

Reading in the Creative Society: Approaches using the Life with Reading Pattern Language to Inspire Creative Reading

TAKASHI IBA, Faculty of Policy Management, Keio University

AIMI BURGOYNE, Faculty of Policy Management, Keio University

AYAKA YOSHIKAWA, Faculty of Environment and Information Studies, Keio University

FUMIE NIWAI, Keio Futsubu School

NORIHIKO KIMURA, Graduate School of Media and Governance, Keio University

YASUSHI WATANABE, Yurindo, Co.,Ltd. & Keio Research Institute at SFC

In this paper, we will present the "Pattern Language for Creative Reading" as a way to create opportunities to share one's experiences reading, and have dialogues about reading. We will also present its application. We anticipated ways in which reading will change from now on in this creative era and created "Life with Reading," a Pattern Language to support the practice of reading. This pattern language is composed of 27 patterns split into three categories: tips for reading, how to have fun reading, and the idea of "creative reading." With a pattern language, it will be possible to increase the opportunities to communicate about ways of and experiences with reading, and the ways to approach reading. In this paper, not only will we provide an outline of the pattern language itself, but also introduce how it was brought into use, and what was thought of its use when the pattern language was practiced within a University and Middle School. From this actual case of its use, it was suggested that this pattern language is an effective medium to share tips on reading and how to have fun while doing it.

Categories and Subject Descriptors: **[Social and professional topics]:** Computing education—*Informal education*; **[Software and its engineering]:** Language features—*Patterns*; **[Software and its engineering]:** Software development process management—*Design patterns*

General Terms: Human Factors

Additional Key Words and Phrases: reading, book, pattern language, design, creativity

ACM Reference Format:

Iba, T., Burgoyne, A., Yoshikawa, A., Niwai, F., Kimura, N., and Watanabe, Y. 2018. Reading in the Creative Society: Approaches using the Life with Reading Pattern Language to Inspire Creative Reading. HILLSIDE Proc. of Conf. on Pattern Lang. of Prog. 25 (October 2018), 17 pages.

1. INTRODUCTION

In the present day, countless media is used in our everyday lives, and many say that "books are no longer being read" or "books are no longer being bought." It is true that the existence of books as a form of media has changed in comparison to the past. On the other hand, however, there are still many people who have fun with, make use of, and live with books. Perhaps people are split into two large categories: those who enjoy books and those who have not yet found the skills needed to enjoy books.

When asking people who are bad with or do not like reading, they often believe that books must be read thoroughly from the beginning to the end or that the intentions of the author must be correctly understood, leading to them having trouble continuing reading or getting bored and tired while trying to do so. There are cases in which thoroughly reading through or correctly grasping the authors intentions is important. However, that is not all there is to reading, and it should be accepted that there are various ways to read and have fun doing so.

The concept of "How to Read" is in fact very diverse. There are countless reasons for reading, ways to read, and ways to enjoy reading, so the experience of "reading" varies from person to person. However, there are not many opportunities to converse with people about these unique styles of and experiences with reading. What was read (the object), how one understood it (the content), and how much one read (the amount) is often talked about, but how one reads or how one enjoyed reading (the way) is rarely shared.

From this problem awareness, we created the "Pattern Language for Creative Reading," which captures various ways to read and enjoy doing so, and spur creativity. With these sorts of words (a language) about "How to Read," it will be possible to increase the opportunities to communicate about ways of and experiences with reading, and approaches on how to create opportunities to encounter books. The 27 patterns that we will introduce in this paper are separated into three categories: tips for reading, how to enjoy reading, and creative reading. While these patterns can be applied to reading in forms other than books, such as academic papers, newspapers, etcetera, they were created with the reading of books in mind.

In the following sections, we will first discuss the anticipated state of reading from here on in the near future and then provide an overview of the Pattern Language for Creative Reading. Following that, we will introduce an example of its use in a University and Middle School, and how, in this case, it was introduced and what was thought of it.

2. CREATIVE READING IN A CREATIVE AGE

2.1 The Emerging Creative Era

Takashi Iba, one of the authors of this paper, suggests that modern history can be split into three changing eras: Consumption, Communication, and Creation, also known as the three “C’s.” The first “C,” Consumption, refers to an era in which consumerism, buying products and services, was the symbol of happiness. The second “C,” Communication, refers to an era in which good relationships and the ability to communicate with others, on or off-line, was the judge of a good lifestyle.

We are now entering the third “C,” the Creation Era, where people can create what they want. The ideology of this era is supported by several theorists and authors. This includes Richard Florida, who once debated the fascinating trends of the world from the viewpoint of a “Creative Economy” and “Creative City,” and Daniel Pink, who says that following the Information Age is the “Conceptual Age,” where design and empathy will become even more important. In the field of personal fabrication, this same vision is referred to as “Fab Society.” These viewpoints, in the meaning that they mean to make creativity and the ability to “create” widely accessible to people, are all pointing to the same direction. We refer to the society they are leading to as the “Creative Society.”

In this Creative Society, people will put value in the idea of “creating.” The ability to “create” the things you want by yourself will symbolize the richness of life and lifestyles. People will create the things and arrangements around them, organizations and regions that resonate with themselves, and new methods. When this time comes, “Tools for Personal Fabrication” such as 3D Printers, and places such as “Future Centers” or “Living Labs” will become the support for creative activities. People can also write and use Pattern Languages to help create a better lifestyle for themselves.

In the Creative Society, we can create by ourselves the things that we currently see as natural to buy or have made for us, which is the best method to obtain the things that most suit yourself. In this type of society, “how many of the things you want to build are you building” will become the new index to measure the richness of life and lifestyles. This is the third “C,” the Creation Era.

The three changing “C’s” can represent not only the flow of society as a whole, but also changes in individual themes. In the next subsection, we will describe the future of “reading” in the context of the three “C’s” .

2.2 Reading in the Creative Society

In the Consumption society, there was “consumerist” reading. In other words, the main point of reading was to understand and relish what was written in the book. The fact that with that reading style, correctly understanding what was written in the book was considered “good learning” resonates with the learning style of that era.

When the Communication society came about, sending out and interchanging information, evaluations, and criticisms of books, as well as communicating about books, began to hold a larger meaning. Many people began to introduce and recommend books on SNS (Social Networking Services), as well as write their thoughts and reviews about books on book review sites. Communication about books became recognized as a part of the reading experience, and the ways to enjoy reading expanded.

In the Creative Society, people live while creating things around them. Reading as a creative activity is using what is read as a source of ideas, a way of reading that is referred to in this paper as “Creative Reading.” In the Creative Society, the ability to read creatively will be accessible to anybody, a vision we believe can be fulfilled with the “Life with Reading” patterns.

In Creative Reading, what the reader takes in goes beyond the authors intentions and what is written and leads to new discoveries. Reading is not just purely the action of processing words, but is also a significant source of support and stimulation in creative activities.

2.3 Creative Reading

One may be wondering: what exactly is Creative Reading? Put simply, it is reading in order to put a unique image you have into words. When thinking of a new idea or plan, one may have a vague image in their head, but it is often difficult to express it with words. In those cases, the reader can put what they wanted to say into words as they flip through a book. In order to compose their own words, readers should search for words in the treasure chest that is books.

Another style of Creative Reading is using the workings of the theoretical systems or story worlds that are written and applying them to completely different fields. For example, one might think about the process of creating systems within organizations when reading a book about forest ecosystems, or think about the design of educational spaces while reading about the lay-out of Martian colonies. This will, of course, differ from the author's aim of the book and the reader is somewhat arbitrarily reading into it differently, so it is inevitable that the ideas may be a bit of a leap. However, it is this leap that is necessary to spur creative ideas.

In fact, there are sociologists who constructed theoretical systems by using biological theories to think of social systems, and people who innovated various methodologies based on concepts they learned from completely unrelated fields. Readers can take in how what is written in the book and the creative field they are working in relate and use analogies to deepen their thoughts. One can say that that style of reading is extremely related to the Creative Society.

Additionally, there is the style of Creative Reading in which, to paint a vision of the future, the reader collects pieces of what is written in the book as "Fragments of the Future." Whether in a novel, poetry, art-book, or even a manual, one can collect any stories, phrases, and ideas in which they can sense a bud of the future and collect these as parts of the "Fragments of the Future." Reading in order to paint by oneself an image of the future; this is another kind of Creative Reading.

Overall, Creative Reading can be defined as using what is written in books to create the world around oneself. There are most likely people who have already read in these styles we introduced before the arrival of the Creative Society. However, the important feature of the Creative Society is that these reading styles will be widely available to any ordinary person (these reading styles will be put into words which can serve as an accessible tool for anybody to easily use.) That being said, reading to gain direct knowledge and sharing what you took in will remain as a necessity and way of enjoying reading. But in addition to this, we see a future in which creative styles of reading makes the idea of reading even more attractive.

Following this, we will introduce a pattern language that includes tips and ways to enjoy reading in general, and tips for Creative Reading. The to support the practice of these styles of Creative Reading which we went over in the above section. In the next section, we see an overview of the Pattern Language for Creative Reading, "Life with Reading."

3. OVERVIEW OF PATTERNS - LIFE WITH READING

The "Pattern Language for Creative Reading" that we will introduce here was created based on the Pattern Language Creation Process (Iba, 2016 ; Iba & Isaku, 2016) by interviewing around 30 people, with no requirement as to how frequently they read, and digging up the moments they feel ingenuity or enjoyment when reading, and any unique points in their reading habits.

Because the 27 patterns we created this time were made with the purpose of making it easier for those who do not usually read to take one step forward, we focused on making it an entrance that helps solve problems which tend to occur when reading, shows ways to enjoy reading other than just reading the contents, and conveys how to use it as a type of creative medium. Additionally, we made the text itself short so that even those who are not fond of the act of reading can read it easily.

In "Life with Reading: A Collection of Keys for Reading"(Figure 1), 27 "keys" to support the practice of creative reading are introduced and separated into three categories: "Tips for Reading," "Ways to Enjoy Reading," and "Ideas for Creative Reading". Each individual category has nine patterns (Figure 2).

The patterns are not all written in the traditional pattern format. The first category "Tips for Reading" is written in the traditional format of a context, problem, and solution. The next two categories, however, are different. In "Ways to Enjoy Reading," we introduce ways to have fun with reading. Because there is not a "correct" way to have fun, there are not usually problems or forces. As everybody's idea of what is fun varies, instead of writing it in an active voice as usual patterns are, they are mainly written in a passive voice, and written in a more gentle style, with the purpose of introducing some possibilities of ways reading can be enjoyed. "Ideas for Creative Reading" introduces the concept of "Creative Reading." It is the ideal state of reading in the Creative Society put into words, so it does not always have a clear "solution." Because the three

sections have such distinctly different writing styles, and some may not consider the last two sections are patterns, we refer to each pattern as a "Key" for reading.

In the first category, "Tips for Reading," we introduce patterns that show ways to better practice reading. These Keys focus on tips to help people who are bad with reading or do not like to read books face reading better. There are nine Keys that share tips on how to solve worries and problems that tend to occur while reading, such as the reader worrying that they must read the book thoroughly from beginning to end or accurately grasp the authors intentions, or the reader not being able to make time to read.



Fig. 1. The pattern cards of "Life with Reading - a Pattern Language for Creative Reading"

Tips for Reading	Ways to Enjoy Reading	Ideas for Creative Reading
1. Rough Reading	1. Valuable Possession	1. Inspiration for Creation
2. Notes on Pages	2. Discovery of Detail	2. Writing Style Abstraction
3. Freestyle Reading	3. Special Spot	3. Source of Courage
4. Book the Date	4. Familiar Bookstore	4. Alternate Possibilities
5. Meaning of Reading	5. Bookstore Roaming	5. Book Design Inspiration
6. Reading Partners	6. Today's Buddy	6. Framework for Thinking
7. Links Within Books	7. Reading Race	7. Clues for Creative Living
8. Same Deep Feeling	8. Book-Driven Actions	8. Movement of the World
9. Personal Bookshelf	9. Life with Reading	9. Pieces of the Future

Fig. 2. List of the 27 "Keys" in the Pattern Language for Creative Reading

In the second category, "Ways to Enjoy Reading," we introduce ways to better enjoy reading in one's daily life. These "Keys" address the problem of readers becoming bored and unable to close the gap between themselves and books by gathering things that individual people enjoy in reading and their feelings towards books, and putting those points into words, because simply reading the contents of the book does not allow them to thoroughly grasp the goodness of reading. Because they are centered around conveying the enjoyment and charm of books, as to not ruin the positivity, these Keys help solve the problem of people having difficulty making opportunities to get close to books without clearly stating the problem within the pattern contents.

In the third category, "Ideas for Creative Reading," the methods of "Creative Reading," the way of reading in the oncoming times, are summarized. It contains nine Keys about creative methods of reading, where people who live while making various things in the Creative Society can "borrow the power of books for their own creative activities." Like the Keys to enjoy reading, these nine Keys each present individual solutions to the current situation in which people are missing the opportunity to use books as a sort of creative medium, rather than simply a transmissive medium.

While the first two categories do not directly relate to or require Creative Reading, we believe that using these patterns can help inspire Creative Reading.

4. WAYS TO USE THE KEYS FOR READING

Each Key in the "Pattern Language for Creative Reading" is listed on an individual postcard sized card. While the Keys can be applied without the use of the cards, we believe that it is most effective to use them. The main ways to use these cards are to "Put it Somewhere in Reach," "Hear from People who Like Books," "Share Experiences," and "Teach Ways of Reading."

4.1 Put it Somewhere in Reach

Put the "Life with Reading" cards that you would like to practice somewhere that you will see every day. For example, tape it to your bookshelf or put it on your desk. By doing this, you will naturally come in contact with the written "Key for Reading," which will give you a chance to change how you face books and reading. You can simply place the "Life with Reading" card, but putting it in a picture frame is also great. You can even put the card in your planner or notebook to keep it with you at all times.

4.2 Hear from People Who Like Books

Within the "Keys for Reading" that you have not practiced, there may be those which you are not sure how to practice or cannot imagine. In these cases, you can show the card to someone who reads often and ask them how they read. For example, if you ask questions such as "do you do something like this?" or "what are you doing?" you will most likely be able to hear concrete experiences or pieces of advice. You will realize that there are various ways to practice even the same card.

4.3 Share Experiences

Using the "Life with Reading" cards makes talking about our experiences easier. There are several ways in which you can discuss these experiences.

The first method is to spread all of the cards on a table and take turns talking about what you want to. Because you can start off with what you want to discuss, it is easy to talk.

The second method is to shuffle the cards and randomly pass a few to each person. Each person will read the cards they have in their hand and look back at their experiences. Then, each participant will choose one of the cards they are holding, share that "Key for Reading" with everyone and talk about their experiences. This method feels like a game and makes a fun atmosphere.

4.4 Teach Ways of Reading

When teaching ways of reading to people who do not read much, explaining by using the name of the Key as vocabulary and showing the cards makes it easier to convey. For example, when giving homework related to reading or recommending reading, presenting it along with "Keys for Reading" cards allows you to also convey ways and methods for reading. For people who are not good with reading, it becomes a trigger for them to try

to read, while for people who already like reading, it becomes a way for them to broaden the ways they face books. If the words of the “Keys for Reading” become a shared language, it will then be possible to easily convey the Keys by using just the words.

5. CASE 1: SHARING HOW TO ENJOY READING AT A MIDDLE SCHOOL

In the following, we will introduce a case study that took place in at a middle school, with students from ages 13 to 15.

5.1 Background

According to the Reading Survey of 2017, 5.6% of elementary students, 15.0% of middle school students, and 50.4% of high school students do not read even one book a month (non-readers). As one can see, the percentage of non-readers increases with grade level, and the importance of reading in middle and high school education is being pointed at for this.

Some reasons that middle schoolers do not read is that they “are busy with other activities” (54.0%), “have things they would rather do” (56.9), “or “usually do not read” (44.6%). These reasons were given much more often than others, such as they “do not have books they want to read” (35.8%), “do not know what books are interesting” (16.3%), or “are not good with reading” (14.9%). This means that it will be difficult to invite middle school students to read by just introducing a book that they would want to read or going with the conventional approach of teaching students who are bad with reading. On the other hand, the proportion of students who say that the “Morning Reading” program, where students were given an allotted slot of time in elementary and middle school in which they all read, “is fun because I get to read” or “made me enjoy reading books” decreases from elementary to middle and high school, showing that securing time to read does not necessarily lead to subsequent reading.

5.2 How it was Introduced

At the Keio Futsubu School (a private co-ed middle school), every week one hour of the first year’s language arts class (which takes place for five hours every week) is reserved for “Library Time,” where the librarian teaches information literacy and reading education. Up until now, rather than just exhibiting popular books or those that inspired movies and distributing lists of recommended books, we have implemented various reading programs, such as “reading aloud,” “storytelling,” “book clubs,” where a group all reads the same book, and “book talk,” where students introduce a book according to a theme. However, there are many students who do not read outside of class time, and so they were largely split into two groups: those who read and those who do not, with an increase of students who only read highly entertaining books such as light novels and comic books, leading us to seek a better and more effective method for reading education. Specifically, the task was to find out how to share tips, way to enjoy and awareness of reading with students who do have the habit of reading and so do not use their own time to read, and how to get them to have feelings of wanting to read.

The “Life with Reading: Keys for Reading” cards introduced in November 2017 at a workshop for librarians, aim to make a change in attitudes regarding reading by starting dialogues about tips and ways to have fun while reading. This is different from the reading programs that have taken place at school libraries up until now, such as recommending books and talking about the contents of the book or the author. It was decided to use these cards in the classes at the library because it was believed that they can be used to convey tips about and ways to enjoy reading to students who feel the necessity of books but have a hard time getting into reading.

Over the third semester (from the middle of January 2018 to the end of February), 6 class periods were used for reading, with 15 minutes for group discussions using “Life with Reading: Keys for reading,” 30 minutes for free reading, and 5 minutes for reflecting. We selected six Keys that we deemed would help first year middle school students recall their experiences with reading. These Keys were: FREESTYLE READING, ROUGH READING, and READING PARTNERS from the Tips for Reading category, and FAMILIAR BOOKSTORE, BOOK-DRIVEN ACTIONS and TODAY’S BUDDY from the Ways to Enjoy Reading category.

In the class, following the fourth way of using the cards, “Teach Ways of Reading (4.4),” the librarian begins by talking about their experiences with reading while explaining the words and illustrations on the card. Then, the students begin to recall their own experiences and speak one after another, making discussions within the groups begin (Figure 3). This naturally leads into the time for dialogues between students. Furthermore, large

copies of the cards were placed on each desk so that the group can look at it together while discussing. After this, time is given for each student to read freely anywhere in the library they would like and are recommended to try using the Key written on the card they discussed (Figure 4). For example, we recommended that they find the place where they can do their FREESTYLE READING, try ROUGH READING with books other than stories, choose books with READING PARTNERS, or borrow a book as TODAY'S BUDDY for reading in the train from the library. Lastly, the students record on their reflection sheet their thoughts and reading styles they tried during the class and what they would like to try to do later on.

5.3 The Students Practice and Thoughts

From the reflection sheets from each class and the survey we gave after each of the six sessions, we learned the achievements and points that need to be improved in using the "Life with Reading" cards in reading education.



Fig. 3. Sharing their own experiences in the light of the Keys

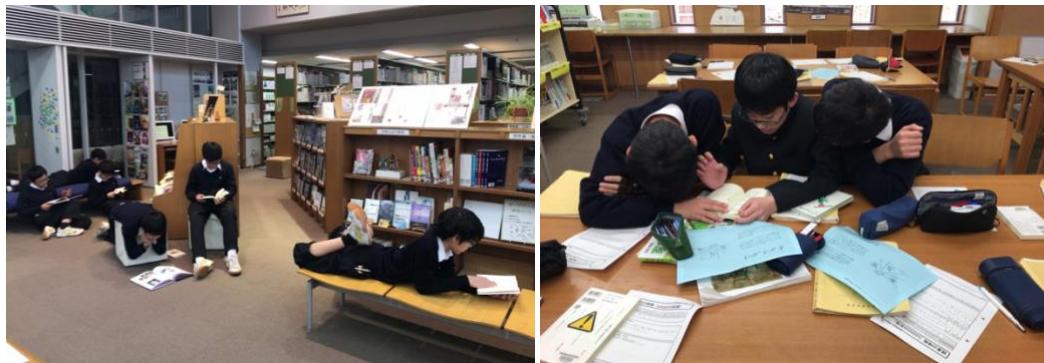


Fig. 4. Students trying out their "Freestyle Reading" in the library (left) and students discussing a book with "Reading Partners" (right).

To begin with, the Key that left the biggest impact on the students and was thought to have a large influence on the students reading after the classes was "Freestyle Reading." Each student has their own "Freestyle Reading," and opinions on the appropriate place for reading were actively exchanged during the group discussion. Within the classes, students tried reading in various places and with various postures. Additionally, there were many students who found spaces or time where they can easily read outside of class (Figure 5). From a state in which there were few students who had talked about their "Freestyle Reading" before (Figure 6), students were able to gain awareness of their experiences by using "Keys for Reading" and put that awareness into words. With this, they could increase communication with their peers and stimulate each other,

making them better able to think of ways to read. For example, comments such as those below were written in surveys taken after the classes ended.

- I checked not only a posture that makes reading easier, but also the environment in my room. I used to read in the winter without the heater on and had a hard time concentrating, so I tried reading with the heater on and I could concentrate. In today's class, I tried out different ways to hold a book and noticed that it is easier for me to read while holding the book with two hands rather than one.
- I tried out various reading styles, such as in the bath or on the train, but when I read on the train I started feeling sick and couldn't read, and in the bath my hand would fall asleep and I couldn't read.
- I thought that reading on my bed is bad because I would fall asleep, but when I tried it, I didn't fall asleep and was able to read relaxed.
- I was able to find a place in my house that I could calmly read.
- Today I read at a very open and spacious place and realized that I read better in more cozy and narrow places.

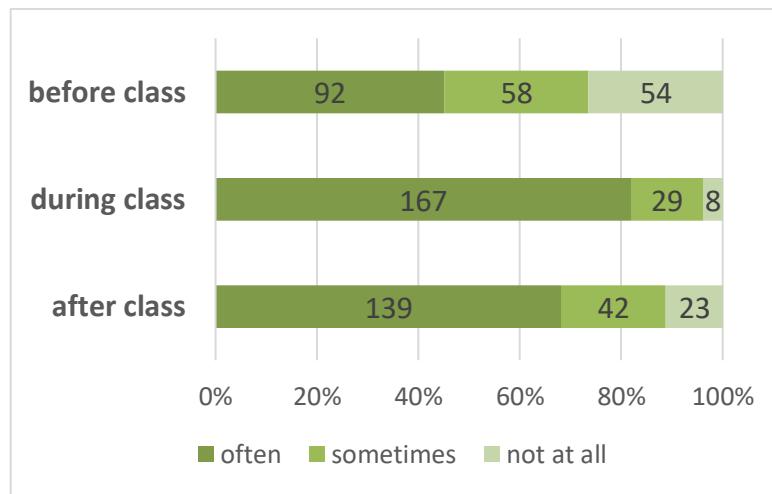


Fig. 5. People who searched for or thought of places where they can read easily

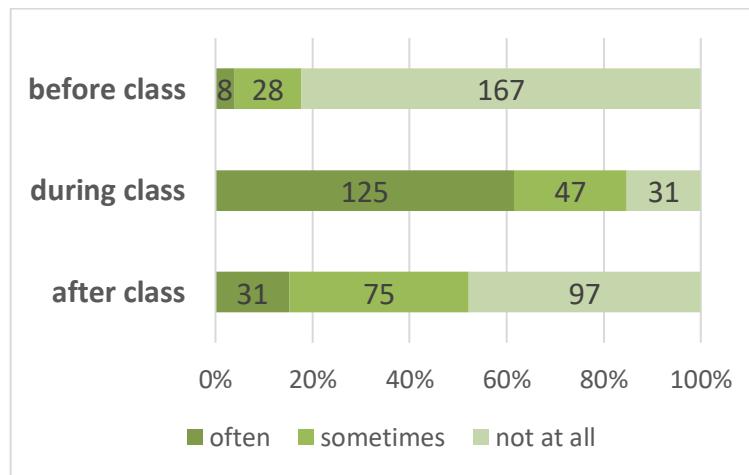


Fig. 6. People who talked with friends or family about where and how they read

On the other hand, the Keys that had the greatest change in number of people who practice it before and after the classes was "Reading Partners." According to the survey, the number of students who search for "Reading Partners" to recommend them books increased (figure 7) and there were a large number of students who

actually read books that their "Reading Partners" read (Figure 8). One can say that students who had before not even thought of getting book recommendations from someone was able to learn tips to find interesting books.

- I never really read books and so I didn't know what books I should read. The friend that I walk home with and I see eye to eye, so I asked them for their recommended author and when I read it, it was very interesting.
- I asked for book recommendations from people who watch the same TV shows and it was very interesting. I realized that books recommended by people who are on the same wavelength are very interesting.

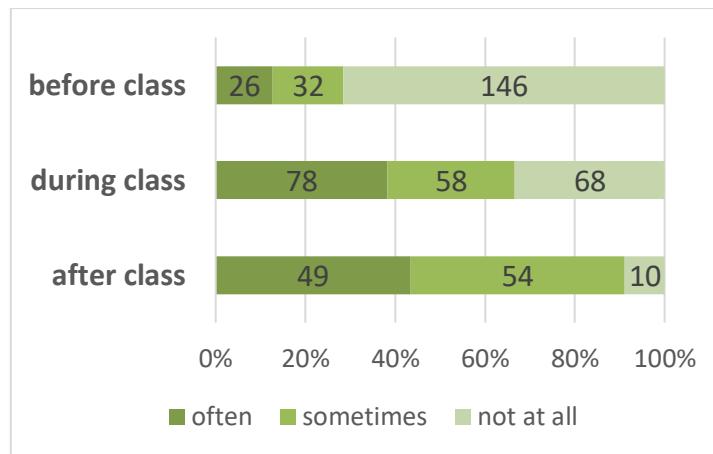


Fig. 7. People searching for "Reading Partners"

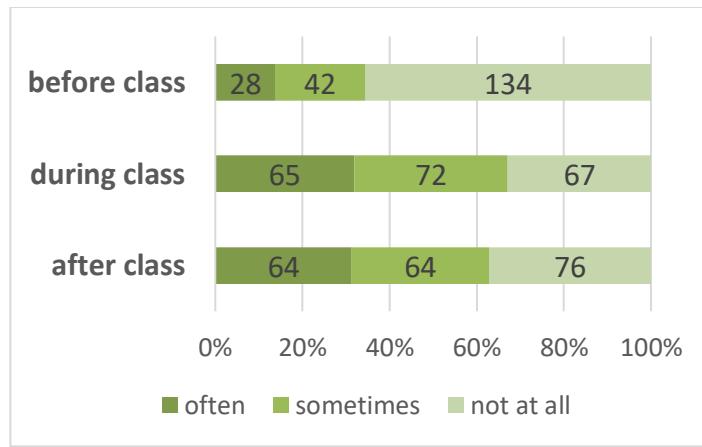


Fig. 8. People who read books that "Reading Partners" is reading

Conversely, the Key that few students tried after the classes was "Rough Reading". This is most likely because most students were reading novels, and so there were not many opportunities for them to try the reading style where they only pick up the necessary parts. However, as shown in the comments below, students who tried out "Rough Reading" or realized that encyclopedias and newspapers are read with "Rough Reading," took in this style in a forward-looking fashion as a way of reading. From here on, in order to teach "Rough Reading" as a tip for reading, it is necessary to make time to read books other than novels during class.

- I tried out this pattern by roughly reading a baseball textbook while reading "Run! Basket ball team at T. High school" (a Japanese novel).
- Today's theme was "Rough Reading," so I chose a book about baseball formations that I could read roughly. It is nice to read the whole thing slowly, but carefully reading specific parts of the book makes it easier to understand, and it made think that this reading style is actually pretty nice.
- It is fun to read the many descriptions and depictions in novels, so I won't read it roughly. However, even if you read illustrated encyclopedias or art books roughly you can understand the contents from the contents, so they are often read roughly. Even in newspapers, people only roughly read the articles they are interested in. I realized that I already know a lot of different reading styles. I want to try it out with other books too.

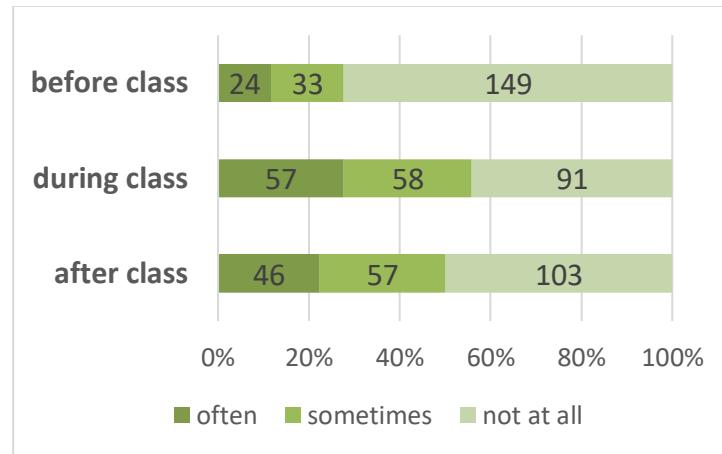


Fig.9. People who do "Rough Reading"

Compared to the other three Keys, " Familiar Bookstore" and "Book-Driven Actions" did not lead to as many interesting discussions during class. There were not many students who talked about it after the classes (Figures 8 and 10), and the number of students who practiced it did not increase much (Figure 10 and 12). One can think that this is because, during the one and a half months in which the class was taking place, there were not many opportunities to go to a book store or do something based on what the students read.

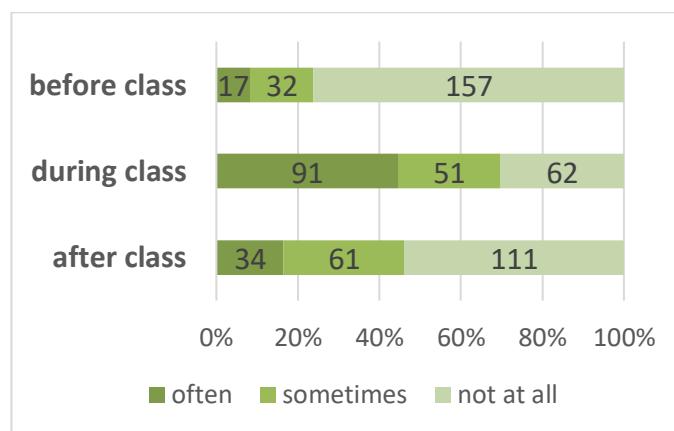


Fig. 10. People who talk about bookstores with their friends

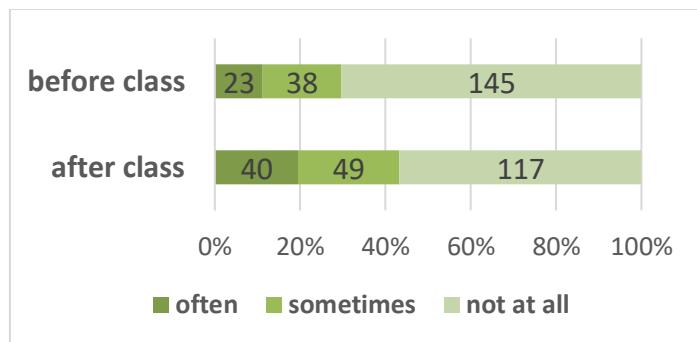


Fig. 11. People who tried going to a bookstore

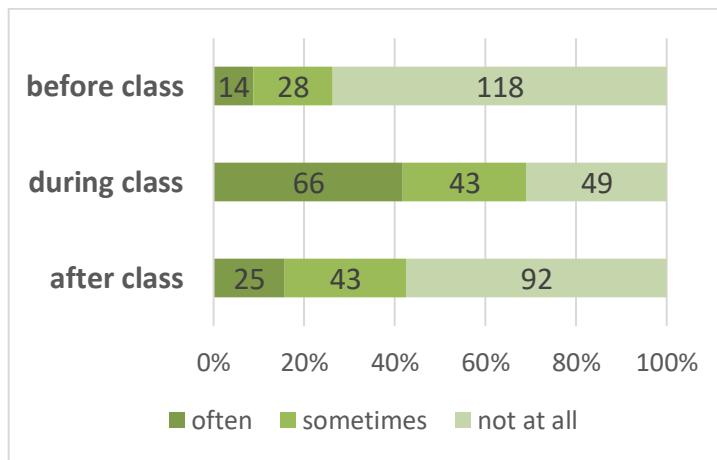


Fig. 12. People who talk about their experience with "Book-Driven Actions"

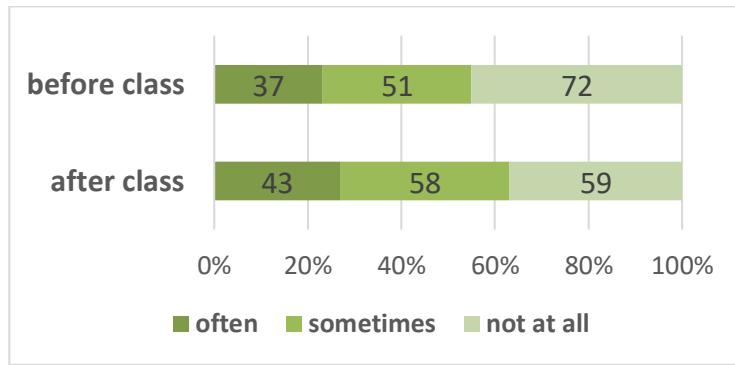


Fig. 13. People who do so something based on what they read

The result of using the "Freestyle Reading" "Reading Partners" "Rough Reading" "Familiar Bookstore" "Book-Driven Actions" and "Today's Buddy" cards from "Life with Reading: Keys for Reading" was that even though it was within a limited time frame, it was able to lead to more communication between peers about tips for reading and ways to enjoy it. Based on the survey following the classes and how things were in the school library, we were able to confirm that even after the classes ended, students are positively engaging in reading by using the names of the "Keys for Reading" in conversations with their peers, and practicing the reading tips. Additionally, 125 students (65%) said that the amount of books they read outside of school increased and 91 students (44%) said that they tried reading books by different authors that they were recommended.

6. CASE 2: DIALOGUE WORKSHOP FOR ADULTS

The last example of an application of the cards that we will introduce is an event where dialogue workshops about reading experiences took place.

6.1 How it was Introduced

At the "Library Fair" that took place in November of 2017 at Yokohama, 200 participants used a number of Keys to talk about their experiences reading in the context of them(Figure 14). The 27 Keys support talking about one's unique experiences with reading and sharing those stories with others.



Fig. 14. Dialogue workshop using the "Keys for Reading"

Some comments we received from the participants were: "It was a very exciting time, and I was able to experience the fact that patterns also function as a tool for communication" and "when people ask me what is good about reading, if I show them these "words," I think they will get in the mood to read. One can say that by sharing experiences with patterns or what you would like to do, one can discover the diverse ways that others read, and it can function as "glasses of recognition" or "media for dialogue".

Also, from people who are not very good with reading but would like to do so, we heard things such as "I had never thought of things like "Rough Reading" or "Personal Bookshelf" I think I would like to challenge reading again" and "I went to a book store and bought five different books to put in my bookshelf. I'm having fun by making plans to read before going to bed and choosing what to read based off of my mood, and reading the parts that I don't really understand roughly." We had examples such as these that connect with practice, and expect that it will become a trigger to read.

We made, as a "Pattern Object"(Iba, et al., 2016), a bookmark and gave it as a souvenir to participants (Figure 15). The bookmark is designed so that you put it in the book you are reading, and so when you open your book it catches your eye and prompts practice of the Keys.



Fig. 15. The Pattern Object, Pattern Bookmark

7. CONCLUSION

In this paper, we introduced a Pattern Language that inspires Creative Reading and examples of its use. Creative Reading is not a new idea, but one which has been practiced by creators, artists, innovators and researchers up until now. In Creative Society in which each person's creativity is desired and demonstrated, we see a future where this idea is open to everyone. The author Haruki Murakami says the following about his experience with reading.

"If books didn't exist, or I didn't read as many books as I did, my life would most likely by much colder and bounded than it is now. In other words, the action of 'reading,' to me, is a significant learning opportunity, and books are like a "school." (Haruki Murakami, 2015, p.210)

Including the various sides such as tips for reading, ways to enjoy it, and creative reading, words about "reading a book" will continue to increase, leading to the entrance of "Life with Reading."

The sociologist Niklas Luhmann said that societies are established by chains of communication, and to change the society, one must change communication (Luhmann, 1989). In regards to education, up until now much progress has been made with reading promotion activities by schools and libraries becoming the main constituent and doing things such as out-loud story-telling and reading weeks, and laws being enacted. Again, in the present day, there is communication about books themselves in the form of internet reviews or recommendations on SNS. However, there is not much communication about the action of reading itself. The reason is that there is not enough of a vocabulary available to talk about reading. For example, the highly educated advocate for editing, Seigo Matsuoka, says the following in regards to techniques for reading books.

"The biggest problem is that the process of reading is hard to see from the outside. Marcel Duchamp says that 'You can see what people see but you cannot hear what people hear,' meaning that 'You can see what people are reading, but you cannot see how people are reading.' " Matsuoka, 2009, p.8)

In the current situation, ways of reading stay as one's own experiences and is not opened or shared with others. The Pattern Language for Creative Reading that we introduced in this paper was made to be a shared language for this purpose, and we would be happy if the cases we provided was successful in sharing an image of the ways of use.

ACKNOWLEDGEMENTS

The Pattern Language for Creative Reading that we discussed in this paper is the result of the joint research between Keio University's Iba Laboratory and Yurindo Co., LTD. Starting with Hiroki Koishi for his commitment to the making of the patterns, we would like to express our thanks to the people of Yurindo Co.

We would also like to express thanks to the project members who worked with us to make the language: Tsuyoshi Ishida, Rio Nitta, Wataru Murakami, and Hina Kato. Finally, we would like to thank the many people who shared their tips for reading and ways they enjoy it in an interview and the members of Iba Lab who gave advice in writing this paper.

APPENDIX: "LIFE WITH READING" PATTERNS

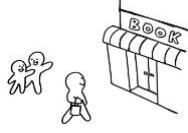
A.1 Tips for Reading*

No.	Pattern Name	Pattern Illustration	Pattern Summary
1	Rough Reading		When reading with the mindset of catching every detail, there may be times when you give up halfway, or are even discouraged from starting in the first place. Therefore, pick up phrases / sections that seem important as you read, grasping the overall flow of the book. Focus on the parts, which you feel, is important instead of getting caught up in the detail. Keep in mind it's always possible to revisit any important sections later. By approaching the reading process in this way, you will be able to understand the overall content of the book even without stressing over detail.
2	Notes on Pages		When reading, you may encounter new exciting ideas. However, as such findings are often instantaneous, you may not get a chance to deepen those thoughts, or even forget them as time passes. Therefore, make habit to have a pen or a pencil any time you read; underline points you feel are important, and write in your thoughts/comments in the margins. By leaving a trace of your thoughts in the book, you will be able to organize and deepen your thoughts as you read. Furthermore, it will make it easier for you to quickly find important sections when you read the book again, and may even allow you to see how your thoughts/knowledge changes and develops over time.
3	Freestyle Reading		When you are sitting down and reading a book quietly, there may be times when you get tired or sleepy, inhibiting you from focusing on your reading. Therefore, by changing your posture or the environment in which you read, find for yourself a comfortable reading style. For instance, instead of sitting still in a chair, you may want to try reading standing up or lying down. You could also listen to music or change the place in which you read. Through finding the styles of reading that work for you, you will find more opportunities in your life to enjoy reading.
4	Book the Date		You may find it difficult to find time for reading in your daily life. Even if you have a book that you want to read, other plans may get in the way. Therefore, build time to read into your schedule and write it in your planner. By regarding reading as something that is as important as any other plan, you will find it easier to make time for it.
5	Meaning of Reading		In a busy life where you are constantly facing task after task, reading can become something of low priority. However, if you continue to neglect reading, you may be losing important opportunities to grow and develop your knowledge in the long run. Therefore, secure time for reading with the mindset that it is a high priority, essential part of your personal growth. The knowledge you gain from reading accumulates and develops over a long period of time. If you are able to identify for yourself how reading contributes to your long-term growth, you will naturally be able to make time for reading even amidst a busy schedule.
6	Reading Partners		Even if you want to make time for reading, there are times when you cannot help but to prioritize other plans. Especially if the book you are trying to read is challenging one, you may get frustrated and give up on it before you can gain any significant understanding. Therefore, search for people who are interested in similar topics as you, and make opportunities to read/discuss the book together. By having other people to read/discuss the book with, it will be easier to establish and stick to a timeline to finish the book.

* The 9 "Tips for Reading" patterns are introduced in full in "Nitta, R., Murakami, W., Watanabe, Y., Iba, T. 2018. Supporting Life with Reading: 9 Patterns from A Pattern Language for Creative Reading. HILLSIDE Proc. of Conf. on Pattern Lang. of Prog. 25 (October 2018), 12pages"

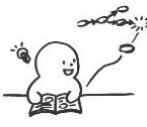
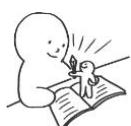
			Furthermore, having people to discuss with, allows you to understand the book through multiple angles, helping to deepen your understanding and clarify any points that you find difficult to understand.
7	Links Within Books		When searching for the next book to read, you may find yourself not knowing where to start. Amidst the vast number of books available to read, it can be difficult to find ones that will be meaningful to you. Therefore, search for works/authors referenced in books that you have enjoyed in the past. In other words, looks for the "links within books". Through using information referenced in books that you enjoy, you will be able to discover works that are relevant to your interest and/or expand your mind.
8	Same Deep Feeling		When looking for the next book to read, it can be difficult to find one that suits your taste. Therefore, find a person whose "wavelength" is similar to yours, and share book recommendations with them. This will make it easier to come across books that you can enjoy, and will allow you to encounter those you wouldn't have found on your own. Even if the topic of the book is something outside of your usual interest, you will most likely enjoy it if you and the person who recommended it share a similar deep feeling.
9	Personal Bookshelf		Even if you find a book that catches your interest, you may not proceed to purchase it if you feel that you will not read it right away. However, you may forget about that book over time, or may not be able to find it when you want it again. Therefore, try to purchase a book at the moment it catches your interest, and have it stashed in your bookshelf for later. Your bookshelf is not only a place to store books, which you have already read. It is also a place to keep books that you may read at some point in the future. By having such books stored in your bookshelf, your bookshelf will begin to resemble your interests in the past, present, and future.

A.2 Ways to Enjoy Reading

No.	Pattern Name	Pattern Illustration	Pattern
10	Valuable Possession		The value of books is not just about what is written inside; a book's physical qualities also contribute to how you feel towards a book. Qualities such as the texture of the pages and the weight of the book are as much part of a joyful reading experience, and may even be the very reason you pick it up in the first place. Furthermore, a book will become even more special if you "dress it up" with your favorite book cover or bookmarks. You'll find yourself feeling cheery and happy every time you pick up such a book.
11	Discovery of Detail		Books are made with extreme dedication and attention to detail. For instance, an author may sneak in some clever references, or even be the creator behind intricate details on the book cover design. When you are able to spot such a subtle but fascinating detail, you won't be able to help but feel impressed. Discovering traces of the authors' passion/dedication can increase your appreciation and respect of both the book and its author. Consequently, your fondness for the book will grow even bigger.
12	Special Spot		As you grow your book collection, there is bound to be a book or two that especially catches your heart. This could be a book that you received from a friend, a book signed by your favorite author, or simply a book that you have loved growing up. A special book deserves a special place to be displayed. For instance, you could put the book at the best place on your bookshelf, or put it somewhere in your room as interior décor. Place your favorite book at a special place, and you'll find yourself smiling every time you catch sight of it.
13	Familiar Bookstore		In order to enjoy reading, you must have opportunities to meet great books, and bookstores are one place where you can find them. If you're able to find nice bookstores (one that suits your taste in books, or one that has interesting layout/displays) that you can visit from time to time, you'll have a better chance of meeting wonderful books. A reliable and comfortable bookstore will make searching for books a delightful experience.
14	Bookstore Roaming		A bookstore is not only simply a "place for buying books"; it is also a place where you can explore. Gazing around bookshelves with many different books, each with its own character, is enjoyable in itself. By paying a visit to the bookstore, you may get the chance to see which books are in season, or even look at books that are out of your usual interest. Noticing changes in the books featured on the shelves, or meeting new unexpected books, are some of the fun parts of visiting a bookstore. If you're able to spot a book that catches your heart, you'll

			find yourself wanting to add it to your collection.
15	Today's Buddy		One of the fun parts of reading is picking out which book to read. Similar to how you pick out clothes to wear everyday, you can also choose books to suit your mood of the day. For instance, if you want to lift your spirits, pick up your favorite novel. If you're feeling ambitious, pick up a book that challenges your mind. The book that you choose will become your buddy for the day, and keep you company throughout the day.
16	Reading Race		Books can be topics of conversations. There may be times when you pick up a book to be able to discuss it with a bookworm friend, knowledgeable colleague, respected teacher, etc. You're sure to feel accomplished if you're able to keep up with some of the niche conversations that you wouldn't have had before. Discussing a book with others is as much of the fun as the reading experience itself.
17	Book-Driven Actions		When reading a book, there may be times when you are introduced to delicious-sounding food or captivating places. By reading about them, you may feel encouraged to have a taste of a dish that shows up in the story, or visit a place from which the plot is based on. Try actually making that dish or paying a visit to the book's location; it will be an exciting experience where your world and the story's world overlap.
18	Life with Reading		One of the fascinating things about books is that they deliver works created by those in the past, to the present. Through reading, we are able to get in touch with a far away world amidst our daily lives. This is possible because people's ideas have been captured and kept in the form of books over a long period of time. When thinking about books in this way, you may feel that having that book in your hands is a small miracle in itself. Getting to witness such a miracle is one of the joys of living a "Life with Reading".

A.3 Ideas for Creative Reading

No.	Pattern Name	Pattern Illustration	Pattern
19	Inspiration for Creation		When creating or designing something, there may be times when you feel that your output lacks originality or depth. In such a case, flipping through books or reading some related passages could help inspire new ideas. Instead of only reading books for the sake of understanding the contents, use them as sources of inspiration that can give you ideas for projects you are working on. Considering books as "Inspiration for Creation" is one of the keys ideas of "Creative Reading".
20	Writing Style Abstraction		When working on a piece of writing, there may be times when you have a difficult time creating a certain mood in your work. In such a case, pick up a book with the tone/mood you are trying to create, and familiarize yourself with such a writing style before you begin the writing process. By immersing yourself in the desired tone/mood beforehand, you will be able to better express the feeling you want to convey in your own writing.
21	Source of Courage		Undertaking creative activities often comes with obstacles and challenges; however, you may not always be in the right mindset to overcome such difficult situations. Reading can give you courage in those instances; the courageous actions of the characters within a book, or the passion that you can feel from the author's words can be turned into your own power and vitality. Books are treasure houses of knowledge on overcoming difficulties and breaking new ground, and can be a "Source of Courage" from time to time.
22	Alternate Possibilities		It's easy to take for granted the lives we live, and the everyday situations we face. However, such things are a build-up of small daily occurrences; it is possible that your life and/or environment could have been very different. Books allow you to see a different world, and stimulate your imagination of "Alternate Possibilities". By witnessing the stories of those with different lives/perspectives, you may be able to re-appreciate your current situation, or get inspired to change your actions.
23	Book Design Inspiration		A book is not only about what is written inside of it. It is comprised of a combination of various other aspects such as the layout / cover design, illustrations / decorations, paper texture, etc. Therefore, apart from reading the contents, one way to enjoy a book is to gain inspiration from its various design aspects. While it might not be a good idea to judge a book by its cover, it can sometimes be a good reason to pick up a book.

24	Framework for Thinking		When you are trying to understand something elusive, there is no need to approach it single-handedly. Theories or frameworks from other domains that can be found in books, could be a useful "Framework for Thinking" to help you understand your topic. For instance, you could deepen your understanding of organizational management while reading a book about an organism's immune system. By taking such an analogical approach, you will be able to perceive things from a different angle than before.
25	Clues for Creative Living		Even if you are told, "we are entering an era of creativity", you may be clueless about what to do if that is not the way you have been living before. Indeed, the time in which every individual is encouraged to exhibit creativity has just begun; however, there are many before us who have lived in this way. By reading books written about such creative people, you will be able to gain hints on how to shape your way of living. Reading is, in other words, a way to gain "Clues for Creative Living".
26	Movement of the World		What sort of world do we live in? The news helps us keep up with what goes on in the world, but often times the news only show prompt, short-term information. Books can be used to gain an understanding of a mid to long-term evolution or movement of the world. This can be done by not only reading books, but also by visiting bookstores and seeing what kinds of books are being published/featured at that time. By observing the books that are in season over a period of time, you will be able to gain a sense of the "movement of the world".
27	Pieces of the Future		What will the future bring? That is one rhetorical question, which no one can answer. However, it is also true that the future does not come out of nowhere; it is, in fact, connected to the present. Therefore, one way to utilize reading is to look for "Pieces of the Future". Books can help you collect various ideas and hints, which you can use to put together to create your own future vision. Taking such approach is the ultimate form of "Creative Reading", and will be the base for you to live your life creatively.

REFERENCES

- Alexander, C., Ishikawa, S., Silverstein, M., Jacobson, M., Fiksdahl-King, I. and Angel, S. (1977), *A Pattern Language: Towns, Buildings, Construction*, Oxford University Press. New York.
- Iba, T. (2015) "Pattern Languages as Media for Creative Dialogue: Functional Analysis of Dialogue Workshops" in PURPLSOC: The Workshop 2014, eds by Peter Baumgartner, Richard Sickinger, Berlin: epubli, pp.236-255.
- Iba, T. Yoshikawa, A., Kaneko, T., Kimura, N., Kubota, T. (2016) "Pattern Objects: Making Patterns Visible in Daily Life" (Chapter 11) in Matthaus P. Zylka, Hauke Fuehres, Andrea Fronzetti Colladon, Peter A. Gloor (eds.), *Designing Networks for Innovation and Improvisation* (Springer Proceedings in Complexity), Springer International Publishing, pp.105-112
- Luhmann, N. (1989) *Ecological Communication*, University of Chicago Press, Chicago, IL
- Matsuoka, S. (2009) *Tadokujutsu [How to Read Books A Lot]*, in Japanese Chikumashobo.
- Ministry of Education, Culture, Sports, Science and Technology, Homepage for Promotion of children's reading activities, http://www.mext.go.jp/a_menu/sports/dokusyo/suisin/index.htm
- Murakami, H. (2015) *Shokugyo Toshiteno Shosetsuka* [Novelist as a profession], in Japanese, Switch Publishing. Sten Andler. 1979. Predicate Path expressions. In *Proceedings of the 6th ACM SIGACT-SIGPLAN symposium on Principles of Programming Languages (POPL '79)*. ACM Press, New York, NY, 226–236. DOI:<http://dx.doi.org/10.1145/567752.567774>

Received May 2018; revised October 2018; accepted February 2019