Michiko is a housewife and lives in an apartment in Tokyo with her husband and two kids. Last Sunday was her younger kid’s birthday. Michiko decided to bake special kind of cheese cake that her mother used to make for her when she was a kid. She knew she had kept the recipe somewhere but did not remember where. She searched for it everywhere – in her diary, in the drawers and cupboards but could not find it.

She decided to call her mother and ask her directly. It had been a while since Michiko's mother had made that cake, so she could not remember a few of the ingredients. She promised to check her recipe book and call back later.

はは き おし
母に聞いたらすぐ教えてくれた。

True/False

4. Kenichi is a high school student who loves painting. He has a great talent for painting portraits. He is the president of his school's art club and has won many prizes at art contests. However his weak point is math. He often struggles to do his homework and tests. His friend Yukio is good at math and often helps Kenichi with homework and test preparation. Kenichi in turn helps Yukio in all his art projects. Last Friday, Kenichi was trying to do his math homework when he got stuck as usual. He called Yukio but his mother answered the phone. She told him that Yukio had just stepped out to buy some bread. She promised to tell Yukio to call Kenichi as soon as he came back.

でんわ る す
ゆきおに電話したところ留守だった。

True/False

5. Mr. Kubota is about 70 years old. He likes visiting places. Now that he is retired he often goes on sightseeing trips with his wife. One day he told his friend that he gets tired very soon with all the traveling. He wished he had traveled more often when he was younger. However since he had been a salaried man he did not get much time to go on trips.

わか りょこう
若いときよく旅行した。

True/False

“End of Warm-Up”

If you have any questions or concerns about the task that you completed in the warm-up session, please write them in the Comments section below.

Comments

Please work on the next 24 stories and judge whether John's sentence is accurate for each story. Please circle “True” if you think the Japanese sentence John wrote matches the content presented in the story. If you believe his sentence does not match the content, please circle “False.” Please keep in mind that his sentence does not have to describe the entire story.

After you complete the 24 stories, please refer to the section titled “Who Is the Winner in 2005?” which is attached at the end of this document. Count the number of sentences you have marked “True” and enter that number in the corresponding bracket. Then write down the name of the contestant who won this year's prize. Please do not count any sentences that were included in the warm-up exercise.

Before you begin the main session, we would like to remind you that your responses on this task will not affect your grade in any way. Therefore, please do not share your responses with anyone. The responses you provide on this task must be entirely based on your own personal views.

Please start now.

Main session

1. Adam, Jason and Mike had been sharing a house together. One day, when Adam woke up in the morning, he noticed that there was a Japanese textbook on the table. He questioned Jason whether he studied Japanese the night before. Jason told him that he was watching a basketball game on TV and he thinks it was Mike who was studying Japanese. Mike woke up, came out of his room, and greeted his

housemates. Then, Jason asked whether Mike studied Japanese the night before. Mike answered: “Yes, I did. I stayed up very late last night to study for the Japanese exam.”

ジェーソンが^{にほんご}日本語を^{べんきょう}勉強した。

True/False

2. Mark is a businessman and often travels around the world on business trips. A few years ago, when he was in Kyoto, his Japanese friends took him to a Noh performance. Mark was fascinated by the performance. This was his first experience with Noh. After that, he has made several trips to Japan, and whenever he has been in Kyoto, he always made it a point to go and watch Noh. Just last month when he went to Russia, he went to see the Russian Opera. He enjoyed that as well.

きょうと^{のう} 京都にいるときいつも^み 能^いを見に行った。

True/False

3. While Ken, Eric and Tom were having lunch together in the cafeteria, Ken mentioned that someone had broken into Mariko’s house. Having been told about the incident by his friend just a few minutes earlier, Ken thought that Eric and Tom had not heard the news yet. They talked about the incident.

Tom: “I was watching TV this morning, and they were airing that story. I hope they catch the guy real soon.”

Eric: “I read about that incident in the newspaper this morning. It said that the case could be related to a couple of other burglaries that have occurred in the last couple of months in the same area.”

しんぶん^よ トムが新聞を読んだ。

True/False

4. Kumiko works in Sapporo and lives in an apartment with a roommate, Akiko. She and Akiko get along very well. Kumiko wanted to give a surprise party to Akiko on her birthday last weekend. She made all the arrangements and decided to bake the birthday cake herself. Kumiko always calls her mother when she wants to try new cake recipes. Last weekend, as always, she called her mother and asked her if she had a new cake recipe. Her mother had just finished baking a lemon cake and suggested that Kumiko tries this one for Akiko’s birthday. Kumiko’s mother gave all the instructions over the phone, while Kumiko followed them step by step. After putting the cake in the oven, she told her mother that she’ll call again after the cake is baked and hung up.

あた^{つく} 新^はしいケーキを作ったときいつも母に^れ レシピ^しを聞いた。

True/False

5. Chris ran into Bill on the way to the gym and asked how he had been doing. He told that the camera he made for the engineering class project broke down and Scott’s camera needed to be fixed as well. The night before he went to the engineering lab with Scott.

Chris: “Were you able to fix it?”

Bill: “Oh, well ... Scott was able to fix his camera in no time. His camera is a very simple one. But because I had installed so many features in my camera, I have yet to find out what caused the problem.

While I was working on my camera, Jason came up to me and asked me if I could take a look at his camera. Because his camera was also very simple, I was able to repair it for him right away. Next time, I must make sure that I am not too ambitious with my classroom projects.”

クリス^{なお}がジェーソンのカメラを直した。

True/ False

6. Saburo works in Tokyo but his hometown is in Komatsu, a small town in Ishikawa prefecture. He spent his childhood years in Komatsu before moving to Tokyo for college and then work. The Golden week holidays were near and he was planning on going home. He showed some old pictures of his hometown to his office colleagues and said that he always looked forward to going back home because he could meet his old friends. He showed a photo of a street in his hometown where he used to play as a child. He mentioned that the neighborhood had decided to close that street for safety reasons. They were now using another street which was close by. Saburo said he felt very sad when he was told about the street closing. He remembered that even until last year, when he walked through that street with his old friends they often remembered their childhood days.

まえ みち ある こども おも だ
前はその道を歩くとき子供のころをよく思い出した。

True/False

7. Both Chris's and Alan's families owned two computers each. But Chris and Alan thought they did not need two computers in their households and were thinking about selling their own computers. One day, when Chris was working out in the gym, he ran into Alan and told him that he finally sold his computer. So he asked Alan if he sold his computer.

Alan: "Well ... I talked about it with my mother. We decided to sell my mother's computer and keep mine instead because my computer is still relatively new. Yesterday, a guy down the street bought my mother's computer, and I set my computer in the living room."

う
クリスが二つのコンピューターを売った。

True/False

8. Mariko just got a job in Tokyo. Last year, when she was still in the final year of college, she used to live with her parents in Hiroshima. She also worked part time at a restaurant. She had a very tight schedule between college and part time work. She always cooked at home whenever she had a chance (mostly over the weekends), but often she ate out or bought food from convenience stores. Now since Mariko has started working in Tokyo, she eats out everyday. She often remembers the time at home when she and her mother used to cook together over the weekends. She is eagerly waiting for a long vacation so that she can visit her home again.

じかん いえ りょうり
時間があつたときいつも家で料理をした。

True/False

9. Steven is a student from Australia who has come to Japan on an exchange program. His major is Japanese language and culture. He often gets invited on home-stay programs by Japanese families. Steven always looks forward to such experiences as he thinks that the best way to learn Japanese culture is by living in it. He especially likes talking and spending time with Japanese families. During the Golden Week holidays, he went and stayed with his friend Jiroo's family. Jiroo also studies in the same university and he and Steven often eat lunch together. Jiroo's parents welcomed Steven to stay with them during the holidays. At dinner time, they talked with Steven about various topics. They were impressed to see how well Steven used the chopsticks to eat his food. Jiroo added that Steven always used chopsticks to eat his lunch and he used them very well. Steven said that back in the hostel, he practiced eating using them everyday. And it took him about 6 months to get this comfortable.

はん た はし じょうず つか
ご飯を食べるときいつもお箸を上手に使った。

True/False

10. Jonathan and Nick had been studying in the library. After a while they wanted to take a break and decided to go outside to have a cigarette. Jonathan usually smoked Marlboros, while New Port was Nick's favorite. When they both were about to pull their cigarettes out of their pockets, they spotted Ben, who was holding an unfamiliar cigarette pack. Nick called to Ben, pointing to his cigarette pack, and asked him where he got it. Ben answered that he bought these when he went to China last month and asked if he would like to try one. Ben looked into the pack only to find that there were no cigarettes left.

Ben: "Nick, I am sorry. I am out of them."

Nick: "That's all right."

Nick then pulled his own New Port pack out of his pocket and smoked to his heart's content.

ニックが吸ったタバコは自分のものじゃなかった。

True/False

11. Kanako is a freshman in college who also attends French language classes. Her French teacher told her that she must practice listening to French language more. So for this purpose, she borrowed some French CDs from the university library. She commutes by train and bus to school and she always has to wait at the bus stop and train station for some time everyday. Earlier she always used to listen to music CDs during the waiting periods at the bus stop and train station, but now for the last few weeks, she has been listening to the French CDs. She has already begun to feel that her listening skills in French are getting better. Even her teacher appreciated her progress.

バス停で待ったときいつも CD を聞いた。

True/False

12. Richard was a graduate student who was studying chemistry. One day when he was walking the street near campus, he ran into Mark who had belonged to the same lab under the same advisor.

Richard: "Hi, Mark. Have you started doing research for your master's thesis yet?"

Mark: "Yes, I have. I finished grading students' papers last week, and now I have been focusing all my energy on finishing my project. How is yours going?"

Richard: "Unfortunately, I have not started the research for my thesis yet. Right now I am analyzing the data for Dr. Smith's research project. Hopefully, his project will be complete in two weeks and then I can start working on my research."

リチャードの研究が終わった。

True/ False

13. Yunhee is a Korean student studying in a university in Nagoya. Her parents live in Korea. When Yunhee initially came to Japan, she did not have any financial assistance. So her father helped her to enroll in the university and settle down. After that, Yunhee started searching for scholarships and part time work. She finally got a part time work at a library. However the money was not much. Whenever she needed money, she always called her father, who helped her with advice on how to balance her expenses. Just last month, she heard that she got a scholarship from the Japanese Government. She first told her parents about the good news. Her father congratulated her and said that she does not have to worry about money matters for the time being.

お金が要るときいつも父に相談した。

True/False

14. Robert Johnson had just moved into a new house with his two sons, Eric and Jason. Since they had moved in only yesterday, there were still many pieces of furniture left in the living room that needed to be moved to other rooms. Robert asked his sons to help move his drawer into his bedroom. Jason went to the

other side of the drawer and was ready to lift it with Robert. Eric, on the other hand, thought Robert and Jason could easily handle the drawer and went toward the chair that was sitting in the corner of the living room. Then Robert spoke to Eric.

Robert: "Eric, you don't have to move the chair because it is going to be used in the living room. Can you help us with this drawer, instead? It's kind of heavy for just two of us."

As soon as he heard Robert's request, Eric went to the drawer. The three of them lifted the drawer together and moved it to Robert's bedroom.

ロバートは^{はこ}いすを運んだ。

True/False

15. Makiko works for an automobile company in Tokyo. Until last month her house was in the suburb of Tokyo and it took her almost three hours to get to her office in the morning. Her daily routine would start early in the morning. She always read the newspaper while sipping her coffee. This was the only relaxing time for her in the otherwise hectic day. Then, she would rush to get the 6am train and reach office by around 9am.

コーヒ^のーを飲んだときいつも^{しんぶん}新聞^よを読んだ。

True/False

16. Bill had two children, Frank and Peter. One evening, when Bill asked his children what they wanted for dinner, both Frank and Peter said that they wanted to eat pizza. Bill called a local pizza shop and had one Family Special delivered to his home. Once the pizza was on the table, Bill and Frank started to eat immediately. After a while, Bill noticed that Peter had not touched the pizza yet and began to worry.

Bill: "Peter, are you O.K.? You are not eating."

Peter: "Well, I thought we were going to get a pizza without olives on it. I don't like olives."

Bill: "If you don't want to eat this pizza, there is fried rice in the refrigerator. If you want to eat fried rice, heat it in the microwave first."

Peter went to the refrigerator, pulled out the plate of fried rice, and put it in the microwave. When it was fully heated, Peter brought it to the table and ate it. He enjoyed the rice.

だれもピザ^たを食べ^ななかった。

True/False

17. David, Eric and Charles were brothers. After dinner one evening, Eric wanted to watch a movie video and wondered if David and Charles wanted to watch it as well.

Eric: "I am going to watch the video in the living room. Do you want to watch it together?"

Charles: "Sure. Let's go."

Eric then turned to David, who kept quiet.

Eric: "Are you going to watch, too, David?"

David: "Well ... I need to finish my math assignment tonight. So I'm going to go to my room and work on the assignment."

Eric: "Are you sure? It is the movie Matrix."

David could not resist the invitation.

David: "O.K. I will do the assignment after watching Matrix."

David, Eric and Charles went to the living room and watched the video together.

デビッドがビデオを見る^み前^{まえ}に食^{しょく}事^じをした。

True/False

18. Bill is an engineering student and has just started working towards his Masters thesis. Until recently he had been using a computer kept in the computer room to do his work and store all data. Three months ago, that particular computer, which he had been using, accidentally crashed. He had not backed up his data elsewhere, and so all the work he had done was lost. This was a big shock. He had to prepare all the data again and remembered to back them up. After that he always saved the data at several places (like floppies and CDs). Last month he purchased his own laptop, and doesn't use the computer room any more for his work. He often tells other students in the computer room about the accident and advises them to back up their data as often as possible when they use that computer, especially.

その経験からコンピューター・ルームのコンピューターを使うときデータをよくバックアップした。

True/False

19. Taroo is a high school student. He is getting ready to take his final exams. Taroo and his friends have been seriously preparing for the exams for the last three months. Every weekend, they get together at someone's place and study together. Taroo's favorite subject is mathematics. He often brings one or two puzzling question to each of these study sessions. The group would always start their session with Taroo's questions. If they got different answers to the questions, which is what happened most of the time they always looked up the textbook again to review the formulae. This exercise has helped the group a lot to look at a new question from various angles and think of different ways to solve it.

答えが違ったときいつももう一度調べた。

True/False

20. Joe invited Jeremy, Brian and Matt for a party at his house. When they had all arrived and had finally settled down, Joe asked each of them if they cared for a Sapporo beer.

Jeremy: "Why not? Sapporo is my favorite."

Brian: "Well ... No."

Matt: "No. But thanks anyway."

Joe handed a bottle of Sapporo to Jeremy, who drank it up in several gulps. Joe opened another bottle of Sapporo for himself and had a sip of it. Then he realized that he also had Budweiser and wondered if Brian and Matt cared for the American brand.

Joe: "Do you guys want Budweiser?"

Brian: "Yeah, I love Budweiser."

Matt: "Sorry, I can't drink beer. Do you have sake?"

Joe: "Sure."

Joe went to the kitchen and opened the refrigerator. He picked a can of Budweiser from the first shelf. He also pulled a bottle of sake from the refrigerator in the living room he gave the Budweiser to Brian and handed the sake to Matt. Matt didn't drink the sake immediately, though he was thirsty. Brian opened the Budweiser and sipped it while listening to Jeremy's story.

みんなはビールを飲んだが酒は飲まなかった。

True/False

21. Richard is a final year undergraduate student at a university in America. His major is Economics and he has been focusing on the topic of post-war Japanese economy for his research thesis. Before beginning to write the actual thesis, about six months ago, his advisor asked him to turn in a report on each chapter that he intended to include in the thesis. While writing those reports, Richard always spent long hours in the library and internet looking for a number of books and articles. This exercise was very exhausting but his advisor told him that this way he will be able to focus on all of the important points in each chapter. He has

already written about five papers in all so far. Now, he is looking forward to give a final shape to his actual thesis.

レポートを書くときいつも本をたくさん探した。 True/False

22. Adam, Bill, Jeremy and Paul were taking the same math class together, and the final exam was scheduled for the following week. The instructor was allowing the students to bring their notebooks to the exam, but he would not allow them to bring their textbooks. Since Adam, Bill, Jeremy and Paul were very sneaky, they decided to copy their textbooks and put the copies in their notebooks. When they got to Kinko's, there were only two copiers available. Adam told Bill that he did not understand why the instructor would not let them bring their textbooks to the exam. Then he pulled his textbook from his sack, which was blue, and copied several pages. Bill, too, picked his textbook from his sack, which was red, and made copies of certain pages. When they finished making copies they left Kinko's, telling Jeremy and Paul that they (Adam and Bill) were heading to the gym to work out. While Jeremy was copying his textbook, he looked at Paul and noticed that the pages of Paul's textbook were filled with markings and notes. Jeremy wondered whether Paul would be able to make clear copies.
Jeremy: "You can copy my textbook if you want."
Paul: "No, thanks. I think I understand most of the textbook. But I want to make copies of the notes I wrote in the book during the lecture."

Paul then proceeded to make several copies from his own textbook. When both Jeremy and Paul finished making copies, they headed back to their dorm.

ポールがジェレミーの教科書をコピーした。 True/ False

23. Mariya is a Mexican girl, who is a foreign student in Japan. When she first came to Japan, she had studied Japanese only for a year in Mexico. She had the shortest Japanese language experience among other students of her class. In her Japanese language class, she always spoke very slowly in Japanese. Everyone started thinking that Mariya always spoke very slowly. But one time, they heard her speak in Spanish on the phone and were surprised to hear how fast she spoke. Mariya smiled and said that she had to think a lot before talking in Japanese, but she didn't have to think so much in Spanish. Perhaps, if she thought a little more while speaking Spanish too, she'll have fewer fights with her friends. Everyone laughed.

日本語の授業では話したときいつもゆっくりしゃべった。 True/False

24. Larry had three sons, Eric, Mike and Ted. One day, he decided to clean the house. He began with the kitchen. After a while, he saw Eric and Mike watching TV in the living room and wondered if they could help him.

Larry: "I am doing the house-cleaning right now. I wonder if you guys could help me with that."

Eric: "Sure, Dad. Anytime you want."

Mike: "I am going to meet my friend at 2:00. I think I can help you for about twenty minutes or so."

Eric then vacuumed the floor in the living room while Mike took the kitchen garbage to the trash. While Larry was wiping off the kitchen table, he saw Ted walking toward the entrance.

Larry: "Ted, could you help us?"

Ted: "Dad, I want to meet my friend."

Larry: "All right. You must be back before 5:00."

Ted: "O.K."

Ted rode his bike to meet his friend while the rest of the family cleaned the house together.

エリックは掃除^{そうじ}しなかった。

True/False

“End of Main session”

Who is the Winner in 2005?

1) Indicate the number of “True” responses for each contestant:

Name	Number of True Responses
Peter	(14)
Ruth	(18)
Jane	(15)
John	()

2) Write down the name of the contestant who won this year’s prize:

The winner for this year is ()!

This is all. Thank you very much for your time.

APPENDIX E

TRANSLATIONS OF TEST STORIES: CHINESE, KOREAN, JAPANESE TVJ 1

Chinese Translation (TVJ 1)

(Directions)

指示

为了选拔有两年多日语学习经历的美国学生的日语大会的冠军，我们希望得到你的合作。这个大会要求参加者在看了各种情景的故事录像后用日语来为各形容各个故事且写一个句子。今年我们有四位参加者——约翰、彼德、如斯、杰恩。彼德、如斯、杰恩已经作了记录，只有约翰的还没有。这次的冠军可得到免费包括往返飞机票在内的去日本旅游两星期的待遇。

故事的内容已经写下来了。你的任务是读这些中文句子然后判断它跟它下面的日语句子的内容不符合。如果你认为符合请划‘True’，否则请划‘False’。请注意，他的句子不需要说明故事中全部的细节。

这些句子你搞得如何并不会关系到你的成绩，因此请不要同别人商量你的答案。

为了了解你对这次举动理解的程度，我们将先进入预备练习。首先请回答下面的五个问题，这五个问题的结尾处，你将看到写有‘预备练习结束’的文字。之后请随下一页的指示，继续进行。

.
.
.

“预备练习结束”

到这为止，如果有什么疑问或评语请写在下面的评语栏。

“评语”

“正文”

现在我们进入24个故事，请你读这些故事，然后判断约翰写的句子是否符合故事的真实内容。如果你认为符合请划‘True’，否则请划‘False’。他的句子不需要详细说明故事中的细节。当你完成全部的故事之后，请你进入“2005年的冠军”这一阶段。这段被放在这篇的后面部分。除掉预备练习问题，请你计算你划了几个“True”且把这个数字填它下面的表中，然后请写出今年的冠军的名字。请不要计算预备练习问题。最后再一次提醒您，这次举动你表现得如何并不会关系到你的成绩，因此请不要同别人商量。你的答案一定要是你自己的意见。

请开始。

.
.

“正文结束”

2005年的冠军

在下面的表格里填上约翰的“True”的个数。

姓名	“True”的个数
彼德	
如斯	
杰恩	
则恩	

请写下今年的冠军的名字

今年的冠军是（ ）

(Test Stories)

2. 花子小姐是一个大学生，她正翘首以待她的暑假。她计划与她的朋友去夏威夷度假。某一旅行社的人答应给她们折扣票。他说他将在下星期日早晨联络花子小姐，并告诉她更多关于折扣票的信息。花子小姐每星期日早晨 10 点去教会。她忘记提前告诉旅行社的人在星期日的 10 点到 12 点之间并不会在家。到了星期日她一直等到差几分钟 10 点，最后决定出发。她想如果在她离开之后他打电话来，她将用留言机录下电话，过后再回电给他。她刚刚要离开，电话就响了，正是他。她告诉他她必须马上离开，她将在 12 点左右回来然后打电话给他。她放下话筒匆忙离开。

いえ で でんわ
家を出るとき電話がかかってきた。

True/False

4. 文子小姐是大学 4 年级的学生，她与她的室友人合住一间屋子。她正在写她的毕业论文，她在因特网订购了一本书。她被告知这本书将在一星期之内送到，现在已过了一星期，她希望在今天或明天送到。今天她从大学回来，刚一进屋子就发现桌子上放着一个包裹。她的室友说她替文子小姐收下了邮差送来的包裹。文子小姐谢过她开始打开那个包裹，果然是她订购的那本书。

へ や はい み
あやこが部屋に入るときパッケージを見つけた。

True/False

6. 纪美子小姐是一位办公室女职员，她工作在京都。她的双亲住在大阪。她新结交的男朋是和她同一个公司的经理。她决定介绍她的男朋友给她的父母认识。所以他们登上了从京都往大阪的电车。她的父母非常高兴见到他们，并要求他们在到达大阪站之前打电话。因为她的父母住在离大阪站很近的地方，所以他们想去接站。当他们快要到达大阪站的前一站时，她决定打电话给她的双亲，却发现手机没电了。没办法只好等到到站再说了。车一到站，她就赶快用公用电话给父母打了电话。

えき つ りょうしん でんわ
駅に着いたとき両親に電話した。

True/False

8. 太郎是一位高中生，他每天坐公共汽车去上学。一天早晨在他等公共汽车时，他看见一位骑自行车的人无意中撞到了过马路的老人。太郎跑过去帮忙。这位老人只是受了一点轻伤，可那骑自行车的人还是决定送他去医院检查。他希望太郎帮忙。太郎立刻随他们去了。太郎离开他们后，赶快去学校，幸好公共汽车马上就来了。如果错过了这一个，下一个要等几分钟。他的第一节课是数学。当他进入教室时，老师正要开始上课。于是他悄悄走向自己的座位坐下。

せんせい じゅぎょう はい たらう
先生が授業を始めるとき太郎が入ってきた。

True/False

9. 中野先生在东京经营一家书店。他每天早晨 8 点半去书店，清扫之后在 9 点开始营业。昨天他刚刚要出发去书店时，因为他在名古屋读大学的女儿打来了电话，他说了一下电话。当他接完电话时，他发现时间已是 9 点了。他飞奔到他的书店，并开始用钥匙打开百叶窗。当他在开窗户时，他看见了隔壁老板铃木先生，他们像往常一样互相打招呼。

みせ あ すずき あ
店を開けたとき鈴木さんと会った。

True/False

11. 铃木先生、木村先生、和田中先生是同事。至今为止他们差不多在这个公司里工作 5 年了。他们每月聚一次谈一些关于公司工作环境的话题。这个聚会办得很成功，因为他们有了一个机会能轻松地谈一些对工作的意见、提案等。今天午饭时间，他们 3 人聚在铃木先生的办公室商量下一次聚

会的时间。他们临时定在星期五午饭时间。就在这时木村先生记起他的秘书真纪子小姐曾经向他说过也想参加这聚会。所以他们打电话给她并叫她来铃木先生的办公室。然后他们问她这个时间是否合适她。木村先生向她道歉说在决定时间之前忘记叫她了。可她说那个时间她正好有空闲。她感谢他们邀请了她。

かいぎ ひ き こ き
会議の日を決めるときまさ子に来てもらった。

True/False

13. 玛丽的生日要到了，她期待着邀请朋友与切生日蛋糕。她的妈妈为她烤好了一个大巧克力蛋糕，她的爸爸正如他许诺的，在她切蛋糕时给了她意外的惊喜。盼望已久的时刻终于来到了，她快乐地吹灭了蜡烛。就在她切了第一块蛋糕时，灯灭了很快又亮了，玛丽看见她的爸爸手里拿着一个唱着生日歌的玩具熊走进屋子。她快乐得跳起来，玛丽跑向她的爸爸且紧紧地拥抱了他。

き でんき き
パーティーでケーキを切ったとき電気が消えた。

True/False

15. 美纪是一位高中生，她非常喜欢她的猫。这是她的妈妈上个月给她的生日礼物。上星期当她从学校回来，发现她的猫不在屋子里。她很不安到处寻找，可是家里找不到，于是就在家附近找。两个小时过去了还是没找到。她凄凄地回到家。就在她进屋时，听到楼上有什么动静。她上楼查看所有的屋子。她打开她的壁橱门，里面什么都没有。这时她听见身后一声咚的声音。可就在她刚要关上壁橱门时，听到放在壁橱、盖着盖的箱子里喵的一声。她赶快打开壁橱，在箱子里找到了猫。她总算松了一口气。她看见她的小妹妹把饭碗掉在了她后面的地上，造成刚才那一声咚，也许是它吵醒了猫。

し ねこ こえ き
ドアを閉めたとき猫の声が聞こえた。

True/False

18. 裕香和同班同学决定要组办一个郊游。他们聚在裕香的家里商量这件事，比如地方、日期和时间。然后他们列要去的人员名单。他们决定邀请他们的两位老师。裕香和她的朋友珠实负责联络他们。在裕香联络第一位老师之前，她看好电话号码然后告诉珠实她将打给谁，这样珠实就能用手机同时打给第二位老师。她们联络完老师，接着联络班里的同学们。

れんらく でんわばんごう しら
ゆがが連絡するとき電話番号を調べた。

True/False

19. 次郎是名古屋某所大学的二年级学生，他很喜欢听收音机。最喜欢听的是每星期六晚6点钟的新闻节目。在那之前从4点钟到5点半，他总是和朋友打网球。昨天当他打完球回家，还没开灯就打开了收音机，他刚要打开收音机时，墙上的钟就响了。次郎很高兴他准时赶到。他开了收音机且听了 he 喜欢的节目。

とけい な
ラジオをつけたとき時計が鳴った。

True/False

21. 正雄是大学一年级的学生，他正在为他的英语课写一篇报告。这是他进这个大学后第一篇用英语写的报告，所以他非常小心、以免漏掉老师在班里说的重点。到了要交的日子，他把报告带来，用书钉钉好并像其他同学一样走到教室前面来交它。其他同学还在钉书钉时，他是第一批交上报告的学生的其中之一，可是他刚刚交完报告，忽然想起他忘记了老师一再强调的在报告末尾添上参考文献。他把这个疏忽告诉了老师并向老师是否可以明天另交参考文献。老师同意了但告诉他以后要更加注意了。

だ たいせつ おも だ
レポートを出すとき大切なポイントを思い出した。

True/False

23. 三郎是日本某所大学の二年級(にねんぎ)の学生。他每天都大约在7点的时候从大学回家。吃完晚饭后,他总是先写作业然后看电视。昨晚他看一部日本电影直到很晚。电影结束后,他站起来要关掉电视。就在他要关的时候,时钟响了,这才注意到已是半夜1点。明天他很早就有课要上,所以他赶紧关掉电视睡觉了。

テレビを消したとき時間(じかん)に気付(きづ)いた。

True/False

Korean Translation (TVJ 1)

(Directions)

지시

2년 이상 일본어를 공부해오고 있는 미국인 학생들중에 가장 일본어가 능숙한 사람을 평가하려 합니다. 이 대회(대회)의 참가자들은 다양한 상황의 비디오녹화 영상을 보고 각 상황에 대하여 한 문장씩 일본어로 작문하게 되어 있습니다. 올해는 존, 피터, 루쓰, 재인. 4명의 경쟁자가 있습니다. 피터와 루쓰 그리고 재인의 결과는 이미 얻어진 상태이며 여기서는 존의 일본어 실력에 대해 알고자 합니다. 이 대회의 승자는 일본 왕복 비행기표를 포함하여 일본에서 2주간 무료로 머물 수 있는 특권을 얻게 됩니다.

녹화된 대화는 문장화하여 여러분에게 보여지게 됩니다. 한국어로 쓰여진 각각의 이야기를 읽고 이야기 밑에 써여진 일본어 문장이 그 내용에 합치되는가의 여부를 판단해 주십시오. 만약 존이 작성한 일본어 문장이 이야기의 내용과 합치한다고 생각되면 “True”에 표시하고 존의 문장이 그 내용과 합치되지 않는다고 생각되면 “False”에 동그라미 해주십시오. 단, 존의 문장이 이야기의 전체를 다룰 필요는 없다는 사실을 염두에 두시고 판단해주시기 바랍니다.

이 작업은 당신의 성적과는 아무런 연관이 없습니다. 그러므로 여러분의 대답을 다른 사람과 상의하지 말아주십시오.

당신이 작업내용을 잘 이해하였는지를 알아보기 위하여 먼저 사전연습을 하고자 합니다. 다음 다섯 이야기를 보아주십시오. 다섯번째 이야기의 끝에 “연습문제 끝”이라는 단어가 보입니다. 다섯번째 이야기를 마치면 다음 장에 써여진 지시를 따라주십시오.

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“연습문제 끝”

연습문제에서 여러분이 한 일에 대해 질문이나 확실치 않은 점이 있다면 아래의 코멘트란에 적어주십시오.

논평(코멘트)

다음 24개의 이야기를 읽고 존의 문장이 각 이야기에 일치하는지를 판단해 주십시오. 존의 일본어 문장이 이야기에 제시된 내용과 합치한다고 생각되면 “True”에 동그라미 하십시오. 그의 문장이 내용과 합치하지 않는다고 생각되면 “False”에 동그라미 하십시오. 그의 문장이 전체 이야기를 묘사한 것이 아니라는 것을 염두에 두시기 바랍니다.

24개의 이야기를 마친후 이 자료의 끝에 첨부된 “2005년의 승자는 누구인가?”의 난을 결정해 주십시오. 여러분이 “True”로 표시한 문장의 수를 세어 해당하는 괄호에 적고 올해의 승자가 누구인지 이름을 적어주십시오. 연습문제의 문장은 제외하여 계산해 주십시오.

본론에 들어가기에 앞서 이 실험에 대한 당신의 대답이 결코 당신의 성적에 영향을 미치지 않는다는 점을 기억하십시오 그러므로 당신의 대답을 타인과 상의하지 않도록 하십시오.이 작업에 대해 당신이 제공하는 대답은 전적으로 당신의 개인적 관점에 근거한것이어야 합니다 지금부터 시작해 주십시오.

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“본론의 끝”

“2005 년의 승자는 누구인가?”

각 경쟁자에 대해 “True”의 응답수를 표시하십시오.

이름	True 응답의 수
피터	
루쓰	
재인	
존	

2)올해의 우승자가 누구인지 그 이름을 적어주십시오.

올해의 우승자는 ()!

(Test Stories)

2. 하나코는 대학생이며 여름방학을 간절히 기다리고 있다.그녀는 친구들과 하와이로 놀러 갈 계획이다.하나코와 그 친구들을 위해 티켓을 끊어 줄 여행사 직원은 단체 할인을 약속하였다.그 직원은 다음주 일요일 아침에 할인에 관한 더 자세한 정보를 위해 하나코에게 연락하겠다고 말했었다.하나코는 매주 일요일 아침 10 시에 교회에 간다.그래서, 그녀는 오전 10 시에서 정오사이에는 전화를 받을 수 없었으나 그것을 직원에게 미리 알리는 것을 잊고 있었다.일요일 아침 그녀는 10 시 몇분 전까지 기다리다 교회로 출발하기로 했다.그녀가 떠난 후에 그 직원이 전화를 해도 자동응답기가 메시지를 받으면 다시 그녀가 연락을 취할수 있을 것이라고 생각하였다.그녀가 집을 막 나서려 할때, 전화가 울렸고 그녀가 전화를 받았다. 그 직원이었다.하나코는 자기가 교회에 가려하기 때문에, 정오경 집에 돌아와서 다시 그에게 전화하겠다고 하였다.그러고는, 그녀는 수화기를 내려놓고 서둘러서 나갔다.

いえ で でんわ
家を出るとき電話がかかってきた。

True/False

4) 아야코는 대학 4 년생이며 원룸아파트에서 친구와 함께 살고있다.그녀는 현재 논문을 쓰고 있으며 온라인으로 책을 주문해 놓았다. 그녀는 1 주일 이내에 그 책을 받을 것이라고 알고 있었고 언제라도 그 책이 도착하기를 기다리고 있었다.오늘 학교를 마치고 집에 돌아와 그녀가 방으로 들어가자 탁자위에 소포가 있었다.그녀의 룸메이트인 친구는 벌써 방에 돌아와 있었는데 그녀가 아야코를 위해 우체부로부터 소포를 받아 두었다고 했다.아야코는 친구에게 고맙다고 한후 소포를 뜯었다.그녀가 주문했던 책이었다.

あやこが部屋に入るときパッケージを見つけた。

True/False

6. 키미코는 직장여성이며 교토에서 근무하고 있다. 그녀의 양친은 오사카에 살고 있다. 키미코의 새 남자친구는 같은 회사의 매니저이다. 키미코는 그 남자친구를 부모님께 소개하기로 결심했다. 그래서 그들은 기차를 타고 교토에서 오사카로 갔다. 그녀의 부모님은 키미코와 그녀의 남자친구를 무척 만나고 싶었기에 그녀에게 오사카 역에 도착하기 전에 전화해 줄 것을 부탁했다. 그녀의 부모님은 그역 근처에 살았기에 그들을 차로 마중나갈 생각이었다. 키미코와 남자친구가 오사카역 바로 전 정거장에 도착하려 할때 키미코는 부모님께 전화하려고 생각하였지만 휴대폰의 배터리가 다 떨어졌음을 알았다. 그래서 그녀는 오사카 역에 도착할때까지 기다렸다. 오사카에 도착하자 그녀는 급히 공중전화로 부모님께 전화했다.

えき つ りょうしん でんわ
駅に着いたとき両親に電話した。

True/False

8. 타로는 고등학생이며 매일 학교에 버스로 통학한다. 어느날 아침 그는 버스를 기다리다가 자전거가 길을 건너던 노인과 부딪히는 장면을 목격했다. 타로는 서둘러서 도와주러 갔다. 노인은 조금 다쳤을 뿐이었지만 자전거를 타고 있던 사람은 그를 병원에 데려가기로 했다. 그는 타로에게 도와달라고 부탁했다. 타로는 즉시 그들과 함께 갔다. 노인과 자전거를 탔던 사람을 병원에 남겨두고 그는 서둘러 학교로 갔다. 다행히 그는 버스를 곧 탈수 있었다. 만약 그가 이번 버스를 놓쳤더라면 다음 버스는 몇분 후에 올 것이었다. 첫 수업은 수학이었다. 그가 교실로 들어갔을때, 선생님이 막 수업을 시작하려고 하고 있었다. 그는 조용히 자리로 가서 앉았다.

せんせい じゅぎょう はじ たろう はい
先生が授業を始めるとき太郎が入ってきた。

True/False

9. 나카노씨는 도쿄에서 책방을 운영하고 있다. 매일 아침 그는 8시 30분에 가게로 가서 청소를 하고 9시에 문을 연다. 어제 그가 막 일하러 나가려 할때 그는 나고야의 대학에서 공부하고 있는 딸의 전화를 받았다. 그는 그녀와 이야기했고 전화가 끝날 무렵에 그는 벌써 9시가 된 것을 깨달았다. 그는 가게로 서둘러 가서는 밖에서 셔터를 열기 시작했다. 셔터를 열면서 그는 이웃가게의 주인인 스즈키씨와 일상적인 인사를 나누었다.

みせ あ すずき あ
店を開けたとき鈴木さんと会った。

True/False

11. 스즈키, 키무라, 타나카는 작은 회사의 직장동료이다. 그들은 지금 거의 5년동안 이곳에서 일하고 있다. 그들은 직업환경과 관련한 다양한 문제들에 관해 토론 하기 위해 비공식적인 모임을 한달에 한번씩 가진다. 편안한 분위기에서 새로운 아이디어를 도출할 뿐만 아니라 그들의 관심사를 말할 수 있는 기회를 가질수 있다는 점에서 이 모임들은 매우 성공적이었다. 오늘 점심식사 시간에 그들 세명은 다음 모임의 날짜를 정하기위해 스즈키의 사무실에서 만났다. 그들은 임시적으로 금요일 점심시간으로 정했다. 바로 그때 키무라는 그의 비서인 마사코가 그들의 모임에 참석할 관심을 보였기에 그녀도 부르기로 했던것을 기억해 냈다. 그래서 그는 마사코에게 전화해 그녀를 스즈키의 방으로 오도록 했다. 그리고 그들은 그녀에게 정해진 날이 적당한지 물었다. 키무라는 그들이 날짜를 정하기 전에 그녀에게 전화하지 못한 것에 대해 사과했다. 그러나, 그녀는 정해진 날짜가 괜찮다고 했고 자기를 불러준것에 대해 감사하다고 했다.

かいぎ ひ き こ き
会議の日を決めるときまさ子に来てもらった。

True/False

13. 마리는 그녀의 8 번째 생일을 즐기고 있었고 그녀의 친구들을 불러 케익을 자를 것에 대해 몹시 신이나 있었다. 그녀의 어머니는 그녀를 위해 큰 초콜릿 케익을 구웠고 아버지는 깜짝 선물을 준비하고 있었으며 케익을 자를 때 그녀에게 주겠다고 약속했다. 기다리던 순간이 왔고 마리는 행복한 마음으로 촛불을 켜었다. 그녀가 케익을 자르자마자 전기가 나갔다가 잠시 후 다시 들어왔다. 마리는 아버지가 생일 축하 노래를 부르는 커다란 곰인형을 안고 방으로 들어오는 것을 보았다. 그녀는 기뻐서 짙충거리며 뛰어 가 아버지를 껴안았다.

パーティーでケーキを切ったとき電気が消えた。

True/False

15. 미키는 여고생이며 그녀의 고양이를 매우 좋아한다. 그녀는 지난달 생일 선물로 어머니로부터 이 고양이를 받았다. 지난주 미키가 학교에서 돌아왔을 때 그녀는 집에서 고양이를 찾을 수 없었다. 그녀는 매우 걱정이 되어 집 안 여기저기 찾아 다니기 시작했다. 집에서 고양이를 찾을 수 없자, 그녀는 밖으로 나가 동네를 찾아 헤매었다. 두 시간이나 찾았지만 고양이는 아무데도 없었다. 미키는 슬퍼져서 집으로 돌아왔다. 그녀가 집으로 들어가자마자 그녀는 윗층의 방으로부터 시끄러운 소리를 들었다. 그녀는 올라가서 모든 방을 살폈다. 그녀는 그녀 방의 옷장 문을 열어 보았지만 아무것도 발견하지 못했다. 그때 그녀는 뒤에서 쿵하는 소리를 들었다. 그러나 그녀가 막 문을 닫으려 할 때, 그녀는 고양이의 야옹소리가 옷장안의 닫혀진 상자 속에서 나는 것을 들었다. 그녀는 급히 옷장을 열었고 상자 속에서 고양이를 찾았다. 그녀는 마음이 놓였다. 그녀는 그녀의 여동생이 떨어뜨린 씨리얼 그릇이 쿵하는 소리를 냈으며 그 소리가 아마도 고양이를 깨웠을 것이라고 생각했다.

ドアを開めたとき猫の声が聞こえた。

True/False

18. 유카와 그녀의 급우들은 소풍을 가기로 했다. 그들은 유카의 집에서 만나 계획을 짰다. 그들은 장소와 날짜 등에 관해 이야기했다. 그들은 그 행사에 참석해 줄 것 같은 사람들의 명단을 만들었다. 그들은 선생님도 두 분 모시기로 했다. 유카와 그녀의 친구 타마미가 두 선생님에게 연락하는 것을 담당했다. 유카가 두 분 중 첫 번째 선생님께 연락하기 직전에, 그녀는 전화번호를 확인하고 타마미에게 자기가 누구에게 전화하고 있는지를 말했다. 그래야 타마미가 나머지 한 분 선생님께 동시에 휴대폰으로 전화를 할 수 있을 것이었다. 그들은 선생님과 연락을 끝낸 후, 나머지 급우들에게 연락했다.

ゆがが連絡するとき電話番号を調べた。

True/False

19. 지로는 나고야에 있는 대학 2 년생이며 그는 라디오 청취를 좋아한다. 그가 가장 좋아하는 라디오 토크쇼는 매주 토요일 오후 6 시에 방송된다. 그는 친구들과 4 시에서 5 시 반 정도까지 테니스를 친다. 어제 (토요일) 그는 테니스를 치고 돌아와서 그의 방 불을 켜기도 전에 라디오를 켰다. 그가 라디오를 켜자마자 벽시계가 울렸다. 지로는 시간을 맞추어 주었기 때문이다. 그는 방의 불을 켜고 좋아하는 프로그램을 계속 들었다.

ラジオをつけたとき時計が鳴った。

True/False

21. 마사오는 대학 1 년생이며 영어수업의 레포트를 쓰고 있다. 이것은 그가 대학에 들어와 처음으로 영어로 적는 레포트이어서 그는 선생님이 수업 시간에 지적한 모든 중요 점들에 주의를 기울이고 있었다. 제출 당일날 다른 사람들처럼 그는 레포트를 정리하고 스테이플로 철한 후

제출하러 교실 앞으로 가지고 갔다. 다른 학생들이 아직 레포트를 철하고 있는 동안 그는 제출하는 줄의 선두편에 서 있었다. 하지만 그가 선생님에게 레포트를 제출하고 난 순간 그는 마지막에 참고문헌을 적는 것을 잊었다는 것을 상기했다. 선생님은 그것에 관해 전에 특별히 지적한바가 있었다. 그는 선생님에게 실수에 관해 이야기 했고 그가 참고문헌을 다음날 별도로 제출해도 될지를 물었다. 선생님은 알겠다고 했지만 다음부터는 조심하라고 말했다.

レポートを出すとき大切なポイントをおもいだした。

True/False

23. 사부로로는 일본에 있는 대학 2 년생이다. 그는 매일 7 시경에 학교에서 돌아온다. 저녁을 먹고 나면 그는 보통 숙제를 하고 TV 를 본다. 어젯밤 그는 일본 영화를 늦게까지 보았다. 영화가 끝나, 그는 TV 를 끄려고 일어섰다. 그가 TV 를 끄기 직전에 그는 시계소리를 들었고 새벽 1 시임을 알았다. 그는 다음날 일찍 수업이 있기에 빨리 TV 를 끄고 자러갔다.

テレビを消したとき時間に気付いた。

True/False

Japanese Translation (TVJ 1)

(Directions)

指示

二年ちょっと日本語を勉強したアメリカ人の学生のための日本語大会で受賞者を決めるのにあなたのご協力をお願いします。大会に参加する参加者はいろいろな場面において取ったビデオテープを見てその場面について日本語で一文を書かなければなりません。今年の参加者はジョン、ピーター、ルースとジェーンの四人でした。ピーター、ルースとジェーンのスコアはもう入力してありますがジョンだけのスコアはまだ入っていません。この大会で優勝した学生は日本で二週間の滞在費と往復航空券をもらうことができます。

録画したビデオの内容はもう書き起こしてあります。あなたは各ストーリーを読んでその下に書いてある文が上のストーリーに合っているかどうかを判断してください。文がストーリーと合っている場合は True に、合っていない場合は

False に○を付けてください。この文はストーリーを必ずしもまとめるわけではありません。

このタスクがあなたの成績には一切影響しませんからほかの人と相談や答え合わせは遠慮してください。よろしくお願いします。

あなたがこの指示をどれだけ分かったかを確かめるためにまず練習しましょう。まず次の五つの問に答えてください。5問の終わりに「練習終了」が出ます。そのあと次のページの指示に従って進んでください。

・
・
・

練習終了

このタスクに関して質問かコメントがあったらしたに書いてください。

「コメント」

「本文」

次の24問を読んでそれらに伴うジョンに書かれた文が正しいかどうかを判断してください。文がストーリーと合っている場合は True に、合っていない場合は False に○を付けてください。注
ジョンの文はすべてのストーリーを必ずしもまとめるわけではありません。

一番最後の24問目のストーリーの後「2005年の優勝者」の部分を参照してください。練習問題を除いて(本文だけ)に出た True の答えを数えて、その数字を表に書き込んでください。それから、今年の優勝者の名前を書いてください。練習問題は除いてください。

もう一度注意点を繰り返しますとこのタスクがあなたの成績には一切影響しませんからほかの人と相談や答え合わせは遠慮してください。

それでは、はじめてください。

.
. .
.

本文終了

2005年の優勝者

1) 次の表にジョンの True の回答数を書いてください。

名前	True の回答数
ピーター	
ルース	
ジェーン	
ジョン	

2) 今年の優勝者の名前を書いてください：

今年の優勝者は_____です。

(Test Stories)

2. 花子は大学生で今年の夏休みを首を長くして待っている。友達と一緒にハワイへ行く予定だ。旅行業者は花子と彼女の友達にグループ割引をくれると言った。その割引についてもっと詳しいことは次の日曜日に電話で伝えと言った。花子は毎週日曜日の朝10時に教会へ行くことがある。だけど日曜日の朝10時からお昼の間は家にいないことを旅行業者に言い忘れた。当日、花子は10時ちょっと前まで待って、家を出ることにした。もし電話がかかってくれば、留守番電話にきっとメッセージが入るだろうと思った。出かけようとする時点で電話がなった。花子が受話器を取ったら旅行業者だった。花子は今教会へ行くところだと言って、戻ってから12時ごろ電話すると言った。彼女は受話器を戻して急いで出た。

いえ で でんわ
家を出るとき電話がかかってきた。

True/False

4. あやこは大学の四年生でルームメイトと一緒に一部屋のアパートに住んでいる。彼女はこのごろ卒業論文を書いていて、インターネットで本を注文した。一週間以内に本が届くと言われたの

だ。1週間経ったので、今日か明日までに届くはずだった。今日大学から帰って部屋に入ったらテーブルの上にパッケージを見つけた。アパートにいたルームメートがそのとき出て、そのパッケージを郵便集配人から受け取ったと言った。あやこがルームメートにありがとうと言って早速パッケージを開けてたら注文した本だった。

あやこが部屋に入るときパッケージを見つけた。

True/False

6. 紀美子はOLで京都で働いている。彼女の両親は大阪に住んでいる。紀美子の最近できた彼氏が同じ会社で働いている。彼氏を両親に紹介しようと思った。そして紀美子と彼女の彼氏は京都から大阪までの電車に乗った。紀美子の両親は二人と会えることを楽しみにしていたので紀美子に大阪に着く前に電話してくれるように言った。両親は駅の近くに住んでいるから迎えにいきましょうと思っていた。紀美子と彼氏が大阪より一つ前の駅に到着する前に両親に携帯で電話しようとした。そうしたら携帯電話の電池が切れているということに気付いた。仕方がなく大阪に着いてから公衆電話で両親に電話した。

駅に着いたとき両親に電話した。

True/False

8. 太郎が高校生で毎日バスで学校に通っている。ある日の朝バスを待っている間にある自転車がそこで歩いていた老人にぶつかったのを見た。太郎も助けに行った。老人が少し怪我をしたので自転車の人が彼を病院へ連れて行こうと決心した。太郎に助けを求めたら太郎は早速一緒に行くと言った。その老人と自転車の人を病院まで送って急いで学校に向かった。幸いにそのときバスも来た。このバスに乗り遅れたら次のはもうちょっとあとだった。一限目は数学だった。クラスに入ったら先生が授業を始めようとしていた。太郎は静かに自分の席に行って座った。その後すぐ授業が始まった。

先生が授業を始めるとき太郎が入ってきた。

True/False

9. 中野さんは東京の本屋さんだ。中野さんは毎朝8:30に本屋へ行って掃除してから9時ごろ店を開ける。昨日家を出ようとしたとき名古屋で勉強している娘さんから電話がかかってきた。彼女と話していて時間に気付かなかった。気付いたらもう9時だった。急いで本屋に行って外側からシャッターを開けようとした。その時点で隣の店の鈴木さんを見た。中野さんは毎日のように挨拶し、シャッターを開けた。

店を開けたとき鈴木さんと会った。

True/False

11. 鈴木さん、木村さんと田中さんが同じ会社で働いている。みんなここに入ってから五年になっている。彼らが毎月一回集まって会社の仕事の環境について話し合う。この話し合いが今までとても成功した理由はみんなこの場を使ってそれぞれ仕事に関する心配事や提案などを気軽にみんなの前で言えるからだ。次の話し合いの日時を決めるのに今日お昼に三人が鈴木さんの部屋で集まった。三人が金曜日のお昼に話し合いをすることにした。そのとき木村さんが秘書のまさ子さんも次回話し合いに参加したいと言っていたことを思い出した。だから彼女に鈴木さんの部屋に来てもらってもうすでに決めてしまった日にちと時間がいいかどうか聞いた。木村さんは決める前に呼んであげなかったことをわびた。しかしまさ子さんはそのことを気にしなかった。金曜日のお昼時間がいいと言って、参加させてくれることをみんなに感謝した。

かいぎ ひ き こ き
会議の日を決めるときまさ子に来てもらった。

True/False

13. マリーが八歳の誕生日を祝おうとしていて友達を招いてケーキを切ることを楽しみにしていた。マリーのお母さんがマリーのためにケーキを作ってくれた。そしてお父さんはマリーに秘密のプレゼントをくれるように約束した。いよいよ待っていた瞬間が来た。マリーが喜んでろうそくを吹き消した。ケーキを切ったとたんに部屋の電気が消えてしまったが次の瞬間にまたついた。お父さんがその時バースデーソングを歌っていたぬいぐるみの熊を持って部屋に入ってきた。マリーはうれしくてうれしくてたまらなかった。ケーキを切って早速お父さんを抱きしめた。

き でんき き
パーティーでケーキを切ったとき電気が消えた。

True/False

15. みきは高校生で自分が飼っている猫が大好きです。先月お母さんからこの猫を誕生日のプレゼントとしてもらった。先週みきが学校から帰ったら猫は家にいなかった。彼女はとても心配になって猫を探し始めた。家で見つからなくて近所を探そうとした。二時間ぐらい経っても見つからなかった。みきががっかりして家に帰った。家に入ったところ二階の部屋から音が聞こえた。みきが二階に行って全部の部屋を探した。自分の部屋の押入れを開けてみたら何もなかった。その時後ろからどしんと落ちる音がした。しかし、押入れのドアを閉めようとしたところに押入れの中に置いてあった箱の中から猫の声が聞こえた。また押入れを開けて箱を開けたところねこがその中にいた。みきはほっとした。うしろにみきの妹さんが自分のセリアルの食器を落としてさきのおとをさせたのだ。それが多分猫を起こしてくれたかもしれない。

し ねこ こえ き
ドアを閉めたとき猫の声が聞こえた。

True/False

18. ゆかと彼女の同級生がピクニックに行こうとした。みんながゆかの家で計画を決めに集まった。ピクニックの日、時間、場所などについて話し合った。それから、ピクニックに出そうな人の名前リストを作った。その人の中に二人の先生たちを招待することにした。ゆかとたまみがみんなに連絡すると言った。一人目の先生に連絡する前にゆかが電話番号を確認し、たまみに誰に電話するかを教えた。なぜかという、たまみは同時に自分の携帯電話で二人目の先生に連絡できたからだ。先生たちに連絡をしてから残りの同級生に連絡した。

れんらく でんわばんごう しら
ゆかが連絡するとき電話番号を調べた。

True/False

19. 次郎は名古屋にある大学の二年生でラジオを聴くのが大好きだ。次郎の一番好きなトーク番組が毎週土曜日 6 時から放送される。で、四時から五時半まで友達と一緒にテニスをやる。昨日(土曜日)テニスをしてから家へ帰って電気もつけずにまずラジオを付けた。ラジオをつけた瞬間に柱時計がなった。次郎は間に合ってよかったと思った。そして電気をつけてラジオ番組を聴き続けた。

とけい な
ラジオをつけたとき時計が鳴った。

True/False

21. 正男は大学一年生で英語のクラスでレポートを書かなければならなかった。大学に入ってから初めての英語でのレポートだったから先生に授業で注意されたポイントに気を付けた。提出の日にレポートを持ってきて、ホチキスで止めた。そして、ほかの学生のように教室の前に持っていった。ほかの学生はまだホチキスでレポートを止める作業をしていたので正男は先に提出した。

しかし提出したとたんに自分が参考文献を添付するのを忘れたことに気付いた。先生が参考文献を必ずつけるように言われたことも思い出した。正男が自分のミスについて先生に説明し次の日別に提出してもいいかと聞いた。先生は承諾してくれたが次回はもっと気をつけるように注意された。

レポートを出すとき大切なポイントをおもいだした。

True/False

23. 三郎は日本の大学の二年生だ。彼は大学から毎日七時ごろ帰る。晩御飯のあと普段は宿題をしてからテレビを見る。昨夜遅くまでテレビで映画を見ていた。映画のあと立ち上がってテレビを消しに行った。テレビを消す直前に時計の音を聞いて時間を見たら、もう一時になっていた。次の日朝早くから授業があるので早速テレビを消して寝た。

テレビを消したとき時間に気付いた。

True/False

APPENDIX F

TRANSLATIONS OF TEST STORIES: CHINESE, KOREAN, JAPANESE TVJ 2

Chinese Translation (TVJ 2)

(Directions)

指示

为了选拔有两年多日语学习经历的美国学生的日语大会的冠军，我们希望得到你的合作。

这个大会要求参加者在看了各种情景的故事录像后用日语来为各形容各个故事且写一个句子。今年我们有四位参加者—约翰、彼德、如斯、杰恩。彼德、如斯、杰恩已经作了记录，只有约翰的还没有。这次的冠军可得到免费包括往返飞机票在内的去日本旅游两星期的待遇。

故事的内容已经写下来了。你的任务是读这些中文句子然后判断它跟它下面的日语句子的内容不符合。如果你认为符合请划‘True’，否则请划‘False’。请注意，他的句子不需要说明故事中全部的细节。

这些句子你搞得如何并不会关系到你的成绩，因此请不要同别人商量你的答案。

为了了解你对这次举动理解的程度，我们将先进入预备练习。首先请回答下面的五个问题，这五个问题的结尾处，你将看到写有‘预备练习结束’的文字。之后请随下一页的指示，继续进行。

.
. .

“预备练习结束”

到这为止，如果有什么疑问或评语请写在下面的评语栏。

“评语”

“正文”

现在我们进入24个故事，请你读这些故事，然后判断约翰写的句子是否符合故事的真实内容。如果你认为符合请划‘True’，否则请划‘False’。他的句子不需要详细说明故事中的细节。当你完成全部的故事之后，请你进入“2005年的冠军”这一阶段。这段被放在这篇的后面部分。除掉预备练习问题，请你计算你划了几个“True”且把这个数字填它下面的表中，然后请写出今年的冠军的名字。请不要计算预备练习问题。最后再一次提醒您，这次举动你表现得如何并不会关系到你的成绩，因此请不要同别人商量。你的答案一定要是你自己的意见。

请开始。

.
. .

“正文结束”

2005年的冠军

在下面的表格里填上约翰的“True”的个数。

姓名	“True”的个数
彼德	
如斯	
杰恩	
则恩	

请写下今年的冠军的名字

今年的冠军是（ ）

(Test Stories)

2. 迈克是商人，他常到世界各地出差。几年前他到京都时，他的日本朋友带他去观赏能乐。这是他第一次接触能乐，他被迷住了。从那以后，他多次出差到日本。每次在京都，他总是要找机会去看能乐。就在上个月，他去了俄罗斯，在那儿他看了俄罗斯歌剧。他也喜欢看俄罗斯歌剧。

きょうと のう み い
京都にいたときいつも能を見に行った。

True/False

4. 久美子在札幌工作，她和一个叫明子的朋友同住一间公寓。她和明子关系很好。上周末，久美子想给明子办个生日晚会，给她一个惊喜。她做好了一切准备，并决定亲手为明子烤个生日蛋糕。每当久美子想尝试新的烹饪方法时，她就打电话给她妈妈。因此上周末她又打电话给她妈妈问她是否有做蛋糕的新方法。她妈妈刚刚烤了个柠檬蛋糕，因此她建议久美子可以试试。久美子一步步地按照妈妈电话中的提示做着蛋糕。在她把蛋糕放进烤箱后，久美子告诉妈妈等蛋糕烤好后再打电话给她，然后她就挂了电话。

あた つか はは れ し び き
新しいケーキを作ったときいつも母にレシピを聞いた。

True/False

6. 三郎在东京上班，但他家在小松，石川县的一个小镇。来东京上大学和工作以前，他在小松度过了他的童年。快到黄金周了，他打算回家一趟。他给同事看了他家乡的照片。他说他很想回家因为他可以和老朋友见面。他给人看家乡的一条街道的照片。他说他小时候常在那里玩。他说为了安全，当地居民已经决定关闭那条街。他们现在走附近的另外一条街。三郎说当得知那条街要被关闭的消息时，他觉得很伤心。他记得直到去年为止他和老朋友们一起走在那条街上时，他们常回忆起他们的儿童时代。

みち ある こども おも だ
前はその道を歩くとき子供のころをよく思い出した。

True/False

8. 真理子刚在东京找了份工作。去年她读大学四年级时，她和父母住在广岛。她还是一家饭店打工。学习和打工弄得她每天都很忙。有时间的话她总会在家做饭（大多是在周末），但她基本上在外面吃或者到超市买。自从真理子开始在东京上班后，她每天在外吃饭。她常想起一年前她在家时周末和妈妈一起做饭的时光。她真渴望有个长假，那她就可以回家看看。

じかん いえ りょうり
時間があつたときいつも家で料理をした。

True/False

9. 斯蒂芬是来自澳大利亚的学生，他作为交换学生来到日本。他的专业是日本语言和文化。他常受邀去日本人家里居住。斯蒂芬总是非常期盼这样的机会，因为他认为学习日本文化的最佳办法就是生活到文化之中。他特别喜欢和日本人聊天来打发时间。黄金周期间，他去了他的朋友次郎家。次郎也在同一所大学读书，他和斯蒂芬常一起吃中饭。次郎的父母也非常欢迎斯蒂芬和他们一起共度假日。吃晚饭时，他们和斯蒂芬聊了许多。他们对斯蒂芬熟练地用筷子吃东西的样子印象很深。次郎说斯蒂芬常用筷子吃中饭，所以他用得顺手。斯蒂芬说他每天在宿舍练习用筷子吃饭。他花了近六个月才习惯用筷子的。

はん た はし じょうず つか
ご飯を食べるときいつもお箸を上手に使った。

True/False

11. 加奈子是大学新生。她在上法语课。她的法语老师告诉她必须多练习法语听力。为此，她从学校图书馆借了些法语光盘。每天她乘电车和公交车去学校，每次她都得上车等一段时间。以前在车站等车时她总是听音乐，但过去几个星期以来，她一直听法语。她已经觉得自己的法语听力进步了。甚至她老师也表扬了她的进步。

バス停で待ったときいつもCDを聞いた。

True/False

13. 润希是名古屋一所大学的韩国留学生。她父母在韩国。润希刚到日本时，她没有任何经济援助。所以她父亲给她在学校注册并帮她安顿下来。接下来润希就一边申请奖学金一边开始找工作。她最终在一个图书馆找到一份工，但钱不多。每当她需要钱的时候，她就给她父亲打电话，她父亲总会给她一些如何平衡花费的建议。上个月她刚刚得知她得到了一份日本政府奖学金。她首先把好消息告诉了父母。她父亲对她表示祝贺，并说她从此就不用为钱担心了。

お金が要るときいつも父に相談した。

True/False

15. 真纪子在东京一家汽车公司工作。到上个月为止，她在东京郊区住，每天早上她差不多要花三个小时才能到办公室。她的日常生活从早上一大早就开始了。她总是边喝咖啡边看报纸。这是她忙碌的一天之中唯一能放松的时刻。接着她就去赶早上六点的电车，然后九点左右到公司。

コーヒを飲んだときいつも新聞を読んだ。

True/False

18. 比尔学的是工程学，他现在刚开始做他的硕士论文。他一直用电脑室的一台电脑储存数据。三个月前，他一直在用的电脑坏了。他没在其他地方备份，所以他以前的心血都白费了。这真是个打击。他必须重新准备数据并记得作备份文件。从那以后，他总是把文件保存到不同的地方（如软盘和光盘）。上个月他买了自己的笔记本电脑，所以不再用研究室的电脑了。他告诉电脑室的其他学生那次意外，并常提醒他们一定要备份数据文件，尤其是在用那台出过问题的电脑时。

18. その経験からコンピューター・ルームのコンピューターを使うときデータをよくバックアップした。

True/False

19. 太郎是高中生。他在准备期末考试。过去三个月里，太郎和他同学都在为考试认真准备着。每个周末，他们就聚在某个人的家里一起学习。太郎最喜欢的是数学。每次他都会准备一两个难题去。所以每次聚会学习，他们总是先解决太郎的问题。他们经常会有不同答案，每当这时，他们总会查阅书本复习公式。这种练习帮助大家养成了从多个方面考虑问题及寻求多种解决问题的方法的习惯。

答えが違ったときいつももう一度調べた。

True/False

21. 理查德是美国一所大学四年级的学生。他学的是经济，他决定把战后日本经济作为他的论文题目。大约六个月前，就在他开始真正着手写论文前，他的导师让他交一份报告，报告一下每个章节里想写的内容。在写这些报告期间，理查德经常在图书馆和因特网上查找很多书和参考文献。这是很烦杂的事，但他导师告诉他通过这个方法，他能抓住每个章节的中心内容。迄今为止，他已经写了五篇报告。现在他准备真正开始着手他的论文了。

レポートを書くときいつも本をたくさん探した。

True/False

23. 玛丽亚是位墨西哥女孩。她在日本留学。她第一次到日本时，她只在墨西哥学过一年日语。他们是他们班上学日语时间最短的学生。她在日文课上说日文时，她总是说得很慢。所以大家都以为她说话很慢。但有一次，她同学听到她用西班牙语打电话，他们都很吃惊因为她说得太快了。玛丽亚笑着说她说日语时得花时间考虑，但说西班牙语能脱口而出。她还说或许，她如果能在说西班牙语时也能稍微先想想的话，她和她朋友之间的冲突也就会少些了。听了这话，大家都笑了。

日本語の授業では話したときいつもゆっくりしゃべった。

True/False

Korean Translation (TVJ 2)

(Directions)

지시

2년 이상 일본어를 공부해오고 있는 미국인 학생들중에 가장 일본어가 능숙한 사람을 판가름하려 합니다. 이 대회에 참가자들은 다양한 상황의 비디오 녹화 영상을 보고 각 상황에 대하여 한 문장씩 일본어로 작문하게 되어 있습니다. 올해는 존, 피터, 루쓰, 재인 4명의 경쟁자가 있습니다. 피터와 루쓰 그리고 재인의 결과는 이미 얻어진 상태이며 여기서는 존의 일본어 실력에 대해 알고자 합니다. 이 대회의 승자는 일본 왕복 비행기표를 포함하여 일본에서 2주간 무료로 머물 수 있는 특권을 얻게 됩니다.

녹화된 대화는 문장화하여 여러분에게 보여지게 됩니다. 한국어로 쓰여진 각각의 이야기를 읽고 이야기 밑에 써여진 일본어 문장이 그 내용에 합치되는가의 여부를 판단해 주십시오. 만약 존이 작성한 일본어 문장이 이야기의 내용과 합치한다고 생각되면 “True”에 표시하고 존의 문장이 그 내용과 합치되지 않는다고 생각되면 “False”에 동그라미 해주십시오. 단, 존의 문장이 이야기의 전체를 다룰 필요는 없다는 사실을 염두에 두시고 판단해주시기 바랍니다.

이 작업은 당신의 성적과는 아무런 연관이 없습니다. 그러므로 여러분의 대답을 다른 사람과 상의하지 말아주십시오.

당신이 작업내용을 잘 이해하였는지를 알아보기 위하여 먼저 사전연습을 하고자 합니다. 다음 다섯 이야기를 보아주십시오. 다섯번째 이야기의 끝에 “연습문제 끝”이라는 단어가 보입니다. 다섯번째 이야기를 마치면 다음 장에 써여진 지시를 따라주십시오.

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“연습문제 끝”

연습문제에서 여러분이 한 일에 대해 질문이나 확실치 않은 점이 있다면 아래의 코멘트란에 적어주십시오.

논평(코멘트)

다음 24개의 이야기를 읽고 존의 문장이 각 이야기에 일치하는지를 판단해 주십시오. 존의 일본어 문장이 이야기에 제시된 내용과 합치한다고 생각되면 “True”에 동그라미 하십시오. 그의 문장이 내용과 합치하지 않는다고 생각되면 “False”에 동그라미 하십시오. 그의 문장이 전체 이야기를 묘사한 것이 아니라는 것을 염두에 두시기 바랍니다.

24 개의 이야기를 마친후 이 자료의 끝에 첨부된 “2005 년의 승자는 누구인가?”의 난을 결정해주시요. 여러분이 “True”로 표시한 문장의 수를 세어 해당하는 괄호에 적고 올해의 승자가 누구인지 이름을 적어주시요. 연습문제의 문장은 제외하여 계산해 주십시오. 본론에 들어가기에 앞서 이 실험에 대한 당신의 대답이 결코 당신의 성적에 영향을 미치지 않는다는 점을 기억하십시오 그러므로 당신의 대답을 타인과 상의하지 않도록 하십시오.이 작업에 대해 당신이 제공하는 대답은 전적으로 당신의 개인적 관점에 근거한것이여야 합니다 지금부터 시작해 주십시오.

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“본론의 끝”

“2005 년의 승자는 누구인가?”

각 경쟁자에 대해 “True”의 응답수를 표시하십시오.

이름	True 응답의 수
피터	
루쓰	
재인	
존	

2)올해의 우승자가 누구인지 그 이름을 적어주시요.

올해의 우승자는 ()!

(Test Stories)

2. 마크는 사업가로 종종 사업상 세계를 여행한다.몇년 전 그가 교토에 있을 때, 그의 일본인 친구들이 그를 “노”공연에 데려갔었다.마크는 그 공연에 매료되었다.그것은 그의 첫번째 “노”와의 경험이었다.그 후 그는 일본으로 몇차례 여행을 갔고 그가 교토에 있을 때면 언제나 “노”를 보러갔다. 바로 지난 달 그가 러시아에 갔을 때, 그는 러시아 오페라를 보러 갔다.그는 그것 또한 즐겼다.

きょうと のう み い
京都にいたるときいつも能を見に行った。

True/False

4. 쿠미코는 사포로에서 일하며 아파트에서 룸메이트인 아키코와 함께 살고있다. 그녀와 아키코는 매우 잘 지낸다. 쿠미코는 지난 주말 아키코의 생일에 깜짝파티를 해 주고 싶었다. 그녀는 모든 준비를 해 놓고 직접 생일케이크를 굽기로 했다. 쿠미코는 새로운 케이크 레시피를 시도하고자 할 때는 항상 그녀의 어머니께 전화를 한다. 지난 주말, 언제나처럼, 그녀는 어머니께 전화해서 새로운 케이크의 레시피가 있는지 물었다. 어머니는 막 레몬 케이크 굽는걸 끝냈으며 쿠미코에게 아키코의 생일에 그것을 해 보라고 추천했다. 쿠미코의 어머니가 전화로 모든 지시 사항을 알려주셨고 그 사이 쿠미코는 차례대로 그것들을 따라했다. 케이크를 오븐에 넣은 후 그녀는 어머니에게 케이크가 구워지면 다시 전화하겠다고 말하고 끊었다.

あたら つか はは れ し び き
新しいケーキを作ったときいつも母にレシピを聞いた。 True/False

6. 사부로 는 도쿄에서 일 하지만 그의 고향은 이시카와현의 작은 도시인 코마즈이다 그는 대학과 그 후 직장 때문에 도쿄로 이사하기 전 어린시절을 코마즈에서 보냈다. 황금연휴가 가까와 저서 그는 고향으로 갈 계획을 하고 있었다. 그는 몇몇 오래된 고향사진을 사무실 동료들에게 보여주며 그가 옛 친구들을 만날 수 있기때문에 언제나 고향에 돌아가고 싶어한다고 말했다. 그는 어렸을 때 놀곤했던 한 장의 고향 거리 사진을 보여 주었다. 그는 이웃들이 안전상의 이유로 그 거리를 막아버리기로 했다고 말했다. 그들은 이제 가까운 옆에 있는 다른 거리를 쓰고 있다. 사부로 는 그 거리가 막힌다는 이야기를 듣고 매우 슬펐었다고 말했다. 그는 바로 작년까지만도 그가 옛 친구들과 함께 그 거리를 거닐며 그들의 어린시절을 자주 추억했었던 것을 기억했다.

みち ある こども おも だ
前は那道を歩くとき子供のころをよく思い出した。 True/False

8. 마리코 는 도쿄에 막 직장을 얻었다. 그녀가 졸업반이었던 지난 해, 그녀는 히로시마에서 부모님과 함께 살고 있었다. 그녀는 또 음식점에서 파트 타임으로 일하고 있었다. 그녀는 대학과 파트 타임 일로 일정이 매우 빠듯했다. 그녀는 기회가 날때면 (거의 주말에) 언제나 집에서 요리를 했지만 주로 외식을 하거나 편의점에서 음식을 사서 먹었다. 이제 마리코 는 도쿄에서 일하기 시작했기 때문에 그녀는 매일 외식을 한다. 그녀는 집에서 그녀의 어머니와 함께 주말동안 요리하곤 했던 때를 종종 기억한다. 그녀는 긴 휴가를 얻어 집을 다시 갈 수 있기를 간절히 바라고 있다.

じかん いえ りょうり
時間があつたときいつも家で料理をした。 True/False

9. 스티븐 은 호주에서 온 학생으로 교환 학생 프로그램으로 일본에 왔다. 그의 전공은 일본어와 일본문화이다. 그는 종종 홈스테이 프로그램을 통해 일본가정에 초대된다. 스티븐 은 일본 문화를 배울 가장 좋은 방법이 그 속에서 생활하는 것이라고 생각했기에 항상 그런 경험을 기다려왔다. 그는 특히 일본인 가족들과 이야기하고 시간을 함께 보내기를 좋아했다. 황금연휴 기간 동안 그는 그의 친구인 지로의 가족과 함께 보냈다. 지로 역시 같은 대학에서 공부하고 스티븐과 자주 함께 점심식사를 같이 한다. 지로의 부모님은 스티븐이 연휴동안 그들과 함께 지낼 것을 환영하였다. 저녁 식사시간에 그들은 스티븐과 여러가지 관해 이야기했다. 그들은 스티븐이 능숙하게 젓가락을 사용하여 음식을 먹는 것에 매우 감동받았다. 지로는 스티븐이 항상 젓가락을 사용하여 점심을 먹으며 젓가락질에 매우 익숙하다고 덧붙였다. 스티븐 은 기숙사에 돌아가면 매일 젓가락을 사용하여 먹는것을 연습했다고 말했다. 그리고 그가 이만큼 편하게 사용하게 되는데는 약 6 개월정도 걸렸다.

はん た はし じょうず つか
ご飯を食べるときいつもお箸を上手に使った。 True/False

11. 카나코 는 대학 일학년으로 불어 수업을 듣는다. 그녀의 불어 선생님은 그녀에게 불어 듣기연습을 좀 더 해야한다고 말했다. 그래서 그녀는 불어 CD 를 대학도서관에서 빌렸다. 그녀는 기차와 버스로 학교에 통학해서 항상 버스 정류소와 기차역에서 매일 어느 정도 기다려야 한다. 전에는 버스 정류소와 기차역에서 기다리는 동안 그녀는 항상 음악 CD 를 들었었지만, 지금은 지난 수 주간 불어 CD 를 듣고 있다. 그녀는 불어 청취능력이 나아지고 있음을 벌써 느끼기 시작했다. 그녀의 선생님도 그녀의 발전을 인정했다.

バス停で待ったときいつも CD を聞いた。

True/False

13. 윤희는 나고야의 대학에서 공부하고 있는 한국 학생이다. 그녀의 부모님은 한국에 살고 계신다. 윤희가 처음 일본에 왔을 때, 그녀는 경제적 보조를 전혀 얻지 못했다. 그래서 그녀의 아버지가 그녀가 대학에 등록하여 정착하도록 도와 주셨다. 그 후 윤희는 장학금과 파트타임 일을 찾기 시작했다. 그녀는 마침내 도서관에서 파트타임 일자리를 찾았다. 그러나 돈은 많지 않았다. 그녀가 돈이 필요할 때마다, 항상 그녀는 아버지께 전화를 했고 아버지는 항상 그녀에게 수입과 지출을 맞추는 방법에 관한 조언을 하며 도와주었다. 바로 지난 달, 그녀는 일본 정부로부터 장학금을 받을 것이라는 소식을 들었다. 그녀는 제일 먼저 부모님께 그 좋은 소식을 알렸다. 그녀의 아버지는 축하하며 당분간 그녀가 돈걱정 할 필요가 없을거라 했다.

お金が要るときいつも父に相談した。

True/False

15. 마리코는 도쿄의 자동차 회사에서 일한다. 지난 달까지 그녀의 집은 도쿄의 근교에 있었기 때문에 아침에 사무실에 도착하는데 거의 3 시간이나 걸렸다. 그녀의 하루 일과는 아침 일찍 시작되었다. 그녀는 항상 커피를 마시며 신문을 읽었다. 이것은 너무도 바쁜 하루에 있어 그녀의 유일한 쉬는 시간이었다. 그리고 나서 그녀는 6 시 기차를 타기위해 뛰었고 9 시경에는 사무실에 도착했다.

コーヒーを飲んだときいつも新聞を読んだ。

True/False

18. 빌은 공학도이며 그의 석사학위 논문을 막 시작했다. 최근까지 그는 컴퓨터실의 컴퓨터로 일하며 모든 자료를 저장하는데 그 컴퓨터를 사용하고 있었다. 3 개월 전 그가 사용해 오고 있던 그 컴퓨터가 우연히 고장이 났다. 그는 다른 곳에 그의 자료를 백업해 두지 않았었기에 그가 해 온 모든 일이 소실되어 버렸다. 이것은 큰 충격이었다. 그는 모든 자료를 다시 준비해야 했고 그것들을 백업하는것을 기억했다. 그 후 그는 자주 몇 곳에 (플러피와 CD) 자료를 저장했다. 지난 달 그는 자신의 노트북을 사서 더 이상 그의 작업을 위해 컴퓨터실에 가지는 않는다. 그러나 그는 종종 컴퓨터실의 다른 학생들에게 그 사고에 대해 이야기 하며 그들이 특히나 그 컴퓨터를 사용할 때는 그들의 자료를 가능한 자주 백업하라고 조언한다.

その経験からコンピューター・ルームのコンピューターを使うときデータをよくバックアップした。

True/False

19. 타로는 고등학생이다. 그는 기말 고사를 준비중이다. 타로와 그의 친구들은 지난 석달간 그 시험에 열심히 준비해 오고 있다. 매주 그들은 누군가의 집에 모여 함께 공부했다. 타로가 가장 좋아하는 과목은 수학이다. 그는 종종 한 두 개의 어려운 문제를 매 스터디 그룹에 가지고 온다. 그 모임은 항상 타로의 문제로 시작한다., 만약 그들이 문제에 대해 다른 답을 내면, 거의 항상 일어나는 일이지만, 그들은 언제나 교과서를 살펴보고 공식을 다시 확인한다. 이런 연습은 그 그룹이 새로운 문제에 대해 다양한 각도에서 보고 그것을 푸는 다른 방법을 생각할 수 있도록 많이 도와줬다.

こた ちが いちどしら
答えが違ったときいつももう一度調べた。

True/False

21. 리차드는 미국 대학의 졸업반이다. 그의 전공은 경제학이며 그는 논문 주제로 전후 일본의 경제에 관한 논제에 초점을 두어왔다. 실제 논문을 쓰기, 약 6 개월 전, 그의 교수는 그에게 논문에서 다룬 각 단원에 대한 레포트를 제출하도록 요구했다. 그 레포트들을 쓰면서, 리차드는 도서관과 인터넷에서 많은 책과 기사들을 찾아 언제나 긴 시간을 보냈다. 이런 연습은 매우 피곤한 것이었지만 그의 교수는 이 방법으로 그가 각 단원의 모든 주요한 부분들에 초점을 맞출수 있게 될거라고 했다. 그는 지금까지 모두 벌써 5 장 정도를 썼다. 이제 그는 실제 논문의 마지막 형태잡기를 바라고 있다.

か ほん さが
レポートを書くときいつも本をたくさん探した。

True/False

23. 마리아는 멕시코 소녀로 일본에 있는 외국인 학생이다. 그녀가 일본에 처음 왔을 때, 그녀는 멕시코에서 일본어를 단지 1 년동안 공부했을 뿐이었다. 그녀는 학급의 다른 학생들 사이에서도 최단기간의 일본어 경험을 가지고 있었다. 일본어 수업에서, 그녀는 항상 매우 천천히 말했다. 모두는 마리아가 항상 매우 느리게 이야기 한다고 생각하기 시작했다. 그러나 한번, 그들은 그녀가 전화로 스페인어로 이야기하는 것을 들었는데 그녀의 말이 매우 빠름에 놀랐다 마리아는 웃으며 그녀가 일본어로 말할 때는 많이 생각해야하지만 스페인어로는 그렇게 많이 생각할 필요가 없다고 말했다. 아마도 만약 그녀가 스페인어를 말하면서도 좀 더 많이 생각한다면, 그녀는 친구들과 싸움을 훨씬 덜 하게 될 것이다. 모두가 웃었다.

にほんご はな
日本語の授業では話したときいつもゆっくりしゃべった。

True/False

Japanese Translation (TVJ 2)

(Directions)

指示

二年ちょっと日本語を勉強したアメリカ人の学生のための日本語大会で受賞者を決めるのにあなたのご協力をお願いします。大会に参加する参加者はいろいろな場面において取ったビデオテープを見てその場面について日本語で一文を書かなければなりません。今年の参加者はジョン、ピーター、ルースとジェーンの四人でした。ピーター、ルースとジェーンのスコアはもう入力してありますがジョンだけのスコアはまだ入っていません。この大会で優勝した学生は日本で二週間の滞在費と往復航空券をもらうことができます。

録画したビデオの内容はもう書き起こしてあります。あなたは各ストーリーを読んでその下に書いてある文が上のストーリーに合っているかどうかを判断してください。文がストーリーと合っている場合は True に、合っていない場合は

False に○を付けてください。この文はストーリーを必ずしもまとめるわけではありません。

このタスクがあなたの成績には一切影響しませんからほかの人と相談や答え合わせは遠慮してください。よろしくお願いします。

あなたがこの指示をどれだけ分かったかを確かめるためにまず練習しましょう。まず次の五つの問に答えてください。5問の終わりに「練習終了」が出ます。そのあと次のページの指示に従って進んでください。

練習終了

このタスクに関して質問かコメントがあったらしたに書いてください。

「コメント」

「本文」

次の24問を読んでそれらに伴うジョンに書かれた文が正しいかどうかを判断してください。文がストーリーと合っている場合は **True** に、合っていない場合は **False** に○を付けてください。注：ジョンの文はすべてのストーリーを必ずしもまとめるわけではありません。一番最後の24問目のストーリーの後「2005年の優勝者」の部分を参照してください。練習問題を除いて(本文だけ)に出た **True** の答えを数えて、その数字を表に書き込んでください。それから、今年の優勝者の名前を書いてください。練習問題は除いてください。もう一度注意点を繰り返しますとこのタスクがあなたの成績には一切影響しませんからほかの人と相談や答え合わせは遠慮してください。

それでは、はじめてください。

本文終了

2005年の優勝者

1) 次の表にジョンの **True** の回答数を書いてください。

名前	True の回答数
ピーター	
ルース	
ジェーン	
ジョン	

2) 今年の優勝者の名前を書いてください：

今年の優勝者は_____です。

(Test Stories)

2. マークは実業家で、出張で世界中を回ることがある。数年前京都に来た。そのときマークの友達が彼を能に見に連れて行った。マークにとってこれは初めての経験でとても印象深かった。そのあともマークは何回も日本へ来た。そして京都にいる間いつも能を見に行った。先月彼はロシアへ行ったのでロシアの有名なオペラを見に行った。彼はオペラもとても気に入ったようだ。

きょうと のう み い
京都にいるときいつも能を見に行った。

True/False

4. 久美子さんは札幌のアパートにルームメートの明子さんと住んでいる。久美子さんと明子さんは仲がとてもいい。先週末明子さんのために誕生日パーティーをしようと久美子さんが思った。そしてバースデーケーキを自分で作ろうと思った。久美子さんはいつも新しいケーキを作るたびお母さんにレシピを聞く。先週末もいつものようにお母さんに電話して何か新しいケーキのレシピはないかと聞いた。お母さんはそのときレモンケーキを作ったばかりだったのでレモンケーキを教えた。久美子さんはお母さんが言ったとおりに材料を混ぜた。そしてケーキをオーブンに入れてお母さんに次のように言った。

久美子：ケーキができてからまた電話するね。ありがとう、母さん。
そう言って久美子さんは電話を切った。

あた　　つく　　はは　　れ　　し　　び　　き
新　　しいケーキを作ったときいつも母にレシピを聞いた。

True/False

6. 三郎は東京で働いているが故郷は石川県にある小松という小さな町である。彼は子供のときは小松にいたが大学と仕事のため東京に引っ越した。ゴールデン・ウィークが近かったのでそろそろ故郷へ帰ろうとしていた。彼は故郷の古い写真を同僚に見せて「子供のときの友達に会えるからいつも帰宅を楽しみにしている」と言った。小さいとき遊んでいた道の写真も同僚に見せた。彼はその道が危ないのもう今では通行禁止になったと近所の人に聞いた。今では近くにあるもう一つのみちが使われているようだ。三郎は通行禁止のことを聞いてとても悲しかった。「去年までその道を友達と一緒に歩いたけれどそのとき僕らはよく子供のころを思い出したものだ」と同僚に言った。

みち　　ある　　こども　　おも　　だ
前はその道を歩くとき子供のころをよく思い出した。

True/False

8. 真理子は東京で仕事をし始めたばかりだ。大学四年生だった去年は広島で両親と一緒に住んでいた。広島のレストランではバイトもしていた。彼女は勉強とバイトでとても忙しかったので普通は外食したりコンビニで弁当を買ったりしていた。週末に少しでも時間があつたらいつも家で両親と料理をした。今はもう東京で働いているから彼女は毎日外でご飯を食べる。実家で暇なときにはいつも母と一緒に料理を作った一年前のことを真理子はよく思い出す。真理子は今度の休みに家に帰れることを楽しみにしている。

じかん　　いえ　　りょうり
時間があつたときいつも家で料理をした。

True/False

9. スティーブンはオーストラリアから日本に来た留学生だ。彼は専攻が日本語と日本文化だ。スティーブンはよく日本人にホームステイに招待される。彼は日本文化を実際に見て習うことができると思っていていつもホームステイの機会を楽しみにしている。スティーブンは特に好きなのは日本人の家族と遊びに行くことだ。ゴールデン・ウィークに彼は友達の次郎のふるさとに誘われた。次郎はスティーブンと同じ大学で勉強していてよく一緒にご飯を食べた。連休に次郎の両親はスティーブン家に招待した。晩御飯のときみんなスティーブンといろいろ話をした。スティーブンがおはしを上手に使っているのを見て次郎の両親は感動した。次郎はスティーブンが大学でもいつもおはしを上手に使うと言った。スティーブンは毎日寮ではしで食べる練習をしていたと言った。そして今のようになるまで六ヶ月もかかったと言った。

はん　　た　　はし　　じょうず　　つか
ご飯を食べるときいつもお箸を上手に使った。

True/False

11. 加奈子は大学の一年生でフランス語の授業に出ている。フランス語の先生は加奈子にもっとリスニングの勉強をしてほしいと言った。その勉強のために図書館からフランス語のCDを借りた。加奈子はバスと電車で通学していて毎日バス停や駅で何分か待たなければならないのだ。前は待っている時間にいつも音楽のCDを聞いていたけれど、数週間前からは毎日フランス語のCDを聞いている。今ではフランス語の聞き取りが前よりだいぶよくなったと加奈子は感じている。彼女の先生も聞き取りがよくなったとほめてくれた。

バス停^{てい ま}で待ったときいつもCD^きを聞いた。

True/False

13. 潤希^{ユンヒ}は韓国人で名古屋の大学で勉強している。彼女の両親は韓国にいる。日本に来て最初のころは経済的な面で苦しかった。だから潤希のお父さんが授業料や生活費を出してくれた。そのあと潤希は奨学金やバイトを探し始めた。やっと図書館でバイトが見つけれられたがたいしたお金ではなかった。お金が足りないときはいつもお父さんに電話した。お父さんは収入・支出のバランスについて教えてくれた。先月文部科学省からの奨学金がやっともらえたのでそのことを最初に両親に言った。お父さんはとても喜んでくれてこれからはお金の面でそんなに心配しなくてもいいねと言った。

お金^{かね い}が要るときいつも父^{ちち}に相談^{そうだん}した。

True/False

15. 真希子は東京の自動車会社で働いている。先月までは彼女の家は東京の郊外だったので朝の通勤時間はほぼ三時間ぐらいかかった。彼女の一日は朝早くから始まった。起きたらいつも新聞を読みながらコーヒーを飲んだ。忙しい一日の中でこの時間だけが少しゆっくりできる時間だった。それから六時の電車に乗って九時ごろ会社に着く、という生活を彼女は送っていた。

コーヒー^のを飲んだときいつも新聞^{しんぶん}を読^よんだ。

True/False

18. ビルは工学部の学生で最近修士論文を書き始めた。最近までは彼がコンピューター・ルームにあるコンピューターを使っていてすべてのデータはそのコンピューターに保存していた。三ヶ月ほど前、彼が使っていたコンピューターがだめになってしまった。今までのデータはバックアップしていなかったので全部失ってしまった。これはショックだった。データを最初から作り直さなければならなかった。そしてその経験から忘れずにバックアップした。そのあとデータをCD-ROMやフロッピーなどいろいろなところにいつも保存するようにした。先月自分のノートパソコンを買ったのでコンピューター・ルームをあまり使わなくなった。コンピューター・ルームに来るほかの学生にそのコンピューターにおこったことについてよく話をし、忘れずにバックアップするように注意している。

その経験からコンピューター・ルームのコンピューター^{つか}を使うときデータをよくバックアップした。

True/False

19. 太郎は高校生だ。もうすぐ期末試験を受ける。太郎と彼の友達は今三ヶ月前からまじめに試験の準備をしている。毎週土日にみんなが誰かの家で集まって勉強することもある。太郎は数学が一番好きだ。彼は毎回頭を悩ませるほど難しい数学の問題を必ず一つか二つ持ってくる。勉強会の最初にはいつも太郎が持ってきた問題に挑戦してみる。みんなで違う答えが出たら（ほとんどはそうだったけど）いつも彼らは教科書の公式を必ず復習した。こういった勉強のやり方をしてみんなが新しい問題をいろいろな角度から見て考えられるようになったので勉強会は有意義だった。

こた ちが いちどしら
答えが違ったときいつももう一度調べた。

True/False

21. リチャードはアメリカのある大学の四年生だ。彼は専攻が経済学で卒業論文のテーマは「戦後における日本経済」だ。六ヶ月ほど前、論文を書く前に卒業論文各章の内容についてレポートを書いて提出するように指導教官に言われた。レポートを書いている間リチャードはたくさんの本や論文を探すのにいつも図書館やインターネットを使った。このやり方では疲れるけれど、こうすることによって各章の大切なポイントを見逃さないで抑えることができると指導教官に言われた。今ではもう五つぐらいレポートを書いている。これから実際に卒業論文を書こうとしている。

か ほん さが
レポートを書くときいつも本をたくさん探した。

True/False

23. マリヤはメキシコ人で日本に留学している。最初に日本へ来たときは彼女がメキシコで一年間だけ日本語を勉強してきたということだった。ほかの同級生と比べると彼女が日本語を勉強した時間は一番短かった。日本語の授業では彼女はいつもとてもゆっくりしゃべった。マリヤはいつもゆっくりしゃべるとクラスみんなが思っていた。ある日彼女がスペイン語で電話をしているのを聞いてみんなびっくりした。彼女がとても早口でしゃべっていたからだ。マリヤは、日本語はよく考えてから話すので話すのが遅いと微笑んで言った。スペイン語の場合はそんなに考えながら話していないので早口で話せるけれど、スペイン語でもちゃんと考えてから話したら友達とのけんかも減るのにと反省した。これを聞いてみんなが笑い出した。

にほんご はな
日本語の授業では話したときいつもゆっくりしゃべった。

True/False

APPENDIX G
CONSENT FORM

CONSENT FOR PARTICIPATION IN RESEARCH

I consent to participating in this research (Time Expressions in Japanese Second Language Acquisition) conducted by Mineharu Nakayama or his representative (Priya Ananth) who intends to conduct this study in order to develop the theory of time expressions in acquisition of Japanese. S/he has explained to me that the results of this experiment will be used only for research purposes, and the responses that I have provided in this research will be compiled for use in the study. I have furthermore been informed that if my individual data are discussed, it will be referred to by subject number only; my name will by no means be disclosed in public. S/he has also informed me of the expected duration of my participation.

I acknowledge that I have the right to obtain additional information regarding the study and that any questions I may raise concerning my participation in this study will be answered to my full satisfaction. Furthermore, I understand that I am free to withdraw consent at any time and to discontinue participation in the study without prejudice to me.

Finally, I acknowledge that I have read and fully understand this consent form. I sign it freely and voluntarily.

Date: _____ Signed: _____
(Participant)

Signed: _____
(Principal Investigator or his authorized representative)

APPENDIX H

BACKGROUND QUESTIONNAIRE

Questionnaire for the subject's background information (for learners of Japanese)

Date: _____ Subject # KU2005/TVJ_____/V_____/_____

1. Please indicate your age: _____ years old

2. Please indicate your gender: Male Female

3. What is your native language?

English Chinese Korean Other (Specify) _____

4. (a) Have you lived in Japan for more than one month? Yes No

(b) If 'Yes,' when?

How long?	Place (City)	Purpose (Study, work, etc.)
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_____	_____	_____
_____	_____	_____
_____	_____	_____

5. How long have you studied Japanese?

From (Yr/Mo)	Until (Yr/Mo)	School:	Level/	Class meeting hour/wk
		Type of class		

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. Do you understand (or have studied) any language(s) other than your first language and Japanese?

Foreign Language(s) studied	How long?	Level/	Class meeting hour/wk
		Type of class	

_____	_____	_____	_____
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APPENDIX I
EXAMPLES OF HIT (H) RESPONSES

A. Jiroo is a second-year college student in Nagoya and he loves listening to the radio. His favorite radio talk show is aired every Saturday at 6pm. He plays tennis with his friends from around 4-5:30pm. Yesterday (Saturday), when he came back home from his tennis session he switched on the radio even before turning on the lights of his room. Just as he switched on the radio, the clock on the wall also rang. Jiroo was happy to have made it on time. He then turned on the lights and continued to listen to his favorite program.

ラジオをつけたとき^{とけい}時計^なが鳴った。

True/False

B. Jiroo is a second-year college student in Nagoya and he loves listening to the radio. His favorite radio talk show is aired every Saturday at 6pm. He plays tennis with his friends from around 4-5:30pm. Yesterday (Saturday), when he came back home from his tennis session just before 6 and was about to switch on the radio, the clock on the wall rang. Jiroo was happy to have made it on time. He switched on the radio and listened to his favorite program.

ラジオをつけるとき^{とけい}時計^なが鳴った。

True/False

APPENDIX J

EXAMPLES OF CORRECT REJECTION (CR) RESPONSES

A. Jiroo is a second-year college student in Nagoya and he loves listening to the radio. His favorite radio talk show is aired every Saturday at 6pm. He plays tennis with his friends from around 4-5:30pm. Yesterday (Saturday), when he came back home from his tennis session he switched on the radio even before turning on the lights of his room. Just as he switched on the radio, the clock on the wall also rang. Jiroo was happy to have made it on time. He then turned on the lights and continued to listen to his favorite program.

ラジオをつけるとき^{とけい}時計^なが鳴った。

True/False

B. Jiroo is a second-year college student in Nagoya and he loves listening to the radio. His favorite radio talk show is aired every Saturday at 6pm. He plays tennis with his friends from around 4-5:30pm. Yesterday (Saturday), when he came back home from his tennis session just before 6 and was about to switch on the radio, the clock on the wall rang. Jiroo was happy to have made it on time. He switched on the radio and listened to his favorite program.

ラジオをつけたとき^{とけい}時計^なが鳴った。

True/False