

# **Pattern Song: Auditory Expression For Pattern Languages**

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This paper introduces the concept of the ‘pattern song’ as an auditory expression of a pattern language and presents the first such song. A pattern song is one in which the pattern language and its patterns are embedded into the lyrics. The song introduced in this study is ‘Everyday World-Making,’ which expresses patterns from ‘Ways of Everyday World-Making,’ a pattern language for living well while working and parenting. Pattern song ‘Everyday World-Making’ tells the story of a parent who goes from being worn out by working and parenting to finding happiness and contentment in their everyday life. As the targets of this pattern language may have busy daily lives, auditory expression is an effective way to share these patterns. This paper discusses the auditory expression of a pattern language and analyzes the relation between lyrics and patterns, as well as feedback from listeners.

Pattern Language; Song; Music; Pattern Object

# 1. Introduction

Pattern language is a method for describing practical knowledge in ways that can be shared and used by others. A type of creative problem solving, it also functions as a common vocabulary that can be shared among a group of individuals in collaborative activities. Created in 1977 by Christopher Alexander in relation to the field of architecture (Alexander et al. 1977), the method has been adapted to a range of fields including software design (Beck and Cunningham 1987), education (Pedagogical Patterns Editorial Board 2012), welfare (Iba and Okada 2015), and social change (Shimomukai et al. 2015).

Pattern languages are generally presented as reading materials (e.g., books, papers, cards, and webpages). Many patterns have been published in book form (Figure 1). In the software community, patterns are shared as academic papers and submitted to pattern language conferences (PLoP and other PLoPs held all over the world). Patterns have also been shared via the Internet in locations such as Ward Cunningham's Portland Pattern Repository, which contains software design patterns in the first ever wiki or reader-modifiable web pages.

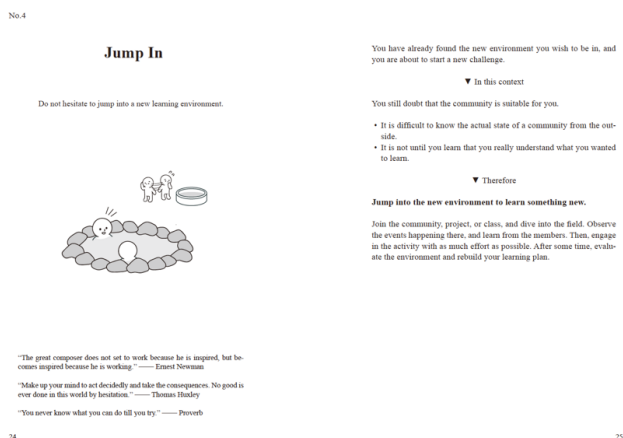


Figure 1: Book extract from 'Learning Patterns' (Iba and Iba Lab, 2014)

In recent years, pattern cards such as Iba Lab's 'Presentation Patterns Cards' (Figure 2) and 'Group Works'<sup>1</sup> have been introduced as tools for using pattern languages in collaborative settings, such as dialogue workshops (Iba, 2014, 2016). The 'Learning Patterns Card Game' is a card game to become familiar with the Learning Patterns, a pattern language for

<sup>1</sup> Group Works: a pattern language for bringing life to meetings and other gatherings. <https://groupworksdeck.org>

creative learning (Okazaki, et al., 2011), and the 'Fearless Journey'<sup>2</sup> game cards allow users to learn about patterns on introducing new ideas within organizations (Manns and Rising 2005) in the form of a game. More recently, 'Pattern Objects' (Iba et al., 2016) have been introduced as a way to make patterns visible in everyday life (Figure 3).

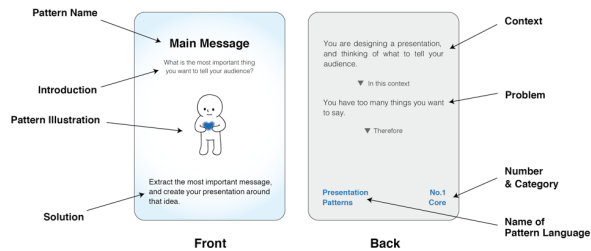


Figure 2: A pattern card from the 'Presentation Patterns'



Figure 3: Pattern objects that make patterns visible in everyday life (Iba et al., 2016)

As mentioned above, patterns are shared through visual media in the form of printed words. We wondered, however, whether patterns could be shared in a way that allows the audience to understand and internalize them in a more effortless, natural and non-visual manner. This led us to explore music and lyrics as a new form of pattern-sharing media. In

<sup>2</sup> Fearless Journey: A GAME THAT GETS YOUR TEAM UNSTUCK. <http://fearlessjourney.info>

this paper, we present the concept of the pattern song as an auditory medium for sharing pattern languages.

## 2. The function of 'songs' as media to foster empathy

Music is one way to convey a message to an audience in a way that is unobtrusive and easy to accept. The lyrics and associated melody functions to express the story of the song, which naturally evokes emotion and influences the listener's mood. Additionally, a song is a story being told by a person's unique voice, which gives a feeling of comfort to the listener. These comforting, melodic qualities allow a song to deliver its message naturally and smoothly. Songs and their lyrics are thus easily internalized. They are capable of moving the listener's emotions without the feeling that these have been 'forced' upon them by some outside force. Instead, the words create the feeling that the listeners arrived at the message by themselves, or that their hidden feelings were revealed and made explicit through the song. By giving rise to these thoughts, songs are able to positively empower listeners. Music can thus be thought of as a type of expression that is very close to the human soul, and a media that fosters empathy.

In the book *The World in Six Songs* (Levitin, 2008), Daniel J. Levitin states the following regarding the function and power of songs: "the demonstrated power of song-as-memory-aid has been known to humans for thousands and thousands of years" (Levitin, 2008, p.177). "Why does music have such power to move us?" he asks. To which the answer, with reference to Pete Seeger, is that it is due to "the way that medium and meaning combine in song, the combination of form and structure uniting with an emotional message."

Interestingly, songs were once a means of communicating important information in our daily lives. Before the development of print technologies, everyday know-how was shared and passed down through 'knowledge songs'.

”Ubiquitous also in every culture are the kinds of knowledge songs that encode information vital to the survival of every member of the group, not just warnings about crocodile aggression, but day-to-day guides such as how to cook certain dark green leaves so that they are less bitter, or where to get fresh drinking water without invading the territory of a neighboring tribe.” (Levitin, 2008, p.159)

However, these knowledge songs became obsolete with the invention of the printing press.

” *“With the invention of the printing press, the need for knowledge songs started to fade. In preliterate societies, they were the sole repository of cultural knowledge, history, and day-to-day procedures. They would have been fundamental to information transmission. Today knowledge songs are of a different stripe.” (Levitin, 2008, p.151)*

Walter J. Ong called the modern electronic age an age of ‘secondary orality’ (Ong, 1982), in which knowledge songs may return in a new form. According to Ong, the age of orality was followed by the age of literacy (writing/print), which was followed by the current age of secondary literacy (videography, etc.). In other words, after writing and print became widespread, orality took on renewed importance through the development of the telephone, the radio, the television, and other electronic technologies.

” *“... with telephone, radio, television and various kinds of sound tape, electronic technology has brought us into the age of “secondary orality”. This new orality has striking resemblances to the old in its participatory mystique, its fostering of a communal sense, its concentration on the present moment, and even its use of formulas (Ong 1971, pp.284-303; 1977, pp.16-49, 305-41). But it is essentially a more deliberate and self-conscious orality, based permanently on the use of writing and print, which are essential for the manufacture and operation of the equipment and for its use as well.” (Ong, 1982, p.133-134)*

The pattern song – an oral representation of a pattern language, a literary media – is an example of expression in this age of ‘second orality’.

An important aspect of the pattern song is the fact that songs are a form of expression that is easy to be memorized.

” *“Songwriters know implicitly that setting something to music is the best guarantee that it will be remembered. In contemporary society, writing things down on paper, a PDA, or a computer may seem more practical, but it may not be more powerful. Songs stick in our heads, play back in our dreams, pop into our consciousness at unexpected times.” (Levitin, 2008, p.153)*

The idea of expressing pattern language in the form of a song is also somewhat practical when considering ‘art’ in a broader context, as language and art have similar functions.

” *“Language and art both serve to represent the world to us in ways that are not exactly the world itself, but which allow us to preserve essential features of the world in our own minds, and to convey what our minds perceive to others.” (Levitin, 2008, p.16)*

In other words, pattern language expressed linguistically, and pattern language expressed as a song both function in the same way. This is reinforced by Niklas Luhmann's Social Systems Theory, in which language and art are both defined as media for coupling physical systems of consciousness and social systems of communication (Luhmann, 1984, 1997). Language and art both function to aid thinking and communication.

### 3. Pattern song: 'Everyday World-Making'

This section will present the pattern song, 'Everyday World-Making'. We will describe the process of creating the song, as well as its relation to the original pattern language, 'Ways of Everyday World-Making' (Iba Lab and Lifestyle Research Center, 2016; Ogo, et al., 2017). 'Everyday World-Making' was created as a song that expresses the concepts of 'Ways of Everyday World-Making,' a pattern language about living well while working and parenting.

The pattern song is written from the perspective of possible readers of the pattern language, which, in this case, is people living busy lifestyles centered around working and parenting. This section will first present a short description of the pattern language, 'Ways of Everyday World-Making', followed by a description of the creative process and final output of the pattern song, 'Everyday World-Making'. Finally, the section will discuss the pattern song's relation to the pattern language.

### 4. 'Ways of Everyday World-Making' patterns

'Ways of Everyday World-Making' is the pattern language on which our pattern song is based. 'Ways of Everyday World-Making' is a human action pattern language (Pattern Language 3.0) that deals with how to live well while parenting and working. The underling concept to 'Ways of Everyday World-Making' is 'to create the everyday world in which we live'. 'Ways of Everyday World-Making' operates under the belief that the world in which we live, raise our children, work, and enjoy activities is a product of our individual efforts. That is, we make it for ourselves.

This pattern language consists of 34 different patterns that can be read by anyone, regardless of age or gender. The 34 patterns are organized into a core category, Own World-Making, and seven sub-categories: Original Color, Smart Juggling, Helping Hands, Turning Point, Growing with the Child, Thoughtful Gift, and Dear Future. The names and illustrations of patterns in each category are shown in Figures 4-11.

## 0. Everyday World



Figure 4: A pattern in the Own World-Making category

### 1. Natural Balance



### 2. Palette Mixing



### 3. Search for Style



Figure 5: Patterns in the Original Color category

### 4. Plenty Simple



### 5. Compose the Day



### 6. Good Stopping Point



### 7. Quality Chore Time



### 8. Favour for Future



### 9. Focus and Simplify



Figure 6: Patterns in the Smart Juggling category



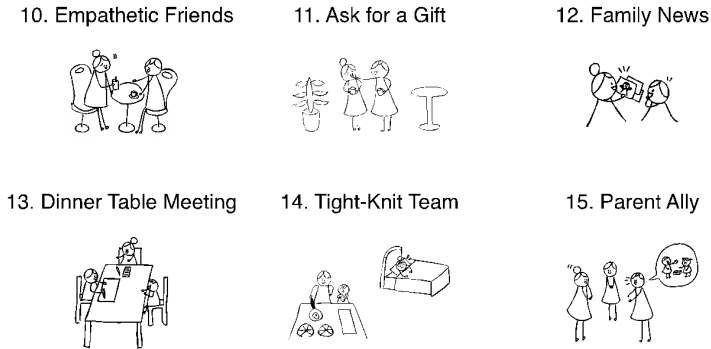


Figure 7: Patterns in the Helping Hands category

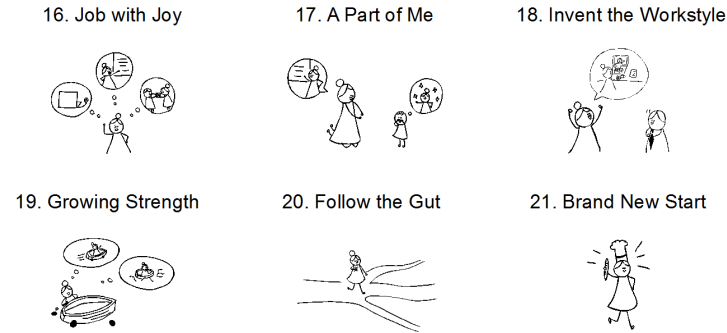


Figure 8: Patterns in the Turning Point category

22. Share the View



23. Child in Charge



24. Take-off Chance



25. Journey of Parenting



26. Test for Fit



27. Ready for Chance



Figure 9: Patterns in the Growing with the Child category

28. Reflection Check



29. Time for Favourites



30. Gesture of Love



Figure 10: Patterns in the Thoughtful Gift category

31. Sketch of Future



32. Warm-up for the Hike



33. Precious Memories



Figure 11: Patterns in the Dear Future category

## 5. 'Everyday World-Making' and the song writing process

The pattern song 'Everyday World-Making' tells the story of a parent who goes from being worn out by working and parenting to finding happiness and contentment in their everyday life. Through the course of the song, the parent discovers the preciousness of everyday

life and learns to appreciate to the people around him/her. In so doing, he/she is able to become more positive about him/herself.

The song was written following the Context, Problem, Solution structure, with the concept of 'creating our own world together' as the central message (as is the case in the 'Ways of Everyday World-Making' patterns). The song-writing process began with the chorus section, which reflects the main message of the pattern language. The A and B sections were written after the chorus. The A section comprises lyrics that introduce the context and the problem of the story, while the B section contains the episodes that lead into the chorus (resolution). The song was written to embody the overall message of the entire pattern language. After the initial draft was completed, the song was further revised through a series of collaborative feedback sessions with one of the authors of 'Ways of Everyday World-Making'. Concepts from additional patterns to the original pattern language were added to the song as part of this process.

'Everyday World-Making' is written from the perspective of a working parent. However, the song targeted a younger audience who may be thinking about become parents in the future. The music of 'Everyday World-Making' was created by MayuGene (Mayu Ueno), and the lyrics were written by MayuGene (Mayu Ueno) & Takashi Iba. The song was released on iTunes<sup>3</sup>, Spotify<sup>4</sup>, Google Play Music<sup>5</sup>, Amazon Music<sup>6</sup> and other music platforms (Figure 12), and has been performed at various pattern language workshops and talks (see section 4).



Figure 12: Cover image of the pattern song 'Everyday World-Making'

## 6. Relation between the pattern song and the pattern language

As mentioned previously, 'Everyday World' was written to express the messages contained

<sup>3</sup> <https://itunes.apple.com/jp/album/id1271022854>

<sup>4</sup> <https://open.spotify.com/album/2RmeBs57qKLuLbr9L69QQ>

<sup>5</sup> <https://play.google.com/store/music/album?id=Bdnmej7yu32fy6ovafox3plr4e6q>

<sup>6</sup> <https://www.amazon.com/dp/B074RD3WJP/>

in the pattern language, 'Ways of Everyday World-Making'. Figures 13-15 show the lyrics of the song, and how these lyrics are related to the patterns. The left side of the figure shows the lyrics in Japanese (the song's original language). The right side gives a translation of the song and a list of patterns relating to certain parts of the lyrics.

These figures show that the beginning of the song tends to contain more Problem elements (written in blue, designated (P)), while the chorus and later parts consists of lyrics relating to Solutions (written in green, designated (S)), Categories (written in brown, with brackets [ ]), and Names (written in red, designated (N)). This gradual shift from Problem to Solution to Consequences was designed so that listeners can follow the transition from a problematic situation to a better, more buoyant quality of life.

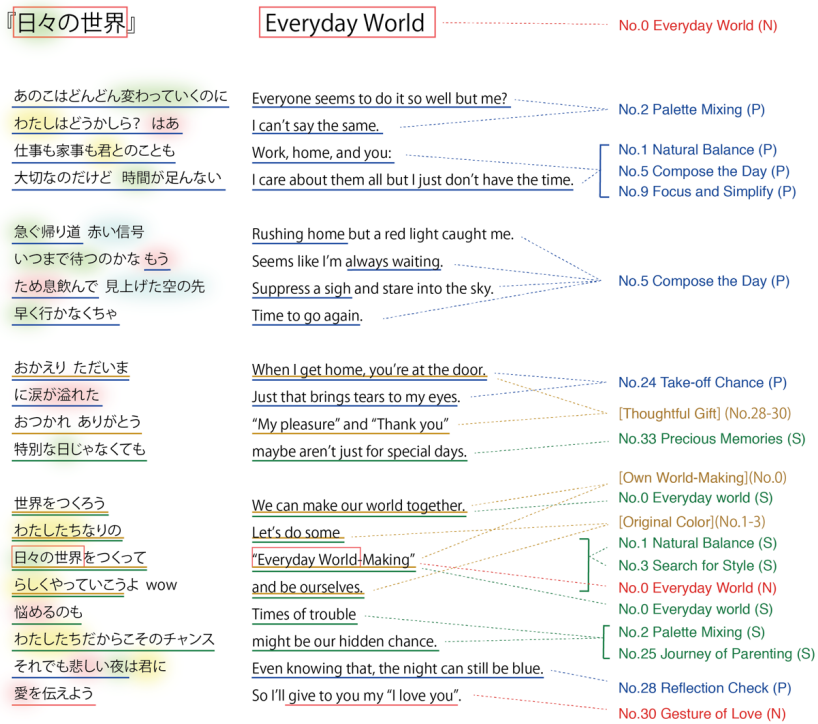


Figure 13: Patterns and categories embedded in the lyrics of Pattern Song #1

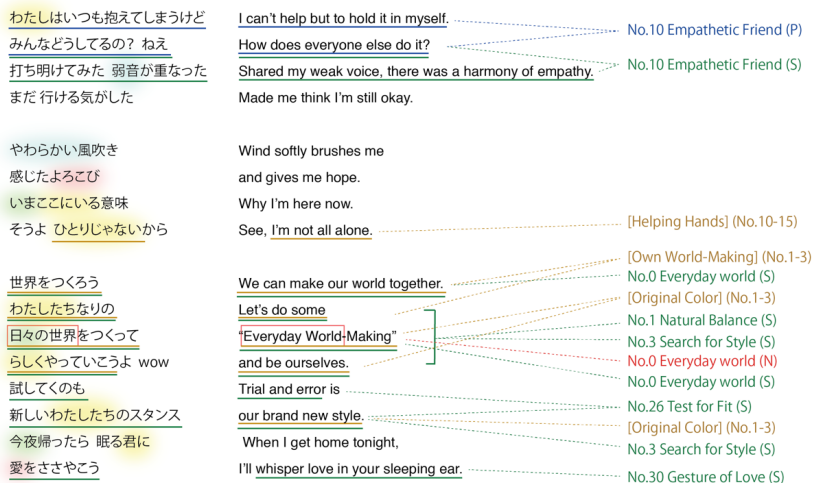


Figure 14: Patterns and categories embedded in the lyrics of Pattern Song #2

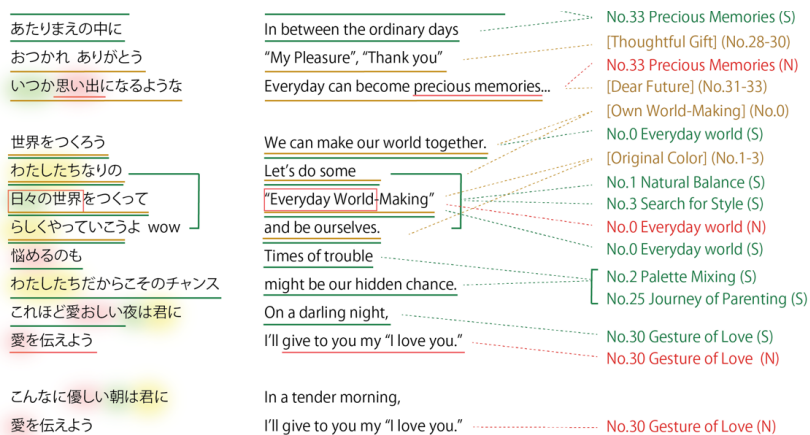


Figure 15: Patterns and categories embedded in the lyrics of Pattern Song #3

## 7. Pattern song performances and listener feedback

The demo version of the pattern song ‘Everyday World-Making’ was shared on YouTube prior to its official release, and as of November 2017 had gained more than 2,000 views. The song has also been performed live at workshops.

The song was performed live at the SFC Open Research Forum 2016 (ORF2016, hosted by Keio Research Institute at SFC) at the end of a sponsored session with Kao Corporation about the pattern language in ‘Ways of Everyday World-Making’ (Figure 16). The song was performed by its creator, singer-songwriter MayuGene (a co-author of this paper), along with co-lyricist Takashi Iba (another co-author). The song was introduced as the first pattern song and performed before an audience who had just learned about the ‘Ways of Everyday World-Making’ patterns. Below are the comments of one female participant:

“*Today I heard a beautiful song! It is a song called ‘Everyday World-Making’. The song was created as the result of a collaborative research with Keio University and Kao Corporation, with the goal of supporting people who want to balance working and parenting in their lives. During the session we received booklets and cards that contained hints about parenting and working (organized using the method of pattern language), and the song was performed as a finale to the session.*

*Singer-songwriter MayuGene, one of the members of the Iba Lab, performed the song, and the whole audience stood up and clapped along. Professor Iba joined in the second verse as well. Such fun! But while it was fun, I had to keep trying to hold back my tears. I tried hard not to ruin the make-up I wore for the first time in a while (plus, it was a joint research with Kao Corporation)!*

*‘Rushing home but a red light caught me. Seems like I’m always waiting.’ I lost it then. Trust me, I’m enjoying my first time parenting, but there are just times when I can’t help but cry. There are definitely some days when it’s tough, painful. I feel from the bottom of my heart that I’m happy, but at the same time, I’m incredibly alone. Why do I feel this way? ...*

*This song really struck me in the midst of these thoughts. Everyday world. During days of parenting, it’s easy to feel like I’ve been trapped inside the house and left behind by the rest of the world, but every action I take and every contact I make with my baby build up to make my own everyday world. Raising a child means that I’m raising someone who will eventually go out into the world. Creating your everyday world eventually leads to a bigger*

*world. No, we are not alone. Every little thing in our lives has value. Me, you, everyone is valuable, and everyone is worthy. That's the message I got from this song.*

*I think many people in the same situation would appreciate this song. I want to sing this song with other parents too. It's a song that brings me hope and comfort. 'Let's do some Everyday World-Making and be ourselves!'*

This comment indicates that the pattern song is a powerful way to express the message of a pattern language. A convenient media by which to condense the concepts from a pattern language, it also has a 'catchy' quality and the power to speak to people's hearts.

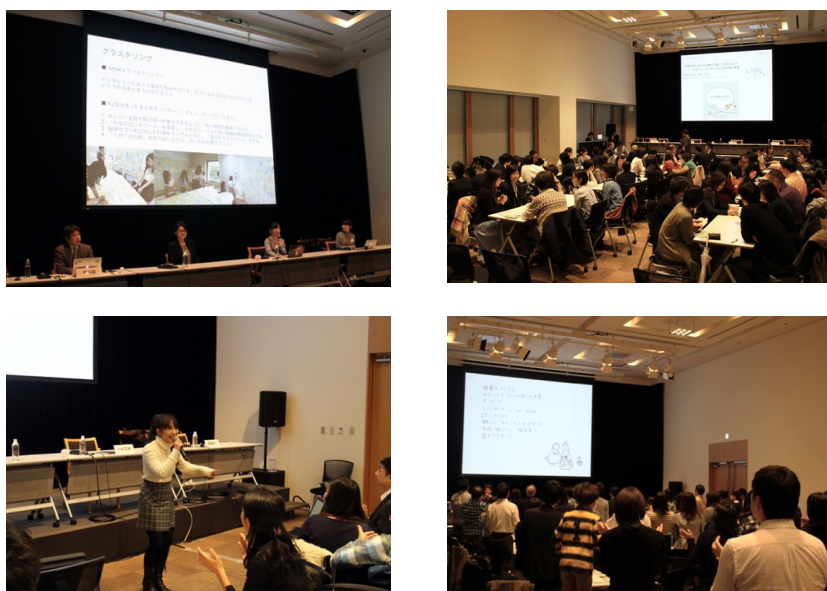


Figure 16: Live performance of the pattern song at the ORF2016 session

The song was also performed at a workshop on 'Ways of Everyday World-Making' patterns at the Shonan Fujisawa Campus, Keio University (Figure 17). This workshop was held for university students who want to balance working and parenting in the future. The song was performed by MayuGene with Yuma Akado from Iba Laboratory, after participants learned about the patterns and wrote letters to their future selves using patterns from 'Ways of Everyday World-Making'. After the event, several participants posted comments on their social media pages, including, "The song was uplifting and makes me want to take on another day with more passion", and "This song is a great song for busy parents".



*Figure 17: Live performance of the pattern song at the campus workshop*

## 8. Conclusion

In this paper, we introduced the concept of the pattern song as an auditory medium to express and share patterns. Since their inception, pattern languages have been shared using different forms of visual media, such as books and cards. In an effort to shift to a more natural and creative medium that reflects modern society, we explored new forms of expression and came up with the concept of expressing patterns through ‘auditory media’. To exemplify this, we examined the case of the pattern song for the pattern language ‘Ways of Everyday World-Making’. We also considered its effectiveness in contributing to the creative shift in our society.

## 9. Acknowledgements

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## 11. Appendix

日々の世界

**Intro**

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D D# F# G Aug D F# G Aug

D D# F# G Aug D F# G Aug

**A**

D F# Bm E7

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**B**

G F# E7

たのしい 家でも 仕事でも 学校でも すべてが 楽しい (た

のしい 家でも 仕事でも 学校でも すべてが 楽しい (た

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のしい 家でも 仕事でも 学校でも すべてが 楽しい (た

Everyday World

Everyone seems to do it so well but me? I can't say the same.

Work, home, and you: I care about them all but I just don't have the time.

Rushing home but a red light caught me. Seems like I'm always waiting.

Suppress a sigh and stare into the sky. Time to go again.

When I get home, you're at the door. Just that brings tears to my eyes.

Figure 18: Score and lyrics of 'Everyday World' #1

Figure 19: Score and lyrics of 'Everyday World' #2

Figure 20: Score and lyrics of 'Everyday World' #3

I'll whisper love in your sleeping ear.

When I get home you're at the door.

In between the ordinary days, "My Pleasure", "Thank you."

Everyday can become precious memories...

We can make our world together. Let's do some

“Everyday World-Making” and be ourselves.

Times of trouble might be our hidden chance.

On a darling night,

I'll give to you my "I love you."

In a tender morning,

I'll give to you my "I love you."

Richard Sickinger  
Peter Baumgartner  
Tina Gruber-Mücke (Editors)

# **PURSUIT OF PATTERN LANGUAGES FOR SOCIETAL CHANGE**

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

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

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