

# AsianPLoP® Bootcamp

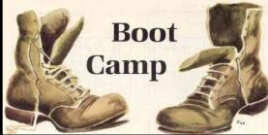
Held at Tunghai University, Taichung, Taiwan

Pattern Languages of  
Programs, People, and Practices



Joseph (Joe) Yoder [joe@refactory.com](mailto:joe@refactory.com)

Takashi Iba [ibasec@sfc.keio.ac.jp](mailto:ibasec@sfc.keio.ac.jp)



Boot  
Camp

## 2025 AsianPLoP

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## AsianPLoP

1st ASIAN CONFERENCE ON PATTERN LANGUAGES OF  
PROGRAMS

March 16th - 17th, 2010, National Center of Science, Tokyo,  
JAPAN

Eiichi Hanyuda, Conference Chair

Hironori Washizaki and Nobukazu Yoshioka, Program Co-Chairs



11th Asian Conference on Pattern Languages of  
Programs, People, and Practices



## Wholeness and Centers

“There is a class of entities which I call centers appearing everywhere in space. They appear where they do, as a result of the configuration which appears in the world. Every part of the world, at every scale, has centers appearing in it...”

—Christopher Alexander





**Positive Space**  
no fragments



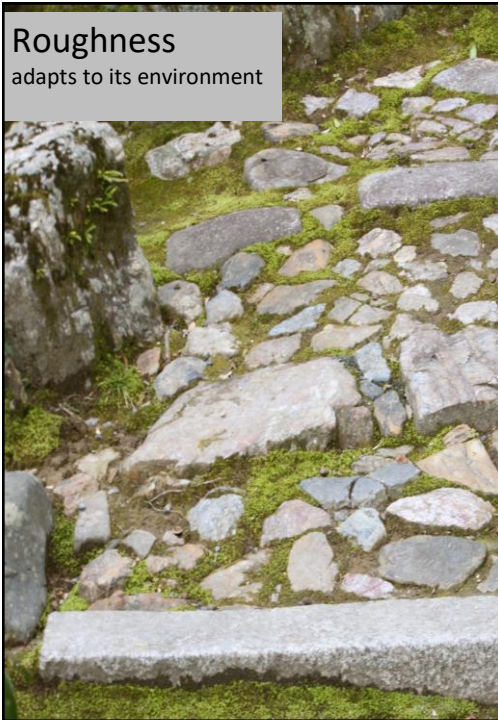
**Simplicity and Inner Calm**  
slowness, majesty, and quietness with no extras



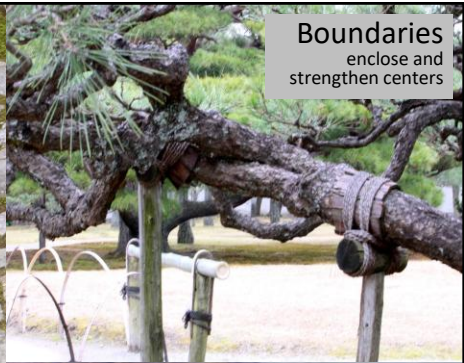
**The Void**  
infinite depth surrounded by the clutter of stuff



**Local Symmetry**



**Roughness**  
adapts to its environment



**Boundaries**  
enclose and strengthen centers



**Echoes**  
similarities between small and larger centers

## Quality Without a Name (QWAN)

- *From patterns perspective, Alexander looked at QWAN as “the quality” that imparts incommunicable beauty and immeasurable value to a structure. It encompasses all of the following:*

Universally recognizable aesthetic beauty and order  
 Recursively nested *centers of symmetry and balance*

### **Life and wholeness**

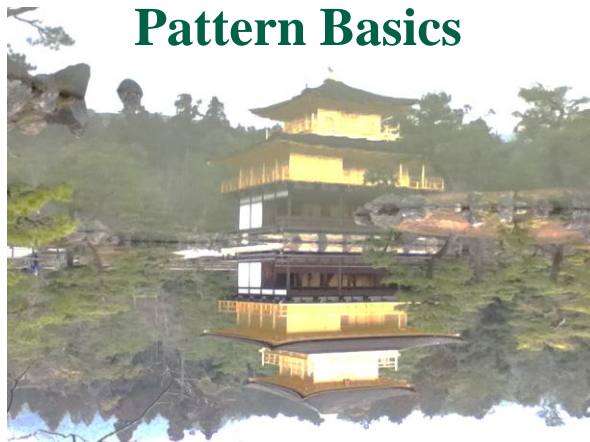
Resilience, adaptability, and durability  
 Human comfort and satisfaction  
 Emotional and cognitive resonance



The Samurai Hasekura



## Pattern Basics

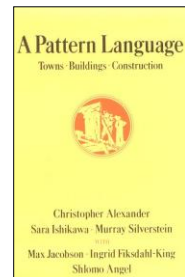


## Alexander's Pattern Definition

Each **pattern** describes a **problem** that occurs over and over again in our environment and then describes the **core** of the **solution** to that problem in such a way that you can use this solution a million times over without ever doing it the same way twice...

Alexander - building architect and author

- *The Timeless Way of Building*
- *A Pattern Language*



## An Example of a Pattern\*

### Window place

Christopher Alexander et al,  
*A Pattern Language-  
 Towns, Building,  
 Construction*  
 1977



## So What is a Pattern?

Patterns can be thought of “**Good Practices**”

**Proven Solutions to Repeating Problems**

**Proven Practices to Repeating Situations**

Embody Experiences of What Works...

...and What Doesn't Work

Captures or Describes Knowledge of Experts

Embody “Quality” Attributes for  
Solutions to specific Designs



To write a pattern is  
not about finding new  
solutions to existing  
problems...

..... but it is to  
abstract recurrent  
solutions that can be  
used for a problem in  
several contexts...





## Pattern Elements

### **Context**

In which situations  
can I use this pattern?

### **Problem**

What does it try to solve?  
What question does it answer?

### **Solution**

What can I do  
that usually works?

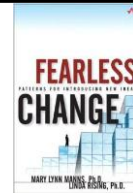


**The context is  
important to show  
when the pattern  
should be applied**

**A very specific context can  
leave out situations where  
the pattern can be applied**

**A very general context  
can encourage the pattern  
to be applied in situations  
where it is not appropriate**

## Context



The setting—target user, patterns applied, size, scope, timing, memory constraints, anything that might invalidate the solution if changed.

- ↳ *An Evangelist or Dedicated Champion has called a meeting to introduce a new idea.*
- ↳ *Members of the user community are free to attend or not. You have resources, your own personal contribution or those of a Local Sponsor or Corporate Angel.*

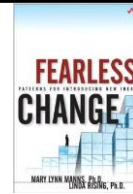
## What problem is the solution solving



## Problem


Short, complete statement of the problem the pattern will solve

- ↳ Usually a meeting is just another ordinary, impersonal event
- ↳ How do we get people to want to attend our meeting?




**You notice some regular techniques or solutions**






**It is not  
enough to  
be recurrent,  
the solution  
needs to be  
**GOOD****



**PROCESS**

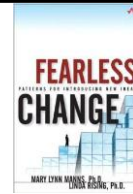
+



**THING**

The solution describes the final result and ways to achieve it

## Solution



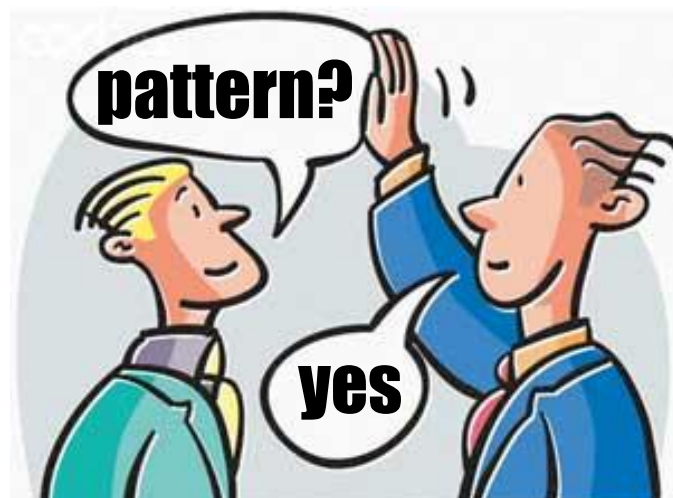
Your proposed method of solving the problem  
Resolve important forces determined by  
context; other forces may be ignored

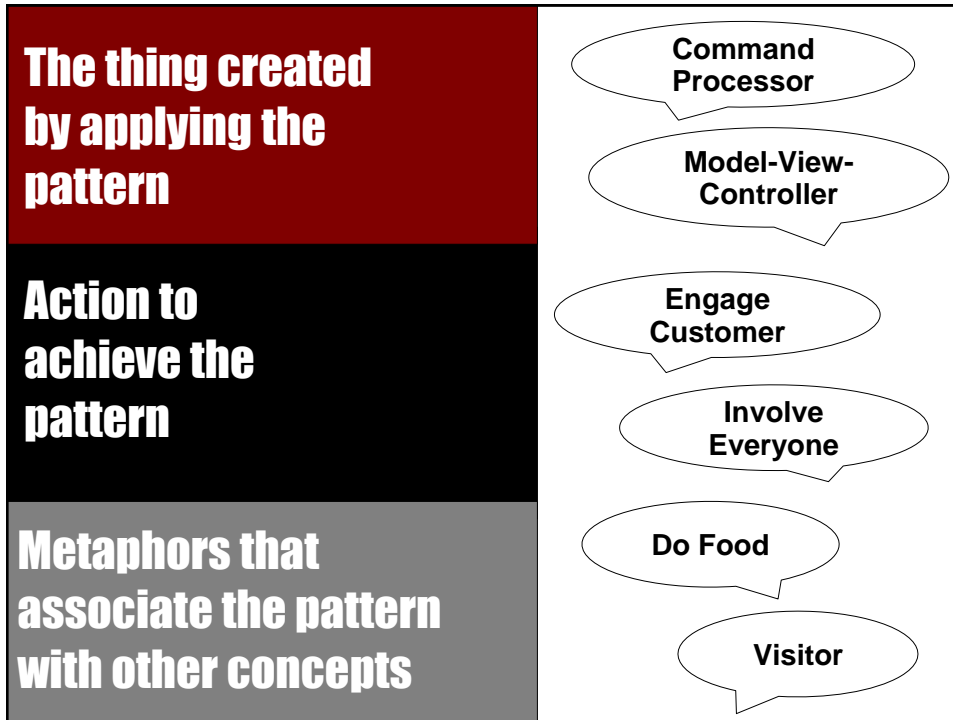
Keep the target audience in mind

Best **Patterns** are **Generative**

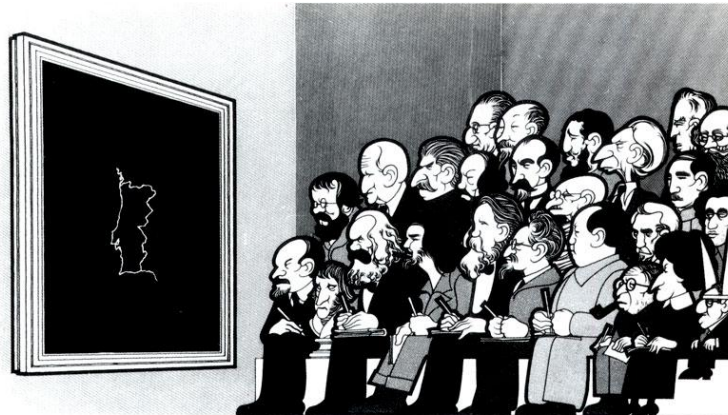
- ↳ **Have food at the meeting—donuts or bagels in the morning, with coffee, tea, and juice, and cookies and drinks in the afternoon, lunch at noon-time...**

**The name of the pattern is very important because it will be part of the user's vocabulary!**



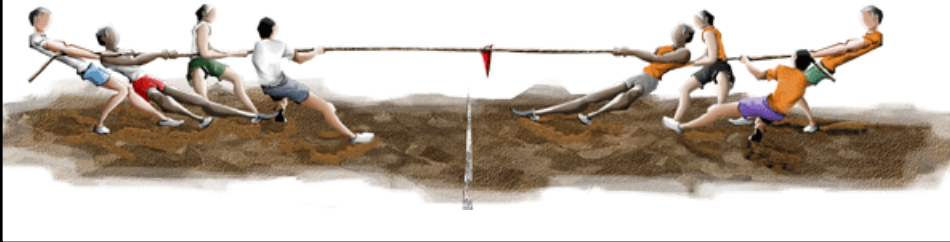


**A pattern usually focuses on a non-trivial problem in which several things need to be considered**

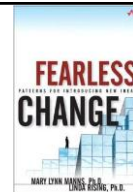


**Pattern forces are  
contradictory and pull  
in different directions...**

This **tension** between forces is  
what makes the problem complex!



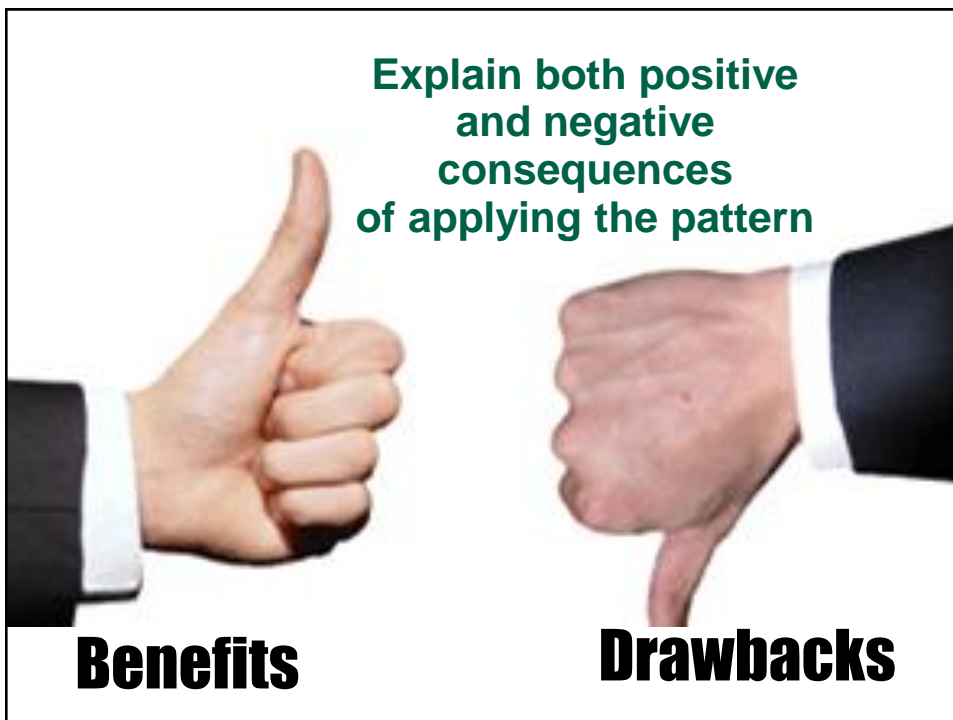
## Forces



Why the problem is hard?

The forces are often contradictory—create tension:

- ↳ **There's always more important work to do**
- ↳ **Most people are curious about new ideas**



## Do not try to sell the pattern at all costs...

Brainstorm both the positive and negative (costs) consequences of the pattern application...



## Make it memorable...

Tell a story to introduce the pattern

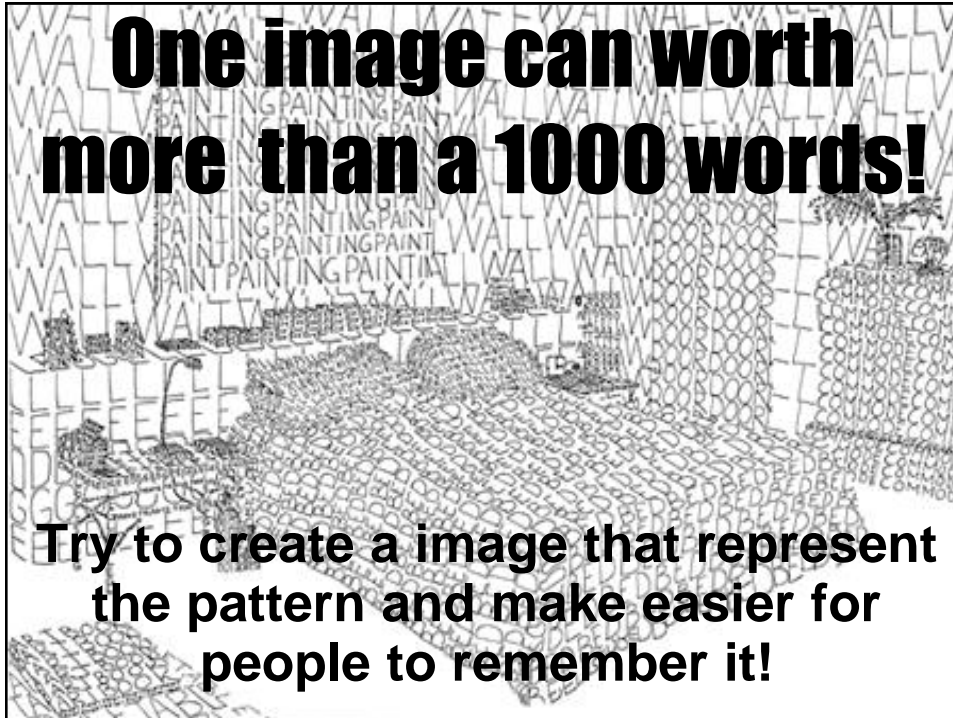
Draw a picture that represents the solution

### Learning by Creating

Learn through actively creating, rather than through memorization.



**One image can worth  
more than a 1000 words!**



**Try to create a image that represent  
the pattern and make easier for  
people to remember it!**





## Group Discussion



**Reflect and chat with neighbors about ideas discussed so far. Are there any questions or other points.**

## Ward's Tips for Mining and Writing Patterns

- Pick a whole area, not just one idea
- Make a list of things you learned
- Cast each item on your list as a solution
- Now write each item as a Pattern
  - Try a four paragraph form where the second paragraph ends with the pivotal “therefore”
- Organize your patterns into sections
- Write an Introduction

## Our Tips for Mining and Writing Patterns

- Pick a complete area
- Take a small 3x5 or equivalent card
- Write the problem and solution as simple sentences
- Outline the tradeoffs/forces
- Add any other ideas such as related patterns, resulting context, etc.
- Give it a candidate name that reflects the solution
- Use this to start writing more detail form of the pattern
- Choose the form and only add sections you need

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## Let's Write a Pattern!

**Name, Aliases**

**Context**

**Forces**

**Problem**

**Solution**

*Resulting Context (Consequences)*

Rationale

Related Patterns

*Known Uses*

Sketch

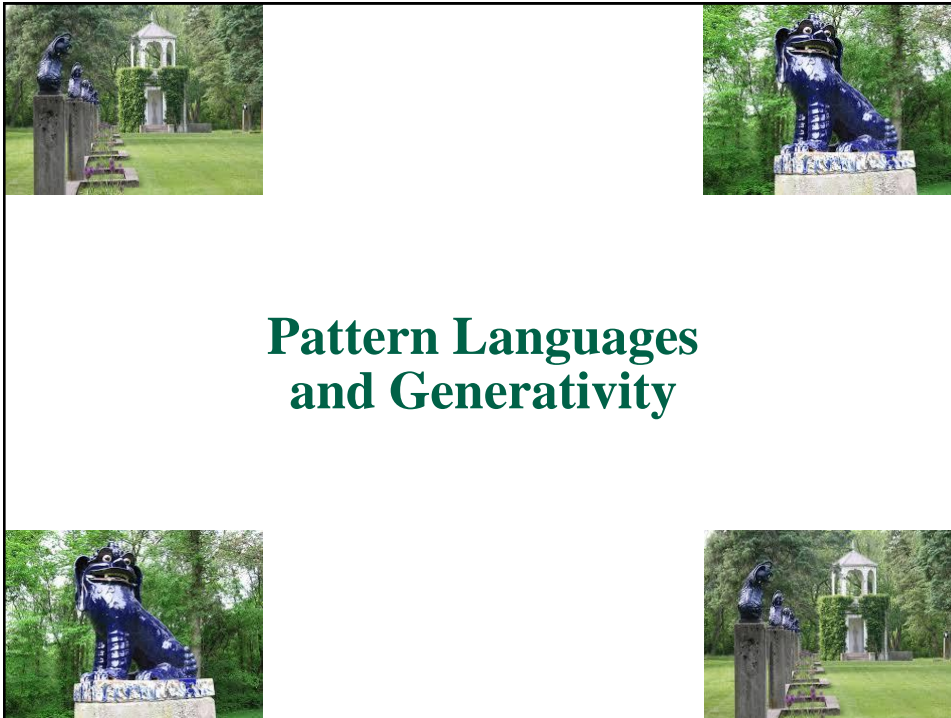
**Author**

References

*Examples*



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## Generativity

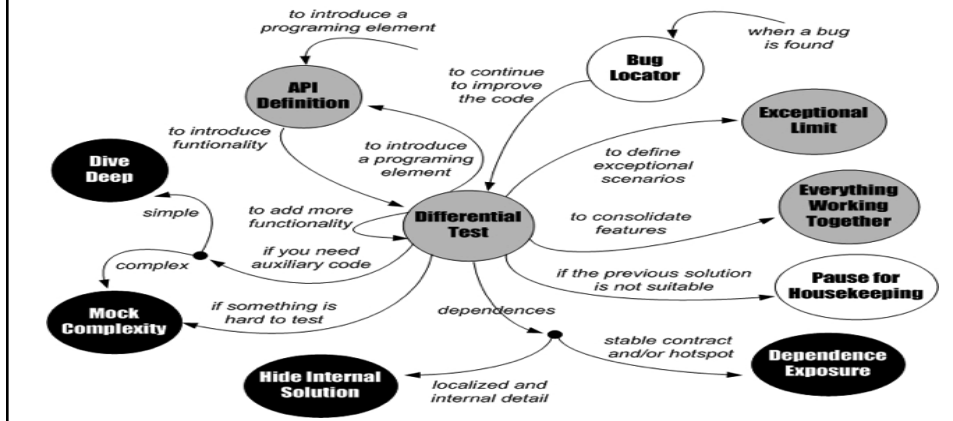
- **Definition:** Having the ability to originate, produce, or procreate (make something new)
- **Wikipedia:**
  - Generativity in essence describes a self-contained system from which its user draws an independent ability to create, generate, or produce new content unique to that system without additional help or input from the system's original creators



# Pattern Languages

Related patterns  
documenting solutions  
for a given domain

“Each pattern then, depends both on the smaller patterns it contains, and on the larger patterns within which it is contained”  
Alexander, TTWOB, p 312



## Collections vs. Languages

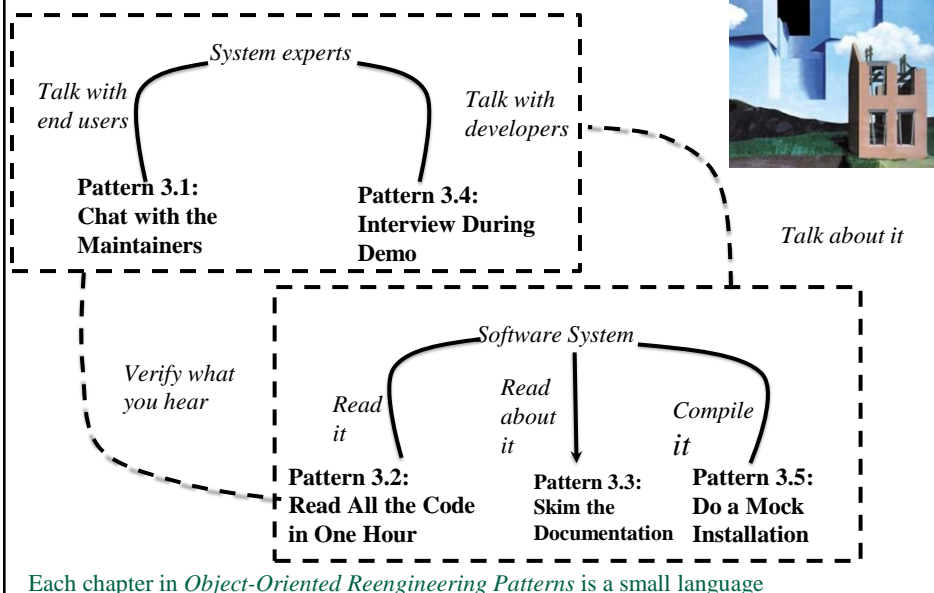
- **Pattern collection**
  - no claim of completeness or deep connections between patterns
  - patterns often are used in isolation
- **Pattern language**
  - include higher level patterns that guide you to more specific, lower-level patterns
  - discusses all the things you need to consider to build something
- **Both have value, languages more complete**



## Parts of a Pattern Language

- **Intent:** A description of the language's intent
- **Maps:** Diagrams showing how patterns build on and relate
- **Context:** An explanation of situations where the pattern language is complete enough to make something significant
- The **patterns** that make up the language
- **Sequences:** Stories/descriptions of how to use several patterns in the language to solve a larger problem

## Example Pattern Languages

### Chapter 3: Initial Contact







## Pattern Mining



- You are interested in creating a pattern language in which you have little experience.  
The patterns extracted from people who have less experience can often be weak or wrong. People that are experienced in the domain are often busy and don't understand patterns.

▼ Therefore

Conduct an interview with experienced people in the area of the pattern language you are creating. Use this information to gather the core information needed to write the patterns.




*Sugarloaf PLoP*





## Pattern Mining

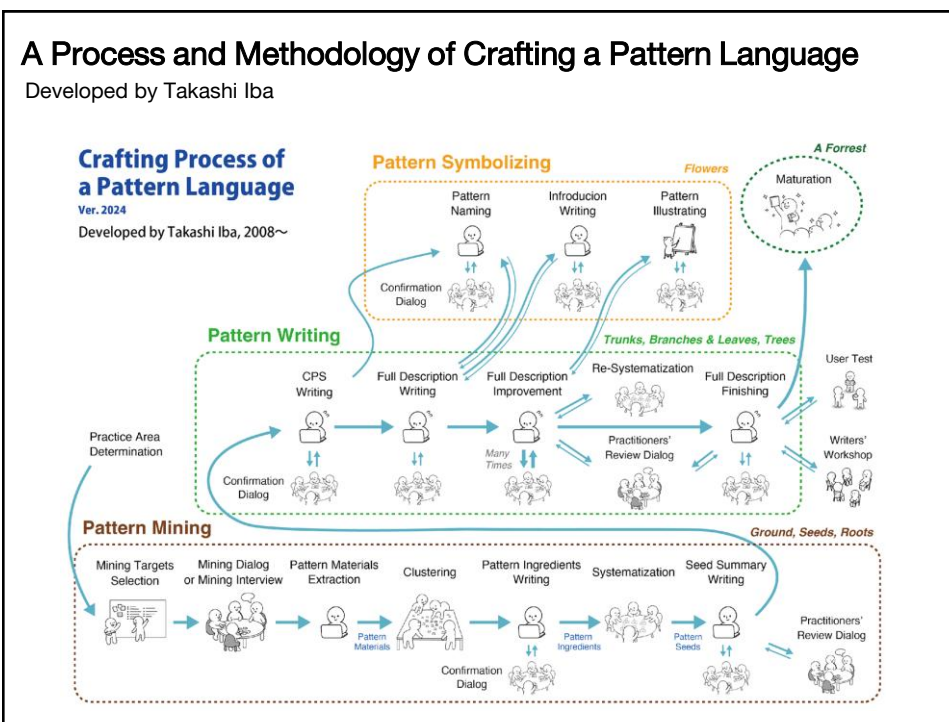
- Keys Worth Sharing**  
Gather Important Key Points
- Problem Digging**  
Get Details of the Patterns
- Context Caching**  
When to consider the patterns



# Pattern Mining Dialog



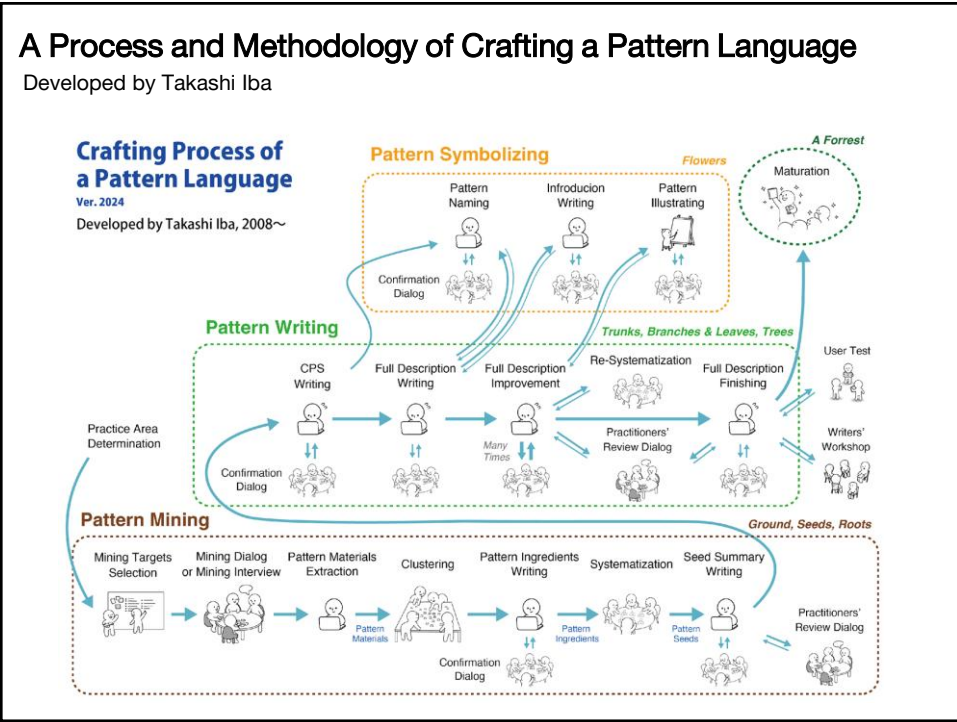
- **Venture of Asking**  
Ask even if you know the answer
- **Empathetic Response**  
Relate and understand through interacting
- **Experience Overlapping**  
Share similar experiences
- **Interesting Points**  
Ask and verify the main points you think are important from the interview (feeling)





### Writing Pattern Ingredient cards from the clustering results

<p>誠心誠意みんなにすり寄り・寄り添いに行くように、周囲の感触を確かめながら直感を検証していくことで、自分の考えを相対化して、みんなが納得できる共通理解を見出し合おうと続ける。</p>	<p>自分の体験と他の人の体験を重ね合わせることで、すべての人のその種の共通するものを探る。</p>
31	Mario
<p>ずっと確信をつないで、その対象の存在確信の条件を抽出することで、確かにこうだと思っていたのに少し時間が経つと違っていたというのではない確かな本質を抽出する。</p>	<p>観取したものは更新されたものであるというやり組み、常に皆が確認されるかを考える。</p>
34	Mario



## Sequences...



94 patterns within 2 pattern languages  
Product Organization Pattern Language  
& Value Stream Pattern Language



Described at ScrumPLoP as the sequence of one of Jeff's most successful teams doing Scrum...

## Understanding Sequences...

Let  $a_1, a_2, a_3, \dots, a_n$  be a sequence of numbers where  $a_1 = -2, a_2 = 4$ , and for  $n \geq 3$ ,  $a_n = \frac{a_{n-1}}{a_{n-2}}$ . What is the sum of the first 99 terms?

(A) -16  
(B) -12  
(C) -8  
(D) -4  
(E) 0

Handwritten calculations show the sequence terms:  $a_3 = \frac{a_2}{a_1} = \frac{4}{-2} = -2$ ,  $a_4 = \frac{a_3}{a_2} = \frac{-2}{4} = -\frac{1}{2}$ ,  $a_5 = \frac{a_4}{a_3} = \frac{-\frac{1}{2}}{-2} = \frac{1}{4}$ ,  $a_6 = \frac{a_5}{a_4} = \frac{\frac{1}{4}}{-\frac{1}{2}} = -\frac{1}{2}$ ,  $a_7 = \frac{a_6}{a_5} = \frac{-\frac{1}{2}}{\frac{1}{4}} = -2$ ,  $a_8 = \frac{a_7}{a_6} = \frac{-2}{-\frac{1}{2}} = 4$ . The sequence repeats every 6 terms:  $-2, 4, -2, -\frac{1}{2}, \frac{1}{4}, -\frac{1}{2}$ .

Simpler than this

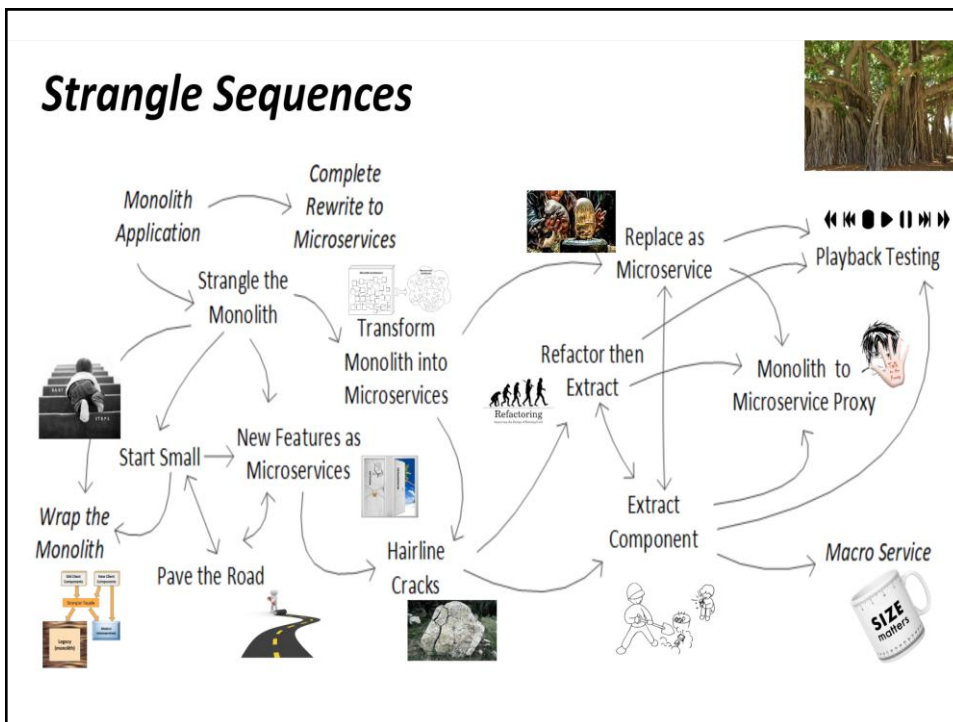
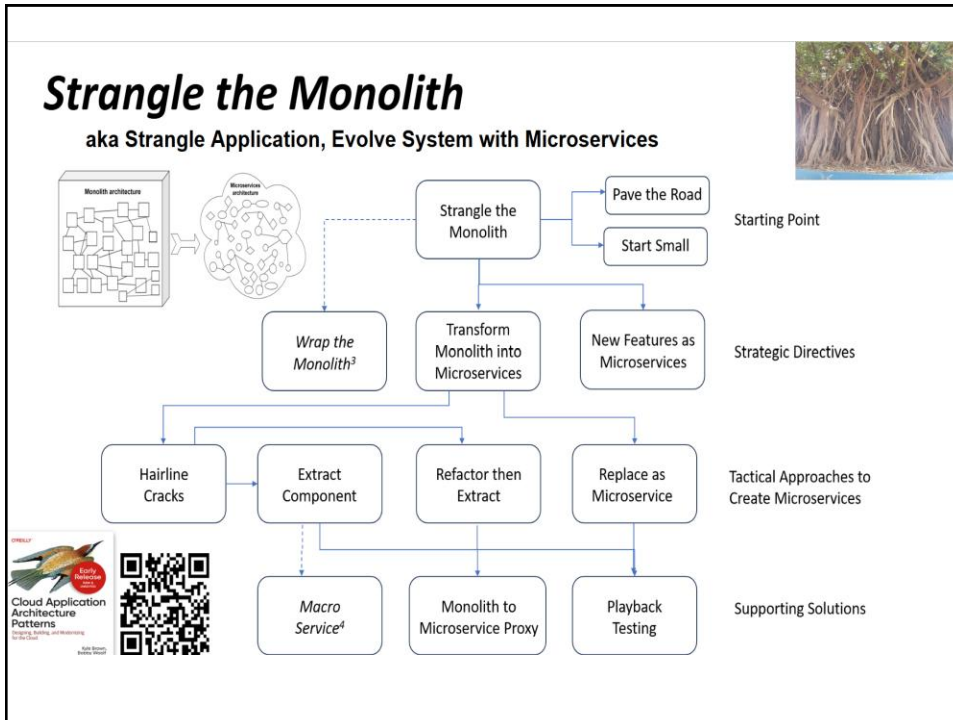
Name \_\_\_\_\_ Date \_\_\_\_\_

### Sequence Order

Write down the events that took place in the correct order.

First	Then	A little while later.
Next	In the middle of the story	Towards the end.
Then	Afterwards	Finally

Not as linear as this







## Group Discussion



**Reflect and chat with neighbors about ideas discussed so far. Are there any questions or other points.**



## Pattern Forms and Styles



## Contrasting Poetic Styles

- **Haiku**—three lines, with the first and last line having 5 moras, and the middle line having 7. A mora is a sound unit, much like a syllable, but is not identical to it. Since the moras do not translate well into English, in English it has been adapted and syllables are used as moras.

Furuike ya  
Kawazu tobikomu  
Mizu no oto

-Basho Matsuo

The old pond,  
A frog jumps in,  
PLoP!

-Translated by: Allan Watts

## Contrasting Poetic Styles

- **Limerick**—a five-line joke of a poem — witty, usually involving place names and puns, and most often bawdy, sometimes unprintable...

There was a small boy of Quebec  
Who was buried in snow to his neck  
When they said, “Are you friz?”  
He replied, “Yes, I is —  
But we don't call this cold in Quebec”

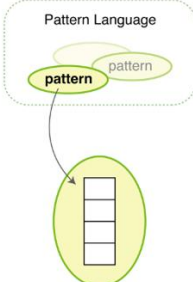
-Rudyard Kipling

## Pattern Styles

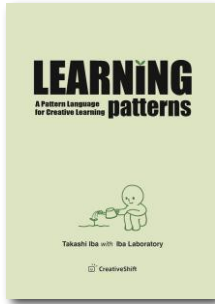
- There isn't one "right" way to write a pattern
- Patterns can be written in various forms and forms can be adjusted to your audience
- Major forms:
  - Christopher Alexander style
  - SW Pattern styles:
    - GOF (Design Patterns) style, POSA style, software pattern paper styles
  - Narrative styles (good for non-software patterns)
    - Story-based variation of Alexander's style, Mary Lynn Manns and Linda Rising, *Fearless Change*
    - Iba-Style, Takashi Iba
    - Rebecca and Joe style
    - Manga Style

**Type I**  
Four-frame Manga for a Pattern









Pattern Language



Learning Patterns



### Creative Learning Girl

Tangible Growth	Community of Learning
<p>Huff... Does reading even do anything...</p> <p>Yeah! I feel you. You can't see growth after all.</p>  <p>Try feeling how much you have read. You have to have surely grown just as much!</p>  <p>Whaaaa my growth!</p>  <p>Woowah! So much growth!</p> 	<p>When learning something, if you learn with people who are interested in it, your learning will deepen and last a long time.</p>  <p>Ughhh! I can't! I don't see it!!</p> <p>It's easy to give up when you're learning alone.</p>  <p>Okay!</p> <p>Then I will start recruiting members for a study group right away!</p>  <p>Let's learn about <b>Recursive Learning</b>!</p> <p>That's an amazing idea to put up a poster, but will people come for that topic...?</p> 

# Pattern MangaZine

<http://mangazine.jp/>

**PATTERN MANGAZINE**  
VOL. 1



**Tangible Growth**

That's... these meetings are so tiring.

You'll find your... [unclear]...

By finding how much you have read, you have to know exactly how much you've read!

Wow, it's so great!

Thank you for your... [unclear]...

**Open Question**

I found myself... [unclear]...

You and the others... [unclear]...

It's about... [unclear]...

We have the... [unclear]...

It's not like... [unclear]...

Thank you for your... [unclear]...

Having a daily work... [unclear]...

Thank you, Trip!

Thought... [unclear]...

If you want to... [unclear]...

It feels so distant... [unclear]...

Certainly, technology... [unclear]...

Without people being... [unclear]...

So, I propose the... [unclear]...

Thank you for... [unclear]...

Alright, then let's... [unclear]...

Will people... [unclear]...

Issue Training... [unclear]...

Well, just wait a... [unclear]...

# Pattern vs. Pattern Gists

## Full pattern description

### Find Essential Qualities

"The ability to quickly assess or characterize the necessary or critical system quality..."



Other... [unclear]...

### How can you best understand a model pattern for a workshop?

Not having... [unclear]...

Having... [unclear]...

On... [unclear]...

Therefore... [unclear]...

Whenever there are major changes... [unclear]...

During quality... [unclear]...

After... [unclear]...

How... [unclear]...

Essential... [unclear]...

## Pattern gist

### Pattern: Find Essential Qualities

Quite often essential system qualities are overlooked or simplified until late in the development process. This can cause delays due to extensive refactoring and rework of the software design in order to correct quality flaws. To avoid extensive rework it is important that agile teams identify these fundamental qualities and make those qualities visible to the team in a timely manner.

### How can agile teams understand essential qualities for an evolving system?

At the start of a project it is important to identify essential qualities critical to the success of the project. This can be done via an agile quality attribute workshop where you agree on essential qualities, and make sure they are visible to team. These workshops should include key members such as the product owner, developers, architects, quality assurance, and the customer. Whenever there are major changes to the roadmap or new system qualities become apparent, the team can choose to hold another quality workshop.

During a quality workshop, which might last an hour or two, simple collaborative techniques can be used to identify and characterize system qualities. People can identify a concern and write it on a sticky note that is associated with a specific system quality (such as performance or reliability). The team can vote on what they consider most important and urgent and then write Agile Quality Scenarios for those.

## Patlets or Thumbnails

Pattern Name	Brief Description
Whole Team	Involve QA early on and make QA part of the whole team.
Quality Focused Sprint	Focus on your software's non-functional qualities by devoting a sprint to measuring and improving one or more of your system's qualities.
Product Quality Champion	Include as part of your agile team a Product Quality Champion. This is someone who helps the team keep focused on important system qualities. This person is involved from the start of the project understanding the customer requirements and continues working throughout assisting the team with a quality focus.
Automate as You Go	Create an environment and use tools to automate fundamental things that add value as soon as you can. Early on the most essential things to automate are the build, integration and test environment configuration.
Agile Quality Specialist	QA provides experience to agile teams by outlining and creating specific test strategies for validating and monitoring important system qualities.
Spread the Quality Workload	Rebalance quality efforts by involving more than just those who are in QA work on quality-related tasks. Another way to spread the work on quality is to include quality-related tasks throughout the project and not just at the end of the project.
Shadow the Quality Expert	Spread expertise about how to think about system qualities or implement quality-related tests and quality-conscious code by having another person spend time working with someone who is highly skilled and knowledgeable about quality assurance on key tasks.
Pair with a Quality Advocate	Have a developer work directly with quality assurance to complete a quality related task that involves programming.



## Shepherding & Writers' Workshops

*Giving and Responding to Advice*

*Improving your Paper...*

## The Role of A Shepherd & Workshop Participants: Guide, Supporter, Mentor

### Reads, reviews, advises

- An *experienced* pattern writer
- Works with the author to improve their paper
  - Offers advice
  - Has opinions
  - Suggests improvements
  - Guides the author
- Offers encouragement!



## Shepherds and Reviewers are Advocates

- Supports the author
- Doesn't have a personal agenda
- Generous, unselfish
- Works on behalf of author to make them be the best they can be



## The Role of a Pattern Author: Effectively Share Wisdom

### **Writes, thinks, rewrites**

- Conceives of the pattern
- Writes the pattern
- Agrees to be “shepherded”
- Receives and responds to advice
- Asks for help
- Asks clarifying questions
- Rewrites



## Focus on Your Reader



## Improve Your Writing

- Share with others
- Write clearly
  - Shorten long sentences
  - Eliminate extra words
  - Summarize main points
- Practice. Revise.
  - understandable problem
  - what are the forces
  - clear tradeoffs



## How do I revise my patterns?

- What do I do with shepherds comments?
- What do I do after a writers' workshop?
- How much revision should I do?
- When should I stop?

## Giving Advice: Consider Its Impact



### Adapt a “triage” approach

- Read and note issues/questions/concerns
- Spend time wisely:
  - Address most important things first
  - Note minor issues
  - Don’t spend time on hopeless causes (if it is really, really bad)
- Be sure to mention what you like, too!

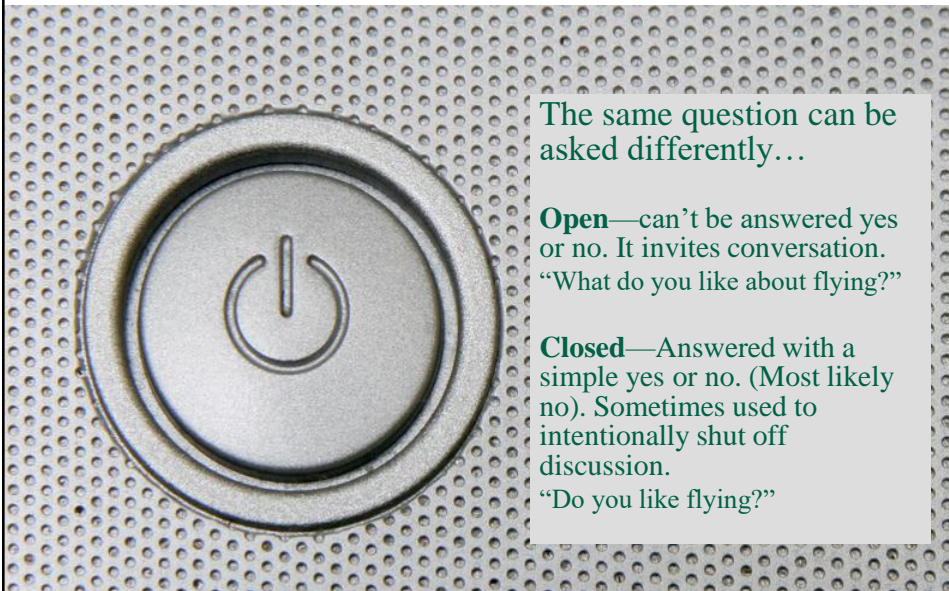
## Types of Advice

- **Valid**—There is clearly a problem I should address.  
“Your pattern is missing some forces”
- **Invalid**—The comment is not useful or valid.
- **Judgmental**—The reviewer liked or disliked something.  
“The name of your pattern doesn’t reflect the solution”
- **Complexity**—The reviewer thinks I should express my ideas more simply or that my solution is too complex.  
“Reword your solution and include a diagram to help explain”
- **Aesthetics**—A comment about the form, not the substance of my pattern. “Can you add a rating to all your patterns?”
- **Praise**—The reviewer is happy. “This is much improved.”

## Responding To Constructive Advice

- You are in control of what to do with advice.  
Here's how you might react and respond:
  - **Valid**—You need to improve your pattern. You may need to ask some questions before making changes.
  - **Invalid**—Most likely you ignore the comment (unless the shepherd or reviewer thought it was very important).
  - **Judgmental**—Ask them why they think that.
  - **Complexity**—May want to explain more clearly...or break down a complicated solution into alternatives or...maybe there is more than one pattern here.
  - **Aesthetics**—You decide whether to fix or ignore “style” issues.
  - **Praise**—You may want to know why they are so happy.  
“What do you like about my new solution?”

## Open and Closed Questions



## Probing Questions

- Evaluation...how good do you think it will be?
- Accuracy...how did you come up with those numbers?
- Completeness... is that all...?
- Relevance...does this apply here?
- Purpose...why did you suggest that?
- Extension...tell me more..



## Clarifying Questions

- Get others to think:
  - Why do you say that?
  - What exactly do you mean?
  - Can you give me an example?
  - Are you saying ... or ... ?
  - Can you restate your concern?



## Writers' Workshop for improving patterns with others



## Writers' Workshops at PLoP



### Writers' Workshops & the Work of Making Things...Richard Gabriel

A circle of interested colleagues, led by a strong, neutral moderator, that provides feedback to the author on how the pattern is understood by the group and suggestions for improvement

#### Roles:

- Author
- Moderator/Leader
- Summarizer
- Sympathetic Participants

Participants read the pattern before the workshop



**The author stands, reads a selection from the pattern, then becomes a “fly on the wall,” outside the circle. No eye contact is made. The author’s name is never mentioned; use “the author”**



<https://www.dreamsongs.com/Files/Shepherding.pdf>  
<http://www.dreamsongs.com/Files/WritersWorkshop.pdf>

## Reviewing and Shepherding are Gifts

*“If someone gives you something ... pass it on”*

- Comments and suggestions are gifts
- Giving these gifts does not mean that your author always is ready to accept it
  - Some may not want your gift because they are looking to validate their ideas, not respond to questions or comments
  - Some may misinterpret your gift because they don't understand what you are saying
  - Some may not be prepared for your gift because they are focused on other concerns
  - Some may not be able to accept it because the time is not right

**Name**  
Carrying Short Literature

**Context**  
You want to enrich your knowledge in an additional and unfamiliar area by reading some literatures.

**Problem**  
You are too busy to make time for studying at your home and office.

**Forces**  
You have to balance the following forces:

- Making time specific for study will sacrifice your family considerations and business.
- There are a number of discrete short times during your commuting, such as a time waiting for trains.
- There are various knowledge sources including short papers, articles and books.
- These short literatures can be good starting points to learn about unfamiliar area.

**Solution**  
Select short literatures and carry them at all times so that you could read them even in short time during commuting.

**Consequences**  
You are now enriching your knowledge continuously!



## Writers Workshop Demo





## Hillside and Patterns Community



## PLoP Community Culture

“the integrated pattern of human knowledge, belief, and behavior that depends upon man’s capacity for learning and transmitting knowledge to succeeding generations”

“the customary beliefs, social forms, and material traits of a religious, or social group”

“the set of shared attitudes, values, goals, and practices that characterizes a company or corporation”

Merriam Webster Collegiate Dictionary  
on the web <http://www.m-w.com/dictionary.htm>

- Shared experiences
- Shared rituals
  - Writers’ Workshop
  - Shepherding
  - Gifting and Games





## Patterns Community Gatherings

- Pattern Conferences

- **PLoP®** since 1994 at Allerton House, Monticello, IL\*

Except: 2006: OOPSLA in Portland, OR, 2008: OOPSLA in Nashville, TN  
 2009: AGILE in Chicago, IL, 2010: Splash in Reno, NV  
 2011: Splash in Portland, OR, 2012: Tucson Arizona,  
 2015: Pittsburgh, PA, 2017 Vancouver Canada, 2018: Portland, OR  
 2019: Ottawa, Ontario Canada, 2024-2025: Skamania Lodge Washington

- Euro PLoP® since 1996 at Kloster Irsee, Bavaria
- SugarLoaf PLoP® since 2001-2015 Brazil, 2016-18 Argentina, Chile
- Viking PLoP® since 2002-2018 rotating among Scandinavian countries
- AsianPLoP® 2010, 2011, 2014, 2015, 2017, 2018, 2019, 2024 in Japan, 2016, 2025 Taiwan
- ScrumPloP® 2009-2014 in Scandinavian countries, 2015-2018 Douro Valley, Portugal
- Chili PLoP® “A different Kind of PLoP”, near Phoenix, AZ 1998-2012
- ParaPloP® Parallel programming patterns, 2009, 2010, 2011
- Koala PLoP® 2000-2002 in Melbourne, Australia
- Mensore PLoP® 2001 Okinawa, Japan
- MetaPloP® 2011 in Douro Valley, Portugal
- UP 1998 Mohonk Mountain House, New Paltz, NY

For more information visit <http://hillside.net/conferences>

Find more information about PLoPs at: [PloPCon.org!!!](http://PloPCon.org!!!)

**PURPLSOC**  
Pursuit of Pattern Languages for Societal Change

**EduPloP® 2015-16**  
Schermehorn, Netherlands



谢谢  
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THE  
HILLSIDE GROUP

PLoPcon.org & Hillside.net

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