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**Dimensions of recipe register and native speaker knowledge:
Observations from a writing experiment**

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Abstract

This study investigates native Japanese speakers' context-dependent linguistic knowledge of cooking recipes. Recipes are a typical example of a register, defined as the use of language in a particular social situation for a specific purpose. Thirty participants in the present study were asked to write a recipe for curry rice (a popular dish in Japan) or an unnamed soup (shown in a photo) on a blank piece of paper without access to any resources. Most participants' texts contained specialized vocabulary and basic procedural organization. On the other hand, few integrated the typical grammatical features of commercial recipes. It suggests that the latter details are not part of the communicative repertoires of most participants. The grammatical characteristics of commercial recipes are likely a product of careful editing, aimed for clarity and consistency. Professional editing appears to have a significant role in shaping the grammar of the written register.

Key words

communicative repertoire; context-dependent linguistic knowledge; recipe register; professional editing; user-generated content; Japanese recipes; writing experiment

1. Introduction

From an early age, native speakers of a language or languages are competent in everyday verbal communication with their caregivers. As children get older, they increasingly expand their “repertoire of communicative contexts” (Hopper 1998, 171). Depending on individual life experiences, native speakers of the same language may develop (and continue to develop in

adulthood) a very different repertoire beyond basic conversational proficiency. The concept of ‘verbal repertoire’ was originally coined by Gumperz (1964) to account for the complex nature of multilingualism. This concept, or the extended notion of ‘communicative repertoire,’ is also useful to elucidate a wide variety of registers used by speakers of a monolingual community (Hymes 1984, 44; see also Martinez et al. 2017 and Martinez and Montaña 2016 for discussion on the multidialectal communicative repertoires of minority students in the U.S.). Rymes (2010, 2014) takes the concept of communicative repertoire even further to include types of extra-linguistic communication, such as gestures and clothing, which individuals use “to function effectively in the multiple communities in which they participate” (Rymes 2010, 528). In a literate society, members’ communicative repertoires include written communication as well. Just as spoken language can vary from chatting with friends to giving a speech to a group of strangers, written language encompasses a wide range of registers (or genres). Unlike spoken language, many written registers are associated with schooling (e.g., academic writing of various types) and occupations (e.g., legal documents, aviation manuals). Some technical registers, such as those just mentioned, are confined to a small group of professionals, while others, such as news reports and travel guides, are addressed to a community at large. Not only are these registers accessible to ordinary members of the society, but since the rise of the internet, they have also been increasingly produced by amateur writers.

It is reasonable to assume that ordinary members of a speech community know the typical properties of publicly accessible written registers, including “global organization, more local structural properties, typical content, specific expressions employed, [and] matter[s] of style...” (Langacker 2008, 478).¹ To find out if this is the case, we conducted an experiment asking native Japanese speakers to write a recipe without access to outside resources. Features of these recipes are analyzed in comparison with those of commercial recipes from cookbooks and online commercial sites, with respect to text organization, vocabulary, and grammar. Our analysis demonstrates that a productive knowledge of the recipe register involves multiple aspects such as discourse topic and one’s understanding of a given task. The next section provides an overview of the recipe register and a summary of the characteristics of Japanese commercial recipes, with

¹ Langacker lists the following examples of written-language registers: “personal letters, business letters, email, signs, labels, recipes, menus, class schedules, course descriptions, newspaper headlines, computer manuals, assembly instructions, linguistics articles, various kinds of legal documents, and many more” (2008, 478).

respect to their text organization (2.1), vocabulary (2.2), and grammar (2.3). Section 3 describes the current experiment and provides a rationale for the data collection procedure and method. In Section 4, we analyze the features of the participants' recipes in comparison with those of commercial recipes and identify factors that may be associated with different dimensions of context-dependent linguistic knowledge. We then consider the role of professional editing in shaping the grammar of commercial recipes (Section 5). In the concluding section (Section 6), we briefly discuss the implications of the current study for communicative repertoire.

2. Recipe register

Although register boundaries are not always clear (Zwicky and Zwicky 1982; Ferguson 1982), recipes are often taken as a whole to be a standard and central case of a register (Zwicky and Zwicky 1982; Fischer 2013; Strauss et al. 2018, 221). A register is generally defined as the use of language in a particular social situation for a specific purpose (Ferguson 1994). The term 'genre' is used distinctively from 'register' in some studies (e.g., Biber and Conrad 2009; Couture 1986), but in this paper, no distinction will be made. While some register distinctions are culture-specific (Biber and Conrad 2009), there are many technical registers that exist cross-culturally. Linguistic features can be more similar cross-linguistically within the same register than different registers are within a single language (Kittredge 1982; Romaine 1994). More register studies have been conducted on English than on other languages, and recipe register is no exception. One goal of the present study is to add to our cross-linguistic understanding of the relationship between situational needs and purposes of the recipe register and the use of language.

Findings from previous recipe register studies on English show that recipes targeted toward a large and generic audience tend to be more explicit and detailed than those targeted toward a group of professionals (Diemer 2013) or a smaller community (Cotter 1997). According to Diemer (2013), who analyzed recipes from Old English to the late 20th century, there is also an increasing tendency for recipes to be more explicit and detailed as well as to include non-procedural sentences that provide helpful advice for non-experts. Studies of user-generated online recipes confirm the same trend, but they also find that the features of the recipe proper are accompanied by interactive elements, which embody audience awareness and involvement (e.g., Diemer and Frobenius 2013). Characteristic linguistic properties of the recipe proper in English

include subject-less, verb-initial imperative sentences, omission of definite articles and direct objects, and absence of temporal markers (Norrick 1983; Cotter 1997).

Japanese recipes have been analyzed from a variety of perspectives, including linguistic forms (Aoyama 1987; Ono 1990), sociocultural comparison (Martinec 2003; Strauss et al. 2018), translation (Naganuma 2006; Yamakata et al. 2017), information technology (Hamada et al. 2002), stylistics (Akiyama 2002), sub-registers (Kaneyasu and Kuhara, forthcoming), and language teaching (Moriya 1993). Most of these studies do not make a distinction between commercial and user-generated recipes. As we believe the two types of recipes represent in part different social situations, the following summary of the characteristics of Japanese recipe register, based on the studies mentioned above, will be restricted to those of commercial recipes in print or electronic form.

2.1 Organization

Japanese commercial recipes share the following structural properties: (1) the dish name, (2) a photo of the finished product, (3) a list of ingredients under the heading *zairyoo* ‘ingredients,’ and (4) cooking instruction in numbered steps, generally under the heading *tsukurikata* ‘directions’ (lit. ‘how to make’). The name and the photo provide a quick reference to the essential information about the dish. The spatial division between the ingredient list and step-by-step procedures (i.e., bipartite structure, Norrick 1983; Cotter 1997) as well as the use of headings make it clear where to find specific information. The use of numbers, in place of conjunctive expressions (e.g., *sono ato* ‘after that’) and demonstratives (e.g., *kore* ‘this (one)’), removes the need to carefully follow the sentences for comprehension and helps readers avoid losing their place while glancing at the steps. Together, the common organizational features of commercial recipes contribute to the visual clarity of the text and aid quick access to necessary information.

2.2 Vocabulary

Not surprisingly, recipes contain cooking terminology and specialized words related to food and food preparation. Although these words are not register markers per se, as they also appear in other registers such as cooking shows, their topic-specific status is confirmed with the Balanced

tender do

- *mizu ni sarasu* ‘soak in the water’
water DAT soak
- *hi ni kakeru* ‘put (something) over heat (fire)’
fire DAT put
- *hi ga tooru* ‘(something) cooks’ (lit. ‘fire passes through’)
fire SUB pass
- *hito-nitachi suru* ‘bring to a gentle boil’
one-simmer do
- *aku o toru* ‘skim the scum’
scum OBJ take
- *aji o totonoeru* ‘season (something) to taste’
flavor OBJ adjust
- *kaburu k(g)urai* ‘just enough (water) to cover’
cover about
- *tabe-yasui ookisa* ‘easy-to-eat size’
eat-easy size
- *shio koshou* ‘salt and pepper’ (fixed word order)
salt pepper

Even though the recipes analyzed in the aforementioned studies are addressed to the general public, many cookbooks and other recipe sources targeted for adults assume the background knowledge of the readers and do not explain these specialized terms (see Diemer and Frobenius 2013 for the similar tendency in English recipes; cf. Norrick 1983). Akiyama (2002) reports the result of a survey conducted by Kawamata (1975) that only 60 percent of the adult study participants understood the meaning of commonly-used cooking terminology such as *sen-giri* ‘julienne strips’ and *mijin-giri* ‘mincing.’ The compounds and onomatopoeia both succinctly convey meaning and contribute to the conciseness of the recipe text. The onomatopoeia used predominantly in the context of cooking are related to visual perception. This contrasts with the use of onomatopoeia for describing food texture in the context of having a meal together (see Szatrowski 2011). Most of the phrases in the third category are not idioms in that the meaning of

the whole is predictable from its parts. Nonetheless, the sequences of the words are fixed both lexically and in their order (e.g., *shio koshou* ‘salt and pepper’ is a commonly used phrase, but *satou shouyu* ‘sugar and soy sauce’ or *koshou shio* ‘pepper and salt’ are not).

Many of the expressions across the three categories have relative meaning; for example, meaning of *yowa-bi* ‘low heat’ in (1), *karit-to* ‘crisply’ in (2), and *tabe-yasui ookisa* ‘easy-to-eat size’ in (3) all depend, not on some absolute value, but on personal judgments based on individual readers’ experience and preferences. At first glance, commercial recipes may seem objective and impersonal, but the cooking instructions also rely on subjective interpretation (see Norrick 1983; Cotter 1997; and Fischer 2013 for similar points about English recipes).

2.3 Grammar

Similar to other how-to texts, recipe texts contain unexpressed generic human agents, who are supposedly following the procedural instructions. In recipes, discourse develops around actions performed on ingredients. Sentences are rather short but usually consist of multiple short clauses (average of three clauses per sentence). This paper focuses on two grammatical aspects that characterize recipe texts: verb morphology (Moriya 1993; Akiyama 2002; Strauss et al. 2018; Kaneyasu and Kuhara, forthcoming) and the topic/contrastive particle *wa* (Aoyama 1987; Moriya 1993; Naganuma 2006; Kaneyasu and Kuhara, forthcoming).

A majority of verbs in recipes are lexically transitive or used transitively with the causative suffix (*s*)*ase* (e.g., *futtou-sase-ru* ‘make (water) boil’). Sentence finally, most recipes consistently use the plain form of the verbs, though some cookbooks consistently use the polite form. The consistent use of plain forms with no overt subject is comparable to that of imperative forms in English recipes; both forms are agency- and time-neutral in the context of recipe texts (see Wharton 2010 for the use of imperatives in English recipes). At the sentence-medial position, verbs frequently end in one of the two continuative forms available in the language: a verb suffix *te* (e.g., *kit-te* ‘cut’) or a verb suffix *i/e* (e.g., *kir-i* ‘cut’). The choice between the two clause-linking forms is related to the relative degree of discontinuity or disintegration between the two situations described in the *te* or *i/e* ending clause and the immediately subsequent clause within the local context (Ono 1990). The degree of disintegration is measured in regard to 1) the number of new participants (ingredients, condiments, or tools) in the second clause, 2) temporal (dis)continuity between the two clauses (simultaneous, immediate, lapse), 3) change of place,

and 4) whether or not the comma punctuation (、) appears between the first and the second clause. In the example (4) below, the *te* clause (*katakuri-ko o mabushita kajiki o tsuyo-bi de yai-te* ‘fry the starch-coated marlin over high heat’) has no new participant in the subsequent clause (*hi o tousu* ‘cook’), has a simultaneous temporal relationship with the subsequent clause (frying and cooking occur simultaneously), has no change of place, and no comma is used. The *i/e* clause (*abura o neshsh-i*, ‘heat oil’), in contrast, has one new participant in the subsequent clause (*katakuri-ko o mabushita kajiki o tsuyo-bi de yai-te* ‘fry the starch-coated marlin over high heat’), has an immediate temporal relationship with the subsequent clause, has no change of place, and a comma is used.

(4) *te* and *i/e* medial forms

furaipan ni abura o neshsh-i, katakuriko o mabushita kajiki o tsuyo-bi de
 frying.pan DAT oil OBJ heat-*i/e* starch OBJ coated marlin OBJ high-heat INS
yai-te hi o tousu.

grill-*te* fire OBJ pass

‘Heat (*neshsh-i*) oil in a frying pan, and fry (*yai-te*) the starch-coated marlin over high heat to cook.’

In commercial recipes, the *i/e* form is associated with a higher degree of discontinuity than the *te* form, especially with respect to the number of newly mentioned participants in the subsequent clause and the prevalent use of a comma after the *i/e* clause (Ono 1990; Kaneyasu and Kuhara, forthcoming). Although the functional division between the *te* form and the *i/e* form followed by a comma in the medial position is a tendency and not an absolute pattern, the systematic use of the two forms contributes to the faster processing and comprehension of the procedural text.

The second characteristic grammar of commercial recipes is the use of the topic/contrastive particle *wa* in the preparation stage of the cooking procedures. When ingredients require preparation, such as washing, peeling, and cutting, before they can be combined with other ingredients, the ingredients that need preparation are typically marked with the particle *wa*, as in the following example (5).

(5) Particle *wa* in the preparation stage

tamanegi wa kawa o muki, kuroobu o 4~8 ko tsukisasu.

onion TOP skin OBJ peel clove OBJ 4.to.8 CLS stick

‘As for the onion, peel the skin, and stick in 4-8 cloves.’

The particle *wa* is only used in preparation steps; when the same ingredients are subsequently mentioned again, they are no longer marked with *wa*. In the next example (6), tofu is marked with *wa* in the initial preparation step, but in its second mention, it is marked with the object particle *o*.

(6) Particle *wa* in the preparation stage

toufu wa hito-kuchi-dai no kaku-giri ni suru.

tofu TOP one-bite-size GEN cube-cut DAT do

‘As for the tofu, cut into bite-size cubes.’

toufu o kuwae, ...

tofu OBJ add

‘Add the tofu, ...’

The exclusive use of *wa* for marking ingredients under preparation steps is pervasive and consistent in commercial recipes (Aoyama 1987; Moriya 1993). As reported in Kaneyasu and Kuhara (forthcoming), the particle *wa* functions as “a cohesive device between locally contrasting elements” (Clancy and Downing 1987, 49), where contrasting elements are various ingredients that make up a dish. The use of *wa* also helps to visually distinguish the preparation steps from the rest of the processes, especially when the preparation stage is dispersed across several numbered steps. Thus, it functionally resembles other organizational and grammatical features: sorting out different types of information, and in turn enhancing visual clarity of the text and supporting quick access to particular information.

In this section, we have identified some of the most typical features of commercial recipes. While organizational and grammatical features are confined to the written recipe register, the specialized vocabulary identified in this section can appear in other food-related registers, both spoken (e.g., cooking shows) and written (e.g., blogs). We will see in Section 4 that only some of

these features typically appear in the recipes written by lay native speakers in our writing experiment. Before we present and discuss the findings, the next section describes the data collection method and provides a rationale for the chosen approach.

3. Data and methodology

The data consists of 30 recipes written by adult native Japanese speakers and their answers to a post-task questionnaire. The participants were recruited via flyers and emails to several Japanese speaking communities in Colorado, United States, where the study took place. All participants were over 18 years of age and were born and raised in Japan at least until they turned 18 years old. Although we did not keep a formal record of their status, participants included short-term university exchange students from Japan, short-term expatriate workers and their families, and permanent residents. Participants were excluded if they lived outside Japan for one year or longer between the age of 3 and 18 years or if they had lived outside Japan for 30 years or longer.

In the first part of the study, the participants were asked to handwrite a recipe for curry rice (a popular dish in Japan) or an unnamed soup (a photo of which was presented to them) on a piece of paper provided by the researchers, without access to any outside resources. One of the researchers was present to oversee the participants' activities. The familiar (curry rice) and unfamiliar simple-looking (soup) dishes were chosen so that the participants did not have to put in any extra effort in remembering or imagining ingredients and procedures. (7) is the prompt given in the writing task of 'a recipe for curry rice.'

(7) Sample writing task prompt

【課題】 日本語を母語話者のように理解できるロボットに、一般的な「カレーライスのレシピ」を書いて教えてあげてください。時間制限はありませんが、質問は受け付けません。辞書やインターネットは使用しないようにお願いします。

‘[Task] Please write “a recipe for curry rice” to teach a robot, who can understand the Japanese language like a native speaker. There is no time limit, but we will not accept any questions. Please do not use a dictionary or the internet.’

In our pilot study, in which we did not specify an addressee, we noticed that writers often supposed a specific type of addressee (e.g., children or researchers). To avoid this extraneous variable, we decided to specify the addressee, a robot with native language proficiency. This choice of addressee also made it possible to use a familiar and simple dish while maintaining the authenticity of the task to some extent. That is, participants may have found it unnatural to teach a native speaker how to make such a popular or simple dish.

The second part of the study was the post-task questionnaire. The purpose of the questionnaire was to gain some insight into what went on in the writers' mind at the time of reading the writing prompt (Q1), their reaction to the register cue word 'recipe' (Q2), and their cooking and recipe-reading habits (Q3 and Q4). As shown in (8), we made the questions in Q1 and Q2 intentionally open-ended so that the participants could express their thoughts candidly in their own words.

(8) Post-task questionnaire

Q1: 【課題】の指示を読んだ時、何を考えましたか。何か疑問が浮かびましたか。何か質問したいことがありましたか。

'What did you think when you read the writing task prompt? What came to your mind? Were there any questions that you wanted to ask?'

Q2: もし、「カレーライスのレシピ」ではなく「カレーライスはどうやって作ったらいいか」教えてくださいという課題だったら、何か違う書き方をしたと思いますか。どのように違ったと思いますか。

'If the writing task asked you to write "how one can make curry rice," and not "a recipe for curry rice," do you think you would have written anything differently? If so, how do you think your writing would have differed?'

Q3: カレーライスを作ったことはありますか。今までに何回ぐらい作りましたか。カレーライスを作る時に既存のレシピを参考にしたことはありますか。

'Have you ever made curry rice? About how many times? Have you referred to an existing recipe when you made curry rice?'

Q4: 普段料理はしますか。料理する場合はどのぐらいの頻度でしますか。料理するしないに関わらず、料理本、料理番組、オンラインのレシピ、料理に関するブログなどを見ますか。

‘Do you usually cook? If you do, how often? Whether or not you cook, do you read/watch cookbooks, cooking shows, online recipes, food-related blogs, etc.?’

After analyzing the features of the 30 recipes in comparison with the characteristics of the commercial recipes described in the previous section, we examined the answers to the questionnaire to consider probable motivations for participants’ use of language. Specifically, we considered if any of the observed language use was prompted or affected by (1) the register cue, that is, the keyword ‘recipe’ in the task instruction, (2) the local demands of the writing task, and (3) participants’ habits of cooking or reading recipes.

4. Findings

4.1 Organization

At the discourse level, most participants organized their texts based on the procedural nature of the writing task. Half of them (15/30) used a listing format with numbered steps (example (9)). Close to one-third (9/30) used a passage style, with sentence-initial adverbials such as *mazu* ‘first,’ *sono ato* ‘after that,’ and *saigo-ni* ‘lastly’ (example (10)).³ Most texts with numbered steps did not include any sentence-initial adverbials (13/15), which suggests that the writers of these texts had the functional knowledge of numbered steps in the recipe or how-to texts.

(9) Listing format with numbered steps

① *yasai to gyuuniku o hito-kuchi-dai ni kiru.*

vegetable and beef OBJ one-bite-size DAT cut

‘Cut vegetables and meat into bite-size pieces.’

② *nabe ni abura o irete, ...*

pot DAT oil OBJ put

³ The rest used bullet points (3/10) or sentences without any connective expressions (3/30).

‘Put oil in the pot, ...’

(10) Passage format with sentence initial adverbials

mazu hajimeni, mizu o futtous-ase, ...

first beginning water OBJ boil-CAU

‘First, to begin, boil the water, ...’

sono ato, katai ninjin kara suupu ni irete-iki...

that after hard carrot from soup DAT put-ASP

‘After that, put the hard carrot in...’

The choice between the listing and the passage formats reflects, to some degree, the participants’ understanding of what the writing task entailed. In the post-task survey (Q1), those who used the passage structure commented that they just thought about the process of making the dish or how to (best) describe the process to someone. Those who used the listing format, on the other hand, commented that they thought about the format or the type of language to use (i.e., list vs. passage). In other words, they gave more thought to the format of their texts rather than the content of their writing alone. Thus, it is not the task (of writing a recipe) itself that determines how participants organize their texts but rather it is their interpretation of the purpose and requirements of a given situation that determines what they attend to and how they use language to meet the perceived needs (see Fischer 2015). The passage and listing formats found in the participants’ texts correspond to the two styles (i.e., narrative-like passage and the recipe proper) used in single online food blogs (Diemer and Frobenius 2013). Bloggers use the two styles to communicate the same cooking steps twice because each part performs a distinct function; the passage style is more reader-directed and personal while the recipe proper is focused on actions and impersonal, like traditional written recipes (Diemer and Frobenius 2013).

Another organizational feature of commercial recipes, the list of ingredients, was used by a smaller number of participants. Seven texts included the ingredient list with the heading *zairyō* ‘ingredients,’ six of which were those with the numbered steps.⁴ Together, 20% (6/30) of the texts resembled the bipartite structure of commercial recipes.

⁴ 3 texts introduced the ingredients in sentences rather than a list.

4.2 Vocabulary

Cooking terminology and specialized vocabulary, including those listed in Section 2.2, were used by all but one participant. The most frequently used words and expressions are listed under (11). There are two notable lexical differences between the commercial recipes and the texts produced in the present experiment. First, while verbal compounds are frequently used in commercial recipes, the participants in the present study overwhelmingly used single verbs, except for more lexicalized ones such as *ni-komu* ‘simmer well’ and *ni-tatsu* ‘come to a boil.’ This is partly because the assigned dishes in the present study did not require the type of actions that are usually expressed using compound verbs in commercial recipes (e.g., *maze-awaseru* ‘mix together,’ *mawashi-ireru* ‘put in in a circular motion’). Another possibility is that these compounds are not part of the productive knowledge of the participants, although they can most likely understand them receptively.

(11) Most frequently used specialized vocabulary

- *hito-kuchi-dai* ‘bite-size’
one-mouth-size
- *yowa-bi* ‘low heat’ / *chuu-bi* ‘medium heat’ / *tsuyo-bi* ‘high heat’
weak-fire medium-fire strong-fire
- *shio koshou* ‘salt and pepper’
salt pepper
- [shape]-*giri* ‘[shape]-cut’
- *hi ga touru* ‘(something) cooks’ (lit. ‘fire passes through’)
fire SUB pass
- *aji o totonoeru* ‘season (something) to taste’
flavor OBJ adjust

The second difference is that many participants (83.3%; 25/30) wrote *dekiagari* (17/25) or *kansei* (8/25) ‘voila’ (lit. ‘(something is) complete’) at the end of their text, while these words were not seen in commercial recipes. In the mind of the participants, these concluding remarks were strongly associated with the topic of cooking and how-to instructions; we speculate that they had acquired such association from wider socio-cultural experiences rather than reading

recipes alone. The word *dekiagari*, in particular, often appears in children's picture books and how-to books, not just for cooking, but also for origami, crafts, and other kinds of play and daily routines in which children actively engage. What these activities have in common is that they have some finished product at the end. Native speakers had likely encountered *dekiagari* numerous times when they were children as they read and were being read these types of books. This is similar to how trite phrases such as *mukashi mukashi* 'once upon a time' and *madetashi medetashi* 'happily ever after' are strongly associated with fairy tales. Because these expressions are considered stereotyped and worn-out, professional writers of stories targeted for adults think twice about using them. Although the case of *dekiagari* and *kansei* as clichéd words is less obvious, because they are not linked to a particular type of how-to instructions, we tentatively conclude that commercial recipe writers, or more accurately commercial recipe editors (see Section 5), avoid using these words for the same or a similar reason as authors (and editors) avoid fairytale clichés.⁵

4.3 Grammar

As we saw in Section 2.3, commercial recipes show systematic uses of the particle *wa* and verb medial *te* vs. *i/e* form. A majority of the study participants' recipes, on the other hand, are unsystematic with respect to these grammatical features.

First, as shown in Figure 1, the participants' sentences in the present experiment's recipes tend to consist of a smaller number of clauses than those in commercial recipes.⁶ Despite the two dishes they were asked to write being quite simple in terms of ingredients and steps, the participants used a larger number of sentences on average than commercial recipes. This is likely because there was no restriction on the length of the recipes in the present study and, other than having to fit what they wrote on a piece of letter-size paper, the participants did not have any communicative or pragmatic motivation to keep their recipes particularly short. On the other hand, in commercial recipes, brevity is an important quality that enhances visual clarity and meets space limitations. The need for conciseness is also associated with the systematic use of *te* and *i/e* medial verb forms.

⁵ This conclusion is based on our formal analysis of five cookbooks and three online commercial recipe sites, as well as informal analysis of other offline and online commercial recipes (see Kaneyasu and Kuhara, forthcoming).

⁶ Data for commercial recipes come from Kaneyasu and Kuhara (forthcoming) and include 30 cookbook and 30 online commercial recipes.

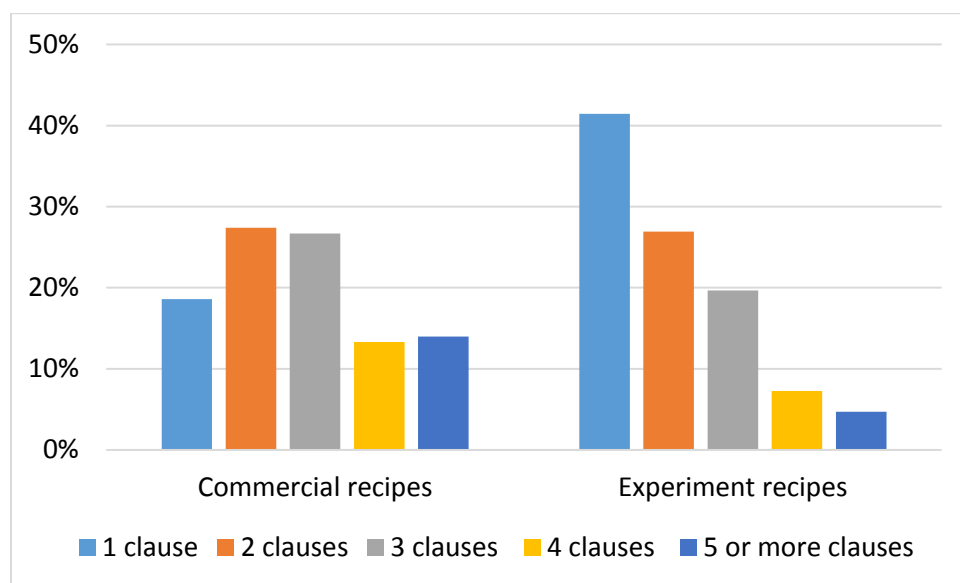


Figure 1. No. of clauses per sentence

When the participants used multiple-clause sentences in their recipes, they showed a preference for *te* or *i/e* medial verb form. Notably, 43.3% (13/30) exclusively used one form or the other (7/13 used only *te* forms and 6/13 used only *i/e* forms). Examples (12) and (13) show a series of *te* forms or *i/e* forms used within single recipes.

(12) Exclusive use of *te* forms in a single recipe

... *itame-te*, ... *kuwae-te* ... *kuwae-te* ... *ire-te*, ... *ire-te* ... *maze-te* ... *yosot-te* ...
 stir.fry-*te* add-*te* add-*te* put-*te* put-*te* mix-*te* serve-*te*
 ‘... stir fry, ... add ... add ... put, ... put ... mix ... serve ...’

(13) Exclusive use of *i/e* forms in a single recipe

... *ir-e*, ... *kuwa-e*, ... *tounyuush-i*, ... *tounyuush-i*, ... *chouseish-i*, ...
 put-*i/e* add-*i/e* put-*i/e* put-*i/e* adjust-*i/e*
 ‘... put, ... add, ... put, ... put, ... adjust, ...’

Seven recipes used both *te* and *i/e* forms three times or more each (23.3% of all recipes). Among them, five texts (16.7% of all recipes) conformed to the way these forms are used in commercial

recipes based on the relative degree of (dis)continuity. (14) is an example of non-systematic use of *te* and *i/e* forms. Recall that, in commercial recipes, *te* forms are associated with lower discontinuity and *i/e* forms with higher discontinuity. In (14), however, both *i/e* form (*nessh-i* ‘heat’) and the *te* form (*ire-te* ‘put’) are followed by a comma (a marker of higher discontinuity), and both *i/e* and *te* clauses have new participants (ingredients, condiments, or tools) in the immediately subsequent clause, which indicate higher discontinuity (one new participant, *abura* ‘oil,’ after the *i/e* clause, and three new participants, *tamanegi*, *ninjin*, *jagaimo* ‘onion, carrot, and potato,’ after the *te* clause). (15) is an example of the systematic use of the two verb medial forms. In this example, only *i/e* form (*tom-e* ‘turn off’) is followed by a comma and has a new participant, *kareeko* ‘curry mix,’ in the subsequent clause.

(14) Non-systematic use of *te* form and *i/e* form

nabe o nessh-i, abura o oosaji 1 ire-te, tamanegi, ninjin, jagaimo o itameru.

pot OBJ heat-*i/e* oil OBJ tablespoon 1 put-*te* onion carrot potato OBJ stir.fry

‘Heat the pot, put in 1 tablespoonful of oil, and stir fry onion, carrot, and potato.’

(15) Systematic use of *te* form and *i/e* form

futtoushi-tara hi o tom-e, kareeko o wake-te ire-te tokasu.

boil-when heat OBJ turn.off-*i/e* curry.mix OBJ separate-*te* put-*te* dissolve

‘When the water comes to a boil, turn off heat, break up the curry mix, put in, and dissolve.’

The second grammatical characteristic of commercial recipes, the use of the particle *wa* for preparation steps, is found in an even smaller number of the participants' recipes than the systematic use of *te* and *i/e* forms. Only three participants' recipes (10%) use *wa* for major ingredients in the preparation steps, which conform to the pattern in commercial recipes. (16) is an example of the conformed use of the particle *wa*. Thirteen recipes (43.3%) use the object particle *o* in place of *wa*. (17) is an example of this type. Eight recipes (26.7%) use *wa* for at least one ingredient in the preparation stage, but they also contain the use of *wa* for other purposes, such as introducing ingredients (e.g., *zairyou wa...* ‘as for ingredients...’), introducing processes (*kirikata wa ...* ‘as for cutting...’, *nikomi-jikan wa ...* ‘as for simmering time ...’,

ajitsuke wa ... ‘as for seasoning...’), and describing non-preparatory steps (e.g., *yasai wa...itamete* ‘as for vegetables...stir fry’). Four recipes (13.3%) skip preparation steps altogether.

(16) The particle *wa* for preparation steps

jagaimo wa hitokuchi teido no ookisa ni kiru. ninjin wa hitokuchi teido no ookisa ni rangiri ni suru. tamanegi wa kawa o mui-te 2-toubun ni sh-i, kushigiri ni suru.

DAT do

‘As for potato, cut into bite-size pieces. As for carrot, cut into bite-size rolling wedges. As for onion, peel skin and cut into two equal parts, and cut into wedges.’

(17) The particle *o* for preparation steps

ninjin 1-pon, tamanegi 1-tama, jagaimo 2-tsu, gyuuniku 200-g o hito-kuchi-saizu ni kit-te kudasai.

cut-te please

‘Please cut 1 carrot, 1 onion, 2 potatoes, and 200 grams of beef into bite-size pieces.’

The three participants whose use of *wa* is congruent with commercial recipes also systematically use *te* and *i/e* medial verb forms (among the five participants mentioned earlier). In the post-task questionnaire (Q1 and Q2), two of them (writers of RC3 and RS14) mentioned the unique structure and language of recipes; one wrote: “recipes have a certain format and way of writing” and the other wrote, “I wondered if I should write ... in the way it is written in cookbooks” (all translations by the authors). Two of them (writers of RS14 and RS15) also mentioned differences between spoken and written language and how they would have used spoken language to describe the procedure if they were asked to write “how one can make the dish” instead of “a recipe for the dish.” To the same question, the writer of RC3 answered “I feel that the assumption is to describe the procedure to someone who does not cook at all or much. Therefore, if I were asked to write ‘how to make’ (instead of a recipe), I would have written it in more detail

and more thoroughly.” Based on their answers to Q3 and Q4, the three participants do not have more experience cooking or reading recipes than other participants. However, for reasons that are beyond the scope of this study, they seem to have a higher awareness of recipes as a unique register, and they have production knowledge of recipe grammar.

4.4 Summary

Table 1 summarizes the features found in the participants’ recipes. If a text has a feature that conforms to that of commercial recipes, one point is given (shown in parentheses). The overall scores on the right-most column indicate the level of similarity between features of each text and those of commercial recipes in general. The total numbers in the last row indicate the number of texts that share the particular characteristic feature of commercial recipes. The larger number suggests that the feature is more prevalent in the communicative repertoires of the participants. For example, the use of specialized vocabulary related to food preparation is part of most participants’ communicative repertoires (29/30).

Table 1. Features of the participants’ recipes

Text ID	Specialized vocab.	Text organization	List of ingredients	Medial verb <i>te</i> vs. <i>i/e</i>	Preparation steps	Score
RS2	0	passage	none	<i>i/e</i> only	skipped	0
RC7	1~5 (1)	bare sentences	none	<i>i/e</i> mostly	<i>o</i> for major ingredients	1
RC8	1~5 (1)	bare sentences	none	non-systematic	skipped	1
RS6	1~5 (1)	bare sentences	none	<i>te</i> mostly	<i>wa</i> for at least one ingredient	1
RS11	1~5 (1)	bulleted steps	none	<i>i/e</i> only	<i>o</i> for major ingredients	1
RC5	1~5 (1)	bulleted steps	none	<i>te</i> only	<i>o</i> for major ingredients	1
RC2	1~5 (1)	passage	none	<i>i/e</i> only	skipped	1
RS1	1~5 (1)	passage	none	<i>i/e</i> only	skipped	1
RC9	1~5 (1)	passage	none	non-systematic	<i>o</i> for major ingredients	1
RC4	1~5 (1)	passage	none	non-systematic	<i>wa</i> for at least one ingredient	1
RC1	1~5 (1)	passage	none	<i>te</i> only	<i>wa</i> for at least one ingredient	1

RC15	6~10 (1)	passage	none	<i>te</i> only	<i>wa</i> for at least one ingredient	1
RC12	1~5 (1)	passage	sentence	non-systematic	<i>wa</i> for at least one ingredient	1
RS7	6~10 (1)	passage	sentence	<i>te</i> only	in the list of ingredients	1
RS9	1~5 (1)	bulleted steps	list with heading (1)	none	simplified	2
RS12	1~5 (1)	numbered steps (1)	none	non-systematic	<i>o</i> for major ingredients	2
RS10	1~5 (1)	numbered steps (1)	none	non-systematic	<i>o</i> for major ingredients	2
RS5	6~10 (1)	numbered steps (1)	none	<i>te</i> mostly	<i>wa</i> for at least one ingredient	2
RS8	1~5 (1)	numbered steps (1)	none	<i>te</i> only	<i>o</i> for major ingredients	2
RC10	1~5 (1)	numbered steps (1)	none	<i>te</i> only	<i>o</i> for major ingredients	2
RC11	6~10 (1)	numbered steps (1)	sentence	non-systematic	<i>wa</i> for at least one ingredient	2
RS4	6~10 (1)	numbered steps (1)	list with heading (1)	<i>i/e</i> mostly	<i>wa</i> for at least one ingredient	3
RS13	1~5 (1)	numbered steps (1)	list with heading (1)	<i>i/e</i> only	<i>o</i> for major ingredients	3
RS3	1~5 (1)	numbered steps (1)	list with heading (1)	<i>i/e</i> only	<i>o</i> for major ingredients	3
RC14	1~5 (1)	numbered steps (1)	list with heading (1)	<i>te</i> only	<i>o</i> for major ingredients	3
RC13	1~5 (1)	numbered steps (1)	none	systematic (1)	<i>o</i> for major ingredients	3
RC6	6~10 (1)	numbered steps (1)	none	systematic (1)	<i>o</i> for major ingredients	3
RS15	6~10 (1)	numbered steps (1)	none	systematic (1)	<i>wa</i> for all major ingredients (1)	4
RS14	6~10 (1)	numbered steps (1)	list with heading (1)	systematic (1)	<i>wa</i> for all major ingredients (1)	5
RC3	6~10 (1)	numbered steps (1)	list with heading (1)	systematic (1)	<i>wa</i> for all major ingredients (1)	5
Total	29	15	7	5	3	

The use of specialized vocabulary is topic driven. Organizational features (text organization and use of the list of ingredients), on the other hand, reflect the participants' understanding of the purpose of the writing task and their knowledge of recipe and how-to text structure. As mentioned earlier, those who used numbered steps commented that they thought about the format

or the type of language to use in addition to the content of the text when they first read the writing prompt. Although all participants wrote that they read recipes in their daily lives, they did not automatically apply the general recipe format when they were asked to write a recipe. Numbered steps and the list of ingredients were employed only when they consciously paid attention to the format (and if they correctly remembered the recipe text structure).

Those who use the commercial recipe grammar (systematic use of *te* and *i/e* medial verb forms and the use of the particle *wa* for preparation steps) seem to see recipes as a unique register with a unique set of grammatical features. There are no texts with an overall score of 3 or below (90% or 27/30 texts) that contain the two grammatical features. These grammatical features are likely not part of most participants' communicative repertoires. Two participants (writers of RC3 and RS14) whose texts contain all characteristic features of commercial recipes (the overall score of 5) have higher awareness and competence in the recipe register. Based on the post-task survey, the higher awareness and competence are not the result of more exposure or experience with the register. An overwhelming majority of the participants did not demonstrate having recipe grammar as part of their communicative repertoire.

5. Role of professional editing in recipe grammar

In the previous section, we saw that most people without access to outside resources do not use recipe grammar when they are asked to write a recipe. Amateur writers of online user-generated recipes such as ones on Cookpad (<https://cookpad.com/>), on the other hand, have available all the resources they wish to consult. Kaneyasu and Kuhara (forthcoming) analyzed a sample of these recipes and found much individual variation in the use of *te* and *i/e* medial verb forms and the particle *wa*. Within the present experiment participants' recipes, we saw that there were more texts with systematic use of *te* and *i/e* forms (5/30) than those with the particle *wa* used exclusively for preparation steps (3/30). In the user-generated recipes examined in Kaneyasu and Kuhara (forthcoming), there were more texts with the particle *wa* used exclusively for preparation steps (12/30) than those with systematic use of *te* and *i/e* forms (5/30). It seems that the use of *wa* is more easily learned and applied to one's text than the use of *te* and *i/e* forms based on the degree of (dis)continuity. Notwithstanding, many publicly available user-generated recipes, including most accessed and top-ranked ones, do not grammatically conform to those of

professional recipes. This tendency suggests that grammatical conformity and consistency are not relevant to comprehension or usefulness of recipe texts, as so judged by the readers.

If the recipe grammar is not essential to the understanding or usefulness of the text, why do professionals adhere to it so strictly? We speculate that rigorous editing of commercial texts explains this phenomenon. To our knowledge, there is no research on recipe editing per se, but we can gain the necessary insights from the literature on editing in other written registers and editors' work in general. First and foremost, consistency is cited as the top priority in editing a text (Joseph 2006; Saller 2017). Writing at that time as the editor of *Language*, Joseph explains:

... the *Language* style sheet, like many style manuals, calls for a comma after the next-to-last element in multiple coordination... It is a small point admittedly, but on occasion that comma can add to clarity, even though oftentimes it makes no difference... When that comma does not matter, it is, in a small way, extraneous so that its appearance violates the goals of parsimony and economy; nonetheless we include it in all cases, since consistency is the higher-ranking constraint, so to speak. (Joseph 2006, 483)

The importance of consistency is also gleaned from the existence of style sheet/manuals for different types of writing. Among things that can be specified in a style sheet, Saller (2017) states that the standardization of spelling, grammar, and style are essential tasks. Though she also notes that editors need to balance consistency with pragmatism, achieving rigid consistency is probably not so difficult in editing short texts such as recipes. Maintaining consistency means in part imposing prescriptive grammar. Even though the systematic uses of *te* and *i/e* forms and the particle *wa* may contribute to text clarity and conciseness, they are likely prescribed top-down rather than locally employed by individual writers. Recipe writers/creators are nonfiction writers; they are often cooking specialists and instructors whose primary job is cooking or teaching rather than writing. White (2017) states that nonfiction writers have less training in writing than fiction authors, and their texts generally require more sentence-level editing.

Professional editors work with already written texts, at various stages, with the aim of readying it for publication through multiple levels of editing, including conceptual editing, developmental editing, line editing, and copyediting (Ginna 2017, 8–9). All this work is done and remains behind the scenes; readers and researchers rarely comment on the work or effect of

professional editing on the published text. As we see in the present study, editing has a significant impact on the grammatical shape and consistency of text. Landert and Jucker (2011) found a difference in formality between letters to the editor from *The Times* published in 1985 and online commentaries from the *Times Online* published in 2008. They speculate that the difference results from the editorial process of publication. Letters to the editor are most likely edited for vocabulary, spelling, and formal style before they are published. On the other hand, online comments are immediately made public by the writers themselves and contain non-standard spelling and colloquialisms (Landert and Jucker 2011, 1431). These characteristics resemble some user-generated online recipes. Even though the grammar of professionally-edited recipes (and possibly other types of texts) is functionally motivated, it is likely prescribed top-down rather than locally employed by individual writers to meet the contextual needs and constraints. If we are to give a realistic account of written registers, we need to recognize the multiplicity of production stages and motivations.

Whether editors work in-house or as freelancers, their job entails seeing raw texts as products. From this perspective, editing is a quality control activity; meticulous editing protects the legitimacy and integrity of publishers and publications. Writers of user-generated online texts, on the other hand, do not represent an institution or an entity larger than themselves, and can remain anonymous. Within many online communities in which these user-generated texts appear, the roles of writers and readers are interchangeable, and in many cases, the users can directly interact with one another. In this type of environment, writers may pay little attention to grammatical or stylistic choices or their consistency, as they are not worried about being judged by others based on their language use. As early as in the early 1990s, when online networks began to form, it was already recognized that the online medium would make it possible to “build a world unmediated by authorities and experts” (Dery 1993, 567). Today, user-generated online texts are on the rise even within those registers that are traditionally considered occupational or professional. In the case of online user-generated recipe sites, text structure is usually constrained with an existing template, but many posts depart from the intended purpose of the template and include messages and replies to the readers within numbered procedural

steps.⁷ Without editorial control, many writers do not make an extra effort to learn and use register-specific prescriptive grammar that is not already part of their communicative repertoire.

6. Concluding remarks

The results of the present experiment, including the writing task and the post-task questionnaire, showed that native speakers' receptive knowledge of recipe register does not transfer equally to their production knowledge. Although all participants reported they often or sometimes read recipes in their daily lives, few demonstrated competence in the grammar of the recipe register. Compared with specialized vocabulary and text structure, register-specific written grammar seems difficult to learn from mere exposure to recurring patterns, at least for most people. We further speculated that recipe grammar reflects professional editing that aims for clarity and consistency, instead of individual responses to the needs and constraints of the local environment. When amateur writers have access to outside resources, which is the case in online user-generated recipes, some try to apply grammatical features of commercial recipes while others seem to not pay attention to these details. The fact that both types of recipes are accessed and appreciated by the users of these recipes tells us that the prescriptive grammar is not seen as essential to the comprehension or usefulness of the user-generated recipe texts by the members of the community. Further studies are required to see if this is also the case for commercial recipes, or if readers have different expectations for 'professional' recipes. Finally, adult native speakers appear to have a communicative repertoire of food preparation procedural writing in general, but very few are versed in professional recipe writing.

Appendix: Abbreviations

ASP	Aspect	DAT	Dative	OBJ	direct object
CAU	causative suffix	GEN	Genitive	SUB	subject
CLS	Classifier	INS	instrument	TOP	topic

References

⁷ In addition, many online user-generated recipes contain interactive features such as interjections and *kaomoji* (emoticons) (see Kaneyasu and Kuhara, forthcoming, for more detailed descriptions) that are not found in the experiment recipes or commercial ones. These features seem to emerge in an environment where there is direct interaction between writers and readers with minimum editorial control (see also Diemer and Frobenius 2013).

- Akiyama, Madoka. 2002. "Shoku o meguru hyōgen: Resipi no bunshō/buntai ni tsuite [Expressions concerning food: Texts and styles of recipes]." *Kokugo Kenkyū* 65: 36–46.
- Aoyama, Fumihiro. 1987. "Ryōri no bunshō ni okeru teidaika no yakuwari [The role of topicalization in recipe texts]." In *Keiryō kokugogaku to Nihongo shori: riron to ōyō*, 258–303. Tokyo: Akiyama Shoten.
- Biber, Douglas, and Susan Conrad. 2009. *Register, Genre, and Style*. Cambridge: Cambridge University Press.
- Clancy, Patricia M., and Pamela A. Downing. 1987. "The Use of *Wa* as a Cohesion Marker in Japanese Oral Narratives." In *Perspectives on Topicalization: The Case of Japanese Wa*. eds. by John Hinds, Shōichi Iwasaki and Senko K. Maynard, 3–56. Amsterdam: John Benjamins.
- Cotter, Colleen. 1997. "Claiming a Piece of Pie: How the Language of Recipes Defines Community." In *Recipes for Reading: Community Cookbooks, Stories, Histories*, ed. by Anne L. Bower, 51–72. Amherst: University of Massachusetts Press.
- Couture, Barbara. 1986. "Effective Ideation in Written Text: A Functional Approach to Clarity and Exigence." In *Functional Approaches to Writing: Research Perspectives*, ed. by Barbara Couture, 69–91. Norwood, NJ: Ablex.
- Dery, Mark. 1993. "Flame Wars." *The South Atlantic Quarterly* 92 (4): 559–568.
- Diemer, Stefan. 2013. "Recipes and Food Discourse in English – a Historical Menu." In *Culinary Linguistics: The Chef's Special*, eds. by Cornelia Gerhardt, Maximilian Frobenius, and Suzanne Ley, 139–156. Amsterdam: John Benjamins.
- Diemer, Stefan, and Maximilian Frobenius. 2013. "When Making Pie, All Ingredients Must Be Chilled. Including You. Lexical, Syntactic and Interactive Features in Online Discourse – a Synchronic Study of Food Blogs." In *Culinary Linguistics. The Chef's Special*, eds. by Cornelia Gerhardt, Maximilian Frobenius, and Suzanne Ley, 53–81. Amsterdam: John Benjamins.
- Ferguson, Charles A. 1982. "Simplified Registers and Linguistic Theory." In *Exceptional Language and Linguistics*, eds. by Loraine Obler and Lise Menn, 49–66. New York: Academic Press.
- Ferguson, Charles A. 1994. "Dialect, Register, and Genre: Working Assumptions About Conventionalization." In *Sociolinguistic Perspectives on Register*, eds. by Douglas Biber and Edward Finegan, 15–29. Oxford: Oxford University Press.

- Fischer, Kerstin. 2013. "The Addressee in the Recipe: How Julia Child Gets to Join You in the Kitchen." In *Culinary Linguistics: The Chef's Special*, eds. by Cornelia Gerhardt, Maximilian Frobenius, and Suzanne Ley, 103–117. Amsterdam: John Benjamins.
- Fischer, Kerstin. 2015. "Situation in Grammar or in Frames? Evidence from the So-called Baby Talk Register." *Constructions and Frames* 7 (2): 258–288.
- GINNA, Peter. 2017. "Introduction: The Three Phases of Editing." In *What Editors Do: The Art, Craft, and Business of Book Editing*, ed. by Peter Ginna, 1–13. Chicago: The University of Chicago Press.
- Gumperz, John J. 1964. "Linguistic and Social Interaction in Two Communities." *American Anthropologist* 66 (6): 137–154.
- Hamada, Reiko, Ichirō Ide, Shūichi Sakai, and Hidehiko Tanaka. 2002. "Ryōri tekisuto kyōzai ni okeru chōri tejun no kōzōka [Structural analysis of cooking preparation steps]." *IEICE D-II* J85 (1): 79–89.
- Hopper, Paul. 1998. "Emergent Grammar." In *The New Psychology of Language: Cognitive and Functional Approaches to Language Structure*, ed. by Michael Tomasello, 155–175. Mahwah, NJ: Lawrence Erlbaum.
- Hymes, Dell. 1984. "Sociolinguistics: Stability and Consolidation." *International Journal of the Sociology of Language* 45: 39–45.
- Joseph, Brian D. 2006. "The Editorial Process Once Again: Behind the Scenes in the Language Office." *Language* 82 (3): 482–485.
- Kaneyasu, Michiko, and Minako Kuhara. "Regularity and Variation in Japanese Recipes: A Comparative Analysis of Cookbook, Online, and User-generated Sub-registers." *Register Studies* (forthcoming).
- Kawamata, Ruriko. 1975. "100-nin no ryōuri yōgo chōsa [Cooking terminology survey of 100 people]." *Gengo Seikatsu* 286: 58–63.
- Kittredge, Richard I. 1982. "Variation and Homogeneity of Sublanguages." In *Sublanguage: Studies of Language in Restricted Semantic Domains*, eds. by Richard I. Kittredge and John Lehrberger, 107–137. Berlin: de Gruyter.
- Landert, Daniela, and Andreas H. Jucker. 2011. "Private and Public in Mass Media Communication: From Letters to the Editor to Online Commentaries." *Journal of Pragmatics* 43: 1422–1434.

- Langacker, Ronald. 2008. *Cognitive Grammar: A Basic Introduction*. Oxford: Oxford University Press.
- Martinec, Radan. 2003. "The Social Semiotics of Text and Image in Japanese and English Software Manuals and Other Procedures." *Social Semiotics* 13 (1): 43–69.
- Martinez, Danny C., P. Zitlali Morales, and Ursula S. Aldana. 2017. "Leveraging Students' Communicative Repertoires as a Tool for Equitable Learning." *Review of Research in Education* 41: 477–499.
- Martinez, Danny C., and Elizabeth Montaña. 2016. "Toward Expanding What Counts as Language for Latina and Latino Youth in an Urban Middle School Classrooms." *Literacy Research: Theory, Method, and Practice* 65 (1): 200–216.
- Moriya, Michiyo. 1993. "Tetsuzukiteki chishiki no bunshō – ryōribun – no shisasuru mono [Implications of procedural knowledge texts – recipes]." *Kōza Nihongo Kyōiku* 28: 114–130.
- Naganuma, Mikako. 2006. "Honyaku ni okeru 'meishika' to iu bunpōteki hiyu [Grammatical metaphor of nominalization in translation]." *Interpretation Studies* 6: 15–28.
- Norrick, Neal R. 1983. "Recipes as Texts: Technical Language in the Kitchen." In *Sprache, Diskurs und Text, Akten des 17. Linguistischen Kolloquiums, Brüssel, 1982*, eds. by René Jongen et al., 173–182. Tübingen: Niemeyer.
- Ono, Tsuyoshi. 1990. "Te, I, and Ru Clauses in Japanese Recipes: A Quantitative Study." *Studies in Language* 14 (1): 73–92.
- Romaine, Suzanne. 1994. "On the Creation and Expansion of Registers: Sports Reporting in Tok Pisin." In *Sociolinguistic Perspectives on Register*, eds. by Douglas Biber and Edward Finegan, 59–81. Oxford: Oxford University Press.
- Rymes, Betsy. 2010. "Classroom Discourse Analysis: A Focus on Communicative Repertoires." In *Sociolinguistics and Language Education*, eds. by Nancy H. Hornberger and Sandra Lee McKay, 528–546. Bristol: Multilingual Matters.
- Rymes, Betsy. 2014. *Communicating Beyond Language: Everyday Encounters with Diversity*. New York, NY: Routledge.
- Saller, Carol F. 2017. "Toward Accuracy, Clarity, and Consistency: What Copyeditors Do." In *What Editors Do: The Art, Craft, and Business of Book Editing*, ed. by Peter Ginna, 106–115. Chicago: The University of Chicago Press.

- Strauss, Susan, Heesun Chang, and Yumi Matsumoto 2018. “Genre and the Cultural Realms of Taste in Japanese, Korean, and U.S. Online Recipes.” In *Pragmatics of Japanese: Perspectives on Grammar, Interaction and Culture*, eds. by Mutsuko Endo Hudson, Yumi Matsumoto, and Junko Mori, 219–243. Amsterdam: John Benjamins.
- Szatrowski, Polly. 2011. “*Shishokukai no gengo/higengo kōdō ni tsuite – 30-sai miman no josei gurūpu o chūshin ni* [Verbal and nonverbal behavior in a taster lunch – focusing on a group of women under 30].” *Hikaku Nihongogaku kyōiku kenkyū sentā kenkyū nenpō* 7: 281–292.
- Wharton, Tim. 2010. “Recipes: Beyond the Words.” *Gastronomica: The Journal of Food and Culture* 10 (4): 67–73.
- Witte, George. 2017. “This Needs Just a Little Work: On Line Editing.” In *What Editors Do: The Art, Craft, and Business of Book Editing*, ed. by Peter Ginna, 96–105. Chicago: The University of Chicago Press.
- Yamakata, Yoko, John Carroll, and Shinshuke Mori. 2017. “A Comparison of Cooking Recipe Named Entities between Japanese and English.” In *Proceedings of the 9th Workshop on Multimedia for Cooking and Eating Activities*, 7–12. Melbourne, Australia.
- Zwicky, Arnold M., and Ann D. Zwicky. 1982. “Register as a Dimension of Linguistic Variation.” In *Sublanguage: Studies of Language in Restricted Semantic Domains*, eds. by Richard I. Kittredge and John Lehrberger, 213–218. Berlin: Walter de Gruyter.

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