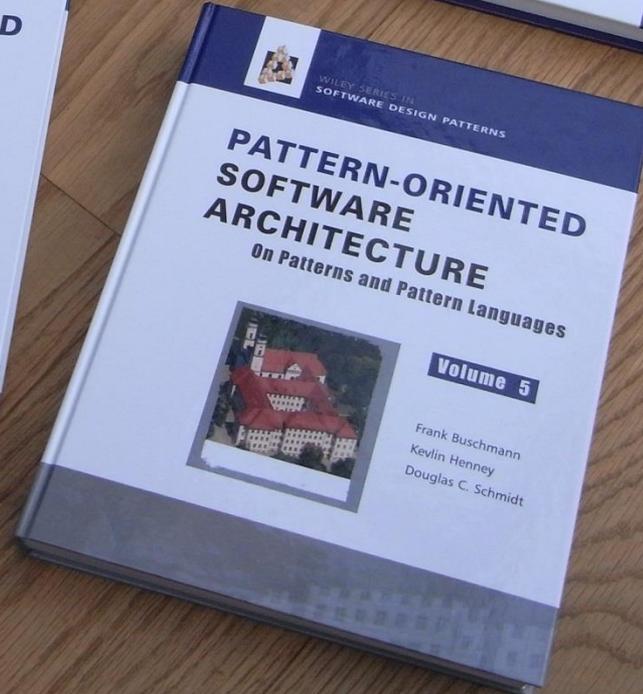
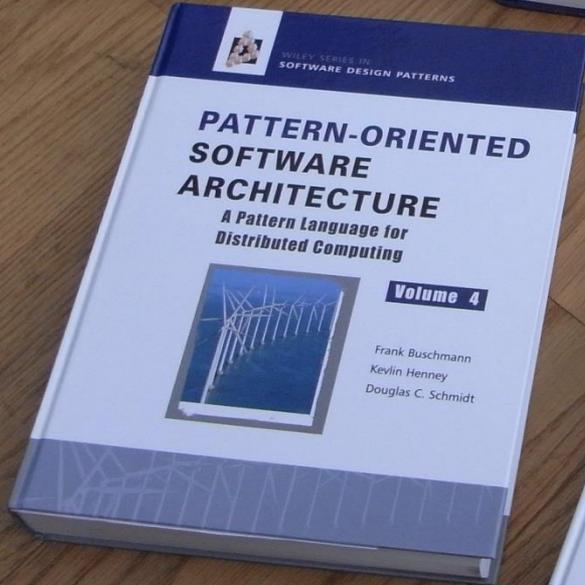
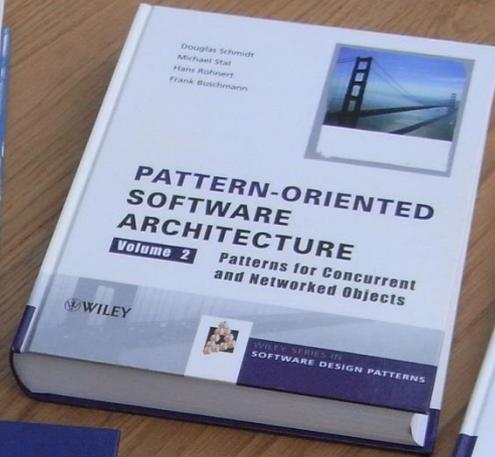
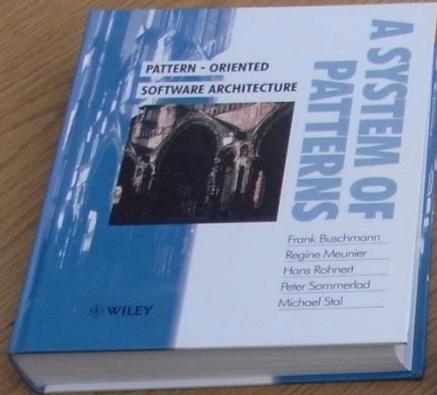


A collection of smooth, multi-colored stones and seaweed arranged on a tiled floor. The stones are in various shades of blue, green, yellow, and grey, and are of different sizes and shapes. The seaweed is dark green and black, and is placed in the center of the arrangement. The floor is made of large, light-colored square tiles with dark grout.

# Patterns for the People

@KevlinHenney  
*kevin@curbralan.com*



**I don't make stupid mistakes.  
Only very, very clever ones.**

**John Peel**

***Failure is a far better teacher  
than success.***

***Philip Delves Broughton***

***<http://www.ft.com/cms/s/0/f33f5508-f010-11e0-bc9d-00144feab49a.html>***

**If you want to learn how to build a house, build a house. Don't ask anybody, just build a house.**

**Christopher Walken**



*Ecce Homo de Elías García Martínez.*



*Ecce Homo de Elías García Martínez.*





*Ecce Homo de Elías García Martínez.*



**Programming is difficult  
business. It should never  
be undertaken in ignorance.**

**Douglas Crockford**  
*JavaScript: The Good Parts*

What experience and  
history teach is that  
nations and governments  
have never learned  
anything from history.

Georg Wilhelm Friedrich Hegel



Software development can only be considered immature because of how we use our experience, not because we lack experience.



9:50 AM Nov 1st, 2009 from TweetDeck

Delete



KevlinHenney  
Kevlin Henney

Wise men profit more from  
fools than fools from  
wise men; for the wise  
men shun the mistakes of  
fools, but fools do not  
imitate the successes of  
the wise.

Cato the Elder

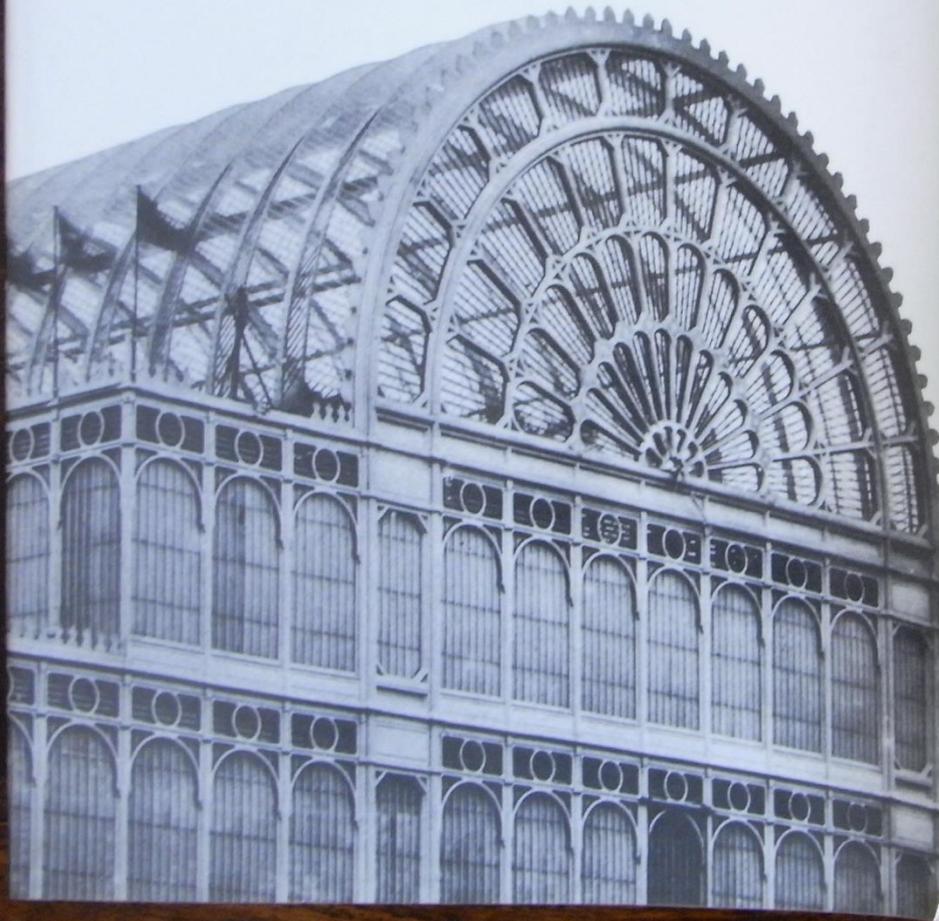
Mark Pagel at the University of Reading, UK, doubts that hominins before *Homo sapiens* had what it takes to innovate and exchange ideas, even if they wanted to. He draws a comparison with chimps, which can make crude stone tools but lack technological progress. They mostly learn by trial and error, he says, whereas we learn by watching each other, and we know when something is worth copying.

<http://www.newscientist.com/article/mg21328571.400-puzzles-of-evolution-why-was-technological-development-so-slow.html>

# SOFTWARE ARCHITECTURE

PERSPECTIVES ON AN EMERGING DISCIPLINE

MARY SHAW    DAVID GARLAN



**One of the hallmarks of architectural design is the use of idiomatic patterns of system organization. Many of these patterns — or architectural styles — have been developed over the years as system designers recognized the value of specific organizational principles and structures for certain classes of software.**



PATTERNS FOR PARALLEL SOFTWARE DESIGN

Omega-Aryna



WHERE CODE AND CONTENT MEET

Boag

Design Patterns (CD)

Gamma • Helm  
Johnson • Vlissides



PATTERN LANGUAGES 4  
OF PROGRAM DESIGN

HARRISON / FOOTE / ROHNERT



PATTERN LANGUAGES 3  
OF PROGRAM DESIGN

MARTIN / RIEHLE / BUSCHMANN



PATTERN LANGUAGES  
OF PROGRAM DESIGN

ISSUES  
2  
COPLIEN • KERTH



PATTERN LANGUAGES  
OF PROGRAM DESIGN

EDITED BY  
COPLIEN  
SCHMIDT



Völte  
Schmid  
Wolff

SERVER COMPONENT  
PATTERNS  
Component Infrastructures Illustrated with EJB



Völte  
Kircher  
Zönn

REMOTING PATTERNS



Borchers

A PATTERN APPROACH  
TO INTERACTION DESIGN  
ARCHITECTING ENTERPRISE  
SOLUTIONS



Dyson  
Longshaw



Schumacher  
Fernandez-Bugliosi  
Hybertson  
Buschmann  
Sommerlad

SECURITY PATTERNS  
Integrating Security and Systems Engineering



Buschmann  
Henney  
Schmidt

PATTERN-ORIENTED  
SOFTWARE ARCHITECTURE



Buschmann  
Henney  
Schmidt

PATTERN-ORIENTED  
SOFTWARE ARCHITECTURE



Kircher  
Jain

PATTERN-ORIENTED  
SOFTWARE ARCHITECTURE



Schmidt  
Stal  
Rohnert  
Buschmann

PATTERN-ORIENTED  
SOFTWARE ARCHITECTURE



面向模式的软件架构  
模式与模式语言  
Frank Buschmann  
Kevin Henney  
Douglas C. Schmidt  
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Schumacher  
Meunier  
Rohnert  
Sommerlad  
Stal

PATTERN - ORIENTED  
SOFTWARE ARCHITECTURE

A SYSTEM OF  
PATTERNS





**PATTERN  
SHOP**

Caution  
Uneven Floor

Patterns

The  
Timeless Way of  
Building



Christopher Alexander

We know that every pattern is an instruction of the general form:

context → conflicting forces → configuration

So we say that a pattern is good, whenever we can show that it meets the following two empirical conditions:

1. *The problem is real.* This means that we can express the problem as a conflict among forces which really do occur within the stated context, and cannot normally be resolved within that context. This is an empirical question.
2. *The configuration solves the problem.* This means that when the stated arrangement of parts is present in the stated context, the conflict can be resolved, without any side effects. This is an empirical question.

# Agile Software Development with Scrum

red  
yellow  
green  
blue  
red  
blue  
yellow  
green  
blue

Color Test

Ken Schwaber  Mike Beedle

**The "defined" process control model requires that every piece of work be completely understood. Given a well-defined set of inputs, the same outputs are generated every time.**

**The empirical process control model, on the other hand, expects the unexpected. It provides and exercises control through frequent inspection and adaptation for processes that are imperfectly defined and generate unpredictable and unrepeatable results.**

Ken Schwaber ■■■ Mike Beedle

# PATTERN LANGUAGES OF PROGRAM DESIGN

# 4



Edited by

**NEIL HARRISON**

**BRIAN FOOTE**

**HANS ROHNERT**

SOFTWARE PATTERNS SERIES

## **SCRUM: A Pattern Language for Hyperproductive Software Development Teams**

*Mike Beedle, Martine Devos,  
Yonat Sharon, Ken Schwaber,  
and Jeff Sutherland*

# PATTERN LANGUAGES OF PROGRAM DESIGN

# 4



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NEIL HARRISON

BRIAN FOTE

HANS ROHNERT

SOFTWARE PATTERNS SERIES

**SCRUM Master**

**Sprint**

**Backlog**

**SCRUM Meetings**

**Demo After Sprint**

## **Sprint**

### **Problem**

You want to balance the needs of developers to work undisturbed and the needs of management and the customer to see real progress, as well as control the direction of that progress throughout the project.

### **Solution**

Divide the project in Sprints. A Sprint is a period of approximately 30 days in which an agreed amount of work will be performed to create a deliverable. Each Sprint takes a pre-allocated amount of work from the Backlog...

# It's Not Just Standing Up: Patterns for Daily Standup Meetings



*photo: Karthik Chandrasekarial*

*Daily stand-up meetings have become a common ritual of many teams, especially in Agile software development. However, there are many subtle details that distinguish effective stand-ups and a waste of time.*

**Jason Yip**

<http://martinfowler.com/articles/itsNotJustStandingUp.html>

Who attends?

All Hands

Work Items Attend

What do we talk about?

Yesterday Today Obstacles

Improvement Board

What order do we talk in?

Last Arrival Speaks First

Round Robin

Pass the Token

Take a Card

Walk the Board

Where and when?

Meet Where the Work Happens

Same Place, Same Time

Use the Stand-up to Start The Day

Don't Use the Stand-up to Start the Day

How do we keep the energy level up?

Huddle

Stand Up

Fifteen Minutes or Less

Signal the End

Time the Meetings

Take it Offline

How do we encourage autonomy?

Rotate the Facilitator

Break Eye Contact

How do we know when a stand-up is going poorly?

Focused on the Runners, not the Baton

Reporting to the Leader

People are Late

Stand-up Meeting Starts the Day... Late

Socialising

I Can't Remember

Story Telling

Problem Solving

Low Energy

Obstacles are not Raised

Obstacles are not Removed

Obstacles are Only Raised in the Stand-up

**Jason Yip**

*<http://martinfowler.com/articles/itsNotJustStandingUp.html>*

PATTERN

LANGUAGES

OF

PROGRAM DESIGN



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## Developer Controls Process

Place the Developer role at a hub of the process for a given feature. A feature is a unit of system functionality, implemented largely in software, that can be separately marketed and for which customers are willing to pay. The Developer is the process information clearinghouse. Responsibilities of Developers include understanding requirements, reviewing the solution structure and algorithm with peers, building the implementation, and unit testing.

PATTERN  
LANGUAGES  
OF  
PROGRAM DESIGN

2



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**EPISODES:  
A Pattern  
Language of  
Competitive  
Development**

*Ward Cunningham*

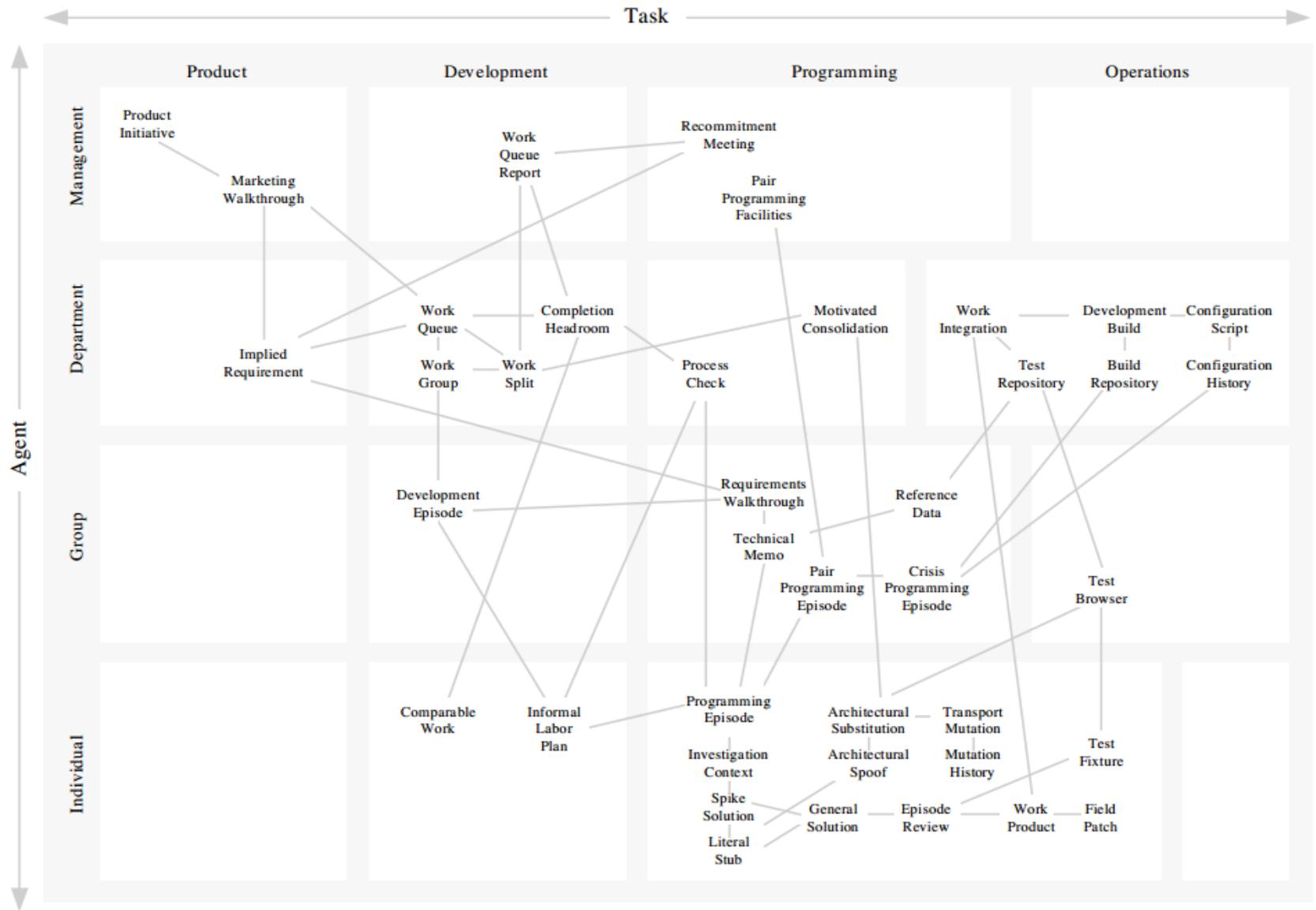


Figure 1. Map of EPISODE patterns and their relations.



# Patterns Manifesto

We are uncovering better ways of developing software by seeing how others have already done it.