

# Patterns for Being Creative in uncertain situations

## Pattern language for developing the Design Attitude

KAORU YAMAMOTO, Institute of Innovation, Musashino Art University

SATSUKI FUJITA, Institute of Innovation, Musashino Art University

MIYAKO KUGUE, Institute of Innovation, Musashino Art University

ATSUSHI HASEGAWA, Institute of Innovation, Musashino Art University

### ABSTRACT

In this paper, we suggest the pattern for Being Creative in uncertain situations. We focus on "attitude" in our life, more than technical skills. We interviewed several service designers who manage to deal with problems without answers, which is so called "wicked problem" [1], about the "Design Attitude in practice process".

Based on this, we prototyped a pattern language for common people (which means non-designers) to manage under uncertain circumstances in society nowadays and exert their creativity. Since these patterns are extracted from Japanese service designers, we assumed our targets as Japanese. However, since the trends uncertain situation are worldwide, we think we could apply these patterns in other countries.

### KEYWORDS

Creativity, Creative Society, Design Attitude, Uncertain Situation, Pattern Language, Service designer

## 1.BACKGROUND

### 1-1. Social changes based on people's values

In the last 100 years, there have been three categories of social changes based on people's values. Since 1920s in United States (and 1945 in Japan), people were attracted in consuming goods and services, which is called "Consumption Society". Since the 1990s, with the spread of the internet, people were interested in communication to connect with people and social networking service, which is called "Information/Communication Society". Professor Iba Takashi in Keio University insists that society will be "Creative Society" from now on [2]. In this stage, people will be able to create things/services/communities/platforms or whatever they want, by their own.

In creative society, technology enabled non-professional people to make goods and services by their own hands. 3D printers have become widespread as tools to create something. Also, companies want to create new concepts, mechanisms and businesses, so they have established a creative agency and acquired a design firm.

## 1-2. Importance of “Attitude” in creativity

In Creative Society, as Iba mentions in his book *Creative Learning* (2019), development of technology enabled many people to create things (either tangible or not) easier by themselves, but on the other hand, same development of technology made so many variations and uncertainty in the world. Therefore people start to think and act creatively to produce what they really want, instead of mass produced things given from someone.

However, most people have a strong prejudice that it is difficult to be creative in their life. Some people start by learning "skills of design", but they give it up, because learning takes lots of time and costs. Actually the truth is that even if they developed some kind of skill, they may not be able to use it effectively in the real situation. What we think is important for many people is not skills, but an attitude about how to be creative. This kind of attitude is called “Design Attitude”.

"Design Attitude" was studied by Kamil Michlewski(2008)[3]. Michlewski studies in the region of business. He studied for professional designers in organizations, but this study can be generalized and applied to more wider range. Even non-designers can use it in their life."Design Attitude" is an attitude that enables "to find a solution creatively under uncertain circumstances" and consists of the following five aspects[4].

- Embracing uncertainty and ambiguity.
- Engaging deep empathy.
- Embracing the power of five senses.
- Playfully bringing things to life.
- Creating new meaning from complexity.

If people develop this attitude first, then skill acquisition can be acquired when they feel it is necessary. The problem is, there are no concrete method for non-designers to develop these “Design Attitude”.

To generalize "Design Attitude" for usual people (which means non-designers), more understandable guide will be necessary for them to gain this attitude in Creative Society. Thus we extracted some patterns of Design Attitude, from people who act creatively in their business as professional, and make into language.

## 2. A PROTOTYPE OF PATTERN FOR DESIGN ATTITUDE

### 2-1. Approach to make the patterns

In this paper, we made a draft of Patterns for Design Attitude. Following the pattern language creation step of Iba[2], we conducted pattern mining, pattern writing, symbolizing[5]. Detailed step are as follows(figure.1). Verification of the usefulness of these patterns (Pattern Practice) is our next step.

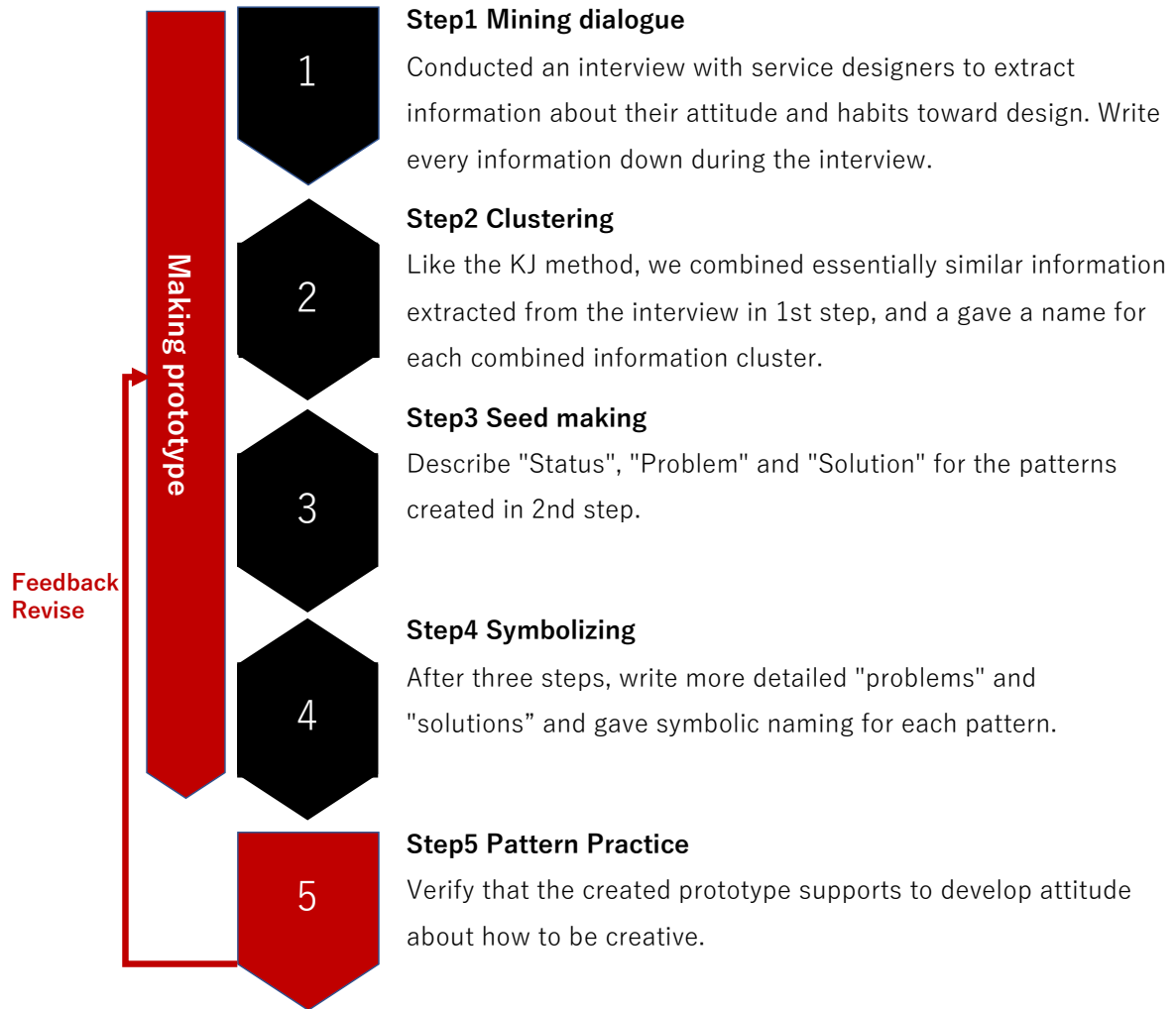


figure.1 Pattern Language making steps

About the interviewees, we selected service designer who manage to deal with the problems without answers. Definition of service designers are yet not stable, but in this paper we assumed designers who apply to principle as follow.

- Think Human-centered
- Co-creative
- Have Holistic perspective

For example, designer who designs organization, community, systems, projects, and of course new services. They regularly deals with so called “wicked problems” which have no correct answers, and even solution is unknown[6].

## 2-2. Pattern language for developing the design attitude

Through the steps above, we made a prototype of this pattern language related to Design Attitude(figure.2&3). This prototype pattern language consists of 5 big areas as follows. Each area consist of several pattern groups except 1.Central mindset.

1. **Central mind set** is the basic mindset of Design attitude, which should be common in any creative activities.

2. **Update regular habit for creation** is area of patterns to train your basic creativity in usual life.
3. **Device ways to deal with information** is area of patterns to manage with information and prepare for creative outputs.
4. **Don't be afraid of output** is area of patterns for your mindset toward making things or expressing your idea towards others.
5. **Co-creation in teams** is area of patterns for extracting team's creativity and aim high achievement.

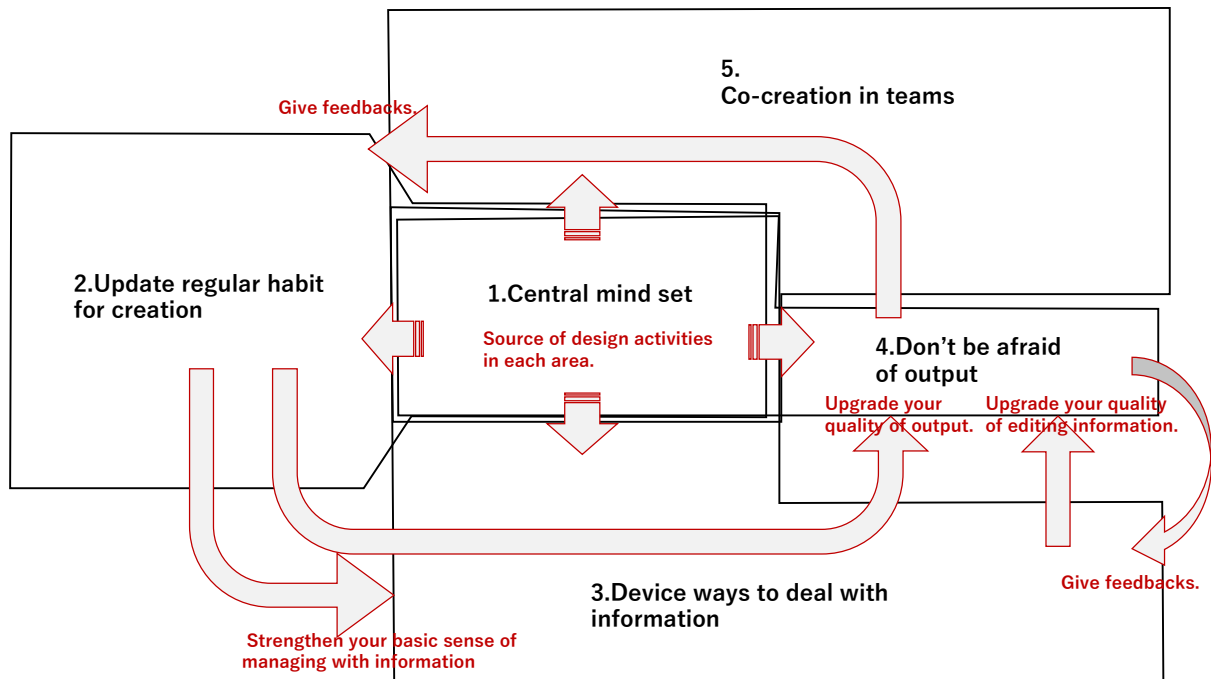


figure.2 Overall construction of Design Attitude Pattern Language

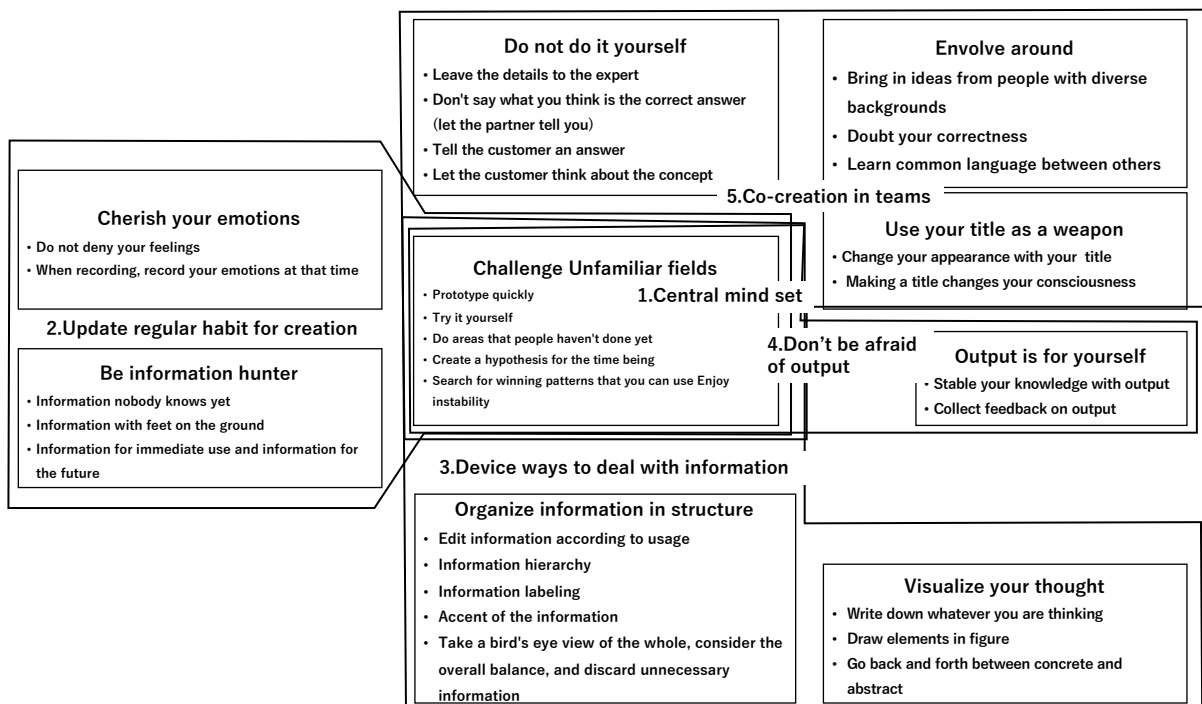


figure.3 Detail patterns

### 2-3. Example of detail description of Pattern language for developing the design attitude

In this paper, we will introduce prototypes of patterns described at the pattern group “Visualize your thought” which is at the lower right in figure.3. We consider these patterns are easy to understand and adoptable for many people.

**Write down Whatever you are thinking.**



**You may come up with a great idea by writing down the seeds of idea.**

#### ▼Context

When you don't know how to proceed with something uncertain like...

- Proposal for a new project/business
- Sentences such as a document/thesis
- Your life plan

#### ▼Issue

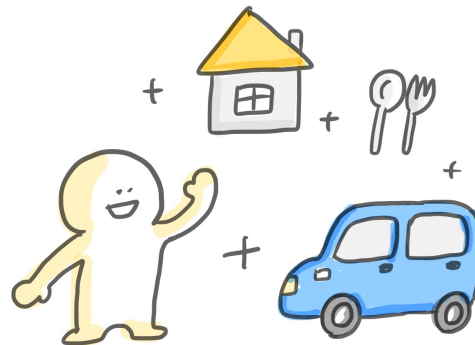
**You have rich information in your head,  
but it is messy so you need to clarify and organize your thinking.**

#### ▼Solution

**Write down any thoughts in your head.**

Putting the seeds of your ideas on the table enables to visualize what's going on in your head, and it will help you organize them. Without thinking about the order, you may write down anything you come up to mind from one end to the other tentatively.

### Draw elements in figure



You may come up with a great idea by writing down the seeds of idea.

#### ▼Context

When you have to organize information like...

- When considering how to make documents or report
- When considering the relationship between multiple concepts
- When identifying the components of things, services, and so on

#### ▼Issue

**When thinking about unfamiliar things or unknown events, it is difficult to imagine the components of things.**

- By drawing with an illustration, you can intuitively understand the components.
- Thinking outside of letters makes your thinking more flexible.

#### ▼Solution

**Draw people and things you need to think about by visual.**

**Even if the content and theme have not been decided, try drawing once.**

- When drawing with a picture, if you have a feeling that something is different, don't overlook it and cherish it.
- Think about which part of the picture you drew is different from your image, and try drawing again.

### 3. CONCLUSION AND DIRECTION FOR FUTURE WORK

In this study, we proposed a hypothesis of learning method for non-designers to develop the attitude to be creative in daily lives, work and own life.

We conducted a theoretical examination of “Creativity” and “Design Attitude”, and made a prototype of pattern language that develop the “Design Attitude” through the specific creative action in each situation.

Since this is version 1, we need to sophisticate these patterns by interviewing more professionals who deals with problems without answers with creative approach, such as service designers.

On the other hand, we assume to conduct experimental verification through workshops or personal experiences, which is called pattern practice (figure.1). We tend to use the feedback to revise this prototype. The test targets are, for example, young people who are unsure of their career or businessmen who want to consider a new business.

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