

Natural Living Patterns: A Pattern Language for Ethical and Sustainable Life

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In this paper we propose Natural Living Patterns, a pattern language for supporting people to lead an ethical and sustainable lifestyle. As the modern society focuses more on living and working natural as human being while relating themselves to the surrounding nature, methods and tools that could support people to realize that lifestyle is in need. Through pattern mining interviews and creating the Natural Living Patterns, we were able to capture the essence of leading such a lifestyle. Out of all the 40 patterns, we describe the following 6 patterns in detail: *Follow the Roots*, *Cheer Shopping*, *Noiseless place*, *Body Dialogue*, *Conscious Food*, and *Minimum Life Cost*. As a way of pattern application, we introduce conducting workshops using the practice we have done with the *Follow the Roots* pattern.

Categories and Subject Descriptors:

General Terms:

Additional Key Words and Phrases: Pattern Language, lifestyle, sustainable

ACM Reference Format:

Kamada, A., Kato, R., Akado, Y., and Iba, T. 2016. Natural Living Patterns: A Pattern Language for Ethical and Sustainable Life. ACM PLoP'16

1. INTRODUCTION

Nowadays, our way of living became convenient and comfortable due to the economic growth and development of information technology. The world's demand has shifted from economic growth along with secured life infrastructure and food source to emotional and mental fulfillment. As the negative effect of profit pursuing business towards human and nature became known, limitation of current system is getting closer. Companies and organization that have noticed these changes have put up slogans considering humanity and society, trying to build a better system. Governments and international organizations also warn the society by setting policies and campaigns (cf. SDGs) to lead the world towards ethical and sustainable direction.

However, individuals that deeply understand the worldwide vision and takes action based on that mindset are not yet large in number. While top-down change of the system is important, there is a need for tools or ways that assist change in consciousness and action of individuals. In this paper we present the Natural Living Patterns, a supporting tool for people to lead an ethical and sustainable lifestyle, by reflecting on their way of living through noticing their connection with the surrounding nature as well as people around them.

2. BACKGROUND

With the globalization due to the rapid development of information technology, people and things can move around easily and we can access information from all over the world, anytime and anywhere. The growth of Internet helped us visualize the problems that we were not fully aware of. Societal problems that need to be solved immediately became known, such as the severe destruction of the environment or disparity in wealth. There are countries with overflowing materials that produces large amount of food waste, while there are people who suffer from hunger given the insufficient life infrastructure. Additionally, forests and ocean is destroyed due to the mass production of industrial goods. Global warming from the massive amount of CO₂ being produced sinks countries and melts glaciers. From such information heard in our daily lives, people are starting to wonder if this is the right way to run a business or to live the way we do now.

In developed countries, the basic infrastructure is already set and we are able to communicate real time with people all over the world beyond time and space. Since everything we need is already here, radical ideas that can change the world or the creativity to come up with products or service that no one has seen before is strongly demanded in the industry. Therefore, workers are in need of creativity, ideas, and speed more than ever, which is becoming the reason to be stressed out [1]. In this context, mindfulness and meditation is attracting attention to live and work better. For example, in forefront IT companies such as Google, the stress workers get was becoming a problem while they aimed for a high goal in a challenging situation on the other hand. As their solution, they prepared a mindfulness program to maintain worker's ability to concentrate and creativity, as well as growing empathy to him/herself or to the world. Other than in Google, this kind of action is being made in lots of companies as well.

The progress in globalization has made the supply chain unclear as the chain has stridden across countries. Form the problems such as the load towards the environment from mass production and consumption or the exploitation of producers due to the demand of low cost in price competitive business model, we can see the limitation of current system. Form these facts, number of companies started noticing that giving too much stress to the workers that they become ill or damaging the environment through the production process is not profitable for the workers or the company itself [2]. What is needed is a way to realize a better way of living and working, through reconsidering our relation with Earth while making economic profit.

3. NEED FOR NATURAL LIVING PATTERNS

3.1 Using the Method of Pattern Language

It is difficult to urge people to change their lifestyle by proposing one-way of living, because each person has their own situation and characteristic such as place to live, the kind of job they do, size of the family, or the sense of values. That is why a tool that can support people to design, based on their situation and characteristic, their own way of living an ethical and sustainable lifestyle is necessary.

Pattern Language is useful in that way since it is a way to put the essence of designing or the practices into words and to share it with others. By not directly suggesting a detailed action but to describe what is good about it and what is the outcome of the action, patterns encourage the readers to change their perspective or behavior. As they continuously look back and apply changes to their lifestyle, it could change how they work and how they live.

Compared to conventional books on lifestyle method that mainly talks about detailed actions to take, what our patterns suggests the reader to do at first is to reconsider one's lifestyle and then decide on the actions to take depending on the situation. Patterns are on topics such as "recognizing the hidden connection between human and nature," "finding the value standard for one's self to build comfortable relationship with surrounding people and nature", and "creating an original lifestyle based on one's value standard."

Our patterns can encourage spontaneous change by giving the readers to think in their shoes and take pattern into action little by little, allowing them to design their lifestyle continuously. Also, since these patterns are not too abstracted, it is easy to use and not so affected by economic conditions or how much spare time the reader has.

3.2 The Process of Making the Natural Living Patterns

Making the Natural Living Patterns begin from August 2015 as a project of Arisa Kamada, Satomi Oi, Younjae Lee and Rina Kato from Iba laboratory, with Takashi Iba as the supervisor. The process we took are: pattern mining through interviews, clustering the pattern seeds using the KJ method [3], pattern writing, and pattern illustrating.

We started by interviewing 10 people who lead an ethical and sustainable lifestyle by relating themselves to the world (Figure 1). For the interviews, we looked at the Mining Interview Patterns to get meaningful ideas. Mining interview is a pattern mining method to gain tactic knowledge from practitioners of a certain theme or domain. By conducting mining interview, it is able to get the key points of experiences through asking along the line of solution, problem, and context [4]. For example,

pattern miners can ask the interviewees any tips, hints, methods they would like to share with beginners, or problems they have faced and how they overcame them.

The interviewees are: Miyako Maekita the president of Sustena Inc. [5], Daisuke Yosumi who is a lifestyle producer [6][7], Natsuko Shiraki the president of the ethical jewelry brand HASUNA [8][9], Takayuki Tsujii the General Manager of an outdoor brand Patagonia Japan, Yasuhiro Suzuki a modern artist [10][11], Safia Minney of ethical fashion brand People Tree Inc. [12][13][14], Masamichi Toyama the representative of Smiles Inc. [15][16], Takamasa Kameishi the representative of Rebirth Project, Ruka Siota the owner of Yusan Pizza, and Zenbo Hidaka the Assistant Priest, Koyasan Sanboin Temple. Through the interview, we mined the essence of their lifestyle, which became the pattern seeds.

In the beginning, we expected interviewees to be highly conscious of environment or society, and thus practice the ethical & sustainable lifestyle from the sense of duty. However, we found out through the interview that they recognize the hidden connection between human and nature and build comfortable relationship with surrounding people and nature. To do so, they make effort to find the value standard for one's self and create an original lifestyle based on one's value standard rather than common sense or economic rules. We changed the name of the pattern language from Sustainable Lifestyle Patterns to Natural Living Patterns through this discovery. It is closer to the idea of practicing the natural lifestyle for human and nature rather than practicing the lifestyle with the consideration of sustainability.



Figure 1. Interviewing people who lead an ethical and sustainable lifestyle

Once the key points of experiences were collected, we used the KJ method to make groups. KJ method is a problem-solving technique named after the cultural anthropologist who developed this method, Jiro Kawakita. It aims to gain new ideas or to reach the essential problem through organizing the complex information. Basic process are: writing out various ideas on cards in one sentence, group the cards by deep relationship, and give each group a name that truly express the contents. Through repeating this process several times, bigger groups that contain original groups are also created.

We were able to group the pattern seeds through this process, which became the outline of patterns of the Natural Life Patterns. Creating a network-like structure between the groups by relating the groups to each other made the patterns into a language form. The overall structure is presented in the following section.

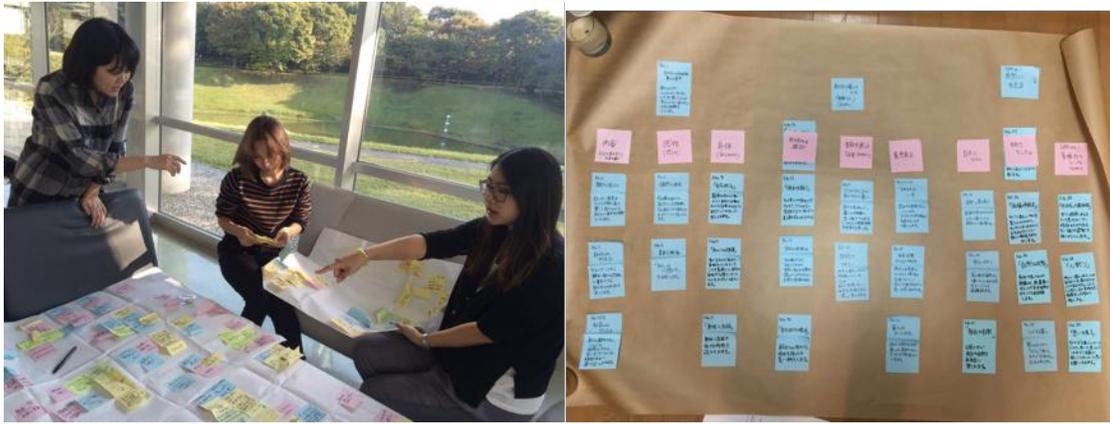


Figure 2. Clustering the pattern seeds by KJ method

After clustering, we wrote out the patterns in detail. Each patterns explained what kind of context it underlies, the problem that often occurs under the context, a solution hint to the problem, and the consequence that explains the result. With force supporting the problem and action supporting the solution, it helps the reader understand the problem further and is able to take the solution into action easily.



Figure 3. Writing and revising the patterns

With the patterns written down and organized in a format, we then designed the pattern illustrations as well as the catalogue. In order to come up with illustration ideas that represent the essence of each pattern, we used the Pattern Illustrating Patterns [17]. Haruka Aramaki, who works as an illustrator, helped us out by participating in this process and provided us the illustrations.

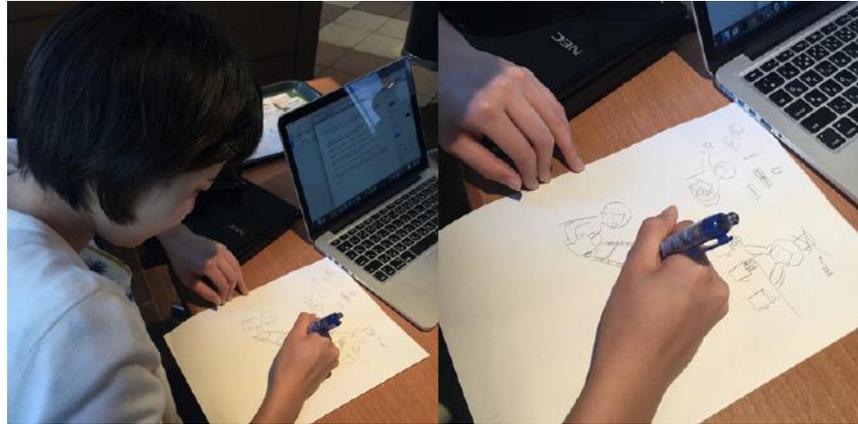


Figure 4. The process of pattern illustration

4. NATURAL LIVING PATTERNS

Natural Living Patterns is a tool that supports people to lead an ethical and sustainable lifestyle through realizing the connection with surrounding people and nature, by reflecting on and update their lifestyle. This pattern language is made up of 40 patterns and is comprised of three pillars: recognizing the hidden connection between human and nature, finding the value standard for one's self to build comfortable relationship with surrounding people and nature, and creating an original lifestyle based on one's value standard. Over all view of the patterns are shown below (Figure 5).

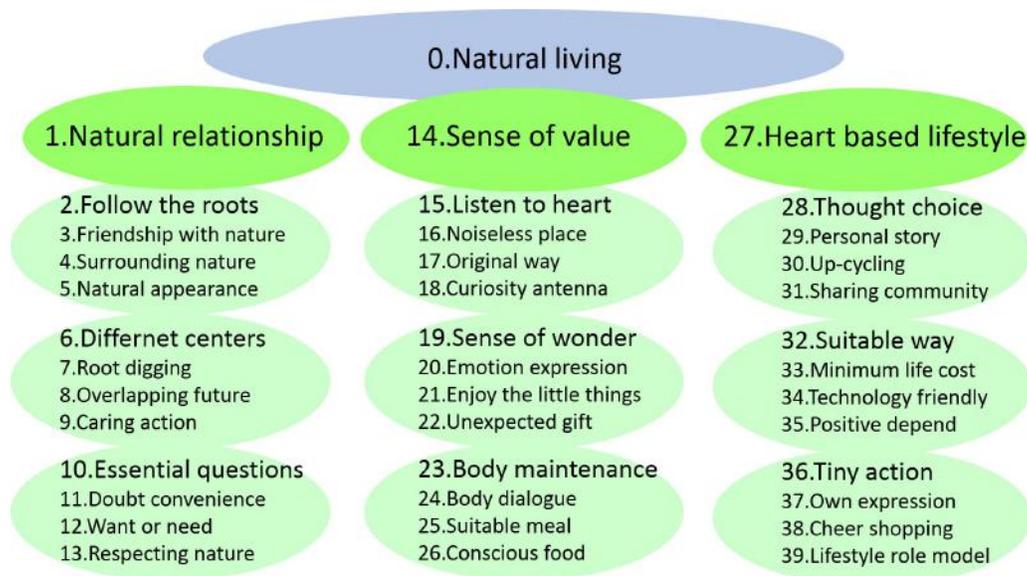


Figure 5. The Whole of Natural Living Patterns

In this section, we introduce the following 6 patterns: *Follow the Roots*, *Cheer Shopping*, *Noiseless Place*, *Body Dialogue*, *Conscious Food*, and *Minimum Life Cost*.

Follow the Roots

Where did this come from, and where will it go?



You eat and live surrounded by many food and things.

▼ In this context

Since there are not so many opportunities to think about the process each one of ingredients or things went through before it came over to us, you live without knowing the true value it has.

There are no chances to think about the background of things or foods. Thus, you tend to forget that the chair you're sitting on or the paper of the book you're reading is made from nature materials. Also, there is a black box between the producers and consumers. That makes it harder to realize the difficulty of producing or the thoughts of producers. The process of manufacturing became complicated and uncertain due to the development of Internet and globalization, which makes us harder to know where and how things were made. When we buy something, we tend to focus on the price and design rather than the process.

▼ Therefore

Trace the roots of foods or things to realize the structure of nature and how human beings are within the circulation of nature.

- Search the production process of your favorite things to know how it's made and what it's made from.
- Buy the whole food as much as possible and cook it by yourself. For example, fillet a fish at home instead of buying a sliced fish, or buy a head of cabbage instead of buying a sliced one.
- Try growing something, such as herbs, at home.
- Choose private shops or markets instead of chain stores to feel the thought of producers.

▼ Consequently

By tracing the roots of foods or things, you can realize how nature supports our life. Knowing that the relationship between human and ingredients are not just buying and consuming, you can be conscious that having valuable lives makes **Conscious Food** possible. Getting interested to food and meal improves the maintenance of your body, making both your heart and body healthy.

Cheer shopping

Shop to show the feeling of support.



You are paying money to get things needed in your life, such as food, clothing, housing, education, medical service, electricity, transportation, or media.

▼ In this context

Without noticing, you may be putting a strain on producers or nature environment through unconscious consumption.

Because we tend to pay attention to one side of buying things, we may not be conscious of many local nature and people involved in the process of making a certain product. In addition, it is difficult to know the thoughts of producers or the reason behind the choice of materials, since products superficially show only its design and price. However, it creates the price competition of pennies and dimes if we only compare products by the price. With the demands of inexpensiveness, producers have to make efforts to cut down the price when they want to focus on the quality. It is easily thought that shopping concludes by exchanging money and the product while being unaware of where the money goes. Shopping can be done without physical money with credit cards and electronic money, so it is hard to have the sense that you are spending money.

▼ Therefore

Buy things with the feeling of support towards the producers and the created environment of the product.

- As money being paid supports the producer, investigate how is your favorite things are made and purchase with the true feeling of support.
- Research where the product was produced in, and shop while questioning whom, how, and where it was made.
- Pay attention to the process of manufacturing to make sure the process is fair and does not destroy the environment.
- When buying products made in undesirable environment, give a little thought towards the fact and be concerned that buying it means that you are involved into the process.

▼ Consequently

In the background of manufacturing process becoming a black box, a sad reality such as exploitation and environmental disruption may be hidden. Knowing those facts and selecting products while keeping in mind to support the producers, you can create a chain of happiness from you to the producers, and to the nature. Even a small support of one person is big enough for the production side. Cheering the producers gives energy to them, which can then be the source of better and meaningful production.

Noiseless place

Find a suitable place to concentrate on yourself.



You want to sophisticate your choice for better life and society.

▼ In this context

It is difficult to concentrate on yourself, thus you find it hard to determine what your true choice is.

Since materials and information surround us, we tend to focus on the outer world rather than the inner self. With the development of Internet, we can feel the connection with others even when we are alone. While it is easy to get information we want, it makes us somewhat uneasy when we don't have the information on the other hand. When there is time, it is hard to prioritize to spend time alone if there's an opportunity to spend time with others. It is easy to go on search before even thinking when we have PCs and smartphones. We can gather various opinions from others easily, which enables us to have the same opinion as someone rather than having an original thought.

▼ Therefore

Find a quiet calm place that you can listen to your heart.

- Natures such as mountains or seas are the suitable place to concentrate on without any artificial materials.
- Finding a café or creating a space at home helps you take time to concentrate on yourself within daily life.
- Organizing your belongings and interiors to have the minimum amount leads you to be surrounded by comfortable things.

▼ Consequently

By cutting off the connection with information from others, advertisement, or Internet once in a while to listen to your heart, you can think about what kind of sense and values you have inside. Thus you don't waste time or money because you can make choice fit you and get things you really need. It's also better choice for society because there is no waste of consumption. Having a place that you can be calm and can concentrate, you can visit there when you get lost in order to think and find the answer.

Body Dialogue

Listen to the message from your body.



You haven't taking enough rest in the busy schedule.

▼ In this context

Without realizing the tiredness, you are unable to do your best in things you do.

Unconsciously, you are focusing on following the assigned schedule or finishing the tasks in front of you. Even if you feel tired, seeing others who seems to be working harder than you makes you feel that being worn out is the outcome of hard work, and working at your "own pace" seems like a selfish thing to do. Being in social systems like companies or schools forces you to follow the way things are done in that system. Even if you want to take a break, you prioritize the assigned tasks thinking about how it could affect the others.

▼ Therefore

Make time to deepen the awareness of your body.

- While still in bed, ask your body how its condition of the day is when you wake up or before sleeping.
- Look in the mirror to check the condition or the change of your body.
- Doing yoga, massage, or stretching exercise to check the condition can be another option.
- Not bringing smartphone into your bedroom creates time for communicating with your body before sleep.

▼ Consequently

Understanding your body is important in order to maintain good condition. You can take tiredness away by understanding yourself well and take action to relieve stress. Therefore you can get a well-balanced mind. You cannot pay respect to others or the earth unless pay respect to yourself. Also, with your best condition, you are able to maximize your ability and become capable of new challenges.

Conscious Food

You are what you eat.



Because of the busy schedule, you cannot take enough time for your meal.

▼ In this context

The purpose of eating is limited to “fill the stomach” and is given less priority to take time for.

There are not much thought given to how eating effects the body. From the restless schedule, you may not be taking time for the meal and end up eating while doing something else. In addition, cheap and convenient foods are appealing for saving time and money. You may be eating more than you really need, because there are many stores and supermarkets where we can get cooked foods easily. Since there are many nutritional foods or processed food products, eating those makes you think that you took enough nutrition.

▼ Therefore

Give a thought towards food that makes your body, and select foods that are currently necessary for you.

- Ask the body what to eat and choose the foods according to condition or feeling.
- Focus on what you eat and enjoy it while eating.
- Avoid chemical seasoning is another option. While supplements can be convenient, it can be replaced by eating foods that include that nutrition.
- In addition, looking for organic restaurants or grocery stores around your house, workplace or school can be a fun activity to do as well.

▼ Consequently

You can choose what to eat based on **Body Dialogue**. Thus, you can enhance the value of time spent for meal, become healthier, and get satisfied. Having the awareness your body is made from what you eat, you think about the making process of food. By having a healthy relationship with meals that make your body, you can be fully prepared to enjoy each and every day. If you care yourself, you can care others or the earth.

Minimum Life Cost

Earn money as the means.



There is an ideal image of a lifestyle you want to make.

▼ In this context

Without noticing, earning money becomes the purpose even if you were doing it to realize your dream.

Earning money can easily become the life goal. When earning money becomes the goal, how much money you have made can only measure the “richness of life”. Money tends to be thought that it is a must need for challenges or to achieve a certain goal. Having money encourages people to buy even the unnecessary things needed in life, and spend too much as a result. Moreover, spending money makes you feel that you need to make more money, regardless of the necessity. The monetary economy enables you to get almost anything with money instead of the barter. Once you get steady income, it is difficult to quit the company because of the fear to lose money.

▼ Therefore

Imagine the ideal lifestyle into details, and calculate the minimum money needed.

- Calculate the minimum cost of a year of life with place to live, things to eat, clothes to wear, and to be healthy.
- Create your own value by asking yourself of the meaning or purpose of having certain thing or making money.
- Concentrate on what you want to achieve, and don't expect too much for other things.
- For example, having a good time with friends or family can be achieved just by being together instead of eating a gorgeous dinner or going on a shopping spree.

▼ Consequently

Calculating the minimum amount money need and understanding the least you should have to live, you can make sure what you really need. Then the consumption cycle will be slow down. The money simplifies the way to feel happy and sometimes makes a shortcut, but looking it from another view can make you free from the strain of money. You can maximize the happiness you feel at the present and challenge more without being concerned with small things.

5. PATTERN APPLICATION

As a way to deepen the understanding of Natural Living Patterns, we conducted a workshop mainly focused on the pattern *Follow the Roots* (Figure 6). The purpose of this workshop was to pay more attention to the background of things we use, food we eat, and clothes we wear unintentionally in daily life. By recognizing the people behind the production of things as well as nature resources being used, we can realize the connection between our lifestyle and the Earth.



Figure 6. Workshop, 2016/03/05@Syonan T-SITE, D-LABO

In order to enhance the effectiveness, we started the workshop from reading the pattern and gave the pattern card as a souvenir to take it into action in daily lives. That way, the participants will be able to remember and understand the pattern further after the workshop. Detailed steps we took in the workshop is as follows:

- (1) Read patterns.
- (2) Choose any food participants like and search its ingredients using books or Internet.
- (3) Draw an illustration of the food with its ingredients on the paper using picture and words to share it.
- (4) Hand some patterns as a souvenir, and encourage them to incorporate some patterns in their daily life.

As the result of this workshop, the pattern became the trigger to think about our daily life from a different viewpoint. In addition, it generated communication among the participants about topics that does not usually come up since the patterns became their common language. Depending on the combination of patterns and contents of the workshop, variations of workshop could be created. The patterns can be used as a tool for participants, but it also works as idea hints for workshop organizers.

6. CONCLUSION

With the change in society, the lifestyle and work style of people are beginning to change. From the times when economic growth was most focused on, where infrastructure of lifeline and securing food were demanded, it is now changing to a time where emotional and mental enhancements are demanded. As the negative influence of profit pursuit type business to people and environment becomes clear, the limit of current business structure is now a reality. That is why many companies and organizations are advocating visions that consider human nature and social nature to fix the structure, but it is hard to say that the consciousness and the action of the individual are also penetrated.

As a tool for individuals to be more coconscious and take action, we introduced Natural Living Patterns as a tool to support people for leading an ethical and sustainable lifestyle by realizing the connection with nature or by reflecting on their daily life. The change in lifestyle and work style of individuals through reading and taking this pattern language into action, it can connect the big vision and small actions together, which includes the possibility of raising the soundness of whole society as well.

ACKNOWLEDGEMENTS

Firstly we would like to appreciate the members of our project, Younjae Lee and Satomi Oi for creating this pattern language with us. We would also like to appreciate Haruka Aramaki for drawing nice illustrations for the patterns. We thank all the interviewees who kindly responded to our request: Miyako Maekita, Daisuke Yosumi, Natsuko Shiraki, Takayuki Tsujii, Yasuhiro Suzuki, Safia Minney, Masamichi Toyama, Takahiko Kameishi, Ruka Siota, and Zenbo Hidaka. Also, we thank the members of Iba laboratory for their great feedback to the patterns. Lastly, we give special thanks to Jessie Henshaw for shepherding.

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