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日本料理の文化的発想支援ツール「和食ランゲージ」の制作

政策・メディア研究科・修士課程 2年

伊作太一

※ 修士論文執筆を英語で行ったので、報告書も研究成果に倣って英語で行います。

English Title:

A Cooking Language: Tool for Cooking in the Creative Society

Research Summary:

The goal of this research is to propose the *cooking language method*, along with creating its first sample created from the Japanese cuisine: the Washoku Language. Cooking language is a method/tool derived from Christopher Alexander's pattern language, inheriting many of his theories and concepts. The method captures recurrent structures among meals of a cuisine that bring good cooking/eating experiences (and are rooted in historical contexts) in a special format called a cooking word (context-history-idea-application). These are each given an original name so that it can be recognized and (re)applied. Then, their mutual relationships are also defined to weave them into a coherent whole (or into a cooking language). In the wave of modernization and the Internet, many of us have a paradoxical mix between aspiration for and disconnection from the food we eat. The cooking language is a tool that will allow for active participation in the kitchen, and therefore will help us (re)create a personal connection to our food.

As the results of the research, I was able to build the philosophical framework of the method, establish its creation method, create the world's very first cooking language (the Washoku Language), and conduct and show elaborate results from two test cases of cooking using a cooking language.

Through the test cocooking sessions, I conclude that the tool is indeed useful for 1) providing frameworks for thinking of menus, 2) suggesting topics to trigger conversations, 3) opening up the train of thought to allow for collaborative design, and 4) providing an opportunity to discover, experience and create the cuisine. The thesis positions this tool as an essential aspect of cooking in the Creative Society where virtually anyone will be able to join in on an inclusively collaborative cooking session (creative cocooking), and along with the system of new roles, places, rules, other tools, processes, and mindsets of cocooking that surround it, the cooking language will help us nurture our creative yet human lifestyles.

Background / Motivation

The main issue the cooking language is trying to attack is our paradoxical relationship with food. On one hand, food is an allure for all of us, and more and more people are on the look for information about it. However on the other hand, the segregation of the farm/factory/kitchen from the dining table is accelerating, and less and less people are producing and processing food for them selves, making them disconnected from their food. Our disregard for food has brought many personal and environmental problems including cynicism for food and the issue of food loss.

Many of the challenges that Christopher Alexander, father of the pattern language method , faced in the field of architecture parallel situations of food. With this as a hint, I saw the potentials that pattern languages have in the field of food and cooking.

Research Details

- Defining and Creating the Cooking Language Method

To do this, first an analogy between architecture and cooking was made to consider which parts of the method can be transposed, and which parts needs to be altered. Then in I considered theories and definitions from the original pattern language method by Christopher Alexander to define what a cooking word is, what its format should be, and how it can be integrated into a coherent cooking language.

- Creating an Actual Cooking Language

he creation process includes the following steps: setting the scope of the language, element mining, element clustering, labeling, language structuring, pattern writing, and pattern symbolizing. Though these steps are in line with Iba's standard creation process of a pattern language [Iba and Isaku, 2016], there were many alterations made to the process. The creation process consists of collecting information from sources, using the KJ method to organize information, and then writing and photographing the information in the cooking language method. The below chart shows the information source I used for the cooking language, along with a photo showing the KJ method would follow.

Information Sources for the Washoku Language

Translated English Title	Original Japanese Title	Author	Year
What is Washoku?	和食って何？	Mari Ako	2015
The Modern Way of Home Cooking	家庭料理の近代	Ayako Ehara	2012
Washoku Textbook: <i>Gion</i> Menu-pad	和食の教科書 ぎをん献立帖	Hiroyuki Morikawa	2013
The Japanese Cuisine: Learning Plate Selection and Arrangements from the Basics	日本料理 基礎から学ぶ器と盛り付け	Koichiro Hata	2009
Introduction to Shojin Cooking: Learning Vegetable Dishes from the Basics	はじめての精進料理: 基礎から学ぶ野菜の料理	Naoyuki Takanashi	2013
Recipes for Permanent Records Treasury of Washoku from a Top-Chef: 300 gifts of recipes for us	永久保存レシピ一流料理長の 和食宝典 —私たちへ300レシピの贈り物	Bessatsu Katei Gaho	2008
Japanese Cooking Explained for Pros	プロのためのわかりやすい日本料理	Koichiro Hata	1998

Notes on Enjoying Japan: Washoku	日本のたしなみ帖 和食	Hiromitsu Nozaki, Ayao Okumura	2015
A Book that tells you the basics of Washoku: Official Textbook for the Washoku Advisor License Exam	和食の基本がわかる本: 和食アドバイザー検定公式テキスト	Ayao Okumura	2015
Washoku License Exam: Introductory Level	和食検定 入門編	Japan Education Centre for the Hotel Industry	2015
Washoku License Exam: Basics Level	和食検定 基本編	Japan Education Centre for the Hotel Industry	2011
The Tao of Washoku: For the Inquiry of Unexplored Good Taste	和食の道 未踏の美味追求のために	Takuji Takahashi	2015
“Culinary” history of Japan You’ll Want to Know	知っておきたい「食」の日本史	Masakatsu Miyazaki	2009
The History of the Japanese Cuisine	日本料理の歴史	Tsuneo Kumakura	2007
The Culinary History of Japan: From the Paleolithic Age to Modern Times	日本の食文化史——旧石器時代から現代まで	Naomichi Ishige	2015
Food and the Intelligence of the Japanese	食と日本人の知恵	Takeo Koizumi	2002
What is Japanese Cuisine?: Looking into the Culture of Umami	和食とは何か：旨味の文化をさぐる	Nobuo Harada	2014



The KJ method

The Completed Washoku Language

The Washoku Language consists of 42 “washoku words” that each capture an recurrent aspect of the Japanese cuisine. Each aspect is described through the *context* which it can be used in, the *history* involving the situation, the *idea* that can be derived from the history, and its *application* that can be used in today’s cuisine. This is accompanied by its original name, along with a representative photo.

For space reasons, below I will introduce one washoku word in full format, along with a summary of the rest of the words.

No.11

Sound of Taste



When choosing ingredients, especially vegetables to use in your dishes.

▼ In this context

Sound has historically been an important factor of taste in washoku.

We have the idea of *shokkan*, which is the sound and/or texture that the food provides us when bitten or chewed on. Without the *shokkan*, the taste of a dish will be incomplete. For example, rice is often considered good when there's the slight elasticity, *koshi*, when chewed (slightly close to the idea of *al dente* when cooking pasta). We have an infinite amount of onomatopoeias that express these different *shokkan*, where some sounds are almost specifically designated for certain food items, and in other cases the food item is sometimes named after the *shokkan* it provides (such as the *hari-hari zuke* pickles). [Koizumi, 2002]

▼ Therefore






Include a variety of ingredients that each provide a different shokkan, and enjoy the different sounds that they make when cooking and eating them.





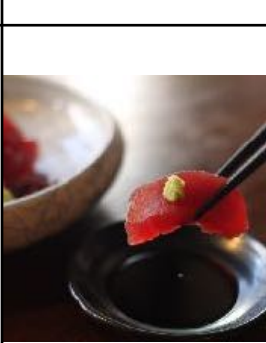

▼ For example







By considering the use of **Diverse Indigenous Ingredients** or the **Five Basic Colors**, the variety in shokkan becomes easier to incorporate. No need to have bad manners and be loud when you chew, but just calmly enjoy the sound and texture when you chew. Also, sounds can be enjoyed at all phases of Japanese cooking: the sound of food simmering in the pot, or the sound of a sharp Japanese knife slicing different items are good examples.







► No.01 **Diverse Indigenous Ingredients**, No.24 **Five Basic Colors**







List of Cooking Words from The Washoku Language






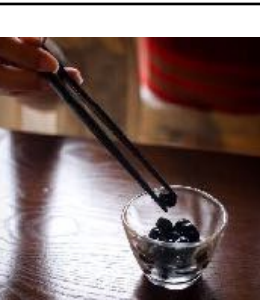
#	Name	Photo	Description
0	Suppress the Self and Highlight the Ingredients		This is at the very heart of the Japanese cuisine. Japanese chefs must understand each ingredient very well, and apply the minimum amount of work and flavoring needed to maximize its taste. She must withhold herself, follow the basics (the <i>kata</i>) and then lastly comes her creativity and originality.
1	Diverse Indigenous Ingredients		Japan, though a small country, contains a variety of geographic features and climate zones across the island. The diverse vegetation and inhabitation that resulted from this brought a wide range of ingredients particular to the different areas/seasons to be used in the Japanese cuisine.
2	Rich Clear Water		Japan's scenic beauty is made possible by its rich supply of clean water full of minerals. Its cuisine is representative of this environment with dishes and cooking methods that use ample amounts of this water. It is said that the delicate taste of these dishes is determined mostly by the quality of the water.
3	Nutritious Fish		With the ample supply of Rich Clear Water and its geographical position being surrounded by the ocean, Japan has a wealthy supply of fish. With also its historical background of being ascetic and prohibiting animal meat, their traditional meals eat fish as their main source of protein.
4	Rice at the Heart		Rice is at the center of most Japanese meals. The country's climate and the ample supply of Rich Clear Water made it historically possible to produce abundant supplies of good tasting rice. The " <i>ichiju-sansai</i> " which is a meal with rice, soup, and three side dishes is the very basic form of a Japanese meal.







#	Name	Photo	Description
5	Power of Microorganisms		The Japanese people are able to ingeniously control microorganisms to create fermented products that are full of umami. Fermented products include shoyu, miso, mirin, sake, natto (fermented beans), etc..
6	Kata of Meals		The <i>ichijyu-sansai</i> , which is a meal consisting of three side dishes with a soup and some rice, is the very basic form of a Japanese meal that has infinite variations but is very easy to plan.
7	Overall Satisfaction		Japanese meals, at the first bite, may not necessarily blast you with flavor like a juicy hamburger would. But after finishing the meal you should feel a sense of overall sense of satisfaction that lasts for a long time.
8	Quick and Easy Meals		The Japanese are historically a race of people that does not spend a long time preparing and eating food. Some examples of Japanese fast food include the " <i>domburi</i> ," where ingredients (in most cases, raw fish) are just cut and topped on top of a bowl of rice, or "onigiri" which are rice balls that can be made in just minutes and be taken anywhere as a packed lunch.
9	Rational Meals		The Japanese were good at utilizing nature's functionality that food items naturally possess. By eating fish and vegetables that are shun (in season) when it naturally tastes the best, they were able to intake vital nutrients needed to survive the corresponding season. They were also skilled at finding good combination of food to eat both taste-wise and functionality-wise.
10	Enjoying Meals with Drinks		Japanese meals were historically designed to be enjoyed with drinks. Though it had several stages of development, meals in Japan were in most cases enjoyed with either <i>sake</i> (Japanese rice wine) or Japanese tea. The simple yet deep flavor of these drinks go along well with almost any kind of meal.


#	Name	Photo	Description
11	Sound of Taste		The <i>shokkan</i> , or the sound and texture of the food when bitten and chewed on, is an important aspect of taste in Japanese dishes. With the Diverse Indigenous Ingredients that the cuisine uses, we are able to enjoy a diverse range of sounds when eating a meal.
12	Unique Mouthfeel		The "Mouthfeel," or the texture you feel with the tongue when eating food is an important aspect of taste when enjoying a Japanese dish. With the Diverse Ingredients that the cuisine uses, some of the food items have unique textures that are sometimes squishy, sticky, smooth, glossy, etc., that are rare in other cuisines.
13	Amplifying Aroma		The natural aroma that the food items contain are an important point in enjoying Japanese dishes. The cuisine has many wisdom of not killing and amplifying this aroma through sensitive cooking skills. Topping the item with small amounts of <i>yakumi</i> , or Japanese spices such as wasabi are one way this is done.
14	Tasteful Arrangements		The arrangements of the food items on the dish is an important aspect of the Japanese cuisine. By creating depth height, and volume through the arrangement, it makes the dish look visually appetizing.
15	Various Means of Cooking		The system of Japanese cooking withholds various cooking techniques including but not limited to cutting, dressing, boiling, simmering, roasting, frying, steaming, stirring, pickling, smoking, drying, and pickling. Through these different techniques, the same ingredient can turn itself into various kinds of dishes with different taste and texture.
16	Eating the Season		Eating food items that are in season when they are the most enjoyable is at the heart of the Japanese cuisine. Thus, the taste of Japanese dishes is never set in stone, but changes in a supple manner with the cycle of the four seasons.

#	Name	Photo	Description
17	Simple and Satisfying Dashi		The elegant technique of extracting dashi (Japanese-style broth), most commonly from <i>kombu</i> (edible kelp) and <i>katsuobushi</i> (dry fermented shipjack tuna), is at the base of all Japanese cooking. Its <i>umami</i> brings a sense of satisfaction after the meal. Yet, due to its elegance, it does not bring satiation even if you have it every meal.
18	Fresh and Raw		Freshness of the food is very important for the Japanese cuisine which values eating items that are ' <i>shun</i> ' (in season). In pursuit for the ultimate freshness, the Japanese often enjoy raw fish. Eating things raw can only be done since they are fresh and in season.
19	Sweetness in Dishes		Japanese dishes often use sweetness as a part of their flavor, even if it is not a dessert dish. Mirin, a type of sweet rice wine, is primarily the source of this sweetness, but different types of sugar is sometimes used too.
20	Light Round Taste		Japanese dishes often make use of the soft, light, and simple flavoring. For example, they use <i>mirin</i> (a type of sweet rice alcohol) instead of sugar to get the roundness in the sweet taste, or when using salt, they would use sea salt to get the depth of umami from the minerals included.
21	Fusion with the Plate		The plate which the food is arranged on is considered an important part of the dish. Choosing the perfect dish that would visually supplement the dish is part of the chef's cooking skills. By doing this, the guest will be able to enjoy the season and the special occasion.
22	Suggestive Whitespace		When arranging food on a plate, chefs sometimes use oversized plates or place only a small amount compared to the plate's size to leave whitespace around it. The space created brings a visual sense of aftertaste for the guests.

#	Name	Photo	Description
23	Contrast and Coexistence		There is an idea called the <i>Inyo-Gogyo</i> in which contrasting elements coexist to create balance on the plate. For example, dark and light colors, strong and lite taste, front and back, circles and rectangles, etc. For example square cut ingredients are best arranged on a round plate to create contrast and balance.
24	Five Basic Colors		Appreciating visual colors of the different ingredients is part of enjoying Japanese meals with the eye. Red, yellow, green, white and black are the five basic colors used. These five colors not only bring visual joy to the guest, but also hints that the dish has a good balance of nutrients.
25	Harmony and Ambiguous Boundaries		The “wa” in washoku means harmony: many dishes exist where contrast ingredients are mixed together, their boundaries become indistinguishable, and creates a homogeneous whole.
26	Expressing the Season		Japanese dishes often express the beauty of nature particular to the current season. The ingredients, color, smell, food arrangement, etc., of a dish should remind the guest of the season through appealing to the five senses.
27	Meaningful Ingredients		The Japanese often give rhetoric meanings to the food items they create. Many of these are based on mere word puns and do not have any nutritional significance. However with the special meanings given by words, these food items gain a tone of celebration to be enjoyed for a special occasion.
28	Metaphoric Arrangements		The Japanese cuisine sometimes uses an ingredient to express objects in nature. This makes the plate artistically enjoyable at the same time enforcing its seasonal sensations.

#	Name	Photo	Description
29	Expressing Microcosm		A Japanese dish sometimes expresses its own view of the world. This kind of a dish encapsulates a unique and beautiful atmosphere, and the guest will be able to submerge themselves in that microcosm.
30	Appreciating Encounters		Treasuring the one-time-only encounters of the day is an important concept for Japanese meals. Meals are designed to place spotlight on the ingredients and people that the chef met that day
31	Sophisticated Techniques		The Japanese cuisine historically had many restrictions imposed upon. Working under and around these restrictions nurtured a high sense of skills in the chefs — notably their ability to tame the sharp Japanese knives.
32	Elegance of Iki		"Iki" is an old Japanese term used to describe the elegant and lively manner of the chef and plates. Since the cuisine requires the chef to be ascetic by keeping flavoring to the bare minimum, she instead cuts and arranges the food items in a beautiful manner to express <i>Iki</i> .
33	Pureness of Taste		The efforts by Japanese chef in pursuit for pure taste are elegant. For example, when making dashi (Japanese cooking broth) scooping away the <i>aku</i> (the froth that causes harshness in taste) is an essential step in getting a clear taste. Other examples include the use of <i>sake</i> (Japanese alcohol) or different <i>yakumi</i> (Japanese spices) to get rid of the raw smell from food.
34	Eating Skills		The sensitive Japanese cuisine requires the guest to eat with chopsticks. This needs some skills to carefully pick up the right amount of food and carrying it from the plate to the mouth. Also, since multiple plates are served all at once, the guest must keep pace at which she eats each item to avoid being left with too much of one item at the end.

#	Name	Photo	Description
35	Wisdom of Preservation		The Japanese have historically been good at preserving food items. Among dried food and pickling, the most notable among their wisdom was the skill of fermentation. By letting microorganisms that are beneficial for the human body to cultivate, it prevented harmful bacteria from contaminating the food.
36	Omotenashi Hospitality		<i>Omotenashi</i> is an idea at the center of Japanese cuisine. It is a kind of altruistic yet casual hospitality that cares for every detail of the guests' stay from the heart of making the best out of their experience.
37	Seasonal Events		Meals have a deep connection with seasonal events that happen year around; each seasonal event is linked with a specialty that in most cases is only enjoyed on that day. For example, the <i>osechi</i> is a type of meal enjoyed on <i>Shogatsu</i> and the few days following. The unagi, or eel, is a specialty enjoyed on a certain day in July.
38	Circle of Danran		As with many other cultures, eating together as a family is an important aspect of the Japanese food culture. The <i>nabe</i> , or the relatively shallow and wide cooking pots are often at the center of the family meal, where everyone eating from the same pot is symbolic of the family bond.
39	Thankfulness for Nature		Whilst cooking or eating Japanese meals, one must always keep reverence for nature. The " <i>Itadaki-masu</i> " and " <i>Gochiso-sama</i> " are special phrases said before and after each meal to show gratitude for the food. These words are not just towards the chef, but mostly towards nature who provided us with the blessings.
40	Unity with the Atmosphere		Japanese dishes and meals aren't complete by itself. The host/chef must also consider the atmosphere that the guest eats in, and create harmony between the dishes and the atmosphere.

#	Name	Photo	Description
41	Harmony and Prodigious Development		Japan, being an island country, was historically prone to having things come in from the outside. Not only were the Japanese able to settle these in as a part of their own culture, they added their own ideas and "Sophisticated Techniques" to develop it in an original direction.

Test Cooking Cases using the Washoku Language

As a part of the research, I conducted two test cases of cooking using the Washoku Language. In the first case, a group of university students, each with at least some cooking skills, was asked to devise a Japanese menu for the night's dinner using the Washoku Language. Afterwards, the group engaged in a discussion, using the Washoku Language to reflect on their experiences of cooking and dining. Here, I considered if a cooking language would become handy in the planning and designing of a menu. In the second case, two students, one a novice cook and the other an adequate cook, were asked to use the Washoku Language to plan a dinner together. Here I considered how a cooking language will come into play connecting the expert-novice gap.



Results and Further Possibilities

Through test cocooking cases using the Washoku Language, I found out that the tool was indeed useful for 1) providing frameworks for thinking of menus, 2) suggesting topics to trigger conversations, 3) opening up the train of thought to allow for collaborative design, and 4) providing an opportunity to learn, discover, and experience the cuisine.

In the theses, I also drew larger picture, positioning the cooking language as a tool for protecting, inheriting, and developing a cuisine, essential for a creative yet humane way of cooking in the inclusively creative society. Since the cooking language method is a speculative approach to suggesting new possibilities for design and collaboration in the kitchen, the method sees much potential beyond the points in this thesis. Therefore, this thesis will close off by hinting some of these possibilities for further work with cooking, pattern languages, and the Creative Society.