

An University Class for Learning and Writing a Pattern Language

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1 Introduction

In a complex society we live in today, it becomes important to increase one's thinking power to understand the complex phenomena, which is difficult to understand intuitively because of their complex consequence. In the complex society, it is also required to collaborate with others in order to solve social problems. However, the thinking and collaboration are not automatically realized, thus we should consider a method and tool for them. In this paper, we focus on “pattern languages” as a method and tool for collaborative thinking. This paper reports our experience to teach the concept and method of pattern languages in our university. The name of class is just “Pattern Language”, and it was held in autumn, 2007.

2 Overview of the Class

The class “Pattern Language” was held in Faculty of Policy Management / Faculty of Environment and Information Studies, Keio University, Japan. These faculties are aimed and designed to provide a trans-disciplinary education for undergraduate students, beyond the conventional disciplines like economics, management, politics, literature, computer science, media art, architecture, and so on. Although the students have a wide variety of interests, we think that the shared competency in the abstract level is to *create* or *innovate* something on the frontier. In this sense, one of our key concept is “creativity”, however it is difficult to understand what creativity means and how we can enhance the ability. Based on such a background, we decided to focus “creativity” and the knowledge of “creative works” as the theme of the class.

The class was taken by about 60 students from freshman to senior. Through the semester, they made a new pattern language for creative works, which we call “Creative Patterns” (Figure 1). They formed small groups to propose some patterns, then they



Figure 1: Students who Wrote a Pattern Language for Creative Works

reviewed and brushed up their patterns with other groups. Finally, they had combined forces to systematize the proposed patterns into a language, which it finally consists of 48 patterns. The aim of the class is to learn the concept and the making process of pattern languages by making an original pattern language, and to deepen their understanding of “creativity” and “creative works” by reading the literatures about creativity, discussing with others, and reflecting their pattern-making activities.

For designing the class, we consider the traits of human cognition, these are two mode of human cognition: experiential cognition and reflective cognition (Norman, 1993). The experiential cognition is the cognition to react the change of environment subconsciously, and it grabs the attention and generates excited emotion. Norman said “The experiential mode is seductive; it draws viewers into its clutches, enticing them with pleasurable sensations, allowing time to pass by quickly, without effort”(Norman, 1993). On the contrary, the reflective cognition is the cognition to examine and think over the matter. Norman said “In reflection, one wants to contemplate the experience and go beyond, finding new interpretations or testing alternative courses of action.”(Norman, 1993). The problem is “to make the student want to do the hard work that is necessary for reflection”(Norman, 1993). Therefore, a teacher should motivate students to reflect by experiential approach. In the class “Pattern Language”, we considered and designed that some activities were for experiential cognition and others were for reflective cognition.

3 Records of the Class

We managed the class in the following process. Note that the textbook of the class was assigned to Alexander’s book “The Timeless Way of Building”(Alexander, 1979).

1st Class: Class Introduction

I explained the summary of course and requirement (Figure 2). In addition, student assistants of the class made self-introductions, who were making new pattern languages,



Figure 2: Class Introduction (1st Class)

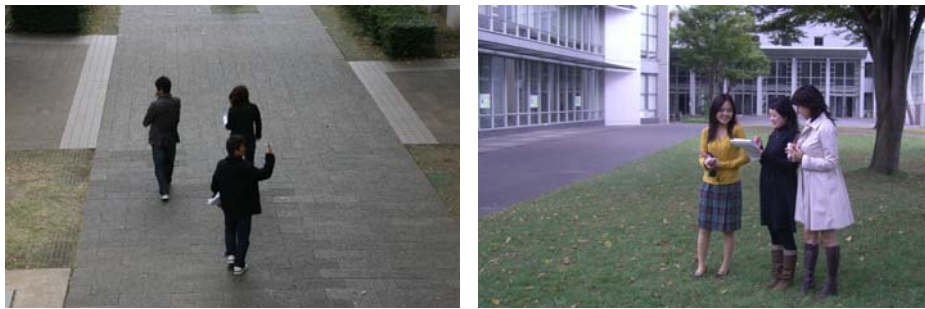


Figure 3: Campus Exploration to Find the Alexander's Patterns (3rd Class)

“Research Patterns” and “Project Patterns”, in my laboratory (Sasaki et al., 2008; Furuchi et al., 2007; Iba et al., 2007; Yumura et al., 2008).

The homework assignment was to summarize what a pattern language is, reading from chapter 1 to 5 of the book “The Timeless Way of Building” (Alexander, 1979).

2nd Class: Philosophy of Pattern Language

I explain the background and philosophy of pattern languages.

The homework assignment is to summarize what a pattern language is, again, reading from chapter 6 to 11 of the book “The Timeless Way of Building” (Alexander, 1979).

3rd Class: Finding Patterns in Architectures

Students explored the campus to find Alexander's patterns in architecture with using the distributed copy of the book “A Pattern Language” (Alexander, 1977). They looked for places that are “alive” and choose patterns, which there are in the place, from Alexander's catalog (Figure 3). They also looked for places that are “dead” and considered the solution to make the place “alive”, choosing patterns from the catalog.



Figure 4: Discussion about Creative Works (4th Class)

The homework assignment was to choose one of the following books about creativity, and described the author's know-how, mind, and attitude for creative works: the book written by Michael Ende, fantasy writer (Ende, 2000), Hayao Miyazaki, Animation Director (Miyazaki, 1996; Miyazaki, 2002), Joe Hisaishi, composer (Hisaishi, 2006), Hiroshi Ishi, the researcher of next-generation computer (Mogi, 2007), Yoko Ogawa, Novelist (Ogawa, 2007), Gen Takahashi, Novelist (Takahashi, 2002), and the dialog between Haruki Murakami, Novelist and Hayao Kawai, psychotherapist (Kawai and Murakami, 1998).

4th Class: Thinking Creativity (1)

Students formed large groups with the students who read the same book and discussed about the result of the homework in groups (Figure 4). After the group discussion, the representative of each group introduced their results. I also explained that (1) the pattern should not be invented but discovered, (2) the knowledge that is described into a pattern may be discovered three times, which is known as the phrase "Rule of Three", and (3) we have to sharpen our antenna to the theme in daily life.

The homework assignment was to summarize the know-how, mind, and attitude for creative works, based on reading the book and discussion.



Figure 5: Thinking Creativity (5th Class)

5th Class: Thinking Creativity (2)

Students made a presentation about the homework of the campus exploration for finding Alexander’s patterns (Figure 5). The “alive” places which the students reported are shown in Figure 6. For each place, they had chosen the embodied patterns from Alexander’s catalog. An example is shown in Figure 7. They also reported the “dead” place (Figure 8), and they proposed the solution to make the place “alive” (Figure 9). The unexpected result is that some places were pointed out as both of “alive” and “dead” place (Figure 10).

After explaining the activity of pattern community, 60 students stood in a circle in the classroom (Figure 5). And I introduced some methods of “Ice Breaking”, which I had learnt in the PLoP’07. Then all students proposed the essence of creative work in front of the other students.

The homework assignment was to summarize the concept of structure, sharing, evolution of pattern languages, reading from chapter 12 to 17 of the book “The Timeless Way of Building” (Alexander, 1979).

6th Class: Forms of Pattern Language

I explained the forms to describing a pattern, such as Alexander’s form (Alexander, 1977), GoF form (Gamma et al., 1995). And student assistants, who were making new pattern

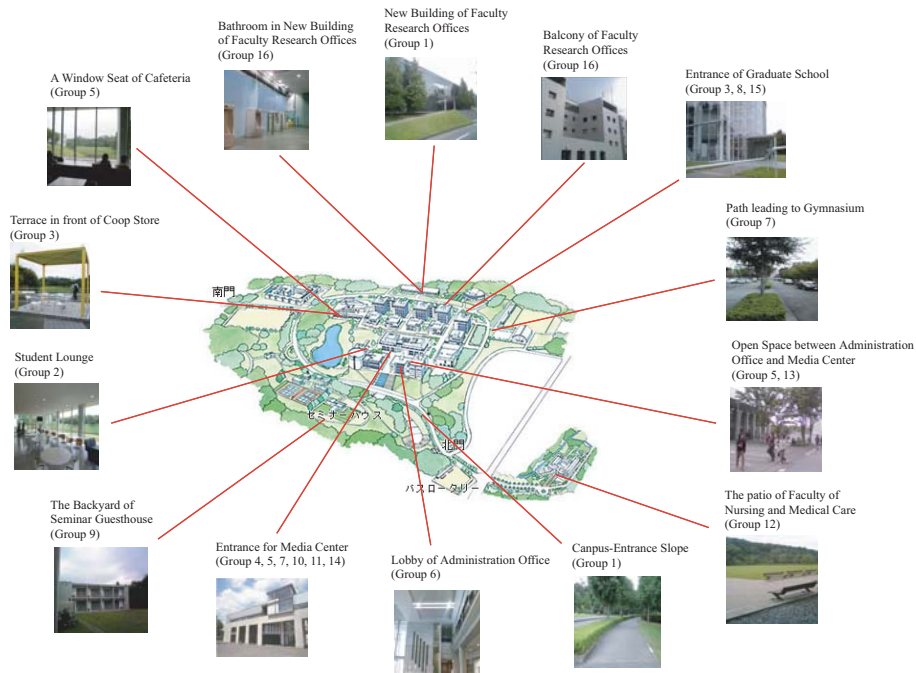


Figure 6: Places that are “alive”


Entrance for Media Center	GROUP 7	GROUP 11
	(104) Positive Outdoor Space (105) South Facing Outdoors (108) Connected Buildings (110) Main Entrance (112) Entrance Transition (114) Hierarchy of Open Space (121) Path Shape (130) Entrance Room (150) A Place to Wait (160) Building Edge (216) Box Columns	(106) Positive Outdoor Space (108) Connected Buildings (115) Courtyards which Live (119) Arcades (238) Filtered Light
ALIVE	GROUP 8	GROUP 14
GROUP 3 (107) South Facing Outdoors (114) Hierarchy of Open Space (128) Indoor Sunlight (171) Tree Places	(106) Positive Outdoor Space (107) South Facing Outdoors (128) Indoor Sunlight (140) Private Terrace on the Street (142) Sequence of Sitting Spaces (150) A Place to Wait (167) Six-Foot Balcony (180) Window Place (207) Good Materials	(106) Positive Outdoor Space (110) Main Entrance (120) Paths and Goals (123) Pedestrian Density (124) Activity Pockets (126) Something Roughly in the Middle (129) Common Areas at the Heart (150) A Place to Wait (161) Sunny Place (193) Half-Open Wall
GROUP 4 (123) Pedestrian Density (126) Something Roughly in the Middle (129) Common Areas at the Heart (150) A Place to Wait (161) Sunny Place (226) Column Place (238) Filtered Light	GROUP 10	GROUP 15
GROUP 5 (106) Positive Outdoor Space (124) Activity Pockets (150) A Place to Wait (161) Sunny Place (226) Column Place	(112) Entrance Transition (114) Hierarchy of Open Space (115) Courtyards which Live (124) Activity Pockets (131) The Flow through Rooms (150) A Place to Wait (161) Sunny Place (226) Column Place (238) Filtered Light	(107) South Facing Outdoors (112) Entrance Transition (142) Sequence of Sitting Spaces (159) Light on Two Sides of Every Room (164) Street windows (168) Connection to the Earth (194) Interior Windows

Figure 7: Example of place that is “alive”

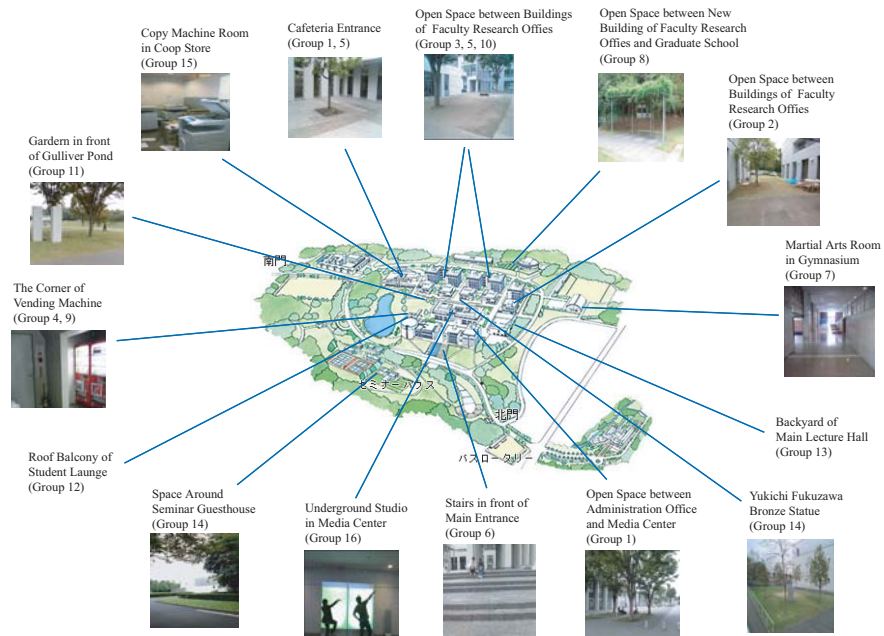



Figure 8: Places that are “dead”

The Corner of Vending Machine




DEAD

GROUP 4 < Solutions >
 (107) South Facing Outdoors
 (161) Sunny Place
 (193) Half-Open Wall
 (238) Filtered Light

GROUP 9 < Solutions >
 (107) South Facing Outdoors
 (162) North Face
 (165) Opening to the Street
 (191) The Shape of Indoor Space

Figure 9: Example of place that is “dead”

Open Space between Administration Office and Media Center



ALIVE

GROUP 13
 (61) Small Public Squares
 (124) Activity Pockets
 (126) Something Roughly in the Middle
 (150) A Place to Wait
 (171) Tree Places

DEAD

GROUP 1 < Solutions >
 (61) Small Public Squares
 (115) Courtyards which Live
 (124) Activity Pockets
 (171) Tree Places

Figure 10: Example of place that is both of “alive” and “dead”



Figure 11: Presentation about How to Make Patterns (6th Class)

languages, “Research Patterns” and “Project Patterns”, in my laboratory (Sasaki et al., 2008; Furuichi et al., 2007; Iba et al., 2007; Yumura et al., 2008), introduced their activity for writing a pattern language, especially how to abstract individual experiences and make them into a pattern (Figure 11).

The homework assignment was to summarize how patterns work in design activity, reading from chapter 18 to 22 of the book “The Timeless Way of Building”(Alexander, 1979).

7th Class: Thinking Creativity (3)

In order to receive a stimulus from the actual case of creative works, we watched the video about the research activity of Professor Hiroshi Ishi, a researcher of next-generation computer at MIT Media Lab.(Mogi, 2007). It was originally TV program “The Professional” which was broadcasted by Japan Broadcasting Corporation (NHK). In addition, the students formed a group for writing patterns, where the group consists of 3 or 4 person.

The homework assignment was to write a pattern by abstracting from the video.

8th Class: First Writing a Pattern

Students made a presentation about the patterns from the video.

The homework assignment was to write down 7 sets of problem and solution for creative works. They chose one of the themes: (1) Patterns of Activity and Methods for Creative Work, (2) Patterns of Environment and Relationship for Creative Work, and (3) Patterns of Self-improvement and Sustainability for Creative Work.

9th Class: Proposing Patterns

With other groups who had chosen the same theme, they explained their 7 sets of problem and solution each other (Figure 13). Then they chose 5 sets from their 7 sets, avoiding

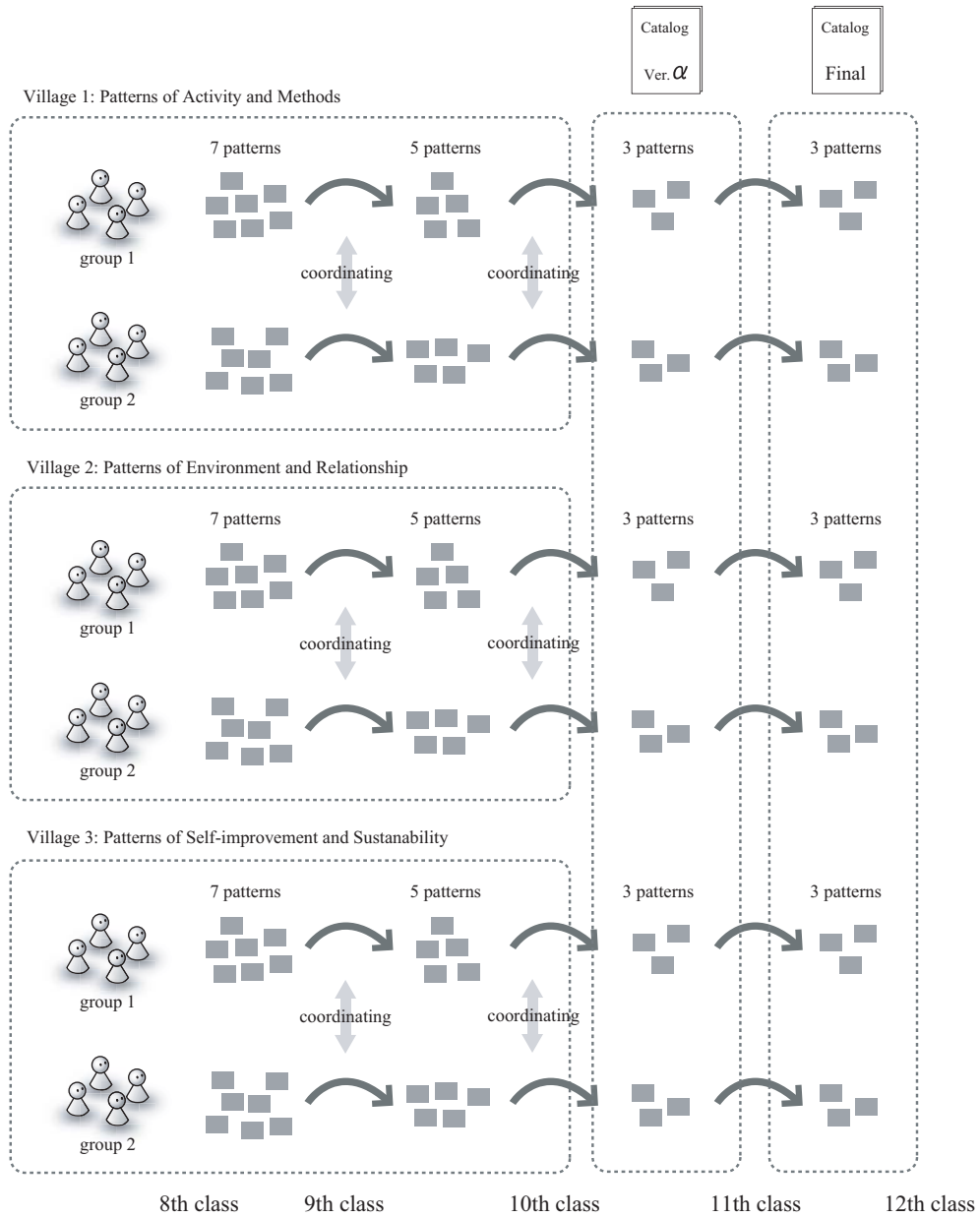


Figure 12: Making Process of Creative Patterns



Figure 13: Proposing Patterns (9th Class)



Figure 14: Blushing Up Patterns (10th Class)



Figure 15: Blushing Up Patterns (11th Class)

duplication with other groups. Student assistants acted as “shepherd” for each theme.

The homework assignment was to write 5 patterns.

10th Class: Blushing Up Patterns (1)

With other groups who had chosen the same theme, they explained their 5 patterns each other (Figure 14). Then they chose 3 patterns from their 5 patterns, avoiding duplication with other groups. Student assistants acted as “shepherd” for each team. The grouping of groups who write patterns under the same theme became to be called as “Village.”, that naming is proposed by the students.

The homework assignment was to improve the description of their 3 patterns.

11th Class: Blushing Up Patterns (2)

We assigned pairs of groups who belonged to different “village”. They explained and reviewed their 3 patterns each other (Figure 15). They reviewed twice in different pairs.

The homework assignment was to improve the description of 3 patterns.

12th Class: Final Presentation and Celebration Party

The final edition of the catalog for “Creative Patterns” was printed and distributed to all of students. Then they made final presentations to propose their patterns (Figure 16).



Figure 16: Final Presentation and Celebration Party (12th Class)

After my reflective talk, we had a small party to celebrate to complete a catalog in the classroom.

4 Feedback from Students

We collected the feedback comments from students in the end of the semester. According to these comments, we can conclude that we achieved success from the viewpoint of our attempt. First, they could learn the concept and the making process of pattern languages by making an original pattern language. Second, they could also deepen their understanding of “creativity” and “creative works” by reading the literatures about creativity, discussing with others, and reflecting their pattern-making activities. The following comments are extracted partially from their comments.

(1) Sophomore, Faculty of Policy Management

“From reading literatures about creativity and making patterns, I learned that every creative expert cares about the similar things. I found it is wrong to think that the only gifted people could do the creative works. They just care about tiny things that we can do too. We can make it better with efforts and consciousness.

In our pattern language, there are some hints about that. When I read the Alexander’s book, pattern language looked complicated and difficult to understand. But I found it had a power to share tacit knowledge with other people. And it will be a power to change the society if we use it. To write and inform about it is the very original attempt, I think, and I am sure that it has possibilities.”

(2) Sophomore, Faculty of Environment and Information Studies

“The logic of pattern language made the image concrete which I felt vaguely, and widened my views. The biggest effect of this class, I begin to find many meanings and accept them when I get some information from TV, books and WWW. I try to find the substantial meaning or theory from information. I felt myself changed. And, I learned that even tiny thing could be a pattern and I thought the patterns were not so difficult things. I am interested in Web-design or advertisement. The knowledge from this class will be useful for my future. This class widened my view and I will make creative ideas through it.

It was very good for me to take this class, which is the first class about “Pattern Language” in our university. To be honest, there were a lot of homeworks to do and that was very hard for me. But I did my best, and the sense of achievement was great. From now on, I will not forget logic of the pattern language and I would like to be sensitive of creativity.”

(3) Freshman, Faculty of Policy Management

“It is the fundamental logic of pattern language that make the tacit knowledge visible and spread it, as I learn. I made my principle: a pattern language should be “pop”. And I participated in group works with it to make it achieve. To make the advanced contents simple for the people to understand, we had a difficult time writing well.

As for me, the pop side of the pattern language was very fascinated. I loved the thought how wonderful to spread the tacit knowledge changing into the explicit knowledge. Maybe Christopher Alexander thought such a thing, I guess. I felt his TIMELESS minds through making patterns in this class.

Actually, I enjoyed this class and I felt that we just made the one object. I got a sense

of achievement to make it out, and this class was really the most beneficial one of my experience. In addition, I made good friends through works. I was right to take this class, thank you.”

(4) Freshman, Faculty of Policy Management

“The first time I knew the concept of pattern language was at the class of “Workshop for Collaboration Skills”. But at that time, I was just a user. I was explained about the pattern language, but I couldn’t figure it and thought that it was like a manual guidebook. In fact, I used it so. But after I took this class and made patterns, I came to understand what the pattern language really was. Then, I could make the most of patterns not as a manual from making it.

When we made patterns, sometimes we forgot to combine the patterns, even that was a feature of the pattern language. We just concentrated on the assignment that was to make patterns concrete. And when we discussed with the other groups, we just paid attention not to make the same patterns with others. Next time I will reflect the combination of patterns to make it more useful.”

(5) Sophomore, Faculty of Environment and Information Studies

“The followings are what I found strongly through writing patterns.

1. Users and writers of pattern language are usually different.
2. It takes long time to write patterns.
3. You can use the pattern language well if you know your requirements.
4. Pattern language shows your requirements distinct.

It takes long time to make patterns. To write the tacit knowledge definitely is the one of features of pattern language. But it means that it is very difficult to tell. So, it takes long time to make it. I think the logic of pattern language is like a recipe of cake. They adjust the recipe with the long time, and we follow it to make good cakes. Even professionals do just like they learned at the cookery school and they add some original techniques to make it modern. “Do the right thing neatly, then it will be special,” Hidemi SUGINO a confectioner said. And I think it has the same meaning as the pattern language.”

(6) Junior, Faculty of Environment and Information

“My discovery is “Situation and Problem should not be the opposite of Solution. Solution itself is sometimes also tacit knowledge.”. For example, at the first time we wrote “we cannot share the vision.” as a situation of the pattern about prototype thinking. But we

reconsidered that maybe the members of project would not be aware that was the basic problem. At that case, they would not notice and use our pattern. So, we wrote the situation like “want to discuss smoothly” and wrote the problem like “Cannot share the vision.” What I found after making the pattern was that problems are sometimes also tacit knowledge for users.”

(7) Sophomore, Faculty of Environment and Information Studies

“In this class, we made patterns of creativity. At the first time, I thought that the each creative people had their own theories and it would be vain to organize them into a catalog. However, from literatures, I found some people saying the same thing even their words were different. And when we discussed in the class there were some groups whose patterns were like to ours, even we did not arrange. From those experiences, I reconsidered that works of this class would be meaningful.

In the finished catalog, some patterns are powerful just by themselves and some patterns relate the others and they will be powerful. I perused it to find relationships between patterns. It was interested beyond expectation. It was fascinated for me that this catalog had a kind of unity even many students were involved in making it. This class was exciting because I could not imagine what we would do next time, and now I reflected it, I felt that I spent useful time.”

(8) Sophomore, Faculty of Environment and Information Studies

“Through this class, we imitated Christopher Alexander and finished to write patterns for creativity. When I reflect, we exactly did what the patterns saying. I realize that what we did was the creative activity for the creativity.”

(9) Sophomore, Faculty of the Environment and Information Studies

“After finished this class, I thought that I underestimated to write patterns at the first time. It is very easy to make a kind of pattern. We just read some books and find a similarity from them, that’s all. But is it universal for everything? No. A kind of pattern is only for the specific situation. It is very difficult to make human activities into patterns.

And another difficult point is that the pattern language for creativity is not similar to the one of Christopher Alexander. The object of Alexander’s one was structures and his patterns existed visible. But the object of ours is abstract and we had to make or use abstract things. It was the reason that we had hard time to discuss it.

I learn that the pattern language supplements with logic of creativity. I am not sure

how we achieved that, but I would like to utilize the logic of the pattern language in some way for my own creative activities.”

(10) Freshman, Faculty of Policy Management

“First of all, the merit of pattern language is put too many knowledge or methods in order through making it. There is a rule of making patterns called “Rule of Three.” It means you have to find more than three similar theories to make one pattern. While searching them, we can recognize the knowledge similar or not. That helps us to make relationships through writing the patterns. To put them in order means also to get out of the chaos of “Methods” and “Techniques” as prof. Iba said. In the present condition, there are too many books and theories to select. We are confused because all kinds of books say they are universal, even actually they are not. Organize the knowledge through making and sharing the pattern language. Then we can make a step forward from this disorder.

Different solutions can be useful for the one context. Until I took this class, I had not such a view. There is a fact that the two diametrical solutions can solve the one problem and it is not unusual. That made my outlook wider.

When we wrote a pattern, one question came to my mind. “Did we really NOT INVENT a pattern?” Many groups including us wrote patterns like this; first, found an interested theory from one or two books and after that, seek the other examples which would support it. We did not read a huge numbers of books and find a theory by chance. I think there are some doubts. First, is our way perfectly objective? Second, is that work worth calling discovery? At last, to search examples for writing patterns, does not it mean the misplace our priorities? and so on. However, the most of these doubts are because of the limit of time and we do not know when we can stop this works. So it is very difficult to reach the conclusion.

These thoughts above reach the one question; will our pattern language really have a “Quality Without A Name” before solving these problems? As Alexander’s theory, patterns declare the tacit knowledge in the world and pattern language is the way to reach the “Quality Without A Name.” If we consider our pattern language for the creativity to be the same as the one of Alexander’s, then our final aim should be the “Quality Without A Name.” One of the sides of “Quality Without A Name” was the antithesis of the main theory at that time. So, at the present time, “Quality Without A Name” is kind of utopia and that role is to make modern theory and practice objective and give us the new point of view. As think so, our pattern language for creativity does not seem to aim that achievement. In that meaning, what we made and what Alexander made is not the same kind. ”

(11) Freshman, Faculty of Policy Management

“I encountered ‘Project Patterns’ in the class of ‘Workshop of Collaboration Skills’ and I found it very interested in. So I was excited to make it by myself in this class.

At the first time, we read Alexander’s book “The Timeless Way of Building” and felt the pattern language was profound. When I read the catalog of Project Patterns, I thought of it just useful method for everyone could use it with changing the tacit knowledge into explicit knowledge. But there are more, I found from this book. To explain “Quality Without A Name” with words is very difficult and it is not just formalized thing. Then, I wonder what is another “Quality Without A Name” of other field, like Christopher Alexander aimed it of building.

Through writing patterns, I realized that some people or methods of different fields cared about the very same thing at the fundamental level. When I started to follow the “Rule of Three”, it was difficult to find from a few literatures, but I widen my view, I could find many similar meaning and I felt it interested. I recognize that creativity is the essence for everything when I found the similarity between a book for creation and business.

Besides, I realized that some things were what I always did without intention. With describing them as patterns, I can do it with conscious or I can do what others always do too. This is very important. Even it is not special for some people that can be a cue to make another people’s idea concrete.

Finally I got the catalog and understood each pattern, I was happy to share this pattern language between members of this class. I felt a kind of community and we will be able to say like “Hey, let’s use ‘*On the Spot*’ now, right?” And with a name of pattern, we can imagine the same page and same view of the catalog at that moment. It will help us not to explain it and moreover, it gives us the sense of unity and joy with sharing the same image. That is an additional value of pattern language, I think. And even when I do the creative activity by myself, I will recall this pattern language because there are a lot of hints to solve any kinds of problems. It will make me think smoothly and enjoy.

When I use it, I can be positive somehow. After all, I thought that this kind of sense is “Quality Without A Name” of our pattern language for creativity.”

5 Conclusion

In our experience, the class to write an original pattern language is effective to learn the concept and the making process of pattern languages. It is also effective to deepen their understanding of the knowledge about the target to write patterns, such as “creativity” and “creative works” in our class. It is hoped that our report will be useful for teachers and facilitators of pattern languages.

Acknowledgment

We wish to express our gratitude to the student assistants of the class, Yohei Yumura, Ayaka Sasaki, Koji Wakamatsu, for designing and managing the class together and for shepherding the students. Thanks are due to members of Iba Laboratory with whom we have discussed several points in this paper, and especially to Noriko Chujo for helping the translation of the students’ feedbacks. Finally, we would like to thank all students who participated in the class.

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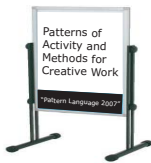
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Appendix

Creative Patterns: A Pattern Language for Creative Work

The following catalog is abstract of “Creative Patterns”, which was written by the students in the class “Pattern Language” at Keio University, 2007. Although, in the original edition, each pattern consists of “Pattern Name”, “Situation”, “Problem”, “Solution”, “Picture”, and “References”, we only show the summary here.



Patterns of Activity and Methods for Creative Work

No.1 Planting Seeds of Idea

Problem

When starting a creative work, it is not easy to find the start point.

Solution

Write down the seeds of idea emerged in the daily life, when reading books and talking with friends.



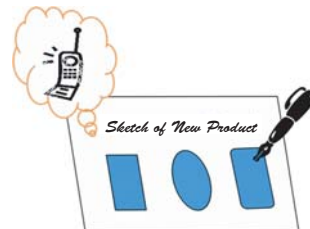
No.2 Draw it!

Problem

It is difficult to arrange the thoughts in an orderly enough fashion to make a concept.

Solution

Draw the picture of the image which is just in your brain.



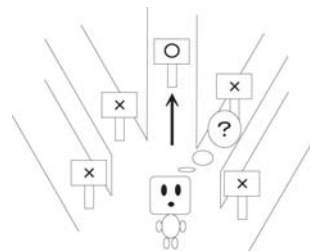
No.3 Constrained Environment as Source

Problem

It is difficult to forget that the environment is much annoyed.

Solution

Utilize the constrained environment as source, rather than just constraints.



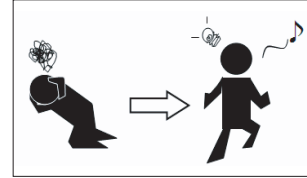
No.8 Like a Child

Problem

The pain has increased in the creative work, and you feel that you are at a dead end.

Solution

Find a factor of “fun” in your creative work, then your imagination is activated by the excitement.



No.9 Small Talk makes Not Small

Problem

The perspective becomes narrow, and it is difficult to go ahead.

Solution

Sometimes change the subject of the talk, and enjoy the small talks. It broaden your horizons and will bring new inspiration.



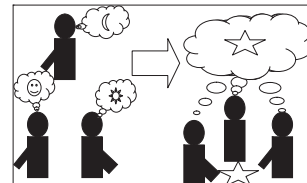
No.10 Proto-Thinking

Problem

The discussion concerning the idea took parallel courses.

Solution

Brush up the idea with making a prototype. It promotes your understanding, and you can share the image with team members.



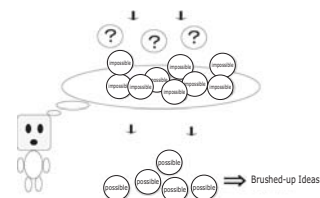
No.11 Edge of Impossibility

Problem

Little idea tends to be chosen from a standpoint of feasibility.

Solution

Discard the idea that is absolutely impossible, and focus on the edge of impossibility. There are new possibilities that have not been realized.



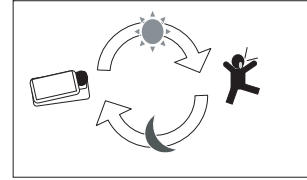
No.12 Rhythm of Life

Problem

The overtime may disturb the health.

Solution

Keep regular hours in daily life. The rhythm becomes the base for creative work.



No.13 Choice of Words

Problem

A fuzzy word makes you confused.

Solution

Care the wording to explain and discuss the idea.



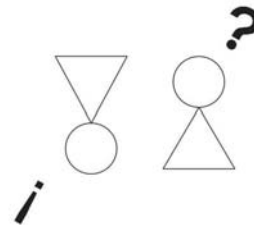
No.14 Reverse Thinking

Problem

There are lots of idea, however only the amount cannot make a jump.

Solution

Change the perspective to think a matter of course, for instance, upside down or inside out.



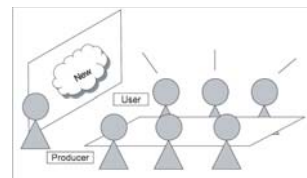
No.15 Involving Users

Problem

The product which you think great is not always great for users.

Solution

Talk deeply with users in your project. Users do not know everything of the product, but the viewpoint of users.



No.16 Make it!

Problem

There is not a foundation which you can come back later.

Solution

Make a prototype for understanding and sharing the image.



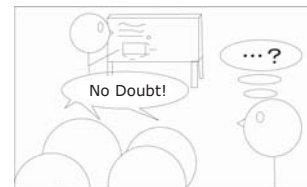
No.17 Doubt “No Doubt”

Problem

When the end of the project or the emergent situation, it not seldom happens a wrong judge, because everybody wants to exit the situation.

Solution

Doubt the conclusion of “No Doubt” for once.



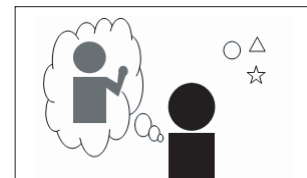
No.18 My First User

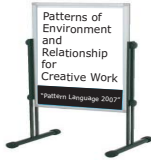
Problem

The idea seems to be not so good for you.

Solution

Put much importance on your first impression, because first user of your product is you.





Patterns of Environment and Relationship for Creative Work

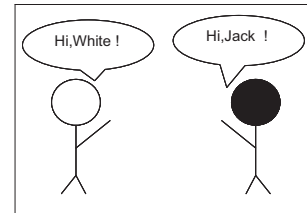
No.19 With a Nickname

Problem

Mental distance among the members brings the goal far away.

Solution

The first step of the project is self-introduction of each other. Calling the member with a nickname makes you close.



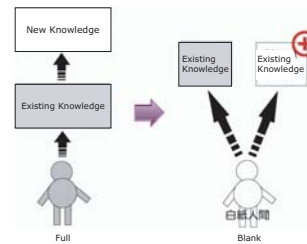
No.20 Be Blank

Problem

Sometimes you should discard conventional ideas, although the idea can be composed by the existing ideas.

Solution

Put away the knowledge from your brain, and make a blank space. Then enhance your sensitivity for imagination.



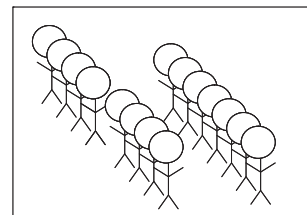
No.21 Understanding Distance

Problem

Understanding a mental model each other is required for success of collaboration.

Solution

During an intermission of the works, try to chat and understand your member deeper.



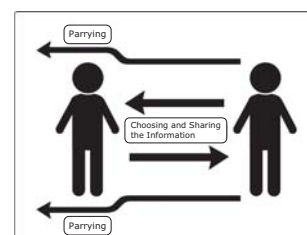
No.22 Parrying

Problem

Overflow of information makes you exhausted.

Solution

Do not treat all information as an information for you. Sometimes you need to parry superabundant information.



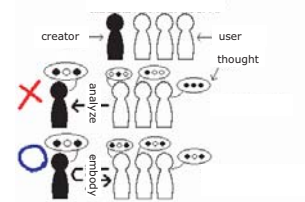
No.23 Creator Side

Problem

After getting the viewpoint of analyzer, the person tends to remain at the stance unconsciously.

Solution

Stand at the creator side rather than a critical mind, during the creation. Critical mind for analyzing your product is required around the review phase.



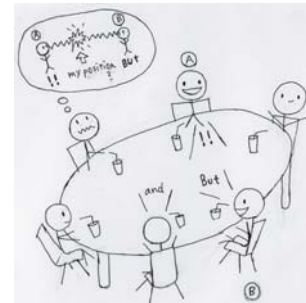
No.24 My Position

Problem

The project cannot proceed any more, because there are no diversity in the roles, for instance, only leaders, idea men, or critics in the team.

Solution

Consider and understand the role of you in the team, and commit the project at your position.



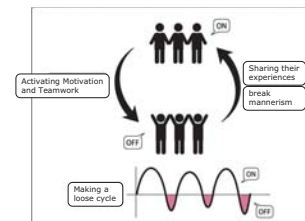
No.25 ON/OFF

Problem

Motivation tends to be getting down with the progress of the project.

Solution

Reset the state of your team, switching ON / OFF, then the cycle promotes the project.



No.26 My Own Base

Problem

The feature of environment influences whether you can settle down to your work or not.

Solution

Prepare your own base for creation, where there are lots of items that are familiar to you.



No.27 Simplicity of Life

Problem

Trivial things consume and irritate you.

Solution

The habit of daily life influences the efficiency of your creative work.

No.28 On the Spot

Problem

You are in constant anxiety as to the result, because you cannot imagine actual needs and the use case.

Solution

Going to your field and observing the phenomena on the spot inspire you. The ratio between observation and thinking should be well-balanced.



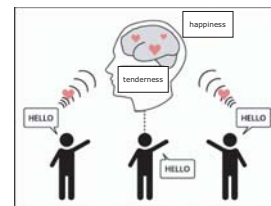
No.29 Aloha

Problem

There are not room in the mind.

Solution

Greeting makes members and you happy.



No.30 Cheerful Facilitator

Problem

During brainstorming or discussion, the silence and uncomfortable atmosphere come up.

Solution

Assign cheerful person for the facilitator who accelerates the nexus of communication.

No.31 Docking Desks

Problem

Each member concentrates on his / her own task, instead of collaboration.

Solution

Make a large table as workspace by docking desks.



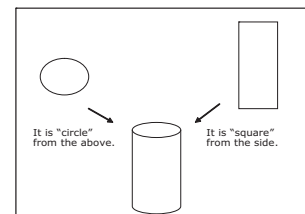
No.32 Multi-Viewpoint

Problem

An emotional conflict, which is caused by the difference of the opinion, hardly arrive at a solution.

Solution

Accept the different opinion at first, then compare and arrange them.



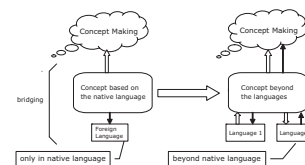
No.33 Lang. Bridge

Problem

Human think based on native language, which is just a framework for describing a world.

Solution

Think from a different viewpoint with using other languages, which you ordinarily use. Languages can act as a bridge between current idea and new one.





Patterns of Self-improvement and Sustainability for Creative Work

No.34 I can Fly!

Problem

You cannot find the possibilities.

Solution

Discard the preconception that you do not have creativity. Believe in that you can fly.



No.35 First Smile

Problem

There are few chance to collaborate with others.

Solution

Smile brings the chance to open others' heart. The nexus of communication is accelerated on the network of smile.



No.36 Memory Tree

Problem

It is easy to find the information on the Internet and drown in the vast expanse of information.

Solution

Use the method of "memory tree". Place the essential point in the center, then grow the branch from the center. This method helps you to find a system in your mind.



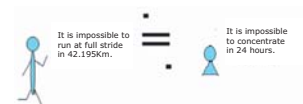
No.37 Tuning Concentration

Problem

Time flies, so a long time is needed for a creative work.

Solution

Tune the level of concentration according the phase and status. Everyone cannot concentrate every-time.



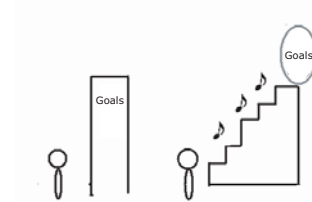
No.38 Small Happiness

Problem

Lower motivation leads to negative thinking.

Solution

The experience of setting and reaching the goals which is relatively achievable makes your motivation up.



No.39 Users in My Immediate Circle

Problem

The image that looks good on your brain sometimes misleads the direction.

Solution

Clarify the target for whom you make a product, and talk with them frequently.



No.40 A Hidden Door

Problem

When your creative work is successful, consequently the completeness hides the door to new world.

Solution

Pay attention to the elements which you omit or forget, and imagine the wholeness in which your current imaginary world is.



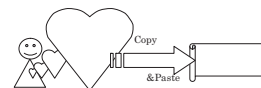
No.41 Feeling Notes

Problem

Various values and perspectives erode your preference gradually, then you tend to fall into losing yourself.

Solution

Write down your feeling during the creative works. The notes will be foundation which you can come back later.



No.42 Color Bridge

Problem

It is difficult to imagine the objects which do not exist in real world.

Solution

Draw your inspiration from colors. Color can act as a bridge between current idea and new one.



No.43 Clean Desktop

Problem

Complexity of the environment inhibits your concentration.

Solution

Clear up your desk and put information into files physically.



No.44 Continual Output

Problem

Inputting the knowledge does not make anything.

Solution

Make outputs continually, then feedbacks and chances come to you.



No.45 Child's Mind

Problem

Deep thinking often takes off your pure feeling for fun.

Solution

Cherish the feeling of "interesting" and "funny" like a child.



No.46 Essence Finder

Problem

The reality consists of lots of branches and leaves. It is difficult to find the essence in their back.

Solution

Listen voice in the bottom of your mind, and conduct the pursuit of essence of matter. What do you really want? What is really needed?



No.47 Bird's Eye

Problem

Human being satisfies the local optimum which is not global optimum.

Solution

Fly from the ground to a sky to grasp the location at where you stands.



No.48 Exit from Patterns

Problem

Pattern languages never cover all of creative works.

Solution

Understand the possibility and limitation of pattern languages, and think yourself about the creativity and its method.

