

Changing paradigms

On the adjectivalization of the verb 'chigau' in Japanese

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Master's Thesis in Modern Japan
60 Credits

Winter 2015

UNIVERSITY OF OSLO

Department of Culture Studies and Oriental Languages

December 1, 2015

Abstract

This thesis explores recent changes in the conjugation of the Japanese verb *chigau*. These changes have resulted in the emergence of several innovative forms based on conjugational formants and auxiliaries normally reserved for adjectives. The result has been a new alternative paradigm wherein *chigau* behaves morphologically more like an adjective than a verb, blurring the line between the two morphological categories in this particular instance. Previous studies on this phenomenon have attributed these changes to a perceived asymmetry between the meaning and morphology of *chigau*; semantically, it usually denotes states and describes characteristics, a trait commonly associated with adjectives. Yet morphologically it behaves as a regular verb, a word class usually thought of as expressing events and actions. Thus, previous studies theorize that in order to neutralize this asymmetry and create harmony between the form and meaning of *chigau*, speakers have resorted to changing the very inflection of the verb itself. However, this does not explain why the same process has not occurred with other stative verbs in Japanese. Most studies have focused on the propagation of the new forms across Japan from their point of origin, and there have been few efforts to posit possible linguistic mechanisms for why these forms arose, and why they have only occurred with *chigau*. I will first argue that the current stativity of *chigau* is the product of a long process of pragmatic inference and semantic extension that is still ongoing. I will then attempt to show that the adjectival formations of *chigau* arose due to analogical inference with the stem of other adjectives. Thus, I posit that the development of the adjectival paradigm is the product of two processes; pragmatic inference and analogy, both well-known processes recognized as important mechanisms for linguistic innovation and change.

The changes documented in the inflectional paradigm of the verb *chigau* are interesting for several reasons. First, they are ongoing, presenting an exciting opportunity to examine language change in action. Second, although Japanese has several productive mechanisms for deriving adjectives from verbs (reference), it is exceedingly rare for a verb itself to transit morphologically to a new class (Inoue, 1998, p.) And third, I have yet to find a similar example of a similar example in English or Norwegian. It is my hope that this thesis can offer some insight into some possible reasons for this apparently unique and interesting innovation.

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Print: Grafisk Senter, Oslo

Acknowledgements

This thesis would not have come about without my supervisor Tomoko Okazaki Hansen. When I started this thesis, I was not truly prepared for the amount of work and dedication that would be necessary, and without her exceptionally patient, kind and steady guidance, with many a helpful suggestion on the way, this paper might never have seen the light of day. I am also grateful to professor Mayumi Sakuma of the Graduate School of Applied Linguistics at Waseda University for most graciously allowing me to follow her lectures from October 2014 to February 2015. Finally, but not last, I am deeply grateful to my mother, who has been an unwaivering source of support and encouragement, in good as well as bad times.

Table of Contents

1	Introduction	1
1.1	Japanese verbs and adjectives.....	1
1.1.1	Verbs	1
1.1.2	Adjectives.....	3
2	Aspect theory and aspect in Japanese.....	5
2.1	Introduction	5
2.2	Aspect and tense	5
2.3	Lexical Aspect	6
2.4	Aspect in Japanese.....	9
2.4.1	The <i>te-iru</i> form	10
2.4.2	Lexical aspect of Japanese verbs.....	11
2.5	Conclusion	16
3	Previous research.....	17
3.1	Inoue (1985)	17
3.2	Kitamoto (1995)	20
3.2.1	Survey 1.....	20
3.2.2	Survey 2.....	22
3.1	Inoue (1998)	26
3.2	Ishii (2011)	27
3.3	Summary and discussion	39
3.3.1	Aspect of <i>chigau</i>	40
3.4	Conclusion	43
4	Corpus analysis	45
4.1	Corpus description.....	45
4.2	Hypothesis	46
4.2.2	On <i>chigatteiru</i>	54
4.3	Hypothesis 2	54
4.3.1	Results	55
4.4	Summary and discussion	57
4.5	Conclusion	60
5	Semantic extension of <i>chigau</i>	62

5.1	Introduction	62
5.2	Mechanisms for innovation and selection	62
5.3	Mechanisms of semantic change	66
5.4	Analogy and morphological change	75
5.5	Conclusion and summary	79
6	Final summary and conclusions	80
	Literature	81

No table of figures entries found.

1 Introduction

Language and the study of it have fascinated me since my high school days. More than anything, it was the idea that languages are as alive, complex and ever-changing as the humans that create and use them, that really intrigued me. For this reason, what especially piqued my interest was the study of language change and how innovations that are considered, sometimes even decried, as wrong, can spread to the point that they are accepted as right by speakers and grammarians alike. The realization that many parts of the language we use today would be considered wrong by past speakers had a powerful impact on me.

When I started to study Japanese I found a well of examples of such changes, some of which have become so accepted that they have even showed up in more recent editions of the textbooks we used. The adjectivalization of *chigau* came to my attention during my exchange studies at Kwansei Gakuin University in 2011, and immediately caught my interest. Here was another fascinating example of how an expression that violates current linguistic norms has gained ground among a considerable number of speakers. This thesis is my small attempt to understand this particular change.

1.1 Japanese verbs and adjectives

Japanese is an agglutinative language, which means that inflection takes place by stringing morphemes and auxiliaries together. Most combinations are easily segmentable, with only a few instances of fusing inflection. Verbs and adjectives are mainly distinguished by which conjugational endings and auxiliaries they take.

1.1.1 Verbs

Verbs (jap: *dooshi*) are commonly divided into two groups depending on their root: vowel-final root verbs and consonant-final roots. (Shibatani, 1991, p. 232).¹ Consonant-root verbs come in two varieties, those with overt consonant roots (e.g. *kak-*, “write”), and those where the consonant was lost for all forms except the a-stem in earlier language stages due to sound changes (Frellesvig, 2011), e.g. (*chiga(w)-*, “be different”, *ka(w)-*, “buy”). The root combines with a conjugational ending and/or auxiliaries (which are also inflected) and conjunctive

¹ Frellesvig (2010), calls them *bigrade* and *monograde* verbs. In Japanese they are commonly referred to as “four-step” (*yon dan*) and “one-step” (*ni dan*) verbs.

particles, which together give rise to a wide selection of different conjugations and formations. The basic inflections are listed in table 1.1 below. Since the non-past is commonly treated as the dictionary form (e.g. dictionaries list *chigau* / *akeru*, rather than *chiga(w)* / *ake-*), I will use this form as the citation form of verbs brought up for discussion.

Table 1: Basic verbal forms (adapted from Frellesvig, 2011, p. 391)

	Consonant-root	Consonant-root	Vowel-root
Root	<i>kak-</i> (“write”)	<i>chiga(w)-</i> (“be different”) ²	<i>ake-</i> (“open _{TRANS} ”)
a-stem	<i>kaka-</i>	<i>chigawa-</i>	none
Finite			
Non-past	<i>kak-u</i>	<i>chiga-u</i>	<i>ake-ru</i>
Past	<i>kaita</i>	<i>chiga-tta</i>	<i>ake-ta</i>
Volitional	<i>kak-oo</i>	* <i>chiga-oo</i>	<i>ake-yoo</i>
Imperative	<i>kak-e</i>	* <i>chiga-e</i>	<i>ake-ro</i>
Negative	<i>kaka-nai</i>	<i>chigawa-nai</i>	<i>ake-nai</i>
Non-finite			
Infinitive	<i>kak-i</i>	<i>chiga-i</i>	<i>ake</i>
Gerund	<i>kaite</i>	<i>chiga-tte</i>	<i>ake-te</i>
Conditional-1	<i>kaitara</i>	<i>chiga-ttara</i>	<i>ake-tara</i>
Representative	<i>kaitari</i>	<i>chiga-ttari</i>	<i>ake-tari</i>
Conditional-2	<i>kak-eba</i>	<i>chiga-eba</i>	<i>ake-ba</i>

Unlike English, verbs can, as well as serving as predicates, also modify nouns attributively: *kaita shoosetsu* (“a novel [subject] wrote”).

² The phoneme /w/ only survives in the negative form *chigawa-nai* in Modern Japanese.

The **infinitive** (*chigai*) has several important functions. On its own it can function as a noun, and many Japanese nouns are derived from infinitives, e.g. *tasuke*, “assistance” (from *tasuke-ru*, “help”), *yorokobi*, “joy” (from *yorokob-u*, “be glad”) (Shibatani, p. 218) and *chigai* “difference” (from *chiga(w)-u*, “be different”). It also serves as a stem for other inflectional forms and often forms compounds with other verbs. For this reason, it is also referred to as the **adverbial form** (jap: *renyookee*).

The **volitional** (*kakoo*), also called the **cohortative** (Shibatani, 1991, p. 232), is used to express conjectural (“probably writes”), cohortative (“let us write”) and volitional (“I will write”) meaning. The conjectural use is rare today and is usually expressed periphrastically by combining a finite form (except the imperative) with *daroo*, the conjectural of the copula *da*, e.g. *kaku daroo* (“probably writes”), *chigau daroo* (“is probably different”).

Note that the volitional and imperative meanings are not used with *chigau* due to semantic constraints, and so the corresponding forms are not used. Also note that the status of the *a*-stem is disputed, as it only appears with the negative auxiliary *-nai*. Some scholars have therefore elected to analyze /a/ as part of the auxiliary (*chiga-wanai* / *kak-anai*).

1.1.2 Adjectives

Adjectives (*keeyooshi*) follow the same morphological principle as verbs, where a root is combined with a conjugational ending, which can further combine with a number of auxiliaries. Adjectives are commonly categorized as either *shiku-adjectives* or *ku-adjectives*, a categorization based on their infinitive ending.

Table 2: Basic adjectival forms (adapted from Frellesvig, 2011, p. 394)

	ku-adj	shiku-adj
Root	<i>taka-</i> (“tall”)	<i>utsukushi-</i> (“beautiful”)
Finite		
Non-past	<i>taka-i</i>	<i>utsukushi-i</i>
Past	<i>taka-katta</i>	<i>utsukushi-katta</i>
(Conjectural)	(<i>taka-karoo</i>)	(<i>utsukushi-karoo</i>)

Non-finite

Infinitive	<i>taka-ku</i>	<i>utsukushi-ku</i>
Gerund	<i>taka-kute</i>	<i>utsukushi-kute</i>
Conditional-1	<i>taka-kattara</i>	<i>utsukushi-kattara</i>
Representative	<i>taka-kattari</i>	<i>utsukushi-kattari</i>
Conditional-2	<i>taka-kereba</i>	<i>utsukushi-kereba</i>
Negative	<i>takaku-nai</i>	<i>utsushiku-nai</i>

Note that many forms resemble each other, e.g. past *ake-ta* vs. *taka-katta* and conditional *chiga-eba* vs. *taka-kereba*. The main difference is that auxiliaries *-(e)ba* and *-(t)ta* do not combine directly with the adjectival root, unlike verbs.

Like the verbal infinitive, the adjectival variant is used as a stem for some formations, notably negative (*-ku-nai*). When used with verbs, the infinitive functions as an adverb; e.g. *haya-i* (“quick, early”), *haya-ku hashiru* (“run quickly”). When the verb is *naru* (“become, turn into”), the meaning is inchoative: *taka-ku naru* (“become tall”), *utsukushi-ku naru* (“become beautiful”). The adjectival infinitive usually does not function as a noun, instead adjectives can be nominalized using the suffix *-sa*, which is affixed to the root; e.g. *taka-i* (“tall”), *taka-sa* (“height”); *utsukushi-i* (“beautiful”), *utsukushi-sa* (“beauty”).

Unlike consonant-root verbs such as *chigau*, adjectives derive their negative form from the infinitive (*-ku-nai*).

Also important to note is that the conjectural (*taka-karoo*, *utsukushi-karoo*) is rarely used. As with verbs, conjectural meaning is usually expressed by combining a finite form with conjectural copula *daroo*, e.g. *taka-i daroo* (“is probably tall”), *utsukushi-katta daroo* (“was probably beautiful”).

2 Aspect theory and aspect in Japanese

2.1 Introduction

As was described in chapter 1, *chigau* is commonly treated as a so-called stative verb, with its stativity given as the main reason for the emergence of adjectival forms. As this discussion ties into the theoretical framework surrounding aspect, I will discuss aspect theory in general and the lexical aspect of Japanese verbs in particular. This discussion is continued in chapter 3, where I will use previous research to analyze the aspectual properties of *chigau*.

2.2 Aspect and tense

The distinction between tense and aspect often engenders confusion. Bernard Comrie (1976) defines **tense** as what “relates the time of the situation referred to to some other time, usually to the moment of speaking” (Comrie, 1976, p. 2). Thus, tense primarily deals with *when* a situation takes place relative to a certain reference point. The inclusion of a reference point makes tense deictic, meaning its external reference varies depending on context (Comrie, 1976, p. 2; Eckardt, 2008, p. 106). Comrie further divides tense into two types based on their reference point: absolute and relative. Absolute tenses are those that relate the time of the situation to the present moment (i.e. the moment of speaking), such as in the English sentences *John is singing* and *John sang* (Comrie, 1976, p.2). Relative tenses locate the time of a situation relative to the time of a different situation than the present moment. This can be seen in the relationship between *when **walking** down the road, I often **meet** Harry* vs. *when **walking** down the road, I often **met** Harry*, where the present participle *walking* indicates that the situation in the subordinate clause occurs simultaneously with the time of the main verb, regardless of the tense of the main verb (Comrie, 1976, p. 2).

Aspect on the other hand, refers to “[...] different ways of viewing the internal temporal constituency of a situation”, irrespective of the time reference. Like tense, aspect is discussed mainly when dealing with verbs, but can also refer to the temporal qualities of other words or larger units, such as phrases and sentences. Unlike tense, however, aspect is not concerned with relating the time of a situation to another time point, and is therefore non-deictic. Thus,

the difference between *he read* and *he was reading* in English is purely aspectual, as both sentences have absolute past tense (Comrie, 1976, p. 3) but conceive of the past situation in different ways. The former (*he read*) “presents the totality of the situation referred to as a single unanalysable whole” and makes no distinction between the individual phases of a situation. The latter (*he was reading*), looks at the situation from the inside and “make explicit reference to “the internal temporal constituency of the situation”, enabling it to focus on one or more of the phases that make up the situation. This particular differentiation is one of the most fundamental distinctions made when discussing aspect, where *he read* exemplifies **perfective aspect** and *he was reading* represents **imperfective aspect** (Comrie, 1976, p. 4).

One important reason for the confusion between tense and aspect is the fact that the expression of aspectual distinctions in many languages has merged with specific tense forms. This is especially the case in languages that have few morphological markers of aspect, such as English and Japanese, where aspectual distinctions are mostly incorporated into different tense forms. This brings us to the distinction between **grammatical aspect** and **lexical aspect**. Grammatical aspect is usually what is meant when a language is said to “have aspect”, in other words, that verbs can be conjugated into forms that serve to distinguish how the verb relates to the flow of time, irrespective of the temporal location of the situation it denotes. Even so, in many languages, the usage of aspect markers is restricted to certain tenses. In Greek, for example, the formal distinction between perfective and imperfective only exists for the past tense.

2.3 Lexical aspect

Grammatical aspect contrasts with **lexical aspect**, which refers to the inherent aspectual meanings of verbs, i.e. their semantic relation to time flow, which does not depend on morphological realizations of aspect (e.g., the verb *to be* is usually inherently stative without further context). As this chapter predominantly analyzes the semantic features of *chigau* as an individual verb, it follows that I will mainly draw on concepts from lexical aspect theory.

The distinction between **stative** and **dynamic** meaning has a prominent place in discussions on lexical aspect. A situation is said to be stative when it constitutes a state that will continue *without change* as long as nothing takes place to change that state (as in *I live in Oslo*). Thus, a stative situation requires no effort to continue (Comrie, 1976, p. 49). Conversely, a dynamic situation is one that changes constantly, and where a continuous input of energy is required to

remain in this state of constant change (as in *She is walking*). While adjectives are usually considered purely stative, verbs are often categorized as either **stative or dynamic verbs** based on which of these situation types they tend to express (Kindaichi et.al, 1976, p.24). Since a state cannot come about or terminate without some change occurring, **a change of state is always dynamic, and a verb that denotes such a change will usually be categorized as a dynamic verb** (Comrie, 1976, p. 50). The question of whether or not a change of state has taken place is therefore highly relevant when evaluating the aspectual qualities of a verb in a given context.

It is important to note that very few verbs are purely stative or dynamic and it is usually more fruitful to think of the stative-dynamic dichotomy as a continuum, in which verbs incline towards one of two extremes to varying degrees. Thus, *live* can be said to incline towards being a stative verb, whereas *run* tends to be a dynamic verb. The question then becomes *how far* to one side a verb inclines. As mentioned previously, *chigau* is alleged to be mostly stative.

Two additional noteworthy distinctions not mentioned so far are those concerning the absence or presence of **duration** and **telicity**. A situation is **durative** when it continues for a certain amount of time; the opposite is a momentary situation with no or very short duration, so-called **punctual** situations. Thus, stative verbs are always durative, whereas dynamic verbs can be either durative or punctual. A situation is **telic** when it has a natural endpoint that marks its completion. Such situations thus cannot be considered to be completed before they have reached their endpoint, beyond which they cannot continue. An example that is often given is the situation *make a chair*, where the process does not end before the chair is completed (i.e. *she is making a chair* ≠ *she made a chair*). In contrast, an **atelic situation** can be terminated at any time, and still be considered to be completed (i.e. *he is singing* = *he has sung*). Note that both telic and atelic situations are durative.

While there are several methods for grouping verbs based on their relation to the flow of time, the most influential in Western linguistics stems from the American scholar Zeno Vendler, who in a 1957 article in *Philosophical Review* introduced a four-way distinction of English verbs based on the aspectual features of the events they denote. These four categories are given below, with some typical example verbs (Jacobsen, 1992, p. 161):

(1)

- **State verbs:** *be, love, contain, know,*
- **Activity verbs:** *run, walk, play*
- **Accomplishment verbs:** *make a chair, walk to school*
- **Achievement verbs:** *die, drop, win the race*

As indicated by the name, **state verbs** encompass stative verbs, in contrast to the remaining three categories, which are all dynamic. **Activity verbs** denote situations that are dynamic but with an arbitrary end point, making them atelic. **Accomplishment verbs** and **achievement verbs** are both telic, but differ in that accomplishment verbs are durative while achievement verbs are punctual. Stative verbs, which are inherently durative, usually cannot take the progressive ([be + V-ing] in English), while dynamic verbs in general are required to combine with the progressive to express *continuous* activity that resembles stativity. Comrie's refers to this as "nonstativity with continuous meaning" (Comrie, 1976, p. 49).³ Detractors from Comrie often subsume this under the term "stative" and classify the progressive form as a "stativizer". Regardless of the terminology, however, it follows that **a verb that takes the progressive form can usually be considered to be dynamic** (Comrie, 1976). The meaning of the progressive form can be predicted based on the semantic interaction between the progressive construction and the aspect of the verb. Thus, one finds that non-punctual dynamic verbs tend to indicate an action in progress when combined with the progressive, while punctual verbs will denote the process leading up to the point of momentary change⁴ or express iterative meaning (duration through repetition (Shirai, 2000, p. 5):

(2)

- Activity verbs (durative): progressive indicates action in progress (*she is running*)
- Accomplishment verbs (durative): progressive indicates action in progress (*she is making a table; he is running a mile*)
- Achievement verbs (punctual): Process leading up to the endpoint (*she is reaching the summit*)

³This test is not foolproof, however, as many exceptions can be found, mainly due to the fact that the progressive can take on finer semantic nuances derived from context. The English progressive in particular is known for its semantic versatility. (e.g. *I am loving it.*)

⁴ Note that this is only valid in English

- Iterative action in progress (*she is jumping; he is coughing; they are knocking on the door*)⁵

As most verbs are not completely stative or dynamic, however, there are many instances where the same verb vacillates between several categories due to contextual interference. For example, we see above that the verb *run*, which usually is an activity verb, acts as an accomplishment verb when the endpoint is specified (e.g. *she is running for president*). Comrie also introduces some examples where verbs usually classified as stative are used with the progressive:

(3) I **am understanding** more about quantum mechanics as each day goes by.

(4) Fred **is being** silly.

In (3) the verb *understand* can be interpreted as a punctual verb with the meaning “grasp, realize”. The progressive does not refer to an unchanging state, but the durative process leading up to a final endpoint, connecting one state of comprehension to another (Comrie, 1976, p. 36). Thus, *understand* can be said to behave dynamically in this case. In (4), we are told that Fred is in the process of acting silly right now. No claim is made about behavior at any other times or in general, implying action in progress. It is therefore easy to paraphrase (4) as *Fred is acting in a silly manner*. On the other hand, *Fred is silly*, does not describe an ongoing action, but rather how Fred behaves in general, without implying that he is doing anything silly right now. (Comrie, 1976, p. 36).

Thus, although lexical aspect theory primarily deals with the inherent aspect of separate verbs, a verb’s stativity or dynamicity also depends on its semantic context; or, as Comrie puts it, “[...] the particular meaning they [verbs] have in the given sentence” (Comrie, 1976, p. 36). This also means that when we analyze the aspectual dimensions of *chigau* in Japanese, **we also have to analyze it as reflected by its usage in actual utterances.**⁶ This point explains the need for a corpus analysis.

2.4 Aspect in Japanese

⁵ Verbs in this group are, due to their tendency to be atelic, sometimes treated as a fifth category called semelfactive (Shirai, 2000, p.6)

⁶ In this regard, it is perhaps not surprising that some detractors of the theories on lexical aspect discussed in chapter 4 consider it meaningless to discuss lexical aspect outside of particular predicates (See Clarke, p. 21)

The discussion on aspect so far has mainly dealt with examples from English. In order to further our understanding of the meanings of *chigau*, it is necessary to consider the properties of lexical aspect in Japanese. I will first discuss the properties of the aspectual *te-iru* marker, before discussing lexical aspect of Japanese verbs.

2.4.1 The *te-iru* form

Japanese has several ways of encoding aspect, and like most languages, this is derived from mainly three sources: the inherent meaning of verbs and adjectives (lexical aspect, see next section), modification of this inherent meaning as provided by verbal auxiliaries and additional modification provided by adverbials and other syntactic elements (Jacobsen, 1992, p. 158). This section is primarily concerned with the second, where the so-called ***te-iru* form** is one of the more productive mechanisms. The *te-iru* combines the gerund (which always ends in *-te* or *-de*, hence it is often called the “te-form”) and the stative existential verb *iru*. Like the English progressive construction (be + verb + *-ing*), it mainly serves to give dynamic verbs “nonstative continuous” or “stative-like” meaning and is usually incompatible with stative verbs. Like its English equivalent, the *te-iru* formation takes on different meanings based on the lexical aspect of the verb, chiefly on-going process or a state resulting from an event that was completed at some point in the past, which I will hereafter refer to as the **resultative** (jap: *sonzoku*). Compare the progressive meaning of (3) with the resultative meaning of (4) (examples and translation from Jacobsen, 1992, p. 159):

(1) *matsu* (“wait”)

Tanaka-san-wa	eki-no	mae-de	matte-iru
Tanaka-POL-TOP	station-GEN	front-LOC	wait.GER-PROG

“Tanaka **is waiting** in front of the station.”

(2) *iku* (“go, arrive”)

Tanaka-san-wa	Tookyoo-ni	itte-iru
Tanaka-POL-TOP	Tokyo-LOC	go.GER-RES

“Tanaka **has gone** to (**is in**) Tokyo.”

The formation in (5) denotes action in progress, while (6) states that Tanaka is in Tokyo, and implies this happened as a result of him arriving there at some previous point). Following, Comrie (1976), the latter usage is often identified as a **perfect**, or more specifically **perfect of result** (cf. Comrie, 1976, p. 56 and Jacobsen, 1992, p. 158), to emphasize that it always implies successful completion in the past. However, the term perfect is often associated with languages that have a formal grammatical distinction between perfect and non-perfect forms (e.g. the past perfect vs. the simple past in English and Norwegian) (Comrie, 1976, chapter 3). Japanese does not have a similar distinction relying on several periphrastic constructions to express different flavors of perfect meaning, of which the *te-iru* form is only one of several options. As it more clearly disentangles Comrie’s concept of perfect *meaning* from language-specific perfect *forms*, resultative is a more suitable term for this usage of the *te-iru* form.

2.4.2 Lexical aspect of Japanese verbs

As mentioned in 3.4.1, the meaning of the *te-iru* form is posited as changing with the lexical aspect of the verb. The most influential framework for mapping this interaction is usually associated with the linguist Haruhiko Kindaichi, who already in the 1950s classified verbs based on their aspectual interaction with the *te-iru* form. He follows a similar four-way scheme as Vendler, with one stative group that never takes *te-iru*, two dynamic groups that do and one final dynamic group that must take *te-iru* (Kindaichi, 1976, p. 7). This model has exerted considerable influence on discussions on the aspectuality of Japanese verbs, which, in combination with its similarity to Vendler’s equally influential model, makes it a useful framework for discussing the aspectual behavior of *chigau*.⁷ Kindaichi’s four categories are summarized below. (Kindaichi et.al, 1976, p. 7; English translations of category names are from Jacobsen, 1992, pp.161-162):

Stative verbs (jap: *jootai-dooshi*) correspond to Vendler’s state verbs. Examples includes the existential verbs *aru* and *iru* (“exist, be”), used for inanimate and animate subjects respectively, and potential verbs, such as *dekiru* (“be able”), *mieru* (“be visible”), *wakaru* (“understand, be clear”) and *chigau*.⁸ Kindaichi remarks that their stativity makes these particular verbs words that are “[...] **called verbs, and yet act non-verbally, and are closer**

⁷ Kindaichi’s model has received criticism for classifying verbs solely on their relation to temporal flow. See Jacobsen, 1992, pp. 163-179 for a summary of this criticism.

to adjectives [...]”⁹, (my emphasis), which keeps with the notion that the stativity of *chigau* makes it more “adjective-like”.

Continuative verbs correspond to Vendler’s durative verbs are durative and typically express an on-going process meaning when combined with *te-iru*. Examples include *yomu* (“read”), *kaku* (“write”), *warau* (“smile, laugh”) and the verb in expressions such as *ame ga furu* (“rain”, literally “rain falls”) and *kaze-ga fuku* (“become windy”, literally “wind blows”). Thus, a sentence like *kare-wa (hon-o) yondeiru* translates to “he is [in the process of] **reading** [a book]” and *ame-ga futteiru* means “it **is raining** [right now]”.

Instantaneous verbs are punctual and denote the transition from one state to another. The prototypical example is *shinu* (“die”), where the subject is perceived as momentarily going from being alive to being dead. Other examples include (*denki-ga tsuku*, “(an electric light) turns on/comes on”, *todoku* (“be delivered, reach”), *tomaru* (“stop, halt”_{INTRANS}), *tsukiru* (“be used up, run out”) and *hajimaru* (“begin, start”). Unlike punctual verbs in English, where the progressive can denote the process leading up to the endpoint, the *-teiru* denotes the situation *after* the endpoint (Shirai, 2000, p. 6). Thus, *shindeiru* of *shinu* means “has died/dead” (not “is dying”), while *denki-ga tsuiteiru* translates to “the electric light **is on**” (not “the electric light is turning on”). Also included are verbs such as *kekkon-suru* (“be married”) and *sotsugyoo-suru* (“graduate from school”). Thus, *Ken-wa kekkon-shiteiru* always translates to “Ken **is/has** gotten married” rather than “Ken is (in the process of) getting married”.

Type 4 verbs have no real equivalent in English, but strongly resemble instantaneous verbs in that they denote a change of state conceptualized as being punctual (what Kindaichi describes as “taking on a state”; jap: *aru jootai-o obiru koto*). They are distinguished from instantaneous by the fact that a) they can only appear in the *-te-iru* form, and b) their *te-iru* forms are not resultative, but “purely stative” (jap: *tanjun-jootai*). Examples include:

(3) *sobieru* (“rise, tower, be dominant”)

Sono	mine-wa	kumo-no	ue-ni	sobieteiru
that	peak-TOP	cloud-GEN	above-LOC	rise.up.STAT

”That peak **rises** above the clouds.”

⁹ (jap: [...]*dooshi to-wa iu monono, dooshi-rashikaranu, keeyooshi ni chikai dooshi de atte [...]*)

(4) *sugureru* (“to excel, surpass”)

Kanojo-wa	gakuryoku-de-wa	hoka-no	hito-yori
she-TOP	scholastic.ability-LOC-TOP	other-GEN	people-ABL

sugureteiru.

come.to.curpass.STAT

“She **surpasses** others in scholastic ability”.

Jacobsen (1992, p. 164) points out that the number of verbs that exclusively belong to the type-4 group are quite rare. He theorizes that some of the members of this class in reality are instantaneous verbs where the non-past form has become defective and the resultative *te-iru* form has been reduced to a purely stative form, having lost “[...] reference to any event giving rise to a state and have come to indicate the state itself”. This semantic shift can be attributed to the very close semantic relationship that exists between resultative and stative forms (Frellesvig, 2010, p. 68). Corroborating Jacobsen’s claim is the fact that the *te-iru* form of several instantaneous verbs today oscillates between resultative and “purely stative” meaning, depending on the context.

(*magaru*, “bend_{INTRANS}”)

(5) Kono kugi-wa magatteiru

this nail-TOP bend.RES

“This nail **is bent**” [resultative; the nail might have been bent at some time in the past
→ instantaneous verb]

(Kindaichi, 1976, p. 11; Jacobsen, 1992, p.165)

(6) Kono michi-wa **magatteiru**

this road-TOP bend.STAT

“This road **bends**” [purely stative; the road has always been bent; no event of it being bent took place in the past → type-4 verb]

(Kindaichi, 1976, p. 11; Jacobsen, 1992. p.165)

(*kawaru*, “change, be altered”)

(7) Kare-no kamigata-ga sukoshi **kawatteiru** koto-ni kizuita.
he-GENhairstyle-NOM a.little change.RES NMLZ-DAT notice.PST

“I noticed something **different** about his hairstyle.” (Literally: I noticed that his hairstyle **had changed** somewhat.) [Resultative; he likely changed his hairstyle at some point in the past → instantaneous verb]

(8) Kanojo-wa seekaku-ga **kawatteiru**.
she-TOP personality-NOM change.STAT

“She has a **strange** personality.” [Purely stative: her personality has always been strange → type 4 verb]

Similarly, and most pertinent to our discussion, is the fact that some members of the stative class can take the *te-iru* form and behave as type-4 verbs. In other words, some verbs that normally behave statively can take *-te-iru* with no discernible change in meaning (Jacobsen, 1992, p. 164). Jacobsen opts to group these verbs with the stative class, and explicitly relates them to Vendler’s state verb class (p. 166). However, it is possible to argue that their compatibility with *-teiru* **suggests that they, like other type-4 verbs, used to be instantaneous verbs, and that their *te-iru* form used to designate the situation after the end-point.**

chigau “be different” (become different)

(9) Sono kotae-wa **chigau/chigatteiru**
that answer-TOP be.different/become.different.STAT

“That answer **is wrong**.”

wakaru, “understand” (grasp, become aware of)

(10) Anata-no kimochi-ga **wakaru/wakatteiru**.

you-GEN feeling-NOM be.aware/become.aware.STAT

“I **understand** how you feel.” (Literally: “I **understand** your feelings.”)

mieru, “be visible” (become visible)

(11) Fujisan-ga **mieru/mieteiru.**

Mount.Fuji-NOM be.visible/become.visible.STAT

“I **can see** Mount Fuji.” (Literally: “Mount Fuji **is visible**.”)

This becomes even clearer when examining the past form of these verbs, which often mirrors instantaneous verbs by expressing a change of state:

(12) Kanojo-no shootai-ga yatto **wakatta.**

she-GEN true.identity-NOM finally become.aware.PST

“I finally **found out** who she really is.”

(13) Hana-ni nikibi-ga **dekita.**

nose-LOC zit-NOM come about.PST

“I **got a zit** on my nose.” (Literally: “A zit **emerged** on my nose.”)

(14) Fujisan-ga **mieta.**

Mount.Fuji-NOM become.visible.PST

“I **spotted** Mount Fuji.” (Literally: “Mount Fuji **came into view**.”)

The important implication from this is that several stative verbs, including *chigau*, **can be used both statively and dynamically**. By analogy with (12), (13) and (14), it follows that the past form *chigatta* should exhibit the same tendency, as in (15)

(15) Ruuru-ga **chigatta.**

rule-NOM become.different.PST

[Intended] “The rules **changed**.”

Kindaichi, however, remains silent on the *chigatta*, and does not discuss the implications of categorizing the *te-iru* form *chigatte-iru* as a type-4 verbs.

2.5 Conclusion

In chapter 2 I summarized aspectual theory and examined the aspectual properties of Japanese verbs. Evidence was found for the possibility that *chigau*, along with other stative verbs, such as *wakaru* and *dekiru*, might have a dynamic component. To elucidate this possibility, it is necessary to examine previous research conducted on the adjectival forms and analyze the lexical aspectual qualities of *chigau*.

3 Previous research

3.1 Inoue (1985)

The earliest research on the adjectivalization is represented by the Japanese linguist Fumio Inoue, who throughout the 1970s and early 1980s conducted a series of surveys on relatively recent linguistic innovations in Japan. Building on this research and sociolinguistic theories, Inoue coined the term *new dialects* (Japanese: *shin-hōgen*) to describe the innovations he found. This was the first time these types of recent changes were given a common nomenclature (Inoue, 1985, intro). Inoue established three important features for defining and describing these new forms:

(1)

- Their usage is more widespread among younger generations
- Usage is mainly confined to informal settings
- Forms are different from those of the standard (or common) language and are considered sub-standard by users themselves. (Inoue, 1988, p. 3.)¹⁰

Thus, Inoue's research mainly deals with recent recent language-variation. Inoue argues that many contemporary scholars of linguistic change have erroneously posited that modern innovations tend to originate in the urban elite in political and cultural centers as part of a process of linguistic standardization and concurrent reduction in regional linguistic diversity. Inoue's new dialectal innovations are part of his efforts to show that a significant portion of innovations in use among young speakers but absent from the speech of older speakers in regional areas are not received standard forms, but local innovations that were coined by members of the local speech community. Inoue thus argues that, while standardization is a powerful driving force in modern Japanese, new innovative dialectal forms serve to counteract it, preventing complete standardization.

¹⁰ Note that Inoue specifically emphasizes that the term should not be taken to mean the creation of a new, systematic linguistic variety. It only refers to individual innovations within pre-existing dialects. (Inoue, 1988, p. 3)

One of the innovations studied by Inoue is an adjectival form of *chigau*, namely *chiga-katta*, a past form of *chigau* (“was/were different”) derived via the adjectival past tense marker *-katta*, and classified by Inoue as an eastern new dialect form. Although still obscure enough to not have been noticed by the media or the public (p. 28), Inoue’s research shows significant acceptance among certain segments of speakers in Tokyo, who appear to treat *chiga-katta* as a sub-standard variant of the standard past stative form *chigatte-ita* (“was different”) and its phonologically reduced colloquial variant *chigatte-ta*. In a series of local surveys conducted throughout Tokyo during the late 1970s and early 1980s, informants recruited from various locations and from different walks of life were asked to gauge the acceptability of the aforementioned three forms in sentences such as (2) below:

(2) Mukashi-no bareebooru-no ruuru-wa ima-to
 old.days-GEN volleyball-GEN rule-TOP now-COM

chigatte-ita/chigatte-ta/chiga-katta

be.different.STAT.PST/different.PST_{ADJ}

“The rules of volleyball **were different** before.” (Adopted from p. 258)

The informants were also asked to evaluate which forms they would use on TV and in their own home. Unsurprisingly, *chigatte-ita* stood out for being considered the most appropriate in general and for TV appearances in particular, presumably due to its association with the written standard. Inoue thus posits that *chigatte-ita* is perceived as the main standard form by speakers (jap: *kyootsuugo*), while *chigatte-ta* and *chiga-katta* are regarded as sub-standard dialectal forms (jap: *hoogen*). In addition, while speakers from all ages accepted the reduced variant *chigatte-ta*, the adjectival form *chiga-katta* occurred among speakers born after the war, and was predominantly used by adolescent speakers, with 30 % of middle school informants reporting using it in private settings. By virtue of its overall popularity, particularly among older speakers, *chigatte-ta* is therefore theorized to be the traditional, “old dialect” form (jap: *ko-hoogen*) by Inoue. Similarly, the concentration of *chiga-katta* among adolescent speakers and its status as an informal form for private use makes it a prime example of a new dialectal form. Finally, Inoue’s research shows a clear downwards trend in popularity for the traditional dialectal form *chigatte-ta* among the youngest informants, whereas *chiga-katta*, despite its obscurity, exhibited a clear upwards trend among the same group. Inoue therefore concludes that *chigatte-ta* is slowly being supplanted by the new form

chiga-katta as the main eastern dialectal past stative form of *chigau* among younger speakers (p. 258).

Inoue also shows that *chiga-katta* is used even more extensively in areas east and north of Tokyo, including older speakers in some areas. Specifically, by travelling northeast along the Tōhoku main line and the Tōbu Nikkō line railways and conducting interviews with local informants along the way, Inoue finds that *chiga-katta* is particularly prevalent in Fukushima and Tochigi (p. 28) prefectures, situated in northern Kantō and southern Tōhoku, respectively. Based on a national survey conducted at 500 middle schools throughout Japan, Inoue finds no evidence that the form was used outside this area at this time (p. 28). These findings lead

Inoue to posit that *chiga-katta* most likely first appeared somewhere in these areas, before gradually diffusing south-west into Tokyo via the Shitamachi area (Inoue, 1998, p. 66). By the late 1970s it had also been detected among speakers in Yokohama, situated just south of Tokyo (Kitamoto, 1995, p. 6). Sato (2008) confirms that the same form starting appearing in Gunma prefecture, which borders Fukushima to the south and Tochigi to the east, around the same time.

Inoue's hypothesis is further strengthened by the fact that the form appears to be more frequent in eastern parts of Tokyo (see the bottom graph in figure 1), particularly in the so-called Shitamachi district, an area situated in the lower eastern parts of the city traditionally associated with the less affluent citizens of Tokyo, and where the language has been more open to influence from eastern Japanese dialects than the traditionally affluent Yamanote area in the western hilly areas of the city.¹¹ Inoue remarks that the spread of a linguistic innovation from the

periphery to an urban population goes against a common assumption made by many contemporaneous and past scholars that innovations mainly take place in urban areas and then gradually diffuse into the periphery (p. 21).

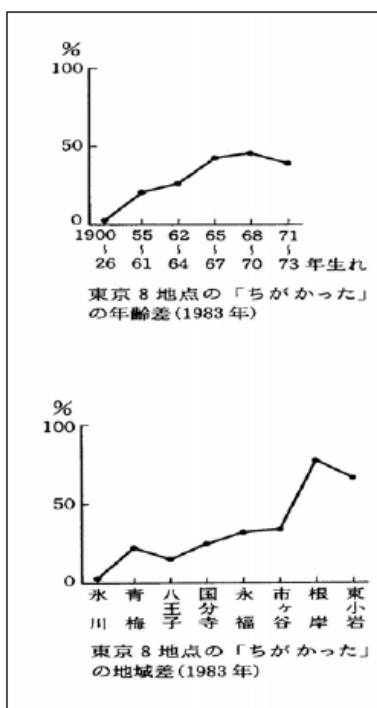


Figure 1: Use of *chiga-katta* among respondents in Tokyo in 1983 by birth-year (top) and location (bottom). The x-axis in the bottom graph goes from west to east in Tokyo. (Adapted from Sato, 2008, p. 4)

¹¹ Not too dissimilar from the traditional social and linguistic distinction between eastern and western parts of Oslo.

3.2 Kitamoto (1995)

While Inoue (1985) focuses on the past form *chiga-katta*, Yoko Kitamoto's 1995 paper "On the adjectival inflection of the Japanese verb 'CHIGAU (differ)'" (*nihongo-dooshi "chigau" no keiyooshi-gata-katsuyoo no jittai*) is one of the first to demonstrate the existence of other adjectival formations as well. The paper summarizes the results of two surveys she conducted among students in 1994 at two separate universities in Tokyo to assess the status of these formations.

3.2.1 Survey 1

Kitamoto's first survey examined whether some conjugational formations were more likely to take an adjectival auxiliary than others. Each informant was given a work sheet with the root *chiga-* repeated 12 times, each time with a different formation. The respondents were then tasked with filling in the element that would form a conjugation appropriate for the formation in question. The tasks given and the results are shown below.

(1)

- | | |
|---|--|
| a) <i>Chiga-</i> () <i>-te</i> | Gerund |
| b) <i>Chiga-</i> () <i>-nai</i> | Negative |
| c) <i>Chiga-</i> () <i>-ta</i> | Past |
| d) <i>Chiga-</i> () <i>kara</i>
"because" | Non-past/negative/past + causal conjunction <i>kara</i> |
| e) <i>Chiga-</i> () <i>-ba</i> | Conditional |
| f) <i>Chiga-</i> () <i>noni</i>
<i>noni</i> "despite, although" | Non-past/negative/past + contradictory conjunction |
| g) <i>Chiga-</i> () <i>-temo</i> | Concessive |
| h) <i>Chiga-</i> () <i>-tari</i> | Representative |
| i) <i>Chiga-</i> () <i>-soo-da</i> | Evidential/hearsay |

- j) *Chiga-* () *keredo* **Non-past/past + concessive particle** *keredo* “but”
- k) *Chiga-* () *shi* **Non-past/negative/past + conjunctive particle** *shi*
“and (moreover)”
- l) *Chiga-* () *node* **Non-past/negative/past + causal particle** *node*
“because”

(Adopted from Kitamoto, 1995, p. 3)

The open brackets are where the respondents were asked to fill in the missing element to complete the required formation. For a), for example, the expected formation is the gerund *chigatte*, in contrast to adjectives (e.g. *takai* → *takaku-te*). Similarly, in task b), the negative formation *chigawa-nai* is expected, and so on. Tasks for the volitional (**chigaō*) and imperative (**chigae*) were dropped, as these are defective due to semantic constraints of the verb.

Table 3: Occurrence of adjectival formations (adapted from Kitamoto, 1995, p. 4)

Formation	Adjectival	Total number of occurrences
Past	<i>Chiga-katta</i>	18
Negative	<i>Chigaku-nai</i>	13
Gerund	<i>Chigaku-te</i>	12
Concessive	<i>Chigaku-te-mo</i>	10
Representative	<i>Chiga-kattari</i>	5
Conditional	<i>Chiga-kereba</i>	4
Negative (topicalized)	<i>Chigaku-wa-nai</i>	2
Representative inchoative	<i>Chigaku-nattari</i>	2
Past inchoative	<i>Chigaku-natta</i>	1
Concessive inchoative	<i>Chigaku-natte-mo</i> ¹²	1

The adjectival formations that were attested and their frequency are summarized in table 3 above and are organized according to frequency. 73 students in total participated in the survey.

The results above suggest that some adjectival forms are significantly more productive than others, with the most productive adjectival form being past *chiga-katta*, the gerund *chigaku-te* and concessive *chigakute-mo*, although other forms also surfaced, most noticeably the representative *chiga-kattari* and the conditional *chiga-kereba* (Kitamoto, 1995, p. 5). Like

¹² Translates to “even if [subject] becomes different”

Inoue, Kitamoto also notes the absence of the hypothetical adjectival non-past **chigai*. She speculates that the lack of a non-past form is due to competition with the verbal infinitive *chigai-*, which has some well-established functions, including as a noun (“difference”).

In addition, Kitamoto notes that many respondents use adjectival and verbal formations interchangeably (p. 5). For example, one respondent that selected *chigaku-te* (adjectival gerund) for task a) switched to *chigatte* (verbal gerund) for the concessive formation in task g). Kitamoto therefore argues that the adjectival paradigm is fairly restricted in its usage and only plays a complimentary part to the standard verbal paradigm. The apparent lack of a non-past means the adjectival paradigm is also partially defective (Kitamoto, 1995, p. 5).

Furthermore, while Inoue (1985) found that most users considered adjectival past *chiga-katta* sub-standard and inappropriate for formal contexts, Kitamoto speculates that this form (as well as other adjectival forms) has seen increased usage in semi- and formal contexts, mainly among younger speakers as well as in certain popular media. She proposes that some speakers might have started to regard one or more of these formations as natural, possibly even standard (Kitamoto, 1995, p. 6). The next step was therefore to test the acceptability of the adjectival forms, which was the focus of Kitamoto’s second survey.

3.2.2 Survey 2

In the second survey, 18 example sentences using various formations of *chigau* were constructed; 8 verbal and 10 adjectival. Each sentence was printed on a separate work sheet, and the students were instructed to rate each sentence separately in order to minimize outside influence on their evaluations (pp. 6 – 7). The respondents were asked to grade the acceptability of each sentence using one of three symbols: ○, △ and ×, representing the evaluations “Feels natural” (jap: *futsuu da to kanjiru*), “Feels somewhat unnatural” (jap: *yaya futsuu denai to kanjiru*) and “Clearly feels awkward” (jap: *akiraka-ni okashii to kanjiru*) respectively. I will refer to these evaluations using the abridged forms “**natural**”, “**somewhat unnatural**” and “**awkward**”. The participants were also asked to rewrite the sentences they rated as “awkward” to what they felt would be a more natural mode of expression. This survey took place in Yokohama and was undertaken at Kanto Gakuin University. 72 second-year students participated; 21 men and 51 women. The results for the adjectival formations are summarized in table 2 below.

Table 4: Results for adjectival formations (adapted from Kitamoto, 1995, p. 7)

Formation	Adjectival	○: Nr. of resp. (%)	△: Nr. of resp. (%)	×: Nr. of resp. (%)
Negative	<i>chigaku-nai</i>	19 (27)	27 (37)	26 (36)
Conditional	<i>chiga-kereba</i>	17 (24)	17 (24)	38 (52)
Past	<i>chiga-katta</i>	29 (40)	19 (27)	24 (33)
Evidential	<i>chiga-soo da</i>	5 (7)	15 (21)	52 (72)
Noun	<i>chiga-sa</i>	1 (1)	2 (3)	69 (96)
Gerund	<i>chigaku-te</i>	15 (21)	22 (30)	35 (49)
Non-past + evidential	<i>chigai daroo</i>	2 (3)	0 (0)	70 (97)
Negative (topicalized)	<i>chigaku-wa-nai</i>	24 (33)	29 (40)	19 (27)
Excessive	<i>chiga-sugiru</i>	8 (11)	16 (22)	48 (67)
Inchoative	<i>chigaku-naru</i>	25 (35)	32 (44)	15 (21)

We see that several of the adjectival formations were deemed “natural” by a significant number of respondents. Once again, the most popular appear to be the adjectival past form *chiga-katta* (40 %) and various derivatives of the infinitive (*chigaku-*), such as inchoative *chigaku-naru* (35 %), topicalized adjectival negative *chigaku-wa-nai* (33 %), negative *chigaku-nai* (27 %) and gerund *chigaku-te* (21 %). The conditional *chiga-kereba* (24 %) also stands out, but was also given a conspicuously high number of negative evaluations, with 52 % of respondents deeming it “awkward”, which is considerably higher than for any of the infinitive-derived formations (except *chigaku-te* at 49 %). Furthermore, combining the ○ and △ ratings for *chiga-kereba* yields a score of 48 %, revealing that the respondents seemed to have split nearly along the middle on this particular form (Kitamoto, 1995, p. 7).

As seen in the first survey, the hypothetical non-past **chigai* is not endorsed by most speakers, with 97 % of participants deeming it “awkward”. The same goes for the adjectival noun formation *chiga-sa*, which combines the root with the suffix *-sa* and was deemed “clearly awkward” by 96 % of participants (Kitamoto, 1995, p. 8). However, the two other root-based formations (evidential/hearsay *chiga-soo da* and excessive *chiga-sugiru*) fared slightly better. While few respondents deemed them completely natural, each form was deemed “somewhat unnatural” by approximately 20 % of the participants, perhaps heralding a decrease in the number of speakers rejecting these forms outright (Kitamoto, 1995, p. 8). Compare with the results for the verbal formations in table 5 below.

Table 5: Results for verbal formations (adapted from Kitamoto, 1995, p. 7)

Formation	Verbal	○: Nr. of resp. (%)	△: Nr. of resp. (%)	×: Nr. of resp. (%)
Non-past polite (infinitive + auxiliary)	<i>chigai-masu</i>	64 (89)	6 (8)	2 (3)
Gerund	<i>chigatte</i>	70 (97)	2 (3)	0 (0)
Non-past + evidential	<i>chigau rashii</i>	69 (96)	3 (4)	0 (0)
Negative	<i>chigawa-nai</i>	55 (76)	15 (21)	2 (3)
Inchoative	<i>chigatte-kuru</i>	69 (96)	2 (3)	1 (1)
Conditional	<i>chigae-ba</i>	64 (89)	6 (8)	2 (3)
Infinitive (as a noun)	<i>chigai</i>	71 (99)	0 (0)	1 (1)
Representative	<i>chigattari</i>	59 (82)	9 (12)	4 (6)

Not surprisingly, the standard verbal paradigm is still highly accepted overall, with several formations rated as “natural” by more than 90 % of the informants. Two forms stand out however, namely *chigawa-nai* (negative) and *chiga-ttari* (representative); both being ranked as “natural” by 76 % and 82 % respectively, a comparatively low number relative to the other verbal formations. Both were also evaluated as being “somewhat natural” by a comparatively high number of respondents (21 and 12 % respectively). A closer examination of the results for these particular formation reveals that the number of respondents who rated negative *chigawa-nai* as “clearly unnatural” or “somewhat unnatural” (24 %, 17 students) and those who considered the adjectival counterparts *chigaku-nai* and *chigaku-wa-nai* to be natural (27 % and 33 % respectively) appears to be converging (Kitamoto, 1995, p. 8), indicating that some speakers consider the adjectival formations more natural than the verbal equivalents.

An important caveat that must be made, however, is that not every one of the 17 respondents who evaluated *chigawa-nai* negatively showed any preference for the adjectival counterpart. Ishii notes that many of them simply replaced it with an entirely different verb conjugated into an equivalent form, such as *kawaru* (“change_{INTRANS}”) or *machigau* (“be wrong, make a mistake”). In fact, most instances of verbal formations being rated as “clearly unnatural” were due to the participants opting for a different verb (Kitamoto, 1995, pp. 8 – 9). Nevertheless, 5 of the 17 participants that evaluated *chigawa-nai* negatively were found to have given either or both of the adjectival equivalents (*chigaku-nai*, *chigaku-wa-nai*) a “natural” ranking. The fact that the 3 negative formations of *chigau* using the negative auxiliary *-nai* in the survey

occur in quite different semantic contexts makes it difficult to draw definite conclusions on possible semantic differences between the verbal and adjectival alternatives (Kitamoto, 1995, p. 8). Nonetheless, the fact that some speakers clearly did reject *chigawa-nai* in favor of either of the adjectival equivalents does seem to indicate that some speakers prefer using the adjectival infinitive for negation, at least in some contexts (Kitamoto, 1995, p. 8). Although Kitamoto alludes to the possibility of a contextual difference in usage between the verbal and adjectival negative formations, she does not elaborate on what kind of contextual difference this might be.

Finally, there were two instances where speakers explicitly preferred the adjectival counterpart. This occurred with representative *chigattari*, where 2 respondents preferred *chiga-kattari*, and conditional *chigae-ba*, where 1 participant preferred *chiga-kereba* instead. For these 3 participants, it would appear that, at least in some cases, the adjectival form actually felt more appropriate than the verbal equivalent. And while this was limited to only 3 speakers, Kitamoto points out that out of the 72 students that participated in the survey, only 3 of them rated all 10 adjectival formations that were used in the survey as “awkward” (Kitamoto, 1995, p. 9).

Kitamoto theorizes that the seemingly growing viability of this new paradigm is due to a desire to neutralize a discrepancy between the meaning and form of *chigau*. She notes that adjectives often conventionally are defined as denoting states, whereas verbs are associated with dynamic events. This notion is reflected in the Japanese nomenclature; *keiyoshi* (“describing words”) for adjectives and *dooshi* (“moving/active words”) for verbs. Kitamoto points out that *chigau*, unlike many other verbs, tends towards stative meaning but still behaves grammatically as a verb. In Kitamoto’s opinion, two processes are taking place to eliminate this asymmetry: a) the creation of an adjectival paradigm which is limited to only expressing the stative nuances; and b) the transfer of the remaining dynamic usages of *chigau* to other verbs that are more suited for expressing dynamic processes (Kitamoto, 1995, p. 9). In other words, these forms represent the rational effort of some speakers to create more regularity in the categorization of parts of speech. Indeed, several instances of participants preferring the more dynamic verbs *kawaru* and *machigau* to verbal formations of *chigau* were found, but it is not possible to determine whether this only occurred for dynamic usages of *chigau*, as Kitamoto does not provide details on which formations were replaced and in what semantic context. Moreover, this hypothesis hinges on the assumption that *chigau* is mostly stative but still has some dynamic usages, but Kitamoto provides no examples to prove this.

Furthermore, while this hypothesis might explain the emergence of the adjectival formations, it does not shed any light on why the same changes have not taken place for other stative verbs, such as the existential verbs *aru* and *iru*, or the verbs *dekiru* (“be able”) and *wakaru* (“understand, be aware”), which are commonly considered stative (Tsuji-mura, 1996, pp. 329-333).

Finally, Kitamoto remarks that while the adjectival forms appear to be gaining ground; they show little sign of supplanting the existing standard and she concludes that there is little probability of this happening in the near future.

3.1 Inoue (1998)

In *Nihongo Watching* (“Japanese Watching”), first published in 1998, Inoue describes how he, like Kitamoto, has become aware of the existence of additional adjectival forms beyond the past form *chiga-katta* in the Tokyo area, including negative *chigaku-nai*, gerund *chigaku-te*, conditional *chiga-kereba* and *chigaku-natta*, the past form of the inchoative formation *chigaku-naru*. Building upon research conducted in the early 1980s, Inoue finds that past inchoative *chigaku-natta* appears to have followed the same propagation route as *chiga-katta*, emerging somewhere between southern Tohoku and northern Kanto at some point in the early 20th century, and then gradually advancing into Tokyo via its eastern districts (Inoue, 1998, p. 69). He is also able to attest the usage of the adjectival conjectural formation *chiga-karoo*, which was not discussed by Kitamoto. Like Kitamoto, Inoue remarks that an adjectival non-past formation **chigai*, has not been attested, but is able to attest the usage of the form *chigee* among adolescent speakers in Tokyo in various comics (p. 70). This form can reasonably be interpreted as a regional version of **chigai*, due to a type of systematic sound change that occurs in eastern varieties, whereby final diphthong /ai/ in adjectives is assimilated to /ee/; e.g. *takai* (“tall, high”) → *takee*, *hayai* (“fast, early”) → *haee* (p. 70).¹³ In contrast to Kitamoto, Inoue therefore concludes that the adjectival paradigm of *chigau* is no longer defective (p. 71). He does not however, consider the possibility that the usage of some formations is restricted by contextual factors, unlike Kitamoto (1995).

Inoue (1998) also demonstrates that similar adjectival formations have come into use in regions further west and south of Tokyo, including Kansai, Shikoku and Kyushu. He

¹³ The same change also occurs with /oi/ and /ae/ in adjectives and other word classes, e.g. *sugoi* (“incredible”) – *sugee*; *omae* (“you”) – *omee*; *kaeru* (“return, go home”) – *keeru*

emphasizes that these innovations might have arisen independently of Tokyo, stating that “when the basis for innovation is the same, the same innovation can happen everywhere” (Inoue, 1998, p. 70, my translation). Nevertheless, he acknowledges that the forms are likely to have used the Tokyo area as a springboard for further propagation (p. 71).

Inoue theorizes that the origin of *chiga-katta* is due to the same reason proposed by Kitamoto: a desire by speakers to reconcile the predominantly stative meaning of *chigau* with its morphological status as a verb. However, Inoue does not believe that the dynamic meanings are being co-opted by other verbs. Instead he assumes a clear-cut aspectual distinction between the stative past form *chigatte-ita* / *chigatte-ta* and the non-stative past form *chigatta*, where the non-stative form can only be used to express a dynamic change of state, as in (5):

(5) A **chigatta**

oh be.different.PST

(After adding a chemical reagent to a system and waiting for a color change indicative of a reaction) “Oh, it [the color] **became different!** (Inoue, 1998, p. 67)

Thus, in Inoue’s opinion, *chigatta* cannot be used in (2) (see page 18), as (2) denotes a past state rather than a dynamic event. Inoue argues that *chiga-katta* has spread because it represents a more “concise” (jap: *kanketsu*) past stative form than *chigatte-ita* / *chigatte-ta* (p. 67).¹⁴ When it comes to the overall aspectuality of *chigau* however, Kitamoto and Inoue are in agreement. He notes that the verb strongly resembles adjectives aspectually, and points out that both its antonym, *onaji*, and its English counterparts *different* and *same* are adjectives. Inoue therefore argues that some speakers have analyzed the stem *chiga-* as an adjective stem due to the strong correlation between adjectives and stative meaning. He hypothesizes that this innovation first arose as a sub-conscious **speech error** among young speakers that went unnoticed until it had gained region-wide traction (p. 67). From this argument it follows that the verb is mainly stative, with a dynamic component represented solely by the past form *chigatta* and has been delegated to the innovative *chiga-katta*.

3.2 Ishii (2011)

¹⁴ It is not clear exactly what Inoue means by “concise” here, as *chiga-katta* and *chigatte-ita* / *chigatte-ta* are not significantly different in syllable length; the description possibly refers to the fact that the morphological structure is less complex (*chiga* + *-katta* vs. *chiga* + *-tte* + *-ita*).

In the 2011 paper “The adjectival inflection of the verb CHIGAU” (“*Godan-dooshi ‘chigau’ no keeyooshi-gata katsuyoo*”), Yukiko Ishii expands upon Kitamoto’s research. Like Kitamoto and Inoue, Ishii has attested several examples of forms that do not fit in the standard verbal paradigm. She is the first to attest the use of adjectival formations on various internet sites, including past *chiga-katta* (6), inchoative *chigaku-naru* (7), concessive *chigaku-te-mo* (8) and conjectural *chiga-karoo* (9), as well as conditional *chiga-kereba* and gerund *chiga-kute*.

(6) Kankokugo-ni	honyaku	onegaishimasu.
korean.language-DAT	translation	wish.HUM.POL
Honyakuki	da-to	chotto chiga-katta node
machine.translator	COP-COMP	a.little different.PST _{ADJ} because

“I would like someone to translate this into Korean for me, because it **was** a bit **wrong** when I tried using a machine translator.” (Quoted in Ishii, 2011, p. 1, from the question-and-answer site *oshiete! goo*, my emphasis and translation)

(7) “ Chigaku-naru ”-wo	違-ni	henkan-shiyoo-to	shitara
different.INF _{ADJ} -become-ACC	違-DAT	conversion-do.VOL-COMP	do.COND
dekimasen.			
come.about.POL.NEG			

“When I tried to convert ‘**chigaku-naru**’ to the Chinese character 違 [i.e. render the expression as 違くなる], it didn’t work [...] (Adapted from Ishii, 2011, pp. 1-2, from *Yahoo! Chiebukuro*, the Japanese version of Yahoo! Answers, emphasis in original, my translation)

The example in (7) is particularly interesting because the speaker later goes on to claim that they did not know that *chigaku-naru* (as well as negative *chigaku-nai*) is non-normative, which keeps with Kitamoto’s belief.

(8) Shai-na	danshi-chuugakusee-ni	shitsumon!
-------------	-----------------------	------------

shy-ADN young.man-junior.high.school.student-DAT question

Chigaku-te-mo ii desu

different.CONC_{ADJ} good COP.POL

“[I have] a question for all the shy male junior high students out there! It’s okay **even if** [the answer] **is wrong**. (Quoted in Ishii, 2011, p. 9, my translation)

(9) Chi’i-mo	shoku-mo	shisan-mo	seeshin-jootai-mo
social.status-ETOP	occupation-ETOP	fortune-ETOP	mind-state-ETOP
nenree-mo	taikan-jikan-mo	chiga-karoo	ga [...]
age-ETOP	bodily.sensation-time-TOP	different.VOL _{ADJ}	but

“Our social status, profession, wealth, mental state, age and subjective sense of time **might all be different**, but [...]. (Adapted from Ishii, 2011, p. 9)

In order to examine the status of the adjectival paradigm in the years that had passed since Kitamoto and Inoue’s research, Ishii conducted two surveys of her own, which she refers to throughout her analysis as **survey 1** and **survey 2** (Ishii, 2011, pp. 10-11). Both were undertaken among students at **Chiba University**, approximately 40 km southeast of Tokyo center, in December 2010. **50 students** in total participated, **22 men and 28 women** (Ishii, 2011, p. 10).

For survey 1, Ishii constructed 10 vernacular sentences (jap: 口語文, *koogo-bun*) containing various formations of *chigau* extracted from both paradigms, although the majority were adjectival. The respondents were asked to grade the acceptability of each sentence using one of three symbols: ○: “Feels natural and acceptable” (jap: *Iwakan-wa naku, kyoyoo-dekiru*); △: “Feels somewhat odd, but still acceptable” (jap: *Tashoo-no iwakan-ga aru ga, kyoyoo-dekiru*) and ×: “Feels odd, not acceptable” (jap: *Iwakan-ga ari, kyoyoo-dekinai*) (Ishii, 2011, p. 10). Survey 1 thus echoes Kitamoto in studying how natural the respondents found various adjectival formations, although the phrasing of the evaluations is somewhat different from Kitamoto’s. The results are summarized in table 4 below. Unlike Kitamoto, Ishii did not examine the evidential *chiga-soo-da*, noun form *chiga-sa* or the excessive *chiga-sugiru* (p. 10).

For **survey 2**, Ishii prepared 8 vernacular sentences using only adjectival forms. The respondents were instructed to evaluate the sentences using the same symbols as in survey 1, but this time based on whether they had heard and used these forms themselves before: ○: “I have heard it before and I sometimes use it myself” (jap: *Kiita koto-ga ari, jibun-demo tsukau koto ga aru.*); △: “I have heard it, but never use it myself” (jap: *Kiita koto-wa aru ga, jibun-dewa tsukau koto wa nai* and ×: “I have never heard it and never use it myself” (jap: *Kiita koto ga nai shi, jibun demo tsukau koto wa nai*. Survey 2 therefore examines if there is a correlation between speakers’ awareness of the existence of the adjectival formations and their own attitude towards them.

The tables below summarize the results for the adjectival formations in survey 1 and 2. Some of the percentage calculations by Ishii were somewhat inaccurate and have been adjusted.

Table 6: Acceptance of adjectival forms in survey 1 (adopted from Ishii, 2011, p. 6)

Formation		○ (%)	△(%)	×(%)
Conjectural	<i>Chiga-karoo</i>	42.0	38.0	20.0
Negative (interrogative)	<i>Chigaku-nai</i> (interrogative)	52.0	46.0	2.0
Negative (declarative)	<i>Chigaku-nai</i> (declarative)	18.0 (↓ 9)	38.0	44.0
Past	<i>Chigatta</i>	68.0	24.0	8.0
Past	<i>Chiga-katta</i>	46.0 (44.0	10.0
Gerund	<i>Chigaku-te</i>	32.0	46.0	22.0
Concessive	<i>Chigaku-te-mo</i>	54.0	42.0	12.0
Inchoative	<i>Chigaku-naru</i>	30.0	44.0	26.0
Conditional	<i>Chiga-kereba</i>	52.0	30.0	16.0

Table 7: Acceptance of adjectival forms in survey 2 (adopted from Ishii, 2011, p. 6)

Formation	○ (%)	△(%)	×(%)
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Conjectural	<i>Chiga-karoo</i>	48.0	46.0	4.0
Negative (interrogative)	<i>Chigaku-nai</i> (interrogative)	94.0	6.0	0.0
Negative (declarative)	<i>Chigaku-nai</i> (declarative)	54.0	38.0	8.0
Past	<i>Chiga-katta</i>	54.0	42.0	4.0
Gerund	<i>Chigaku-te</i>	68.0	26.0	6.0
Concessive	<i>Chigaku-te-mo</i>	84.0	16.0	0.0
Non-past	<i>Chigee</i>	44.0	50.0	6.0
Conditional	<i>Chiga-kereba</i>	62.0	26.0	12.0

As seen in previous research, the past formation *chiga-katta* is still one of the most popular forms, but Ishii remarks that the form *chigaku-nai* appears to have made significant gains since Inoue (1998) and Kitamoto (1995). However, Ishii finds in survey 1 that the acceptance of *chigaku-nai* strongly correlates with whether it is used declaratively or interrogatively. In sentence (10), *chigaku-nai* is pronounced with a rising pitch and forms a rhetorical question, whereby the speaker wishes to refute a statement previously made by the listener. This is similar to the corresponding example sentence in Kitamoto's survey (*Sono kotae chigaku-nai?*). In (11) on the other hand, the same form appears in a normal declarative sentence and is pronounced without the same rise in pitch.

(10) Sono kotae **chigaku-nai?**

that answer different_{ADJ}.INF-NEG

Kaitooran hitotsu zureteru yo

Answer.column one deviate.STAT EMPH

“**Isn't** that answer **wrong**. The answer column is off by one.”

(11) Okashii na. denwa-wa **chigaku-nai**

strange EMPH telephone-TOP different_{ADJ}.INF-NEG

mitai-na noni

apparent-ADN despite

”That’s weird. The number seems to **be right**, though.” (Literally: “It appears the number **isn’t different**.”)

The positive ratings for (11) were significantly lower, with a particularly significant decrease in the number of ○ and △-ratings and a corresponding increase in ×-ratings. This shift indicates that the declarative usage of *chigaku-nai*, while in use, is not as accepted as the rhetorical interrogative usage. Although negative formations in Japanese are often used to form rhetorical questions¹⁵, she argues that *-kunai* is particularly popular among younger speakers (p. 11). This introduces the possibility that some speakers have internally analyzed it as an independent negational morphological segment (as opposed to a compound composed of infinitive *-ku* + negative *-nai*). She points out that most attested examples of *chigaku-nai* occur in rhetorical questions, including the majority of the examples she found online. This important distinction is missed by Kitamoto, who only surveys the interrogative formation.

Another reason why sentence 8 received comparatively low scores is that it often competed with the verb *machigau* (“be wrong, make a mistake”), which is in line with the conclusion drawn by Kitamoto (1995). Compare (12) and (13) below:

(12) Okashii na. Bangoo wa **chigaku-nai**

strange EMPH telephone-TOP different_{ADJ}.INF-NEG

mitai-na noni.

apparent-ADN despite

”That’s weird. It doesn’t look like the number **is wrong**, though.” (Literally: “It appears the number **isn’t different**.”)

(13) Okashii na. Bangoo-wa **machigatte-nai**

¹⁵ Similar to expressions such as “Isn’t it?” or “Don’t you?” in English. Ishii refers to such expressions as “confirmation formations” (jap: *kakunin-keeshiki*) (Ishii, 2011, p. 11)

strange EMPH telephone-TOP be.wrong.STAT-NEG

mitai-na noni.

apparent-ADN despite

”That’s weird. It doesn’t look like the number **is wrong**, though.” (Literally: “It appears the number **isn’t wrong**.”)

As indicated by the translations, there is little change in the overall meaning between (12) and (13), but the nuance is altered. The verb *machigau* is more dynamic and therefore takes the negative stative formation *-te-nai* when expressing a durative state (see chapter 2). It also implies agency; or in other words, that a mistake was made *by someone* (Ishii, 2011, p. 21, footnote). *Chigau* on the other hand, simply states that the subject is deviating from a certain standard, with no connotations of agency, making it a more vague and indirect way of pointing out mistakes. In this context, where the speaker is wondering if the malfunction of the phone is due to *her own actions*, it is likely that some participants favored using *machigau* over *chigau* because the former more directly reveals agency. Some participants (Ishii does not mention how many) also favored simplifying the sentence by replacing the negative of *chigau* with the stative form of the verb *au* (“come together, be correct”), as in (14). Ishii attributes this substitution to the speaker’s desire to make the construction less cumbersome. (Ishii, 2011, p. 12)

(14) Okashii na. Bangoo wa **atteru**

strange EMPH telephone-TOP come.together.STAT

mitai-na noni

apparent-ADN despite

“That’s weird. It looks like the number **is correct**, though.”

The results for conjectural *chiga-karoo* are also interesting because they provide us with data on a previously unstudied form¹⁶. Ishii notes that only 20 % of respondents found this form clearly awkward (×) in survey 1, and only 8 % reported never hearing or using it. Both

¹⁶ Kitamoto explicitly states that she elected to drop the conjectural from her surveys because this form is rarely used with adjectives.

surveys used a sentence that combines the conjectural with concessive particle *ga* to express the meaning “even if [subject] is different” (Ishii, 2011, p. 11).

- (15) kokuseki-ga **chiga-karoo-ga** koi-ni-wa
 nationality-NOM different_{ADJ}-CONJ-but love-DAT-TOP
 kankee nai yo
 relation not.exist EMPH

“Our nationalities **might be different**, but that’s got nothing to do with love.”

- (16) futari-no iken-ga **chiga-karoo-ga,**
 two.persons-GEN opinion-NOM different_{ADJ}-CONJ-but
 ima-wa kyooryoku-suru shika nai
 now-TOP cooperation-do nothing.but not.exist

“Your opinions **might be different**, but right now, all you can do is to cooperate.”

In survey 2, where the participants responded according to whether they had encountered this form and use it themselves, we see a sharp drop in the number of ×-ratings (“never heard and never use”) and a corresponding increase in the aggregate number of ○ and △-ratings (96 %), indicating that most of the respondents have encountered this form, even if they don’t use it themselves. The increase in the number of ○-ratings (“have heard and also use”) while incremental, does indicate that a small number of participants that deemed this form to be unnatural, still sometimes use it (Ishii, 2011, p. 11).

In survey 1, Ishii also examines Inoue’s claim that the verbal past formation *chigatta* can only be used for dynamic events, by asking the survey participants to evaluate the following sentence:

- (17) A **chigatta**
 oh be.different.PST

(Immediately after making a wrong move in a game of mahjong)

“Oh, I messed up”

68 % deemed this usage natural, which is relatively low for a verbal formation. Conversely, 24 % found it to be somewhat unnatural (Δ), suggesting that *chigatta* is not as unequivocally dynamic as Inoue claims. Moreover, Ishii finds that a significant percentage of the respondents preferred using the *machigau* or the form *machigaeru* (“make a mistake_{TRANS}”), both significantly more dynamic and carrying stronger connotations agency (Ishii, 2011, p. 12). Several participants reported that the use of *chigatta* in this particular instance was awkward because it obfuscates the connection between the agent, who made the mistake, and the resulting error (Ishii, 2011, p. 12). This goes against Inoue (1998), where *chigatta* is unequivocally stated to be dynamic, but is more in line with Kitamoto’s findings, who speculates that *chigau* retains *some* dynamic usages that are being co-opted by other more dynamic verbs. In addition, the obfuscatory aspect of *chigau* might provide an additional reason for why the interrogative usage of *chigaku-nai* was not replaced by *machigau*. When *chigaku-nai* is used interrogatively, the purpose is often to point out an error made by the listener. If the speaker were to use *machigau* here, she would in effect be stating that the error was a direct result of the listener’s actions – it would be the *listener’s fault* – constituting direct, blunt criticism. This is avoided by using *chigau*, which due to its stative nature and lack of agency is perceived as being a softer and more polite option (Ishii, 2011, p. 21, footnote).

In survey 2, where Ishii studies the correlation between speakers’ awareness of adjectival formations and their own acceptance of said forms, a similar discrepancy between the interrogative and declarative usage of *chigaku-nai* was found. 94 % of participants were both familiar with the interrogative form and reported to using it themselves; only 54 % stated the same for declarative *chigaku-nai*. The declarative variant is also characterized by a significant increase in Δ -ratings (i.e. the participant is familiar with the variant, but does not use it). In others, although the vast majority of the participants had encountered the declarative usage before, a substantial minority still chose not to use it. Interestingly, this decrease in acceptance materializes despite the fact that the declarative formation in survey 2 could not be replaced by *machigau* or *kawaru*, as the verb here referred to deviation from an expected norm, rather than a dynamic event (Ishii, 2011, p. 12). This reinforces the possibility that the adjectivalization of *chigau* is related to its stativity and lack of agency.

The adjectival past form *chiga-katta* was the form that received the highest number of positive ratings in Kitamoto’s survey. As seen with previous results, the positive ratings in survey 2 are higher, indicating that the number of speakers familiar with the form exceeds the number of speakers who actually use it. In addition, some participants that considered *chiga-katta* completely natural, agreed with Inoue’s claim about an aspectual role distinction, where adjectival *chiga-katta* was stative past tense while verbal past was a dynamic past tense. Ishii cites two example sentences to illustrate this distinction. To these speakers, the two following utterances were aspectually different.

(18) A, **chigatta**

oh be.different.PST

(Immediately after discarding a tile in a game of mahjong):

“Oh I **messed up.**” (dynamic event)

(19) A, sakki-no **chiga-katta**”

oh previous-GEN different-PST_{ADJ}

(A short while after having discarded a tile in a game of mahjong):

“Oh that last move **was wrong.**” (past state)

This distinction is interesting because it suggests that Inoue (1998) was partly right; the verbal past *chigatta* can be used to denote a dynamic event, in contrast to the regular stative past form *chigatte-ita / chigatte-ta*. This lends credence to Inoue’s belief that the adjectival past form *chiga-katta* represents a competing variant of *chigatte-ita / chigatte-ta*. However, Ishii remarks that the participant in question specified that the above distinction was not clear-cut, and only became obvious after careful consideration of the above example sentences. The respondent further specified that when in a hurry, she would use both forms interchangeably for both scenarios (Ishii, 2011, p. 13), suggesting that the dynamicity of *chigatta* is not as unambiguous as Inoue (1998) claims. This will be discussed further in section 3.3.

The adjectival gerund *chigaku-te* was also shown to have distinct functions. In survey 1, speakers were asked to gauge (20) below, where *chigaku-te* is used with conjunctive and

exclamatory meaning. A little over 32 % of respondents found no fault with this usage (46 % deemed it somewhat unnatural).

- (20) Matte, **chigaku-te,**
 wait.GER different.GER_{ADJ}
 riyuu-ga aru-n da-yo
 reason-NOM exist-NMLZ COP-EMPH

(After being chastised by a friend for being late to an appointment)

“Wait, that’s not it, I have (good) reason!” (Literally: “Wait, **it’s different**, there’s a reason.”)

Ishii claims that replacing *chigaku-te* with the verbal *chigatte* makes the sentence much more awkward:

- (21) *Matte, **chigatte,**
 wait.GER be.different.GER
 riyuu-ga aru-n da-yo
 reason-NOM exist-NMLZ COP-EMPH

(Intended): “Wait, that’s not it, I have (good) reason!”

(Ishii, 2011, p. 14)

Nevertheless, many participants preferred replacing *chigaku-te* with the periphrastic construction *soo dewa-nakute* or its colloquial variant *soo janaku-te* (“it isn’t like that”), which combines the adverb *soo* (“like that”) and the gerund of the negative copula *dewa-nai / ja-nai*. Ishii attributes this to the fact that “the fundamental meaning of *chigau* is ‘deviating from a certain standard’” (quoted in Ishii, 2011, p. 14, my translation), and so relies on the comitative case particle *to-(wa)* when explicitly identifying the standard that the subject of *chigau* deviates from. Ishii speculates that this in particular applies to the gerund, as in (22) below, extracted from Kitamoto’s second survey.

- (22) Ani-to-wa **chigatte** benkyoo-girai-na-n da

older.brother-COM-TOP different.GER studying-hate-AND-NMLZ COP

“**Unlike/diverging from** my brother, I hate studying.”

Based on the results for (20) and (21), she concludes that the adjectival gerund *chigaku-te* is less reliant on this case particle for some speakers. Nevertheless, Ishii’s survey 2 reveals that adjectival gerund *chigaku-te* is more accepted when used with the comitative case to explicitly name the standard the subject deviates from, as in (23); 68 % of participants reported being familiar with and using this form.

(23) Futsuu-no choorui-to **chigaku-te**
 ordinary-GEN birds-COM different.GER_{ADJ}
 sora-o tobenai tori-mo iru-n da yo
 sky-ACC fly.POT.NEG bird-ETOP exist-NMLZ COP EMPH

Despite Ishii’s assertion that *chigau* fundamentally signifies deviancy, (24) which does not use *to-(wa)*, received an ○ rating (speaker is familiar with and uses the form) from 84 % of participants in survey 2, which is more than the gerund in (23) received in survey 1.

(24) Sedai-ga **chigaku-te-mo** onaji
 generation-NOM different.CONC_{ADJ} same
 wadai-de moriagareru tte ii ne
 topic-INS get.excited.POT COMP good Q

“It’s great that you can get excited about the topic, **even though** our generations **are different**.”

This seems to indicate that the verb is not obligated to use the comitative case in all contexts. In such instances, the meaning of the verb can be glossed as “be different”, rather than “deviate from a standard”. In (24), for example, this can be attributed to the fact that the subject identifies the reference already known to the speaker (one generation is different / deviates from someone known to the speaker), (Ishii, 2011, p. 14), obliterating the need for the comitative case. In addition, the exclamatory use in (20) suggests that the verb’s meaning has been extended further to approach that of the negative copula or an emphatic refuting

interrogation. Such usages indicate that the verb has undergone grammaticalization. This will be discussed in more detail in chapter 4 and 5.

Ishii also looks into the viability of Inoue’s attested non-past form *chigee*, but only in survey 2.

(25)	Itsumo-to	fun’iki		chigau-na		to-omotte
	usually-COM	atmosphere		be.different-EMPH		COMP-think.GER
	yoku mitara	zenzen		chigee		hito
	well see.COND	completely		different _{ADJ}		person
	datta-yo					
	COP.PST-EMPH					

“I thought he was a bit different from usual, but when I took a closer look, it was a completely **different** person.”

Similar to Inoue, Inoue regards this as an eastern dialectal variant of a hypothetical plain form **chigai*. 44 % of respondents accepted this usage, indicating that it has become fairly entrenched. However, the form stood out with its many Δ -ratings (speaker is familiar with form but does not use it); 50 % assigned this rating to the sentence. Ishii attributes this to the fact that the assimilated forms are, due to their association with eastern rural dialects, generally regarded as rough and uncouth and often classified as “slang language” (jap: *zokugo*) or “youth speech” (jap: *wakamono-kotoba*) (Ishii, 2011, p. 15; Inoue, 1998; Kato, 2008). Ishii also points out that over half of the respondents were women, which might have skewed the results, as female speakers tend to eschew such forms due to social gender roles. The question then becomes why more users have not started using **chigai* instead. Ishii does not examine whether the unassimilated adjectival plain form **chigai* (which received virtually no positive ratings in Kitamoto’s survey) has become more accepted or not, and does not discuss why the assimilated form *chigee* appears to have been established as a valid adjectival form when its unassimilated counterpart shows little sign of being accepted.

3.3 Summary and discussion

The studies described in this chapter confirms the existence of several new form, reveal that many of the them have emerged outside their original point of origin, suggest that they have

some unique properties not found in their verbal counterparts and show that some adjectival forms are more accepted than others.

However, some questions are left unanswered. The studies do not devote much attention to the fact that several of the attested forms of the adjectival paradigm clearly belong to different stylistic registers. While *chigee* is clearly colloquial and dialectal, to the point of being seen as vulgar, *chiga-karoo* represents a form that is rarely used in everyday conversation. This is again in stark contrast to *chigaku-nai*, which seems to be particularly popular among some younger speakers as a softer, more polite variant of *chigaku-nai*, possible due to some social value associated with the segment *-kunai*. However, as Ishii's and Kitamoto's surveys are restricted to one particular age group in Tokyo, we gain little insight into possible differences across generations and regions. Of particular interest is the apparent growing versatility of *-kunai* and its reanalysis as an independent morphological segment. While research on how Japanese native speakers mentally process morphemes falls outside the scope of this paper, it remains an interesting topic of future research.

The notion that a general confusion on the difference between adjectives and verbs seems intuitively correct, but does not on its own account for why a similar process has not been attested for other stative verbs, such as *dekiru* ("to be made, be able to") and *wakaru* ("to be understood, be clear"). In chapter 3 and 4, I will examine the semantic properties of these three verbs to attempt to fill this explanatory gap.

3.3.1 Aspect of *chigau*

As mentioned above, Inoue (1998) claims that the verbal past tense *chigatta* can only express change of state and that only the past stative *te-iru*-form *chigatteita* can be used for past states. However, although Ishii (2011) agrees that *chigatta* can denote what she calls **successful completion of a change of state** (jap: *shuuryoo-genkai-tassee-see*), she also shows that *chigatta* can be used both dynamically and statively, by showing that a significant number of native speakers accept *chigatta* as a stative replacement for the stative past form *chigatteita* in the spoken language:

- (1) Mukashi-wa bareebooru-no ruuru-wa
old.days-TOP volleyball-GEN rule-TOP

ima-to-wa **chigatta** rashii yo
 now-COM-TOP be.different.PSTEVID EMPH

“I hear that the rules of volleyball **were different** in earlier times.”

The only difference is the addition of the temporal adverbial *ima to-wa*, (“compared to nowadays”) and the evidential *rashii*. 96 % of Ishii’s informants found no fault with this usage of *chigatta* (2011, p. 20), demonstrating that the usage of *chigatta* is not restricted to change-of-states, but is also perfectly capable of expressing past states.¹⁷ Inoue also claims that the adjectival past *chigakatta* fulfills the same function as *chigatteita*:

On the other hand, the claim that *chigakatta* and *chigatteita* are interchangeable and only differ in their morphology is supported by survey 1 in Ishii (2011), which gauges the acceptance among speakers of the following two colloquial sentences in which *chigatteita* has been replaced by *chigakatta*:

(2) Mukashi-no kare-wa hatsuratsu-to-shiteite ima-no
 old.days-GEN he-TOP cheerful-COMP-do.PROG.GER now-GEN
 kare-to-wa funiki **chigakatta** yo-ne?
 he-COM-TOP mood different.PST EMPH

”Don’t you think his mood **was different** compared to now? He used to be more cheerful before.”

(3) Ano hito hanashite-miru-to imeeji-to **chigakatta** desho?
 that person talk.GER-see-COMP impression-COM different.PST COP.CON

”That person **was different** from what you expected when you tried talking to him, right?”

Approximately half of the respondents found no fault with (number) and (number), (46 % and 54 % respectively), and over 40 % deemed them somewhat acceptable (44 % and 42 % respectively) (Ishii, 2011, p. 19).

¹⁷ Ishii speculates that the past temporal adverbial *mukashi wa* (“in previous times, before”) provides the semantic context necessary for the stative usage of *chigatta* in this particular situation.

Although Ishii disagrees with Inoue’s claim that *chigatta* is purely dynamic, she does opt to label it as a **perfect tense** (jap: *kanryoo-jisee*) (Ishii, 2011, p. 18), apparently to emphasize its that it signifies a complete transition from one state to another. Ishii’s choice of the term “perfect” for *chigatta* therefore has the advantage of focusing on the form’s dynamicity, but becomes problematic when she decides to label *chigatteita* as a **past tense form** (Ishii, 2011, p. 20), despite the fact that *chigatta* (not to mention the past adjectival form *chigakatta*) is also a past tense form. This suggests a conflation of aspect (perfect) and tense (past) on Ishii’s part. Furthermore, as discussed in chapter 2, the claim that Japanese has a **perfect form** is problematic, as Japanese has no formal distinction between forms with perfect and non-perfect aspectual meaning. The most important point to keep in mind so far is that *chigau* in fact can be used both statively and dynamically, and that the verb’s dynamic qualities are not restricted to *chigatteiru*.

Thus, *chigau* appears to have both dynamic and stative usages. However, we have yet to determine what usage actually dominates overall, as this is not discussed by Inoue or Ishii. Although the verb’s status as a stative verb in most discussions by Japanese scholars implies that the stative usages tend to prevail in modern use (See Kindaichi, 1975; Shirai, 2000; Ishii 2011), some empirical exploration might provide clues to the status of the dynamic usages. To get an idea, we can examine the modern lexical definitions given for the verb in the dictionary *Nihongo kihon-dooshi yoohoo jiten* (“Dictionary of basic Japanese verbs” (Koizumi, Funaki, et.al., 1989, p. 305-306, my translations). The definitions given are summarized below, along with selected example sentences extracted from the dictionary.

- **Not match, not be the same (stative)**

(4) Kono futatsu-no geemu-wa ruuru-ga chigau.
 these two-GEN game-TOP rule-NOM be.different

“The rules for these two games are different.”

(5) Tooyoo-to seeyoo-wa kangaekata-ga **chigau.**
 Orient-COM West-TOP way.of.thinking-NOM be.different

“The mindsets of Asia and the West **are different.**”

- **Not be in its proper state, be wrong, differ from one's expectations (stative)**

(6) Kotae-ga **chigau.**

answer-NOM be.different

”The answer **is wrong.**”

(7) Hanashi-ga **chigau.**

story-NOM be.different

”That **is not** what you told me earlier.”

- **Have more of a certain quality than something else (stative)**

(8) Kanojo-wa futsuu-no hito-to-wa atama-no

she-TOP ordinary-GEN people-COM-TOP head-GEN

deki-ga **chigau.**

quality-NOM be.different

“Her mind/brain **is of a different** kind than ordinary people.”

(9) Shinsen-na sakana-wa aji-ga **chigau.**

fresh-ADN fish-TOP taste-NOM be.different

“The taste of fresh fish **is something else.**”

We see that the dynamic usages do not appear at all, indicating that the stative usages dominate.

3.4 Conclusion

The verb *chigau* appears to be almost completely stative, which goes against Inoue's claim that adjectival past *chiga-katta* and verbal past *chigatta* are clearly distinguished aspectually. While one of Ishii's own informants identified *chigatta* as a change of state, the same survey also demonstrates that *chigatta* also can denote past states. So far, we have examined usages

of these verbs as provided by a dictionary. However, such sentences are by inherently unspontaneous language productions. To gain further insight into the aspectuality of these verbs, and explore whether stative or dynamic usages predominate, it is also necessary to examine spontaneous spoken utterances. In the next chapter I will attempt to answer these queries by analyzing the usage of *chigau* in a spoken corpus and comparing these findings to *dekiru* and *wakaru*.

4 Corpus analysis

The purpose of this chapter is to use a corpus analysis to investigate the aspectual usage of the verbs *chigau*, *wakaru* and *dekiru*, in order to confirm whether or not *chigau* has been stativized, and cast light on the reasons for why *chigau* has been adjectivized while the latter two verbs have not.

4.1 Corpus description

This chapter is based on the 2011 edition of the “BTSJ-based Japanese spoken corpus”¹⁸ (*BTSJ-ni yoru nihongo-hanashi-koopasu*), compiled under the auspices of the Tokyo University of Foreign Studies, and publicly accessible for anyone to use. The corpus consists of 296 conversations and is a compilation of three smaller corpora and other miscellaneous material that were recorded and transcribed between 2007 and 2011. This material is, in chronological order, as follows:

- **BTS-based multi-language Japanese spoken corpus 1** (conversations between Japanese native speakers), published 2007, containing 116 conversations for a total of approximately 24 hours.
- **BTS-based multi-language Japanese spoken corpus 2** (conversations between Japanese native speakers and learners), published 2007, containing 37 conversations for a total of approximately 11 hours.
- **BTSJ-based Japanese spoken corpus 1** (conversations between friends, people meeting each other for the first time, idle talk, debate, invitation), containing 99 conversations for a total of approximately 27 hours.
- Supplementary material containing an additional 44 conversations for a total of approximately 4 hours

The conversations are organized into 21 different groups, based on conversation type, topic and the relationship between the participants. As my goal was to map the meaning of *chigau*

¹⁸ BTS and BTSJ stands for Basic Transcription System and Basic Transcription System for Japanese, referring to a system that organizes a dialogue by utterance and dialogue partner, in order to improve readability and analysis (http://www.tufs.ac.jp/ts/personal/usamiken/btsj_gensoku.html)

in more or less spontaneous conversations between natives, as opposed to the written standard, I chose to focus on groups featuring natural conversations, excluding those groups featuring more constricted situation types, such as phone conversations, scheduled interviews and other more formalized conversation types. I therefore limited my analysis to the following 5 groups:

- **Group 1:** 19 conversations for a total of ca. 7.5 hours, each conversation featuring idle talk between two intimate friends. The first 9 conversations are between two males (abbreviated as “M”), the latter 10 between two females (abbreviated as “FM”). All participants were either college or graduate students in their late teens or early 20s.
- **Group 2:** 23 conversations for a total of ca. 8 hours, with 11 of them between two unacquainted females (abbreviated as “UF”), and the remaining 12 between intimate female friends (abbreviated as “IF”). All participants were college students in their 20s.
- **Group 6:** 5 conversations for a total of ca. 1.5 hours, all 5 between two female friends. All participants were either college or graduate students in their 20s.
- **Group 15:** 3 conversations for a total of ca. 1 hour, all 3 between two intimate female university students in their 20s (abbreviated as “JF” for “Japanese female”).
- **Group 16:** 24 conversations for a total of ca. 6.6 hours, of which 12 comprised informal idle talk between two friends, featuring either two females, one male and one female or two males. The other 12 conversations consisted of discussions about a certain topic. All participants were university students in their late teens or 20s.

Each dialogue had been transcribed using standard Japanese orthography into an Excel sheet and organized by individual utterance. Thus, all utterances cited from this corpus have been Romanized by me.

4.2 Hypothesis 1

My hypothesis was that *chigau* is mainly stative. The results of the analysis for *chigau* are given below, sorted by group:

Table 8: Results for *chigau*

Group	Total number of tokens	Stative tokens (%)	Dynamic tokens (%)
1	152	150 (98.7 %)	2 (1.3 %)
2	149	149 (100 %)	0 (0 %)
6	11	11 (100 %)	0 (0 %)
15	29	29 (100 %)	0 (0 %)
16	59	59 (100 %)	0 (0 %)
Total	400	398 (99.5 %)	2 (0.5 %)

The results in table 1 seem to support this hypothesis, as virtually all of the tokens found were stative. Furthermore, if we break down the tokens by formation, we find that the past form is used very little:

Table 9: Results for *chigau* by conjugational form

Group	Form	Number of tokens
Group 1	Non-past	164
	Past	5
	Negative	1
	Other	2
Group 2	Non-past	144
	Past	3
	Negative	4
	Other	7
Group 6	Non-past	12
	Past	0
	Negative	0
	Other	0
Group 15	Non-past	30
	Past	1
	Negative	1
	Other	1
Group 16	Non-past	110
	Past	2
	Negative	0
	Other	8
Total	Non-past	463 (92.8 %)
	Past	12 (2.4 %)
	Negative	6 (1.2 %)
	Other	18 (3.6 %) ¹⁹
	Total	499 (100 %)

¹⁹ Included a handful of various forms, including gerund *chigatte*, *chigawa-nakute* (negative gerund), *chigatte-kuru* (inchoative compound form), *chigattari* (*tari*-form), *chigattara* (conditional), *chigattetari* (representative of *chigatteiru*), *chigakute* (adjectival gerund)

The results show that the non-past forms is by far the most frequent, making up over 90 % of the tokens found in the corpus. Thus, we find that:

- By far the most prevalent of the non-past forms was plain form *chigau*, with 361 tokens (77.6 % of non-past tokens, 73.1 % of the total number of tokens), suggesting that usage of the verb is mostly restricted to this form.
- The second most used form was *chau*, which amounted to 52 tokens (11.2 % of non-past tokens, 10.5 % of the total number of tokens). This is an alternative form of *chigau* commonly used in western Japan (it is particularly associated with the Kansai region), indicating that many of the participants did not hail from the Tokyo region.
- A further 34 tokens were made up of the bare root of *chigau* and *chau* (*chiga-* and *cha-*).²⁰
- 15 tokens consisted of *chigai-masu*, a non-past compound form that combines the infinitive with the auxiliary verb *-masu*, which expresses politeness and is mainly used when conversing with a stranger or superior. Unsurprisingly, 10 of these were found in the first half of group 2, where the participants did not know each other.

Of the 6 negative tokens, 3 tokens were the adjectival negative *chig-akunai*.²¹, 2 tokens were of the verbal negative *chigawa-anai*. The remaining single token was *chigai-masen*, the negated form of *chigai-masu*, also this in group 2.

Only 12 past forms (2.6 %) in total were found. Only a single instance of the adjectival form *chigakatta* was found, the remaining 11 all expressed using the verbal *chigatta*. All instances of *chigatta* were used as a past stative, either to describe a past state, or express the speaker's realization about a current state

(1) (From dialogue 3-1)

²⁰The root forms were used exclamationally. This usage is particularly interesting because it appears to resemble the usage of the bare root of adjectives, which is sometimes used exclamationally, e.g.: *ita-i* ("painful") – *ita* ("ouch!"); "taka-i" ("tall") – *taka(a)* ("that's expensive!"), *yaba-i* ("dangerous, terrific") – *yaba* ("that's crazy!") etc. However, more research into the usage of the bare stem form *chiga/cha* is needed before making any definite claims.

²¹ Only 5 adjectival tokens in total were found, with 1 past form (*chigakatta*), 3 negative forms (*chigakunai*) and 2 gerund forms (*chigakute*).

(M05 and M06 discuss a woman that M05 knew in his school years. M06 confuses her with someone M05 knew from high school.)

M05:

Aa chigau. Kookoo **chigatta** mon.

oh be.different high.school be.different.PST EMPH

“Oh no, we were in different high schools.” (Literally: “Our high schools **were different.**”)

Interestingly, in many instances the stative usage of non-past *chigau* appeared to have lost lexical content, taking on an exclamatory meaning with little grammatical relation to the rest of the utterance. In these instances the verb was used to express the speaker’s disagreement with a previous statement. This might explain the apparent deficiency of the past forms, as these forms do not appear to possess the same versatility.

(2) (From dialogue 6-1)

(When discussing a trip to Hokkaido made by M11, M12 asks where in Hokkaido he went. M12 mentions several place names, including Abashiri):

M12:

Abashiri-tte hashikko da-kke?

Abashiri-TOP edge COP-EMPH

“Abashiri, is that at the tip [of Hokkaido]?”

M11:

Chigau. Hashikko dewa-nai. Migi-ue.

be.different. edge COP.NEG. right-up.

“No, it’s not at the tip. It’s in the upper right part [i.e. north-east].”

The verb was often duplicated when used in this fashion, presumably for emphasis:

(3) (From dialogue 1-1)

(*Emphatically refuting claim by M02 about the lack of motivation and skill of a shared acquaintance on the baseball team*)

M01:

Chigau-chigau-chigau-chigau. Demo aitsu, aitsu, sugoi

be.different-x4 but he he amazing

ganbariya-san da-yo

hard.worker-POL COP-EMPH

”**No, no, no, no**, he, he’s a real hard worker, actually!”

Another, related usage occurred when the speaker wished to correct their own statement mid-sentence:

(4) (From dialogue 207-15)

(*IF01 and IF02 talk about a Korean movie featuring the Japanese actor Tsuyoshi Kusanagi, IF02 tries to remember the name of the movie*)

IF02:

Nihonjin-ga tabun hotondo zen’in,

Japanese.person probably mostly everyone

a **chigau**, kankokujin-mo deten-da

oh be.different Korean.person-ETOP come.out.PROG.NMLZ-COP

“Most [of the actors] are Japanese, **no wait**, some Koreans appear in it as well.”

Numerous instances where *chigau* was more clearly connected to the rest of the sentence were also found, both as a predicate, as in (5) and (6), and attributively, as in (7)

(5) (From dialogue 7-1)

M14:

BBS-to chatto-tte doo **chigau** no?

BBS-COM chat-COMP how be.different EMPH

“What’s the difference between BBS-systems and chats?” (Literally: How **are** BBS and chats **different**?)

(6) (From dialogue 10-1)

(M19 complains that he has too much part time work and asks M20 how often he works. M20 replies that he only works once a week)

M20:

Atarashiku nanka yaritai naa

new.INF something do.DESID EMPH

”I want to do something else (for a change).”

M19:

A chigau baito?

oh be.different part.time.job

“Oh, you mean like a different part time job?”

As mentioned earlier, a significant number of tokens of the regional variant *chau* were also found. The usage of this form tended to be restricted to situations similar to (2) and (3), where the verb’s lexical meaning has been weakened, whereas the standard form *chigau* dominated in cases similar to (5) and (6), where the verb had a more or less overt grammatical connection to the rest of the sentence. Compare (8) and (9) below:

(7) (From dialogue 11-1)

F01:

Kyoomuka-ni dasu no?

academic.affairs.office-DAT send EMPH

”Are you sending it to the academic affairs office?”

F02:

Chau-chau, janakute

be.different-x2 COP.NEG.GER

”**No no,** not [there].”

(8) (From dialogue 6-1)

(F10 and F09 are discussing an acquaintance of F10 who works in the same university department as her husband. F10 emphasizes that they spend much time together.)

F10:

Moo chotto nanika, **chigau** hito-to

more a.little something be.different person-COM

tsukiatte-mitai-wa toka omottari shinai

socialize.with.GER-try.DESID-EMPH COMP think.PST do.NEG

no-kane?

EMPH-Q

“[...] doesn’t she [I wonder if she] sometimes want to hang out with a slightly **different** type of person, though?”

Some instances of *chau* being used with more lexical content were also found, as in (9) below:

(9) (From dialogue 231-16)

BM05:

Oo, omae’n’chi-no konro-to **chau** shi.na

yeah your.house-GEN stove-COM be.different EMPH

“Yeah, well, their stove **is different** from the one at your place.”

Another point of interest is the negated forms, where the adjectival form *chigakunai* outnumbers the verbal counterpart *chigawa-nai*. All 4 tokens of *chigakunai* were used in rhetorical questions, while *chigawa-nai* only appeared in declarative utterances, in keeping with Ishii’s hypothesis that *chigakunai* is most prevalent in rhetorical interrogative utterances (see chapter 2).²² Compare (10) and (11) below:

(10) (From dialogue 209-15)

(IF06 remarks that IF05 is a hard-working and efficient student. IF05 denies this and maintains she dislikes hard work, but that most of her peers has the same impression of her as IF06. The two then discuss how one’s outward behavior can change depending on the social setting.)

IF05:

Demo yappa saa, **chigakunai?** Soto-de miseteru
but even.so FILL different_{ADJ}.NEG outside-LOC show.PROG
jibun-to sa
oneself-COM FILL

“But **don’t you think it** [one’s behavior when alone] really **is different?** Compared to how you express yourself when you’re with others.”

(11) (From dialogue 39-2)

(IF17 and IF18 are discussing various place names in Japan when IF18 wonders where Beppu city is. IF17 expresses surprise at this because IF18 is from Kyushu, the island where Beppu is located.)

IF17:

Chotto matte. Kyuushuu-jin deshoo?
a.little wait.GER Kyushu-person COP.CON

²² The sole token of *chigaimasen* (dialogue 26-2) was also used rhetorically.

“Wait a minute! Aren’t you supposed to be from Kyushu?”

IF18:

Chigau yo. **Chigawa-nai kedo.**

be.different EMPH be.different.NEG but

“That’s not true. Although it is true.” (Literally: “That’s wrong. Although it **isn’t wrong.**”)

IF17:

Dotchi da-yo? [laughs]

which.one COP-EMPH

“Which one is it?” (Laughs)

4.2.2 On *chigatteiru*

Chigatteiru was virtually unused in the corpus material. This can be due to the fact that the stative meaning of the verb has made *chigau* more or less identical in meaning to *chigatteiru*, rendering the latter form redundant. Interestingly, *chigatteiru* does not appear in any of the historical attestations provided by Kitahara et al (2003) (see chapter 5), which might be attributed to the fact that *-te-iru* did not become prevalent until the LMJ period. Old and Early Middle Japanese had various other aspect constructions applied to verbs, both morphological and periphrastic, fulfilling one or more of the functions covered by *te-iru* in modern Japanese (i.e. resultativity, pure stativity (*tanjun jootai*) and ongoing event). One of the more productive mechanisms was a periphrastic construction formed by affixing the existential verb *ari* (modern Japanese *aru*) to the gerund, yielding *-te-ari* (adnominal *te-aru*). By EMJ this construction had been phonologically fused to *-tari* (adnominal *-taru*) and was eventually grammaticalized, becoming a common aspect marker (Frellesvig, 2010, p. 69), usually denoting resultativity or the perfective aspect, depending on context and the aspectuality of the verb (Shirai, 2000, p. 83).

4.3 Hypothesis 2

In the previous section we examined the usage of *chigau* in the corpus and found that it was overwhelmingly stative, giving validity to the assumption that the adjectivalization of *chigau* derives from the aspectual qualities of this verb. The purpose of this section is to analyze the aspectual qualities of *wakaru* and *dekiru* to determine why these verbs have not undergone a similar change, despite their alleged stativity. Based on the discussion in chapter 3, my hypothesis was that both *wakaru* and *dekiru* would have a bigger dynamic component.

4.3.1 Results

Table 10: Results for *wakaru*

Group	Total number of tokens	Stative tokens (%)	Dynamic tokens (%)
1	254	214 (84.3 %)	40 (15.7 %)
2	202	171 (84.7 %)	31 (15.3 %)
6	33	31 (94 %)	2 (6 %)
15	55	45 (82 %)	10 (18 %)
16	91	73 (80 %)	18 (20 %)
Total	635	534 (84.1 %)	101 (15.9 %)

Table 11: Results for *dekiru*

Group	Total number of tokens	Stative tokens (%)	Dynamic tokens (%)
1	90	73	17
2	110	92	18
6	8	7	1
15	23	19	4

16	49	41	8
Total	280	232 (82.9 %)	48 (17.1 %)

The results for *wakaru* and *dekiru* are interesting in three ways: firstly, they strengthen the hypothesis that they appear to have a significant dynamic component, despite an overall tendency towards the stative end of the spectrum. Secondly, unlike *chigau*, where non-past form was overwhelmingly stative, non-past *wakaru* and *dekiru* could exhibit dynamic meaning, with context often determining which interpretation was valid.

(1) (From dialogue 5-1)

M06:

Moosugu **wakaru** yo.

soon become.clear EMPH

”You’ll **get it** soon.”

In (23), the presence of the adverbial *moosugu* indicates that *wakaru* expresses a change of state, whereas in (24), the negative *wakannai* simply indicates that the speaker is in a state of not knowing.

(2) (From dialogue 39-2)

IF18:

Teyuuka, atashira-ga ikeru kadooka **wakannai** shi.

or.rather we-NOM can.go whether be.aware.NEG
EMPH

”Or rather, I **don’t know** if we can go or not.”

In some cases, this context-dependency was so strong that it became very challenging to determine which interpretation was correct:

(3) (From dialogue 7-1)

IF21:

Chigai-ga **wakanakatta** yo

Difference-NOM be.aware/become.aware.NEG.PST

“I **didn’t** get/**understand** the difference.”

Here, both interpretations are possible, and the verb can be said to operate somewhere in between complete stativity and dynamicity. For a few tokens, the ambiguity was so strong that I opted to exclude them from the count. The results for *wakaru* in particular should therefore not be taken as a definitive count. Nevertheless, they suggest that the verb’s overall trend towards stativity is significantly weaker than for *chigau*,

The results for *dekiru* show approximately the same trend as *wakaru*, with a significant dynamic component, despite its overall stative proclivities.

(4) (From dialogue 24-2)

UF10:

Nanka	[hitoride	itta	hoo-ga	tomodachi	dekiru
well	alone	go.PST	direction-NOM	friend	come.about
kara	tanoshii]	tte	ittemashita	yo	
because	enjoyable	COMP	say.PROG.PST	EMPH	

“Well, he said that ‘it’s more fun if you go alone because you **make** more friends that way’.”
(Literally: “because friends **come about** ...”)

Here, the verb is clearly dynamic, denoting punctual change (the appearance of new friends).

4.4 Summary and discussion

The corpus analysis suggests that whereas *chigau* has become almost completely stative, both *wakaru* and *dekiru* can denote a change of state, although they do tend towards stative

meaning. Jacobsen (1992, chapter 4), attributes the vacillation exhibited by *dekiru* in particular to the fact that instantaneous (what he calls “spontaneous”) and potential meaning share a close affinity for each other. He provides several examples of other instantaneous verbs that also can express potential meaning:

(1) (*aku*, “be opened”)

Ikura oshitemo mado-ga **akanai**
 how.much push.GER.ETOP window-NOMopen_{in}.NEG

“No matter how much I push, the window **won’t open (i.e., can’t open).**”

(Adapted from Jacobsen, 1992, p. 117)

(2) (*hairu*, “enter”_{INTRANS})

Ringo-wa zenbu kono hako-ni **hairanai**
 apple-TOP all this box-LOC enter.NEG

“The apples **won’t** all **fit** into this box (i.e. **can’t** all **fit**).”

Both these sentences contain a clear potential sense, despite the lack of an overt potential morpheme. This is reflected in the fact that they both can be paraphrased by a corresponding transitive verb containing the potential morpheme *-(r)areru*:

(3) (*akeru*, “open”_{TRANS})

Ikura oshitemo mado-ga **akerarenai**
 how.much push.GER.ETOP window-NOMopen_{tr}-POT.NEG

“No matter how much I push, I **can’t open** the window.” (Adapted from Jacobsen, 1992, p. 118)

(4) (*ireru*, “enter, put into”_{transitive})

Ringo-wa zenbu kono hako-ni **irerarenai**
 apple-TOP all this box-DAT put.in.POT.NEG

“As for the apples, I **can’t put** all of them into this box.” (Adapted from Jacobsen, 1992, p. 119)

More specifically, Jacobsen argues that potential meaning arises from those instantaneous verbs that mark what he calls the **semantic object** (i.e. **the patient**) as the **subject** using the nominative particle *ga*, as this is akin to how potential constructions often view “the situation expressed by the predicate as a property inherently residing in the semantic object.”

(Jacobsen, 1992, p. 120) Jacobsen shows that *dekiru* adheres to these criteria; an instantaneous verb that accords subject-like qualities to the semantic object and both can carry potential meaning:²³

(5) Haha-(ni)-wa kuruma-no unten-ga **dekiru.**
mother-TOP car-GEN operating-NOM come.about

“My mother **can** drive.”

Thus, *dekiru* in (5) can be analyzed in two ways simultaneously: as describing a stative property of the **semantic object** (“Driving is possible for my mother”) or the **semantic subject** (i.e. **the agent**) (“My mother is able to drive”). Similarly, *wakaru* in (6) can be interpreted as denoting a stative property of the semantic object (“**What he is thinking is clear** to me”) or the semantic subject (“**I am aware** of what he is thinking”)²⁴:

(6) Watashi-ni-wa kare-no kangaeteiru koto-ga **wakaru.**
I-DAT-TOP he-GEN think.PROG NMLZ-NOM become.aware

“I **know** what he is thinking.”

Jacobsen describes this phenomena as “...the possibility of viewing the potential state [...] as a property of the agent affecting the object” (1997, p. 122). **From this observation it follows that *wakaru* and *dekiru*, despite their overall stativity, still carry connotations of human**

²³ Jacobsen points out that “the same tendency to view potential meaning as a property of a semantic object, and consequently to accord to the semantic object subject-like qualities” can be observed in English expressions, such as *Linoleum floors clean easily* and passive constructions, e.g. *Linoleum floors can be cleaned easily*. (Jacobsen, 1992, p. 120)

²⁴ The syntactic status of the patient in such sentences are disputed and one’s conclusion depends on whether the particle *ga* can be taken as analyzed of subjecthood. See Tsujimura (1996, p. 228) for a discussion on the notion of subject in Japanese.

agency. One consequence of this peculiar property is the fact that the patient of both *wakaru* and *dekiru* can take the accusative marker *o* in certain contexts:

(7) Benkyoo-**ga/wo** dekiru kankyoo-ni

studying-NOM/ACC be.able environment-DAT

jishitsu-wo totonoeta

own.room-ACC prepare.PST

“I prepared a room in an environment where I can study.” (From Higashiyama, p. 4, my translation and emphasis)

(8) Kare-wa kimi-no kimochi-**ga/wo** wakatteiru

he-TOP you-GEN feeling-NOM/ACC be.aware.STAT

“He **understands** how you feel.” (Literally: “He **understands** your feelings.”) (Adapted from Koizumi, Funaki, et.al., 1989, p. 554, my translation and emphasis)

Jacobsen himself explicitly contrasts this phenomenon with adjectives, which are purely stative predicates and therefore cannot take *o* in most cases.²⁵ This might be one reason why neither *wakaru* nor *dekiru* has been completely stativized, and has not seen an adjectivalization of their inflectional paradigms. However, *chigau*, which has very little dynamic usage and does not denote implicit agency, clearly diverges from *wakaru* and *dekiru*.

4.5 Conclusion

The purpose of this chapter was to confirm whether or not *chigau* has been stativized in Modern Japanese, and examine if the stativization of *wakaru* and *dekiru* had progressed to the same extent, in order to cast light on the reasons for why *chigau* has been adjectivized while the latter two verbs have not. The results reveal that while *chigau* has been almost completely

²⁵ This merging of what Jacobsen calls **syntactic subjecthood** and **semantic objecthood** (patient) is in fact widely observed with stative predicates, including some adjectives, such as *hoshii* (“desirable/desire”) and *kowai* (“scary/be afraid of”). Like *wakaru* and *dekiru* these stative predicates also allow accusative *-wo* for the semantic object in some cases (known as the **transitive adjective construction**; Jacobsen, 1997, p. 123)

stativized and shows signs of semantic extension and grammaticalization, while *wakaru* and *dekiru* maintain a significant dynamic component.

5 Semantic extension of *chigau*

5.1 Introduction

In this chapter, I will summarize and discuss commonly cited mechanisms for language innovation in meaning of a particular lexeme or construction. Before discussing semantic change however, is it beneficial to take a step back and review some basic concepts within theories of language change. Inoue (1985) for example, distinguishes between transient innovative forms particular to an individual, which have not been entrenched in an individual's grammar and are little more than individual speech errors, and forms that have become so entrenched in the language of a considerable portion of the speech community that its users no longer consider it non-normative (Inoue, 1985, p. 30). Similarly, Croft (2000) distinguishes between two stages of language change: **innovation** (the creation of novel variants) and **selection** and **propagation** (the dissemination of novel variants due to selection by more and more language users), while Fertig (2013) regards **innovation** as distinct from **change**. The former is defined as an individual speaker's creation of novel variants and forms, and the latter narrowly defined as the process whereby a significant portion of the speech community come to adopt an innovation as part of their linguistic system. Change is primarily seen as a gradual process, while innovation happens spontaneously for each individual. Such a distinction implies that these processes are subject to different mechanisms and that not all novel variants will gain acceptance by other users.

One's view of language change is strongly dependent on one's definition of **grammar**, with disagreement between different schools of thought. Fertig (2013) points out that in recent years the Neogrammarian view of grammar has been somewhat rehabilitated and incorporated into various grammatical frameworks. They tend to emphasize the fluidness and dynamicity of language on one hand, and communicative language use between interlocutors as the fundament for mental grammar on the other.

5.2 Mechanisms for innovation and selection

As shown in chapter 3, although Inoue, Kitamoto and Ishii suggest possible triggering mechanisms for the creation of adjectival forms, their discussion focuses on the selection and propagation of said forms, what Fertig (2013) narrowly defines as **change**. Propagation-

focused theories of language change emphasize the dissemination of new forms throughout the speech community and seek to explain what governs this process, de-emphasizing the creation of innovations themselves. Such theories are commonly associated with sociolinguistics and are often based on empirical studies on language as used in social context (Trudgill, 1983, p. 8).²⁶ They foreground the variability and fluidness of language, from its phonology to its grammar, although Western sociolinguistics has tended to focus on the former (Croft, 2000, p. 54; Labov's *Principles of Linguistic Change* is a good example) and view language as a product of its users rather than a separate independent concept. Inoue (1985, p. 30) posits that innovative variants often begin as linguistic errors, which gain acceptance via diffusion in the speech community, eventually supplanting the original variant. This diffusion of new forms is gradual, meaning that old and new variants will co-exist for a considerable part of the process (2000, p. 54). Inoue proceeds to give a rough illustration of how the treatment of an innovative variant can change as it gradually gains ground in the speech community:

Speech error (*ii-ayamari*) → non-normative form (*goyoo*)²⁷ → popular form (*kan'yoo*) → parallel form (*yure*) → normative form (*seeyoo*)²⁸

For Inoue, a **speech error** is any mistake produced by an individual speaker when using the language, phonological or grammatical, which are characterized by their transience; they do not take permanent hold among speakers. Conversely, **non-normative forms** and **popular forms** represent variants that no longer are rejected outright by a considerable portion of the community; they may achieve some form of recognition by linguistic authorities, albeit often as sub-standard side forms. If the new form's viability continues to increase, it can become a **parallel form**. At this point, it is difficult if not impossible for many users to conclude what form is "more correct" and the new and old variant will tend to be treated as equally appropriate. Finally, if the traditional form comes to be seen as archaic and goes out of use, the new form can supplant it and become the only normative form.²⁹

²⁶ The term 'sociolinguistics' is somewhat ambiguous and has different implications, both within Western tradition (particularly between North America and Britain on one hand and Europe on the other) and outside. See the Introduction to Trudgill, 1983 for a more detailed discussion.

²⁷ Literally: "incorrect use"

²⁸ Literally: "correct use"

²⁹ Inoue stresses that not all new forms start out as erroneous forms. He cites the contradictory conjunctions *keredo* and *kedo* ("but, however"), both phonologically reduced variants of the

The adjectival forms *chigakatta*, *chigakunai* and *chigakereba* can be classified as non-normative, as they are considered substandard, but still enjoy popularity among a significant portion of younger speakers. Whether they will be recognized by linguistic authorities and replace the current normative forms in the future is highly uncertain, in part due to their apparent status as *dialectal forms*, which tend to be rated lower socially than forms close to the written standard (Inoue, 1985, p. 32)³⁰. As indicated in chapter 2 however, some speakers seem to be unaware of the non-normative status of these adjectival forms, suggesting that they for some users can be classified as parallel forms, or even the only normative form.

Within sociolinguistics, particular emphasis is put on users' attitudes towards language and their social motivations for either selecting or rejecting new forms (Croft, 2000; Inoue, 1985; Trudgill, 1983). As Croft (2000, p. 56) explains, not only do linguistic forms vary in surface form, but they carry social nuances "[...] that determine their appropriate use to a great extent". Commonly cited social variables are a given form's associations with formal or informal settings, level of education, geographical location, and sex and age. Social factors are therefore seen as important indicators for how easy a given innovation will spread. Inoue's "erroneous forms", are of interest in this regard, as this category in particular includes many variants that are widely and frequently used but still opposed, sometimes vehemently so, by parts of the speech community³¹, most likely due to some aspect of their social value. Thus, Inoue notes how the number of users of the past adjectival form *chigakatta* is much lower in formal settings (e.g. on TV) than informal ones (e.g. in one's own home). Another example is the potential verb *mirareru* ("able to see, can see", derived regularly from *miru*, "see, watch"), which has the optional variant *mireru*. Inoue shows that this latter variant is less accepted among highly educated, adult speakers, particularly in Tokyo (Inoue, 1985, p. 33). Ishii points out that the form *chigakunai* is used in the specific social nuance of politeness. It is claimed that *chigakunai* is perceived as softer and less accusatory when pointing out the mistake the other interlocutor makes. While the investigation of this claim falls beyond the scope of this paper, it is certainly an interesting topic of future research.

construction *keredomo*, as an example of a linguistic innovation that started out as accepted parallel forms (Inoue, 1985, p. 30).

³⁰ When asked about their usage of these forms these forms, a number of personal acquaintances echoed the sentiment that these forms are used but not "correct" or "good Japanese" (as in "substandard" or dialectal).

³¹ Although, as Inoue himself (1985, p. 29) notes; the very fact that a new form is widely decried as "wrong" can ironically be taken as a sign that it has progressed to the point of community-wide diffusion, so that it no longer can be seen as a simple error or anomaly.

Trudgill (1984) emphasizes the role of contact between different variations in the creation and diffusion of innovations, and that population centers play a crucial role in this regard and often will act as radiation points for innovations. He argues that innovations often use urban areas to bypass surrounding rural regions via interregional transport-ways, effectively jumping from one urban center to another, before diffusing into surrounding areas.³² One of the more famous examples is the spread of the uvular R in Europe, which today is standard in French, German and Danish, and in some varieties of Dutch, Norwegian and Swedish. The uvular R is held to have started in Paris in the 17th century, and while it appears to have gradually spread throughout the French countryside and adjacent areas of Belgium, Switzerland and south-west Germany via the neighboring effect, its spread further north (reaching Copenhagen by the second half of the 18th century) is attributed to a succession of jumps between urban centers; from the Hague, to Cologne, Berlin, Copenhagen, Kristiansand and Bergen, only later penetrating into the surrounding countryside in the corresponding countries (Trudgill, 1984, pp.56-59). Because innovations tend to move between population centers first, the language of urban areas can differ significantly from that of the surrounding periphery. A good example is the Tokyo variety of Japanese, which, despite being located in the Kanto area, differs significantly from the surrounding Kanto dialects in prosody, phonology, vocabulary and grammar (Tanaka, 1983).³³ As discussed in chapter 2, Inoue (1985) shows that the direction of diffusion also can be reversed, so that innovative forms that emerged in peripheral areas influence the language in urban areas. This is the case for *chigakatta* which Inoue traces back to the eastern and northern Kanto area.

While propagation-centered theories on language change thus have contributed to explain why and how new forms are transmitted, both within and between speech communities, Croft criticizes these theories on a few points, of which two are of particular interest here. The first is that they often presuppose the existence of form variability, and almost invariably never offer explanations as to how these new variants arose to begin with. Based on this, he argues that innovation and propagation should be seen as two distinct processes (Croft, 2000, p. 61) and shows that changes in meaning of lexemes and constructions can be seen as a powerful mechanism for linguistic innovation. Secondly, suggestions for causal mechanisms that are

³² A similar belief was also espoused by the Japanese folklorist Yanagita Kunio, who already in the late 1920s postulated that innovative forms tend to arise in cultural and demographic centers and then gradually diffuse into peripheral regions, suggesting that peripheral areas tend to preserve older forms (Kunio, 1980).

³³ For this reason, Tokyo is sometimes referred to as a language island (Tanaka, 1983) (jap: *gengo-no shima*)

offered tend to be teleological. (Croft, 2000, p. 66-7) Croft argues that while many instances can be argued to be **intentional**, they are not teleological. That is, innovative forms can be analyzed as **the unintended results of speaker intention, rather than intended results**.

5.3 Mechanisms of semantic change

Inoue, Kitamoto and Ishii suggest that the stative meaning of *chigau* triggered the adjective conjugation of *chigau*. However, as seen in chapter 4, the meaning of *chigau* used to be predominantly dynamic in Old and Middle Japanese, but in Modern Japanese it is primarily stative. So what caused this meaning change from dynamic to stative? In grammaticalization theories, there are well-known mechanisms of meaning change, including **metaphor**, **metonymy**, **subjectification**, intersubjectification and so on. However the mechanism that seems crucial for the meaning change of *chigau* is pragmatic inference, defined as the process by which “[...] some nolingistic contextual factor comes to be part of the meaning of the unit in question [...]” (Croft, 2000, p. 133) and considered one of the chief driving forces in semantic change.

Intuitively it is possible to regard *meaning* as an abstract notion purely immanent to the expression itself. However, research in various disciplines has shown that the meaning of particular expressions is better described as a cognitive *process* encompassing both abstract and concrete context-specific meanings. In such a model, abstract meanings represent the core meaning of an expression, its **meaning potential** (Hasegawa, 2012, p. 40), referred to as **conceptual structures (Cs)** by Dasher and Traugott, while **lexemes** are ultimately concrete language-specific representations of these abstract meanings. Conceptual structures represent more or less universal concepts that rarely change and are not subject to much cultural influence. Examples of Cs include MOTION, LOCATION, CONDITION, DEGREE, HUMAN BEING, EPISTEMIC ATTITUDE and others.

Furthermore, the lexical realization of conceptual structures is envisioned as a framework that combines a morphosyntactic (S), a phonological (P) and a **meaningful element (M)**.

Meaningful elements are linked to conceptual structures and represent various semantic categories, include situation types (processes, activities and states)³⁴, situation participants (agent, experiencer, instrument, location), modalities (belief types) and speech acts. Thus, the

³⁴ Related to lexical aspect, see chapter 2

conceptual structure LOCATION is linked to Ms such as IN, OUT, AROUND; the C HUMAN BEING finds expression in such Ms as MALE, FEMALE, PARENT OF; while the C of EPISTEMIC ATTITUDE is linked to Ms as HIGH PROBABILITY, POSSIBILITY, LOW PROBABILITY, and others (p. 7).³⁵ While Ms also represent prototypes, they are more fluid and dependent on culture, causing them to vary over time and across languages (pp. 7, 8). The structure of this realization can have significant syntactic consequences and can differ between languages. One example is motion verbs, where differences in the realization of the C of MOTION cause a regular discrepancy in the range of syntactic constructions available to each verb. As an example, while both *run* and its Japanese counterpart *hashiru* can take direct objects that express the traversal of a path, English *run* usually only does so in the context of completion of a finite distance (*run a race, run a mile*), while *hashiru* occurs with both partial and complete traversal: *michi-o hashiru* (literally: “run (down/along) the street”). Similarly, English *fly* usually cannot appear in utterances such as “fly the sky”, although its Japanese equivalent *tobu* can (*sora-o tobu*).

The *meaning* of a particular expression in a specific context arises when these abstract meanings combine with the speaker/reader’s “[...] personal encyclopedic background knowledge” (Hasegawa, 2012, p. 40) and the **pragmatic context**, yielding different meanings depending on the individual speaker’s combination of these two phenomena. Indeed, pragmatic context is posited as the chief driving force of semantic change (Dasher, Traugott, 2005, p. 24, Croft, 2000). Focusing on pragmatic context³⁶, Dasher and Traugott (2005, p. 2) illustrate its effects by using the verbs *must* and *promise*, which, depending on context can take on different meanings.

(1) They **must** be married (I demand it/I am sure of it)

Here, *must* can be interpreted as either a deontic (obligation) or epistemic modal (conclusion/high certainty). Similarly, *promise* can be used refer to an obligation imposed on oneself (2) or one’s certainty of something (3):

(2) I **promise** to do my best (I pledge to do my best)

³⁵ By convention, conceptual categories and linguistic meanings are capitalized to distinguish them from specific lexical meanings and individual lexemes of the same form (Dasher, Traugott, 2005, p. 7, footnote)

³⁶ Dasher and Traugott (2005, p. 11) opt to focus on meaning changes that are expressed linguistically and have implications for grammatical function or lexical insertion because the line between semantic representation and encyclopedic knowledge of the world is hard to draw. As this type of changes is the most relevant to this paper, I have elected to follow their approach.

(3) She **promises** to be an outstanding teacher (I am certain she will be an outstanding teacher)

Three important notions in pragmatic-focused theories on semantic change can be explicated using these examples. First is the fact that semantic change fundamentally is a process born from communication between speaker and listener (referred to as the “**Speaker/writer – Adresse/reader dyad**” by Dasher and Traugott). In such frameworks, linguistic units receive meaning via semantic and contextual negotiations between interlocutors (Croft, 2000; Dasher, Traugott, p. 7). New pragmatic meanings are continuously generated via this process, conventionalized and added to existing ones, creating a growing cluster of semantically related **polysemous meanings** (Dasher and Traugott, 2005, p. 1; Eckhardt, 2008, p. 237). Second, semantic changes occur with a wide range of units, from auxiliaries to fully fledged lexemes, and are not restricted by a form’s grammatical status (Dasher, Traugott, 2005, p. 2). Third, semantic changes display **regularity** – both *must* and *promise* originally only denoted obligation, but evolved to express probability later – **and unidirectionality** – the obligation sense will usually precede the probability sense – which tend to recur across languages.³⁷ One example cited is the Japanese necessitive verb auxiliary *-beki/beshi*, which has followed the same process from obligation to probability as *must* and *promise*.

(4) Tesuto-no mae-wa benkyoo-su-**beki** da
test-GEN before-TOP study-DO-NEC COP

“You **must/should** study before a test.” (Obligation)

Konna koto gurai shitteiru beki da
like.this thing extent realize.RES NEC COP

“You **must/should** at least be aware of something basic like this.” (Probability)

Another well-known example of meaning change is the conjunction *since* in English, which originated as a temporal connective meaning “after”, but can be reinterpreted as a causal connective.

(5) Mary has been miserable **since** John left her (temporal/causal)

³⁷ Nevertheless, Dasher and Traugott (2005, p. 3) stress that these regularities are not absolute.

A similar process has occurred with the Japanese ablative marker *kara* (“from, after”), which in addition to its function as a temporal and motive connective also came to express reason (Frellesvig, 2010, p. 132).

(6) Kare-wa sono toki **kara** zutto byooki desu
 he-TOP that time from continuously illness COP.POL

“He has been ill (ever) **since** then.” (Temporal)

Kare-wa karoo **kara** byooki-ni natta
 he-TOP overwork from illness-DAT become.PST

“He fell ill **from (because of)** overwork.” (Causal)³⁸

In short, meaning is continuously in flux depending on factors such as context and the speaker’s encyclopedic knowledge. Put more simply, “no word means the same thing twice” (Croft, 2000, p. 104)³⁹

This regular and unidirectional process by which lexemes and constructions accumulate new meanings based on pragmatic context has been given various names, including **pragmatic inference, invited inference** (Dasher, Traugott, 2005)⁴⁰, **context-induced inference** (Heine, Claudi, Hünnemeyer, 1991) and **meta-analysis** (Croft, 2000). Based on the historical examples found in chapter 3, it is highly possible that the dynamic meaning of *chigau* (e.g. go across, go against, go away from, avoid, among others) became gradually stative (e.g. be different, be wrong) via pragmatic inference. This can be seen when reviewing some of the historical examples from chapter 3. Based on Eckhardt (2008), the process of semantic change can be divided into three stages, **pragmatic enrichment, reanalysis** and **actualization**. The first is a pre-stage when new meanings are added via pragmatic implication and gradually conventionalized. The second represents the turning point, where the meaning of a unit is reanalyzed based on the accumulated clusters of conventionalized implicatures. This leads to actualization, where the new meaning is entrenched and its implications gradually explored by speakers (p. 239). As seen in (7), the earliest usages of the verb were linked to MOTION,

³⁸ Both examples are from the electronic version of the dictionary “Shogakukan PROGRESSIVE Japanese-English dictionary (2002, 3rd edition)

³⁹ Quoted from Robert Musil’s *The man without qualities*

⁴⁰ Thus, the theoretical framework on semantic change proposed by Dasher and Traugott (2005, p. 5) is referred to as an Invited Inferencing Theory of Semantic Change (IITSC)

containing a cluster of related meanings, such as “cross”, “switch places” and “pass each other”.

(7) Yari-tsuru	hito-wa	chigai-nu-ramu	
dispatch-PERF.ADN	person-TOP	cross.INF-PERF-CONJ	
to	omou-ni	ito	meyasushi
COMP	think-LOC	very	pleasant.CONCL

“When I considered that the messenger I had sent had **probably failed to deliver the message (literally: “had passed by [his destination]”)**, I was very happy.” (From *Kagerō Nikki*, approx. 974 AD, my translation)

This semantic cluster was gradually enriched, spawning meanings such as “miss” and “avoid”, as seen in (8):

(8) Kore-ni	chigawan-to	shidoro-ni	natte
this-DAT	miss.VOL-COMP	disorder-LOC	become.GER
sawagu	tokoro	wo	
panic	process.of	ACC	

“While the panicked [soldiers] desperately scrambled **to escape** this [the falling trees] [...]”

(From the historical epic *Taiheiki*, written in the late 14th century, my translation)

Note the concurrent change in syntactic structure. In (4), *chigau* modifies the subject, whereas in (5) it takes a dative object, which was used to denote the object of the subject’s avoidance (5). The turning point seems to have occurred when this particular syntactic construction was reanalyzed as expressing the notion of divergence and deviation, which appears to have happened by the 14th century. As a consequence, the dative object came to denote the point of divergence, giving rise to a host of new implications, as users experimented with the new meaning.

(9) Haha ya shishoo-no mi-kokoro-ni **chigawan** koto,

mother or teacher-GEN HON-wish-DAT diverge.VOL NMLZ

ikaga su-beki naredomo, izukata-no o-koto-mo,

how do-NEC but both-GEN HON-thing-ETOP

ittan-no koto-to oboetari

temporary-GEN thing-COMP feel.PROG.CONCL

“Although I do worry about what should be done about [those that] **would defy** their mother or teacher, I suspect they are both only temporary.” (From *The Tale of the Soga Brothers*, written during the Nanboku-chō period in the latter half of the 14th century, my translation)

(10) Go-musoo-ni go-ran-zeraretsuru-ni sukoshi-mo

HON-dream-DAT HON-watching-do.PASS.PERF.ADN-DAT little-ETOP

chigawa-neba⁴¹

diverge-NEG.PROV

“Because [this behavior] **does not deviate (does not differ)** even a little from what he [the cloistered emperor] had seen in his dream [...].” (From *The Tale of Hōgen*, written at some point during the 13th or 14th century (possibly 1220), my translation)

In (9), we see that the *ni-chigau*-construction no longer is unambiguously linked to MOTION, in (10) it appears to be edging towards CONDITION (notice also the lack of the volitional form *chigawan*, which indicates willful intent). While dynamic usages persisted, they were affected by the trend towards denoting divergence as well:

(11) Kokora-ni-mo hitobito kokoro-no kawarite

⁴¹ Here it is difficult to ascertain whether the attested sentence uses “chigau” or the semantically similar verb “tagau”, due to conflicting views on the phonological reading of the Chinese character (Miyakoshi, Sakurai et.al. 2003 uses *chigau*, Nihon Kokugo Daijiten second edition uses *tagau*). Due to their semantic and phonological similarity, some linguistics, such as Masatake Oshima, posits *chigau* as a parallel form derived from *tagau*.

around.here-LOC-ETOP people mind-GEN change.GER
 betsubetsu-na-wa kao-no chigoota-to
 separate-ADN-TOP face-NOM diverge.PST-COM
 onaji zo.
 same EMPH

“The minds of every person here are unique; in the same way that their faces also **have diverged (are different)** [from each other].” (From *Gyokujinshoo*, authored in 1563, my translation)

Here, the past form resembles a deverbal adjective (e.g. a *darkened house*). The same shift from change of state to durativity affected the present form, which by the 17th century was used more unambiguously with stative meaning,

(12) Ikani hyakushoo-no atari kitsushi totemo
 how farmer-GEN interaction strict very
 buke-to-wa haruka **chigau** beshi
 samurai-COM-TOP far diverge NEC

“No matter how strict he is with farmers, [because he is an aristocrat] he must be much **different** from samurais [who are known for being particularly strict].” (From *Ikyuu Banashi*, published in 1688).

The shift from a change of state to the state that resulted from that change is often seen across languages. A parallel example in English is the verb *have*, which today expresses stative possession but ultimately stems from the Proto-Indo-European root **kap-*, “to grasp”. This meaning was at some point expanded to express the resultant change of state, reflected in the subsequent Proto-Germanic root **haben-*, “hold something as a result of grasping it”. The original dynamic meaning survives in the Latin cognate *capere*, “seize”⁴² and the

⁴² Despite similarity in form and sense, there is no relation to Latin *habere*.

etymologically related verb *heave* (Bjorvand, Lindeman, 2007).⁴³ Similarly, the meaning of *chigau* was extended from “diverge” to “being in a state that resulted from divergence”.

In summary, we can conclude that the stative usages gradually evolved from dynamic meanings that were all related to the basic notion to divergence and deviancy. This reflects a transition from denoting the endpoint of an event to the state that emerges from this event. A similar semantic development from dynamic separation to stative meaning can be gleaned from the usages of the semantically similar verb *hazureru* (“diverge, come off”). Compare (number) and (number):

(13) Ya-ga mato-wo **hazureta.** (dynamic)

arrow-NOM target-ACC diverge.PST

“The arrow **missed** the mark.”⁴⁴

Sore-wa kisoku-ni **hazureru.** (stative)

that-TOP rule-DAT diverge

“That **is against** the rules.”

The verb *au*, meaning, “come together, join”, which also can be used to mean “agree with”, exhibits a similar development:

(14) Takeshi-wa asu Kyooto-de **au.** (dynamic)

takeshi-TOP tomorrow Kyoto-LOC come.together

“I **will meet** Takeshi in Kyoto tomorrow.”

Kono wain-wa niku-ni yoku **au** (stative)

this wine-TOP meat-DAT well come.together

“This wine **goes (is)** well with meat.”

⁴³ It also survives in the Norwegian cognate *ha*, in expressions such as *ha mer salt i suppa*, “put more salt in the soup” (Literally: “have more salt in the soup”).

⁴⁴ <http://dictionary.goo.ne.jp/leaf/je2/60610/m0u/%E5%A4%96%E3%82%8C%E3%82%8B/>

A similar development can also be found in English with the semantically similar verb *differ*. Believed to have appeared in English in the late 14th century, the verb, via French *différer*, ultimately derives from Latin *differre*, “carry or bear apart [transitive], tend asunder, have opposite bearings, be different [intransitive]”, from *dis-* (“away from”) and *ferre* (“carry”) (OED), which is quite similar to the concepts of divergence expressed by *chigau* and *hazureru*.⁴⁵

This shift does not mean that the older meanings disappeared right away. It is likely that the verb at some point vacillated between expressing change of state and resultant state, and that the stative meaning was not conventionalized right away. As mentioned earlier, the co-existence of new forms with older variants is a common occurrence, one example being the English future marker *going to*. While this marker was reanalyzed as a future marker (*I’m going to work hard*), the older motion sense is still in use (*I’m going to school tomorrow*). Eckhard (2008, p. 239) also stresses that the turning point does not occur in one concrete step for all users; individual speakers will reanalyze several times before the new usage becomes entrenched and different speakers will reanalyze at different points in time. Some speakers might even encounter the new meaning during the post-stage, before undertaking any form of reanalysis on their own. Nevertheless, the overall direction of the change appears to point towards stativity.

Additionally, this type of semantic extension is commonly conceptualized as a stage in the process of grammaticalization, whereby a lexeme gradually loses semantic content and experiences a reduction in the number of productive forms (Croft, 2000, p. 156)⁴⁶. The overwhelming prevalence of the non-past, its lexically light exclamatory uses and the existence of the reduced form *chau* all point to grammaticalization. Even stronger evidence is the fact that the reduced form *chau* had been reduced to an apparently uninflected, rhetorical modal, similar to the construction “isn’t it?” in English. In these instances, the verb simply expressed the speaker’s certainty about the subject and connects to the main predicate via a nominalizer, and was always pronounced with a rising intonation.

(15) (From dialogue 232-16)

⁴⁵ The transitive and intransitive senses received different stress in English and were later split into two different verbs (intransitive *differ* and transitive *defer*), which subsequently came to diverge significantly in meaning.

⁴⁶ Although Croft defines grammaticalization as essentially syntagmatic (i.e. operates in specific constructal contexts only), he mentions that the process is usually described in relation to individual lexical items (p. 156)

(M09 and BM05 talk about the US national soccer team. BM05 mentions that the male team, which, in contrast to the female team, has done poorly in international contests, performed surprisingly well in the last World Cup.)

BM05:

Yarashitara nandemo dekiru-**n** **chau**⁴⁷, aitsura
do.CAUS.PROV anything come.about-NMLZ Q they

“They can do anything if you get them to do it, **can’t they?**”

(16) (From dialogue 233-16)

Sooyuu shiji-wo ataeru-no-ga sugoi daiji-na
such instruction-ACC give-NMLZ-NOM incredible important-ADN
n **chau**⁴⁸ kanaa
NMLZ Q Q

“It’s incredibly important to give such instructions, though, **isn’t it?**”

Further proof of this grammaticalization is the fact that the negative copula *janai* (“am/is/are not”) can replace *chau* in this construction, so that (17) below would be equally valid:

(17) Yarashitara nandemo dekiru-n **janai**⁴⁹, aitsura
do.CAUS.PROV anything be.able.to-NMLZQ they

“They can do anything if you get them to do it, **can’t they?**”

5.4 Analogy and morphological change

⁴⁷ Rising intonation

⁴⁸ Rising intonation

⁴⁹ Rising intonation

In this section I will explore possible reasons why *chigau* became conjugated as if it were an adjective, although adjectival forms are limited mostly to *chigakunai* and *chigakatta*.

The term analogy has been used quite ambiguously, both narrowly and more widely. I will rely mostly on the definitions provided in Kertig (2013), due to his close scrutiny of the term and its ambiguousness. Kertig's definition is influenced by the theoretical framework of the German linguist and Neogrammarian Hermann Paul's view of individual language use, which operated with a discrete distinction between **reproduction** and **production**. The former represents a repetition of a form the speaker has heard before, particularly irregular forms that cannot be inferred via established grammatical rules, such as *went* as the past form of *go*. The latter is a product of the speaker's own mental grammar and their ability to form new regular forms they have never heard before by **analogy** with complete word forms already found in the speaker's grammar. This category therefore tends to include forms with low frequency, such as *edelweisses*. Consequently, although analogy is often described as a mechanism for language change (Kertig, 2013, p. 12), Kertig (2013), following Paul, opts to define **analogy** as a cognitive process of production that underlies all language use. Unlike Paul, however, he contends that since reproduction and production in common language use are known to reinforce each other, they cannot be kept completely separate. This means that forms the speaker already knows can influence the cognitive analogical process that serve to generate new forms (p. 11). Based on this assumption, Kertig proceeds to provide two different definitions of this process, one general and one specific. The former broadly encompasses both linguistic and non-linguistic instances and is defined as a speaker's ability to draw parallels between elements in different domains and make predictions about unknown elements based on knowledge or beliefs about known domains that are perceived to be related to the unknown domain (p. 12). The specific sense applies this general definition to the production of linguistic forms and is particularly salient to our discussion:

Analogy₂ [specific sense] is the capacity of speakers to produce meaningful linguistic forms that they may have never before encountered, based on patterns they discern across other forms belonging to the same linguistic system. (p. 12)

In this framework, analogy is thus not primarily a mechanism for linguistic change but a **regular fundamental mechanism for language production, subject to the individual speaker's knowledge of grammar and meaning**; the "[...] productive/creative capacity inherent in speakers' mental morphological and syntactic systems" (p. 5). It is the very basis

for a speaker's capacity to produce regular normative forms that the speaker has never encountered before, although, as mentioned above, previously memorized forms influence the direction of this process. Forms derived by this process of analogy are termed **analogical formations**. Analogical formations that deviate from current norms of usage are labeled **analogical innovations**. When or if an analogical innovation starts to diffuse among a significant portion of the speech community, it becomes an **analogical change** (p. 12), pursuant to the distinction between innovation and change established in 5.1. To distinguish his conceptualization of analogical changes from other closely related processes, Kertig puts three constraints on this definition. First, analogical changes are overt productions of phonetically new forms; second, they are specifically based on other meaningful forms and perceived semantic or grammatical relationships between them; and last, they only occur within a single linguistic system. These constraints serve to distinguish analogical distinctions from the type of reanalysis discussed in 5.3 (which affects a form's semantic content rather than its surface form), sound changes and changes due to language contact, respectively (Fertig, 2013, p. 13). In fact, following Hopper and Traugott (1993), he explicitly interprets reanalysis to be intimately linked with analogy, in that analogical innovations sometimes represent the overt actualization of a covert semantic reanalysis (p. 28). In such instances, analogical innovations appear to overlap with Eckhardt's (2008) actualization stage.

The question then becomes, why does analogy sometimes produce innovative (i.e. non-normative) forms? The answer relates to the parallels drawn by speakers to other existing forms and the fact that such parallels can result in one form influencing the phonetic makeup of the other. Kertig calls this **associative inference** and defines it specifically as “[...] an influence of one form on the phonetic make-up of another with which it is (perceived to be) semantically or grammatically related.”

It is important to those that associative inference is based on relation *as perceived by the speaker*. Thus, the relation need not be historically true, as long as the speaker believes there is a relation. **Kertig p. 25** One well-known example is folk etymologies, which is triggered by [...] “a morphological or lexical reanalysis that innovatively identifies part of one form with another form” (p. 58). The forms in question are historically unrelated elements but are, due to a perceived etymological connection analyzed as being the same. As with analogy in general, Kertig distinguishes between a narrow and wider sense of folk-etymology. The wide definition includes cases where the innovative identification does not have any overt phonological consequences, i.e. the phonetic realization of the elements does not change. This

includes a host of re-analyses that often cause confusion when encountering homophones. In English, where homophones are often orthographically distinguished, this confusion is often revealed in spelling: *rite of passage* becomes **right** of passage, the expression *anchors aweigh* is substituted for *anchors away* and **whet** one's appetite is replaced by *wet* one's appetite. In its more narrow and technical sense, however, folk-etymology only refers to instances where this process triggers an overt alteration of the phonetic form that is being reanalyzed (p. 58). One example is English *bridegroom*, ultimately from Old English *brydguma* (*bryd*, “bride”, + *guma*, “man”) where the *r* in the second element was inserted due to analogy with the historically unrelated *groom*, “boy, lad” (compare Norwegian *brudgom*) (Fertig, 2013).⁵⁰

We have already established that *chigau* and adjectives are quite similar because they both express stative meanings such as quality, characteristics and condition. We further showed that *chigau* exhibits a greater stative tendency than other stative predicates, such as *wakaru* and *dekiru*. However, we have still not explained why this process has not occurred with the existential verbs (*aru*, *iru*), which are also almost completely stative. But as mentioned above, morphophonological alterations tend to occur when the elements in question are perceived as semantically and grammatically similar. This is also true for *chigau*, which not only semantically, but also phonologically resembles adjectives, mainly due to its root, *chiga-*, which resembles the root of numerous other *i*-adjectives such as *ita-* (-*i*), *aka-* (-*i*) and *taka-* (-*i*), which all end with a consonant +*a*. The similarity is especially striking for the root of the adjective *chika-*(*i*), (“near, close”) which forms a minimal pair with *chiga-*. In contrast, the stem of *wakar-u* and *dekir-u* both end in overt consonants and therefore bear little phonological resemblance to other adjectives. For this reason, it is likely that *chiga-* reanalyzed as an adjectival stem, yielding the forms *chiga-katta* and *chiga-kunai*. Compare with the conjugation of *chikai*:

Past: *chiga-katta* (was wrong) *chika-katta* (was near)

Negation: *chiga-kunai* (is not wrong) *chika-kunai* (is not near)

Another important driving force in the production of analogical innovations is the **regularization** and **leveling** of irregular inflections of verbs and nouns. Examples include the extension of plural *-s* to nouns (*eyen* → *eyes*, *brethren* → *brothers*) and the *-ed*

⁵⁰ However, OED speculates that *bridegroom* might have originated as an independent innovation, where the resemblance to older *brydguma* was accidental

past/participle for verbs (*holp(en)* → *helped*). The same principle can be applied to *chigau*. Once adjectival forms appeared, some speakers transferred the pattern to other forms, yielding forms such as *chigakereba* (conditional) and *chigakaroo* (conjectural), by analogy with forms such as *chikakereba* (“near”, conditional) and *chikakaroo* (“near”, conjectural). Inoue and Ishii also confirms the existence of *chigee* as a possible replacement of the verbal non-past *chigau*, but this form still appears to be tenuous, possibly due to its social connotations and the frequent use of non-past *chigau* compared to other forms in the paradigm.

5.5 Conclusion and summary

In this chapter, after giving an overview of common conceptualizations of language change, theories on semantic change, specifically pragmatic inference, were invoked to provide an explanation for how *chigau* was re-analyzed into exhibiting more and more stative usages. Finally, the concept of analogy was explored to show how the stem of *chigau*, due to its semantic stativization and phonological properties to other adjectives (particularly *chikai*), was re-analyzed as an adjectival stem, triggering the formation of forms such as *chigakunai* and *chigakatta*, by analogy with other i-adjectives such as *chikakunai* (“is not near”) and *chikakatta* (“was near”).

6 Final summary and conclusions

The goal of this thesis was to explore the adjectival forms of *chigau* and attempt to find elucidate possible mechanisms for the development of these forms. In chapter 1 I recounted how the creation of these forms is commonly linked to the perceived stativity of *chigau* and a desire by speakers to eliminate the asymmetry between the verb's meaning and form. In chapter 2 I related the dichotomy between stative and dynamic meaning to aspectual theory and discussed the lexical aspect of Japanese verb, as well as the meaning of the aspectual marker *te-iru*. In chapter 3 I examined previous studies on the adjectival forms and used these studies to examine the aspectual qualities of *chigau*. Here I found that *chigau* appears to be predominantly stative, but still with some dynamic usages. In chapter 4 I used corpus analysis to test the hypothesis that *chigau* was mainly stative; the results indicated that the verb is almost used entirely statively, and also revealed that the verb can be used as an exclamatory interjection. In chapter 5 I drew upon semantic theories surrounding pragmatic inference to argue that the stativization of *chigau* was due to pragmatic inference. I then argued that the morphological reconfiguration of *chigau* can be attributed to analogy with other adjectival roots and the verb's perceived aspectual similarity to adjectives.

Previous studies have shown that these forms have continued to gain traction among speakers, particularly young speakers. One can only speculate what will become of these forms in the future, but their varying social status indicates that some forms will have more success than others. The roughness associated with non-past *chigee* in particular comes to mind as a form that might not enjoy official sanction in the overseeable future. On the other hand, the negative *chigaku-nai*, seems more likely to achieve more traction. The same applies to the past *chiga-katta*, which might be preferred by some speakers.

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