

# Tidy First? Book Review

Diego Pacheco



# tidy

/ˈtɪdi/

*adjective*

comparative adjective: **tidier**

1. arranged neatly and in order.

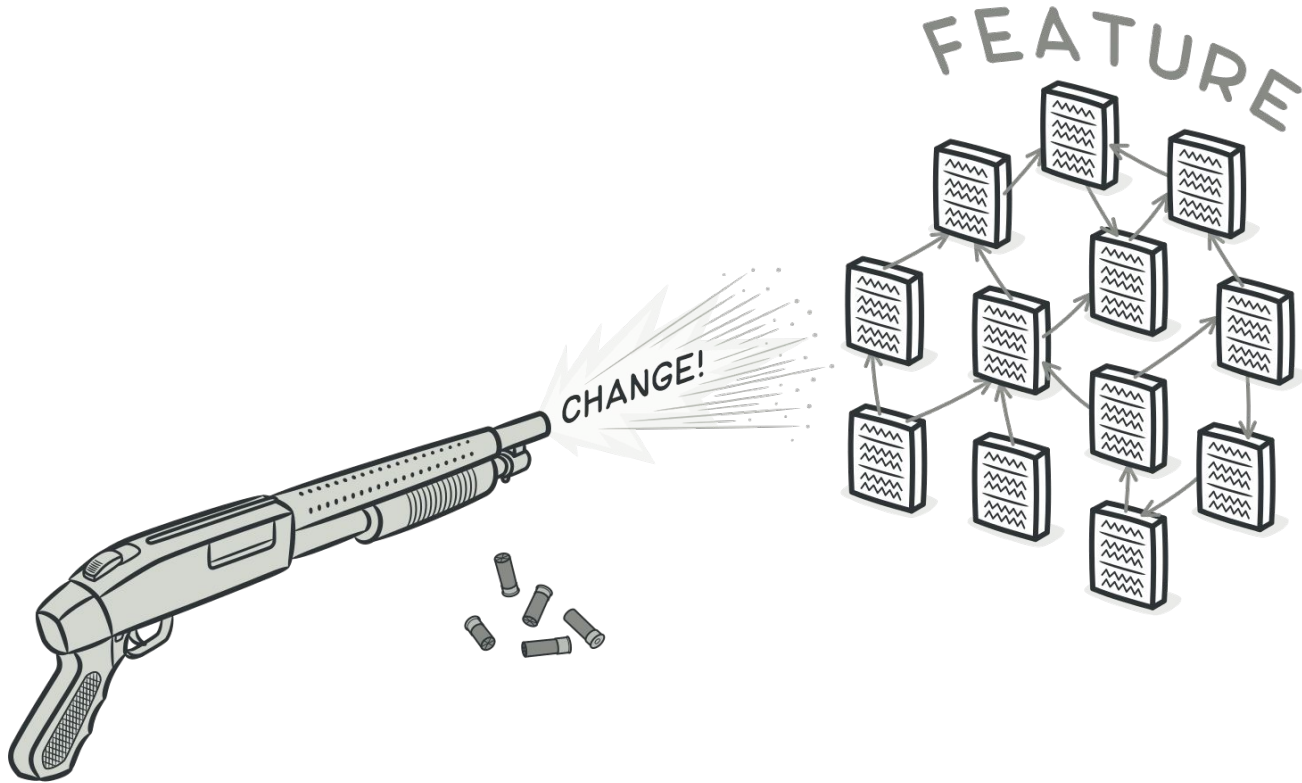
"his scrupulously tidy apartment"

*synonyms:* **neat**, neat and tidy, as neat as a new pin, **orderly**, **well ordered**, in (good) order, **well kept**, shipshape (and Bristol fashion), in apple-pie order, **immaculate**, **spick and span**, **uncluttered**, **organized**, **well organized**, well arranged, sorted out, **straight**, straightened out, **trim**, **spruce**; *archaic* **tricksy**  
"a tidy room"



Mary Condo - Sparkle Joy

# What's Wrong with Refactoring?



Robert C. Martin Series



# Clean Code

A Handbook of Agile Software Craftsmanship



Robert C. Martin



Foreword by James O. Coplien

I'm feeling ...



embarrassed



sad



angry



scared



happy



hungry



shy



excited



worried



tired



frustrated



lonely





## Micro book

- 33 chapters
- 1 page per chapter most of time
- Very very short
- Something too abstract - miss more details
- Good food for thought...

# Part #1 - Tidying == Techniques

1. Guard Clauses (Avoid nested IFs)
2. Dead Code (Just delete it, Logs)
3. Normalize Symmetries (do it all same way)
4. New Interface, Old Implementation (Strangler feelings)
5. Reading Order
6. Cohesion Order
7. Move declaration and initialization together
8. Explaining Variables
9. Explaining Constants
10. Explaining Parameters



# Part #1 - Tidyings == Techniques

11. Chunk Statements

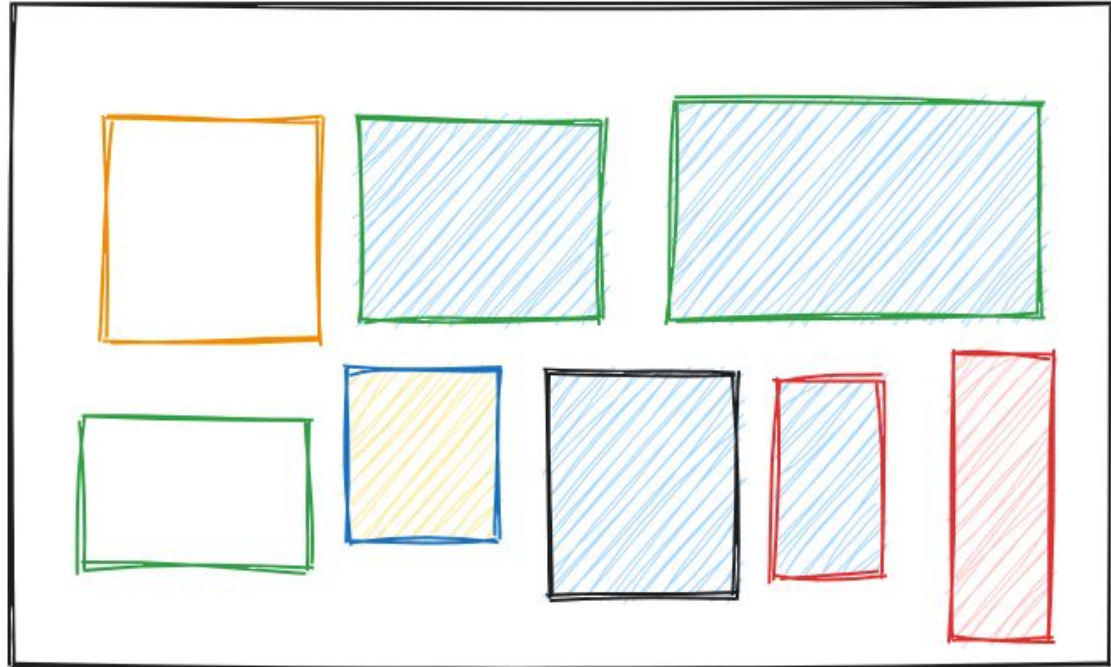
12. Extract Helper (Util class feelings)

13. One Pile

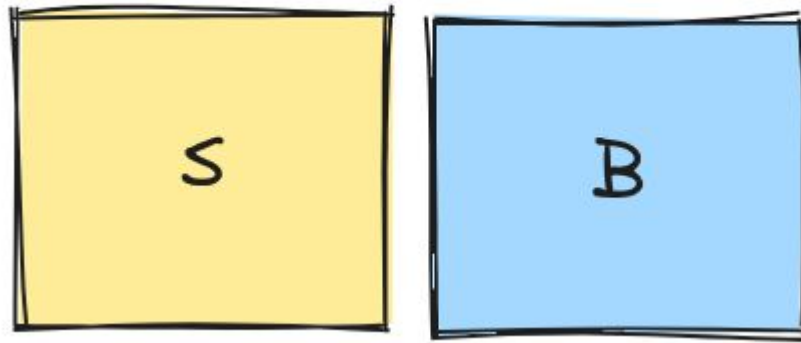
14. Explaining Comments

15. Delete redundant comments

## Part II - Meanings - Making Sense of Changes



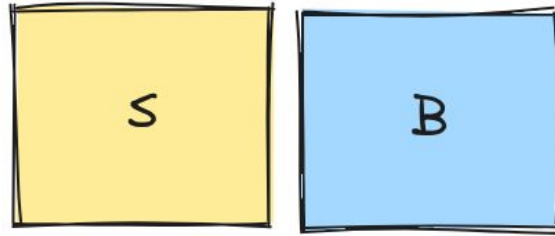
## Part II - Meanings - Making Sense of Changes



Behavior(B) vs Structure(S)

## Part II - Meanings - Making Sense of Changes

*One PR just for Structure?*



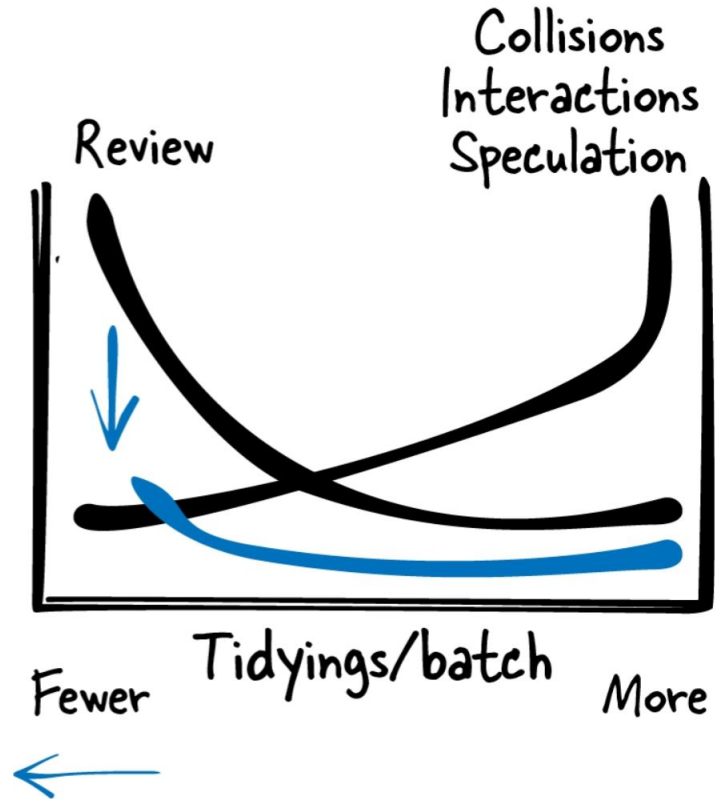
*One PR just for Behavior?*



Channeling Multiple PRs



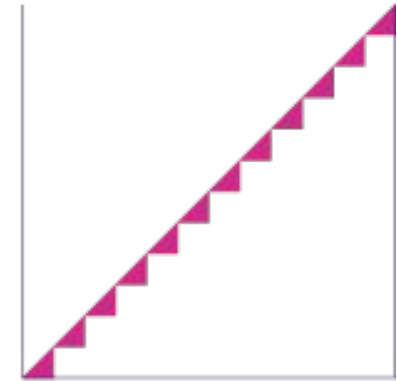
# Batch size - Collision Speculations



Large Batches



Small Batches



Queue Size





# First, Later, Never

## Never

- Never changing this code again
- Nothing to learn by improving the design

## Later

- Big Batch of tidying without immediate payoff.
- Eventual payoff for completing the tidying
- You can tidy in little batches

## First

- Will payoff immediately (improve comprehension or behavior change)
- You know what to tidy and how



# Cost

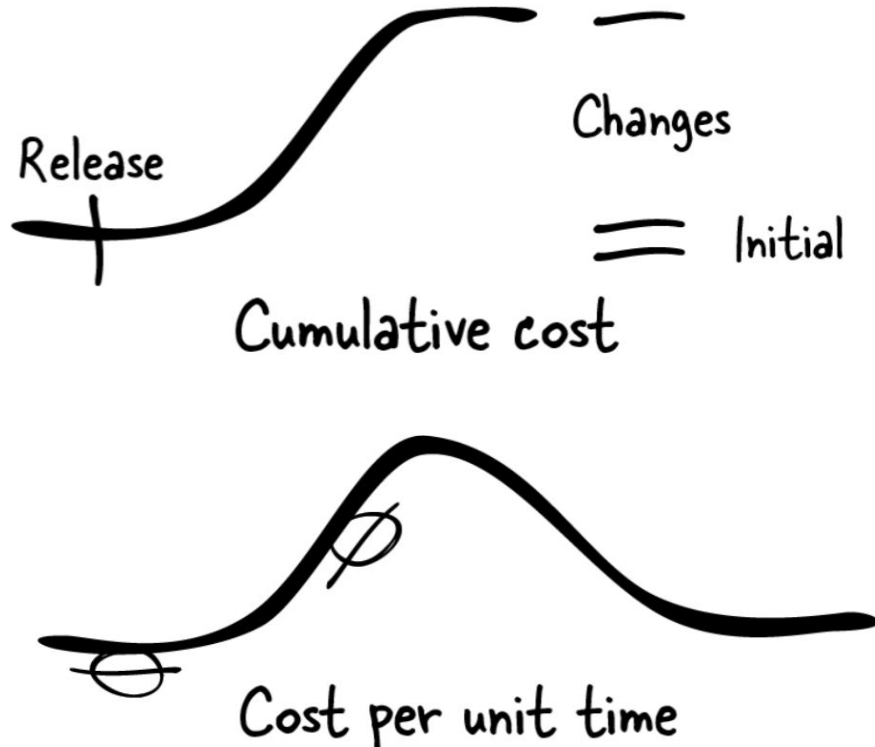
NOW

Cost(Tidying) + Cost(Behavior change after tidy)

<

Cost(Behavior change without tidy)

# Part III - Theory - Constantine Equivalence



$\text{Cost}(\text{change}) = \sim \text{Cost}(\text{Big Change})$

$\text{Cost}(\text{Big change}) = \sim \text{Cost}(\text{Coupling})$

$\text{Cost}(\text{Software}) = \sim \text{Cost}(\text{Coupling})$

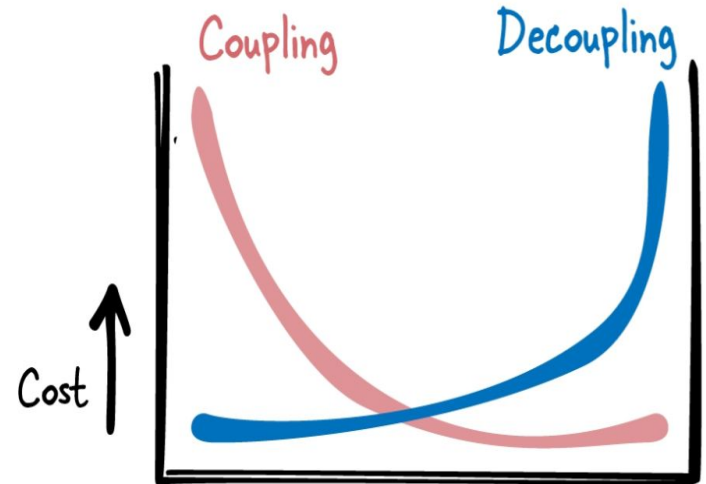
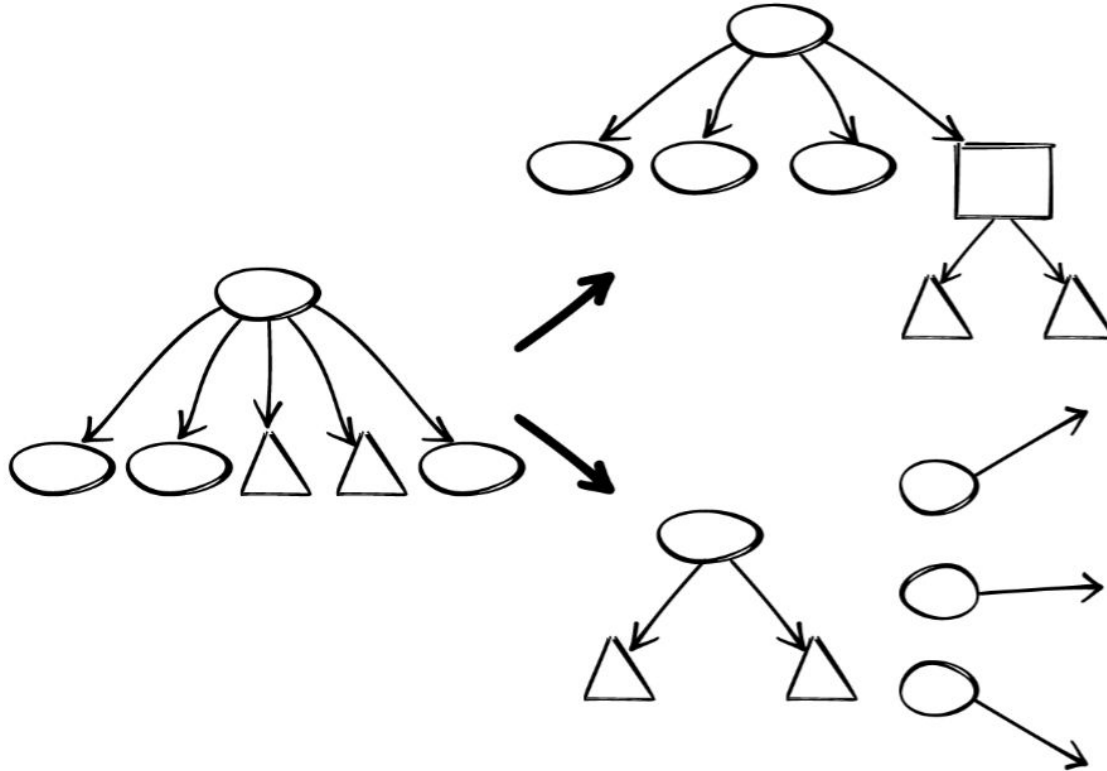


Figure 31-1. Cost of coupling trades off with cost of decoupling

# Cohesion



Geography

Co-location

Similar == Together

Different == Apart

Group things and move them closer before Tidy!

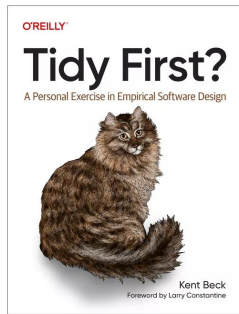
# Forces

Cost: Would the tidy make it smaller, later or less likely?

Revenue: Would the tidy make it larger, sooner, or more likely?

Coupling: Tidy will make us change fewer elements?

Cohesion: Tidy make elements I need to change are smaller and more concentrated scope?



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