

Richard Sickinger
Peter Baumgartner
Tina Gruber-Mücke (Editors)

PURSUIT OF PATTERN LANGUAGES FOR SOCIETAL CHANGE

**A comprehensive
perspective of
current pattern
research and
practice**

Editors: Richard Sickinger, Peter Baumgartner, Tina Gruber-Mücke

Book Design and Page Layout: Wolfgang Rauter, Stephan Längle

www.purplsoc.org

info@purplsoc.org



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A Cooking Language: A Pattern- Based Tool for Discovering and applying History-Based Cooking Ideas

Isaku, Taichi

CoCooking co., Ltd, Japan

taisaku@sfc.keio.ac.jp

Iba, Takashi

Faculty of Policy Management, Keio University, Japan

iba@sfc.keio.ac.jp

This paper proposes the cooking language method, along with its first sample created from the Japanese cuisine: the Washoku Language. Cooking language is a method/tool, derived from pattern language that captures recurrent structures among meals of a cuisine that bring good cooking/eating experiences. Similar to the purpose of the original patterns by Alexander, a cooking language allows for active participation in the kitchen. The paper will briefly cover philosophical aspects of the method, describe its creation method, introduce the first instance of a cooking language (the Washoku Language), and show results and analyses from two test cases of cooking using a cooking language. This paper concludes that the tool has the following purposes: 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.

Cooking; Creativity; Culture; Collaboration; Design

1. Introduction

Imbued with inspirations from Alexander, the cooking language is a method based on pattern language that captures recurrent structures within a cuisine that brings good taste, gives it a name, and then structures the words into a coherent whole. The new set of vocabularies helps people recognize, understand, explain, share, and discover ideas about cooking, thus allowing its users to create a connection with their food. The tool aims to enhance understanding, communication, and ideas in the kitchen.

This paper will cover the necessity for such a tool and method, describe the creation process of a cooking language, introduce a first example of a cooking language describing qualities of the Japanese cuisine, the Washoku Language, and show example operations of the cooking language in actual use.

2. Background

2.1. Our Paradoxical Disconnection from and Aspiration for Food

Over the past few decades, there rose an increasing group of people called the foodies. Johnston and Baumann [2009] described them as someone who is always on the lookout for the next big thing in eating. Food and cooking has gradually earned its seat in the world of entertainment [Kamp, 2006: xiii], with books, magazines, TV shows, and online media about food and cooking has becoming a huge industry. Many people, well beyond the foodies read about the cooking techniques and philosophies of celebrity chefs.

However, this movement didn't necessarily mean that more people were cooking for themselves. The annual Eating Patterns in America report [2015] by the NPD Group concluded that though people in the US are eating out less recently, over half of those meals eaten at home were not cooked there. Though many media from the foodie movement provide us with specific information on recipes we can make, shops and producers we can buy from, and small actions we can start today, we rarely pursue these actions, catching ourselves reaching out for the easier option.

And hence, we have the paradoxical situation where, though there is an increased amount of interest for food and cooking, less and less people are actually cooking for themselves [Guptill et al., 2013].

The increased disconnection between us and the food we eat is slowly but surely becoming an issue. With so many players intervening in the farm-to-table pathway, cause-effect

relationships and responsibilities become blurred. By the time the food is consumed, many personal and environmental problems have become bleached, resulting in many social issues such as the issue of food loss.

My provision with the cooking language is simple: if there was a way we could recreate and enforce the connection between people and the food we eat, it would become first steps to resolving many of these issues.

2.2. Pattern Language as a Tool for Personalization and Participation

One of the things Christopher Alexander, father of pattern languages, criticized was the mass-production houses that all looked alike. His claim was that being forced to live in one of the “hundreds of houses produced by one form or another of semi-automatic processes” was the cause of the “alienation and despair which many people feel” [Alexander et al., 1985:22]. He attributed this problem to the separation between the families—the architect—and the people who actually build it—the builders. He believed that homes should fit the delicate and distinct needs of the families that are going to live in it, and therefore this separation would create misfit homes.

For Alexander, the simplest solution to achieving a process that generated a home that met the distinct needs of its inhabitants, was the participation of the inhabitants themselves into the building process [Grabow, 1983]. Not only would such a process create connections between the people and their environment, the citizens themselves are the experts on their own needs after all.

For this kind of a process to happen, he needed a tool that would give citizens, all complete novices, the knowledge on how to build homes. This is exactly what Alexander’s pattern language did: with vocabulary about architectural knowledge provided, the citizens can discover, discuss, communicate, and materialize their needs. The Mexicali Project introduced in detail in *The Production of Houses* [Alexander et al., 1985] was one of Alexander’s most considered experiments where he actually gathered a group of families to have them build their own homes using a pattern language. Here, this personalization effect is illustrated in detail.

From these points, I believe pattern language is not only a tool for sharing knowledge, but also a tool that allows for the participation of people into the creation process, which in turn contributes to them getting a personal sense of the process. I believe we can find hints here for recreating the human-food connection.

2.3. Pattern Languages and Cooking

Though the cooking language is a derivative of the pattern language method, its fundamental philosophies are shared with the original method. As we already saw above, cooking and architecture share many similarities that hints the possibility of the method to be transposed.

To better understand the relationship, I will use Hesse's [1970] model of analogies to compare the two fields. Hesse introduces three types of analogies that are made: positive analogies, where the connections between the two systems are clear and are known to exist, negative analogies, where it is known that one system has a quality but the other system lacks it, and finally neutral analogies which are possible connections that are still uncertain if they exist. Where there exists both positive and negative analogies, there is the possibility for the system to extend its applicability. The neutral analogies each become a hypothesis for how it can be extended.

No.	Architecture	Analogy Type	Cooking
1	Towns and homes are an essential staff of life that everybody needs.	positive	Food is an essential staff of life that everybody needs.
2	Architecture requires both an aesthetic and functional quality.	positive	Food requires both an aesthetic quality and functional quality (good taste, nutrition, etc.).
3	Towns and homes are physical entities that must be formed.	positive	A dish is made of physical entities that are formed.
4	There is usually a separation of between the architect and the residents.	positive	There is usually a separation between the chef and the guest.
5	There are well-regarded architects who are very skilled at design.	positive	There are chefs who are highly skilled at cooking.
6	Architectural projects take days ~ months to complete.	negative	A session of cooking takes a couple of hours max.
7	When one architectural project is complete, it takes a while for another to begin.	negative	Cooking has frequent iterations that can occur several times a day.
8	Architecture today is considered a professional skill, and not everybody is required to have architectural skills.	negative	Cooking is an activity that many of us can and actually do at home on a daily basis: many people wish they had the skills to cook (compared to gaining architectural skills).

9	There is a certain quality of an atmosphere that many of us can feel comfortable and alive in (the quality without a name).	neutral	There are certain quality of dishes and meals that make a person fulfilled when they eat it.
10	The existence of a pattern language would allow for a generative process of architecture without a masterplan to happen.	neutral	The existence of a cooking language would allow for a generative process of cooking without a recipe to happen.
11	Alexander's pattern language helped participants understand and communicate about their homes.	neutral	A cooking language will help a chef understand and communicate about their dishes that they made.

Table 1: Analogical comparison of architecture and cooking

I believe the positive analogies that can be made (no.1-5 in the table) are sufficient to hint the potentials that pattern language would have in its application to cooking. The negative analogies (no.6-8) are also worth some consideration. For example, if we look at analogy no.6, we realize that architecture is on the far-right side of the spectrum of design when it comes to the length of time that a project takes, while cooking is on the opposite side. Similar observations can be made for analogy no. 7 and 8, where cooking and architecture fall on opposite ends of the axis when plotted using the provided criteria.

Now let's take a moment here to consider the field of software design, one of the areas where pattern languages spread quickly and are the most prominent today [Eto, 2009]. If we consider the analogical relationships between architecture and software, we notice similar negative analogies to those we saw between architecture and cooking: faster projects, quicker iterations, higher demand for the skill. With the similar structure and the prosperity of patterns in software we see today, I think cooking has a good chance.

2.4. Past Work on Pattern Language and Cooking

Cooking has been a hot topic for pattern researchers these recent years. To introduce a few by myself: The Generative Cooking Patterns [Isaku and Iba, 2014] a system of pattern-driven cooking, where a perception from one of the five senses will trigger a pattern, and the solution of the pattern would take the cooking dish to a different phase, eventually generating a dish. Another, the Ingredient Language [Isaku et al., 2015] is another collective set of individual languages that each focus on a specific ingredient, showing how the item contributes to the taste/quality of a dish. Ideally, this language would answer the question "I have some eggs in the fridge, what can I cook from it?" (The dish language, when presented in the previous paper, was originally named the cooking language. However, after some considerations

in naming the language in this paper, we decided to give the name to the language discussed in this paper, while renaming the original cooking language to ingredient language.)

The list continues: The Creative CoCooking Patterns [Isaku and Iba 2015, 2016a], Cooking Life Patterns [Yoshikawa et al., 2016], Cooking Patterns [Akado et al., 2016], etc. These pattern languages, including the cooking language introduced in this paper, all attack a different problem in the vast field of cooking, and in no way are they mutually exclusive from the above introduced patterns. Any of these cooking-related pattern languages can be mixed and matched for a fun, social, improvised, and/or creative meal.

3. Defining the Cooking Language

To begin the discussion, I would like to make the following correspondence of terms:

original concept	corresponds to	one instance
pattern language	cooking language	Washoku Language
pattern	cooking word	washoku word

Table 2: Correspondence of terms

Cooking language is the cooking equivalent of pattern language, and cooking words correspond to patterns. One other thing to note is that, as I will introduce the first example of a cooking language, it is given the name Washoku Language (washoku is the Japanese word referring to its own cuisine), consisting of washoku words. Alexander took an entire book [1979] to describe what a pattern is, what a pattern language is, and how it can be used to create towns and buildings. I could consider each of his concepts and claims to consider if it applied to cooking or not, but to make things simple, we assume that any idea that applies to patterns and pattern languages will, unless otherwise defined, respectively apply to cooking words and cooking languages to some extent. Through such an analogical thinking, we will be able to generate several hypotheses about a new process of cooking.

3.4.1. Defining a Cooking Word

We start by looking at Alexander's description of a pattern:

”...a unitary pattern of activity and space, which repeats itself over and over again, in any given place, always appearing each time in a slightly different manifestation.” [Alexander, 1979:181]

Notice the last portion of the description. Alexander challenged himself by asking why it was possible that what he is trying to define as patterns can take a different structure every time. His solution was that it was not the physical entities themselves that are repeating, but the relationships between elements that are repeating. These relationships themselves do not have a physical structure, and therefore can appear in different forms every time the pattern is applied. Therefore, a more precise description:

” *“a morphological law, which establishes a set of relationships in space” [1979:90]*

Thus, each pattern is talking about a transformation. A pattern usually describes this transformation process through the following four sections: the context, problem, solution, and consequence. This format is highly inspired by how Alexander thought of design: the process of finding problems, and using form to resolve it. [Alexander, 1964]

Bringing this view of patterns into the kitchen, there is no doubt cooking, design in the kitchen, has a lot to do with resolving a conflict (between ingredients, heat, moisture, etc.) with some kind of a physical transformation. And therefore, patterns have high affinity with cooking.

However, not all aspects of food and cooking are understood in a mere problem-solution relationship. There are many things we do to our food just because “it is better that way.” Though it would be completely fine without the entity, adding the extra aspect would enhance our feelings, joy, and affection towards the food. Hence, both approaches are needed: while some cooking patterns [Isaku and Iba, 2014] [Akado et al., 2016] aim to capture the mere problem-solution relationship of cooking, the cooking language is my effort to capture the other half of entities that enhance our experience with food (but does not solve any problems).

With these discussions made, I below provide a definition of a cooking word:

- » A cooking word is a morphological law that establishes an abstract pattern of relationships in a dish and/or its surrounding atmosphere.
- » This relationship forms a physical entity that appeals either to 1) one of our five senses, 2) our intellectual curiosity, or 3) our emotional satisfaction. (In other words, the body, brain, or heart.)
- » These are entities that are recurrent across several ages within a specific cuisine, always appearing each time in a slightly different manifestation.

3.4.2.A Word on Culture: What does a Cooking Language do? What does it not do?

The fact that many of the cooking words are culture dependent brings up rather hard but inevitable questions: *Do we have to define the precise borders of a cuisine/culture in order to create a cooking language? Or, does the creation of a cooking language in turn define a culture/ cuisine?*

Fortunately (or not), answers to both questions I believe are no. First of all, defining a culture and setting its borders is a meticulous and controversial process that anthropologists would do a much better job than I would. Second, the goal of a cooking language is not to define or argue the borders of a culture, nor to map out its entirety. Instead, the goal lays in inspiring people with ideas that are rooted in a culture's history to enhance their everyday cooking experiences. To achieve this goal, a clear-cut definition of the cuisine/culture need not be necessary.

To summarize, A cooking language will:

- » help spot characteristic attributes rooted in the history of a cuisine in dishes.
- » provide one coherent framework (though not necessary complete) in understanding the culture.
- » help gain a deep understanding of a dish (either cooked by oneself or by others) in terms of the cuisine's historical contexts.
- » provide ideas that would help make the dish have qualities inherited from the cuisine in topic, when cooking a dish/designing a meal occasion.
- » help a chef describe the dish they created and its intent in detail in terms of the cuisine's characteristic features and its historical background.
- » enhance communication when cooking with multiple people.
- » enhance a person's experience cooking with a recipe by providing deeper understandings and connections between recipe (thus enhance the learning process)

A cooking language will not:

- » define the culture/cuisine of the topic.
- » specify attributes that are exclusively present in that cuisine.
- » guarantee that a dish designed with the language will have qualities of the cuisine in topic

(though in most cases it will to some extent).

- » guarantee that a dish cooked will have good taste (though it may provide a good guidance)
- » become a replacement for a recipe.

3.1. The Format of a Cooking Word

Synthesizing our discussions up to this point, a cooking word can be thought of as a piece of idea for transforming the state of a dish/atmosphere that is inspired by historical contexts of the cuisine.

Like how a pattern's format allowed it to describe its process of transformation, a cooking word also describes its transformation process through four distinct but continuously flowing sections (roughly corresponding to the sections of a pattern). However, due to the nature of the cooking language where 1) good cooking/eating experiences are not always explained in a mere problem-solution relationship, and 2) a cooking word captures entities that are recurrent across several ages of a specific culture (and therefore needs to provide information rooted in its historical contexts), some modifications to the format becomes necessary.

The sections of a cooking word format are described in the list below.

- » **Context** - Some information on conditions which the cooking word can be applied, most likely when it can be used. Roughly the same idea as a context of a pattern
- » **History** - Historical information, events, and patterns about the cuisine that would provide the cook with some insights on actions she can take in the context.
- » **Idea** - The idea, action, or quality derived from the history that can be applied to the dish the user is cooking.
- » **Application** - Specific examples that are seen/is possible to do in the present day. This section also functions as the cooking word equivalent of a consequence, since it provides a future vision or a resulting context after the idea has been applied.

This written format is accompanied by a visual representation (a photograph), a name for the cooking word, and a sometimes a list of related cooking words.

3.2. From Cooking Words to a Cooking Language

Though a cooking language will not define the entirety of a cuisine, the set of cooking words

found from the certain cuisine should provide one coherent structure that expresses qualities of the topic cuisine.

The reason behind this can be found in Alexander's view of pattern languages. Alexander clearly states for several patterns to be combined when using it [Alexander, 1979]. Each pattern may provide some insightful knowledge to its reader, but a just a collection of patterns would be no different from, say, a mere list of life-hack tips we can find on online media. The method shows its power most when relationships between the patterns are defined. Here, interconnected patterns enforce one another, creating an emergent quality that Alexander called quality without a name.

The same applies for cooking words. The application of a single cooking word would only enhance a dish to a certain extent. Nor would just one cooking word alone create the sense of a culture by itself. However, when multiple washoku words from the Language are applied, the words would start to enforce one another, eventually creating an emergent feeling of Japanese-ness in the dish. This Japanese-ness is the Washoku Language equivalent of the quality without a name.

4. Creating a Cooking Language

This section will – briefly- introduce one method of creating a cooking language. The creation process follows a similar process of that of creating a so-called “3.0-style” [Iba, 2013, 2015] pattern language [for example: Iba and Isaku, 2013, 2014; Isaku and Iba, 2015, 2016a; Iba and Kajiwara, 2016; Sasabe et al., 2016a]. This kind of a creation method differs much from that of Alexander's original pattern language, but it is a method that has been revised and optimized for patterns language in the creative age over the course of seven years.

There is a “Pattern Language for Creating Pattern Languages” [Iba and Isaku, 2016] [Sasabe et al., 2016b] [Shibata et al., 2016] that provides a set of meta-patterns for what the title suggests. Though it is not patterns that we are creating, since patterns and cooking words mostly share the same qualities, mostly the same process can be followed.

The only (and important) structural difference between the two ideas is in its format, and therefore some alterations will occur in the process when looking for the right information during the mining phase, and when writing the cooking words in its format. Below I will briefly introduce the creation process of the Washoku Language, highlighting important aspects to consider exclusive to the cooking language.

4.1. Element Mining

In the element mining phase, relevant literatures are searched for insights that can potentially be included in a cooking word. If we were to give any categorical structure to the kind of literature to search through, roughly they fall in two categories: A) references that look at the particular cuisine in terms of its historical development, and B) references that explain the status quo of the cuisine today (this includes cookbooks and how-to texts). For the Washoku Language, I referenced the following resources on the Japanese cuisine: [Ako, 2015] [Ehara,2012] [Morikawa, 2013] [Hata, 2009] [Takanashi, 2013] [BKG, 2008] [Nozaki and Okumura, 2015] [JECHI, 2011, 2015] [Takahashi, 2015] [Miyazaki, 2009] [Kumakura, 2009].

When reading through information, both practical and conceptual information that meet the following criteria are extracted: 1) Specific styles and methods of eating/cooking that are (were) done, 2) Cultural customs/traditions that are (were) performed around food, 3) Reasoning behind the actions/customs 4) Pattern of similar thoughts/actions present across regions/ages. Each point of information is written down on a slip of paper and are collected on a large sheet of craft paper (figure below). More elaborate description of the process is given in [Sasabe et al., 2016b] and [Iba and Isaku, 2012].



Figure: Each piece of information found from the resources are written down on a note and pooled onto the craft paper.

4.2. Clustering

In the element clustering phase, relationships between the notes found in the pattern mining phase are considered to generate groups of related notes. This process is based on a process known as the KJ method [Kawakita, 1967]. This is a method similar to the Grounded

Theory that forms bottom-up categories of elements through observations of local similarities. An elaborate explanation on performing the KJ method in the context of pattern mining (hence altered a bit from the original Kawakita version) is provided in [Sasabe et al., 2016b], and the same process was followed for creating the Washoku Language.

When this process is continued, eventually small to medium groups of elements will start to form. Each of these groups will become a seed for a cooking word. Once the groups are distinct, the potential cooking words go through another round of the KJ method to get a structure of the cooking language.

4.3. Writing and Visualizing

Once the “seeds” for the cooking words are found, the information in each of the groups are synthesized into the cooking word (context-history-idea-example) format. Though the section formats are different from patterns, the process described in the Pattern Writing Patterns were followed.

For the visual representation of cooking words, we used photographs that capture their culinary qualities. We had a Japanese chef look through the list of cooking words, and collaboratively brainstormed on how each cooking word should be expressed as a photo. In the process, the pattern symbolizing patterns [Shibata et al., 2016], which provides ideas on how to visualize patterns in a memorable way was referenced.

5. A Cooking Language: The Washoku Language

The Washoku Language is a cooking language describing qualities of the Japanese cuisine. This section will first give brief background on the Japanese cuisine to show the need for a cooking language. Afterwards, the 42 “washoku words” will be introduced: ten of them will be given in full text, and the rest will be shown as abstracts.

5.1. Some Context on the Japanese Cuisine

The Japanese cuisine, washoku, is unique in several ways. The small country, with its unique geography and climate, has long developed a particular cuisine that is appreciated by people both in and out of the country.

As an island country with complex coastlines longer than the US and at a geographical location where two ocean currents meet, its cuisine is based on vast variety of fishes. Also, mountains that cover 70% of its land cut the country apart into numerous regions, each developing their own foodways to contribute to the diverse mix of the country. Its geographic

features also resulted in a wide range of climate zones from subtropical to subarctic.

Hence, the country is splendid with indigenous ingredients and dishes particular to the regions. In addition to this, the mountains provide the country with a rich supply of water enriched with minerals, which also contributed to the cuisine centered on rice, fish, and other specialties that use ample amounts of water. Not only natural conditions, but combined with sophisticated philosophies and techniques that were developed by its people, the cuisine stands in a very unique place unseen in other countries. In more recent years its feature as a well-balanced, healthy diet collected the attention of people worldwide.

These characteristics led washoku to be nominated by UNESCO as a World Heritage in 2013. In accordance to its nomination, there came up the need to define what to include in the cuisine. Upon being nominated a World Heritage, the Japanese government agreed on the following four points as components of washoku [MAFF, 2016b]:

- » “various fresh ingredients and using their natural tastes”
- » “well-balanced and healthy diets”
- » “emphasis of the beauty of nature in the presentation”
- » “connecting to annual events”

These points became a good starting point for many efforts to follow on the study of the washoku culture. Many of them were government lead [MAFF, 2013, 2014a, 2015, 2016a], and among their works there were several that aimed to give structure to the washoku cuisine. Some are shown in the figure below.



Figure: Past efforts to provide structure to the Japanese cuisine. Adapted from [Kumakura, 2011], [MAFF, 2014a], and [MAFF, 2015] respectively

These frameworks all point to somewhat the same point: the “washoku-ness” of a thing cannot be determined in a mere yes-no basis, but there is a whole gradient in between.

Though the point of the Washoku Language is not necessarily to analyze and/or define what exactly washoku is, the work can also be considered to fall on the same line of efforts as these frameworks to better understand the cuisine.

5.2. The Washoku Language

This section will introduce three of the actual cooking words from the Washoku Language in full text. Each cooking word will have a name and a photograph at the top of the subsection, , followed by the context — history — idea — application format. Below the picture, the cooking word will begin with the context. Then comes the separator “▼ In this context” followed by the history. After the history section comes the separator “▼ Therefore” followed by idea section. Finally, after the Idea section comes the separator “▼ For example” leading into the application section. At the end of each cooking word you can also find a list of related cooking words, which are cooking words that would co along well with the one on the page to enforce one another.

In addition to the selected ten, the rest of the cooking words will be shown as a list showing only the name, photo, and an abstract of its entity.

5.2.1.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

5.2.2.No.23: Contrast and Coexistence



This entity of form can be seen throughout the cooking process: when choosing colors, when flavoring, when arranging food on the dish, etc.

▼ In this context

Contrast is something we often see in washoku.

For example, dark and light colors, strong and light taste, thick and thin texture, front and back, circles and rectangles, etc. There is no concrete explanation for why, but we can see the thought embedded into our logic, for example with the concept of hon-ne (a person's true unspoken feelings) and tatemae (actions and explanations expressed to hide the hon-ne). The light, white, weak aspects can analogically be thought of the tatemae, while the thick, dark, strong tastes as the hon-ne. There is also an idea called the Inyo-Gogyo, which

originated as a Chinese cosmology but then highly influenced the washoku cuisine, that thinks in terms of in (ying) and yo (yang) as two contradicting forces which are actually complementary. [Koizumi, 2002; Hata, 2009; Morikawa, 2013]

▼ Therefore

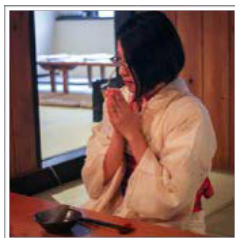
Include contradicting qualities in the same meal, or enjoy contrasting tastes of the same item for different occasions.

▼ For example

The most noticeable and often seen is where a rectangular piece of food is arranged on a circular plate (and vice-versa). Other examples include including dishes with a dark taste and a light taste in the same meal, creating a contrast in the colors used in a dish. You can also create contrast in the time axis by enjoying contrasting tastes of the same item in different occasions: for example, sweet vs. spicy (dry) sake, strong vs. light tea, dark and light shoyu, satsumaage vs. hampen, misoshiru vs. suimono, etc.

► No.15 Various Means of Cooking, No.20 Light Round Taste

5.2.3.No.39: Thankfulness for Nature



You are either at the start or the end of a meal.

▼ In this context

A Japanese meal starts and ends with a moment of thankfulness.

Though it is a rather new manner (resources say it started around the second world war) to say itadaki-masu before a meal, the Japanese people has long held nature in reverence, thankful for the blessings it provides us. Saying the phrase (which literally means “I will receive” in a humble manner) before the meal became one way to express this thankfulness.

In addition, preparing a meal requires the work of many people from farming to distribution to cooking to serving. To show appreciation for the hard work of these people, people in the Edo period started saying what eventually became the phrase *gochiso-sama* at the end of the meal, which is a phrase acknowledging all the running around that went into the meal. [Takahashi, 2015; Okumura, 2015; JECHI, 2011]

▼ Therefore

Take a moment before and after the meal to express your thankfulness for nature's blessings, and also to acknowledge the people who provided the food for you.

▼ For example

Taking a moment as a group to say “*itadaki-masu*” before the meal and “*gochiso-sama*” after are important aspects of a Japanese meal even today. Though it often tends to lose the true intent behind the words, it would be great if you could actually take the opportunity to thank nature and the people who took their time and effort to prepare the meal.

► No.01 Diverse Indigenous Ingredients

6. Cooking with the Cooking Language

Alexander's approach to attacking mass-housing was to create a new way of building that involves the families into the process, even if they were total novices in architecture. Getting involved does not merely mean just participating in the hammering and the sanding, doing whatever the architect tells you to do. In Alexander's sense, it meant that you and your family are the ones that decide and design how everything would be in your new home so that it fits your family's distinct needs.

In the same sense, the cooking language isn't just a tool that would help people learn how to cook, nor is it a how-to cookbook that the user can just follow directions just to be involved with the cooking process. The true goal of cooking languages is to give everyone a chance to first-handedly get involved in the cooking process so that they can feel a personal connection to the food they make and eat.

6.1. The Two Test cases

This section will introduce test cases of cooking using the Washoku Language. These cooking sessions were conducted to see how the cooking language will act as a tool to create this kind of a personal connection to the food we eat.

Two sessions of cooking were conducted, but due to space reasons, this paper will only introduce abstracts of each cases, and focus more on its results and synthesis. One of the two cases can be read in detail in appendix B.

6.1.1. Case 1: Planning and Cooking a Japanese Meal

In the first of the two cooking sessions, a group of four college undergrad students, all friends with each other, were collected to plan a dinner for the night. Since this was the first case ever of designing an actual menu using a pattern-like tool, I collected participants with at least moderate cooking experience/skills. They were told their goal was to collaboratively plan a menu together, and to each describe the dish they created at the end. In the planning process, they were given the list of 42 washoku words to help them plan the dinner. After they got a grasp of what they were going to cook, they went shopping for ingredients, and engaged in a cooking session to actually cook the menu. After cooking and eating as a group, the members were again handed the list of washoku words to engage in a collaborative reflection session.



Figure: Photos from the test cooking session

6.2. Case 2: Bridging the Skill Gap

The goal of the second case of cooking was to see if a cooking language will actually act as a tool to bridge the gap between people of significantly different skill levels of cooking. For this cooking session using the Washoku Language, two college undergrad students were told to collaboratively design and cook a dish. Of the two participants, one person had relatively high cooking skills, while the other rarely had experience with cooking. The goal of this experiment was to observe how the novice cook would interact with the experienced cook using the washoku language as a tool that potentially fills in the skill gap between the two.

The full case, including participant profiles, transcripts from the planning session, the reflection session, and their analyses can be read in Appendix B.



Figure: Photos from the second cooking session

6.3. Syntheses: Practical Uses of the Cooking Language

Below are the points that I found a cooking language to be actually be useful for. These are all points discovered from the test cases.

6.3.1. Framework for thinking of menus

Through the two cases of planning menus using the cooking language, I have discovered there to be two ways to provide a framework to help people devise a menu. First, there were certain cooking words that provided a framework by itself. The Kata of Meals and the Five Basic Colors, which happened to be used by both teams, are good examples. These cooking words worked by discovering existing frameworks from the cuisine, and modifying them so the essence is still there, but is more useable in daily contexts. Since these frameworks are ones that are used throughout the cuisine's history, menus planned using these framework cooking words most likely end up having qualities that remind us of the corresponding cuisine. In this sense, the other cooking words acted as sources for ideas on how to fill in and decorate the framework. In many cases, the cooking words acted as triggers for recalling past experiences of cooking/eating. These became good sources for ideas on what and how to cook during the planning session.

The other way a cooking language can provide us with a framework to help think of menus is a more global approach. In the second case, the participants were asked to choose at least five cooking words, and then think what to cook from there. This was a rather strict approach than in the first case where the participants were allowed to use the cooking language in whatever way they liked; this resulted in the participants not using the cooking words as much, resulting almost twice as long to agree on a menu. By taking the strict approach, the cooking language helped people think of menus easily yet creatively.

6.3.2. Topics to enhance conversations

This is a rather manifest use of a cooking language. Remembering the comments left by that participant from the first case (introduced at the end of section 5.1.5), the cooking words helps set a topic of conversation for reflecting on the cooking experience. In both sessions, participants retrospectively and surprisingly discovered cooking words they haven't considered in the preliminary planning to be present in the reflection session. This suggests another effect of a cooking language: retrospectively giving meaning to and therefore enhancing cooking and eating experiences by providing discoveries.

6.3.3. A tool to learn, discover, and experience the cuisine

Though this is a supplementary effect, it is also a manifest and important one. Especially during the reflection sessions, participants repeatedly mentioned how they learned something new about the Japanese cuisine. The first group of students repeatedly mentioned cooking words that provided them with new learnings, for example, Power of Fermentation, Contrast and Coexistence, and Eating Skills. Eating Skills seemed to be insightful for the second group too, considering the depth they went in discussing the cooking word. As I mentioned above, both groups discussed similar topics and reached similar conclusions on the Japanese cuisine. One future possibility is to focus more on these mere learnings about the cuisine, and develop a program to learn about it.

6.3.4. A collaboration tool that opens up the train of thought

When I was reading the script from the planning session for the first group, I discovered them talking about certain cooking words without being inspired by it. In other words, by using the cooking words, I was retrospectively able to discover reasonings for certain trains of thoughts used by the experienced cooks. For example, Student A and Student C, probably the two most experienced cooks from the first group, naturally headed towards a *ichi-jyu-sansai* meal (Kata of Meals), wanted to include a variety of colors (Five Basic Colors), and suggested to include seasonal items into the menu (Eating the Season). This leads into the next point: a cooking language will help notice the reasonings and/or the train of thought behind experienced cooks.

This aspect was highlighted even more in the second case. By using the cooking language as a tool that opens up the train of thought of experienced cooks, novice cooks can join in the cooking process without difficulty. We saw in the second case that the pair of participants was able to share the menu planning experience with no problem, the conversation driven by the cooking language. Then in the way they described the dish they cooked, we saw no significant difference in the way they understood the dish. From these points I think it is

safe to say that the cooking language became a tool for collaborative cooking that allowed novice cooks to be included in the process.

7. Conclusion

In the shadows of its glory of being nominated as a World Heritage and receiving world-wide fame, the washoku cuisine is recently facing some struggles. For example, in a large-scale, cross-generation survey conducted by a team from Japan's Ministry of Agriculture Forestry and Fisheries [MAFF, 2016c], only 29.8% of respondents said they were taught about the washoku culture at home, at school, etc.. Those who responded that they are teaching/passing down the culture to future generations were as few as 16.8%. Results from the same survey shows repeated evidence that the washoku culture is having trouble making its way down to future generations. Indeed, with the golden arch and the green siren seen on the corner of every city, traditional Japanese foodways are always in combat against new cultures from western nations.

However, viewed with a broader, historical perspective, we can see that that this battle is nothing new. As the Harmony and Prodigious Development cooking word suggests, our country has a long history of incorporating foreign ways, naturalizing it, and then evolving it in an original, sophisticated ways. There is a reason the washoku culture is considered living culture that is able to, based on its tradition and technology that developed over the long history, supplely change itself based on what the age and environment may demand [MAFF, 2014].

There is an old Japanese phrase that reads onko-chishin. The phrase, scribed in four kanji, literally reads "to warm (to visit) the past to discover the new." This has been at the heart of the Japanese development: history and traditions are always respected, while never losing the faith to move forward to create new history. I believe the Washoku Language will become a tool for onko-chishin by guiding us to the past to provide us with new discoveries.

This is probably nothing limited to the Japanese cuisine: in the process of continuous evolution of any cuisine over time, a cooking language will help us to learn from historic roots, not only to protect and practice it, but also to inherit its essence to create new styles of cooking and eating that matches the demand of the fast-changing age.

Alexander had an underlying belief consistent throughout his series of works: the liveliness of humans would only result when there is good quality in the buildings that they live in. The inquiry for creating quality in towns and buildings was his approach to creating a com-

munity with a human feeling. Though he believed that it was the pattern of events (and not its physical geometry alone) that happens at a place that gives the place its life, he also believed that the physical environment was essential and inseparable from (though not exactly causing) the events.

In the same way, I believe the warm, welcoming, fun, human, creative, and sometimes mystic atmosphere that we experience in the kitchen and around the dining table is inseparable from its physical structures — both of the meal and the environment. Therefore, though a cooking language focuses on the physical entities of meals, its ultimate goal is to create a lifestyle with the special atmosphere.

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We live in a time of social and cultural change.

Old patterns are losing their validity and relevance new patterns are needed and in demand.

We need a new approach which can formulate, generate and engage such patterns.

The pattern language approach of Christopher Alexander serves this purpose - the interdisciplinary and participatory building blocks for societal change.

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