



# Mind Busters: Test Your Mind

Maaïke & Göran

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# Exercise: System 1 vs Sytem 2



## What was going on?

System 1:

Automatic

Fast

error-prone

System 2:

Slow

Effortful

conscious



## **Just a heads up...**

We will dive into a coaching exercise after the break which will require a real-life situation from you.

So start thinking about that!



# You're Biased

175+ biases, 4 main categories:

- Not enough meaning
- Too much information
- What to remember
- Need to act fast

[illegible]



## **Some biases:**

Confirmation Bias / Cognitive Dissonance

Clustering Illusion

Inattentional Blindness

Illusion of Control

Sunk Cost Fallacy

Automation Bias



## Link to Testing / Software Development

Existing beliefs about the product / developers (Confirmation bias)

Making false assumptions about requirements (Assumption fallacy, shallow understanding)

Missing 'obvious issues' because of focusing on something very specific (Inattentional blindness)

Requiring estimates on tasks that cannot (Illusion of control)



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## Exercise: Your Story

[github.com/Maaikess/cognitive  
biasesresources](https://github.com/Maaikess/cognitive-biasesresources)

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**And now, for something  
completely different**





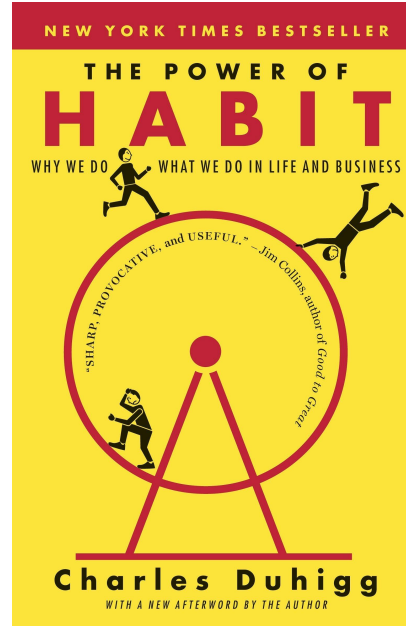
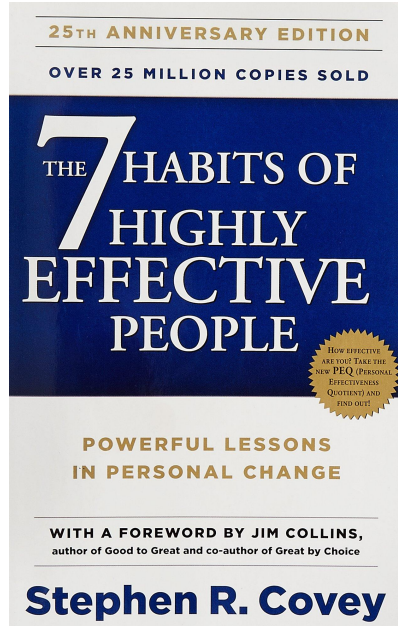
# Meditation, really?!!

Not to be more zen, but to **focus** your attention in the now and back to your body

No need to become a monk, 1 minute can already help

Alternatives: pomodoro technique, take a walk, (heavy) exercise, avoid your mobile phone during every idle moment

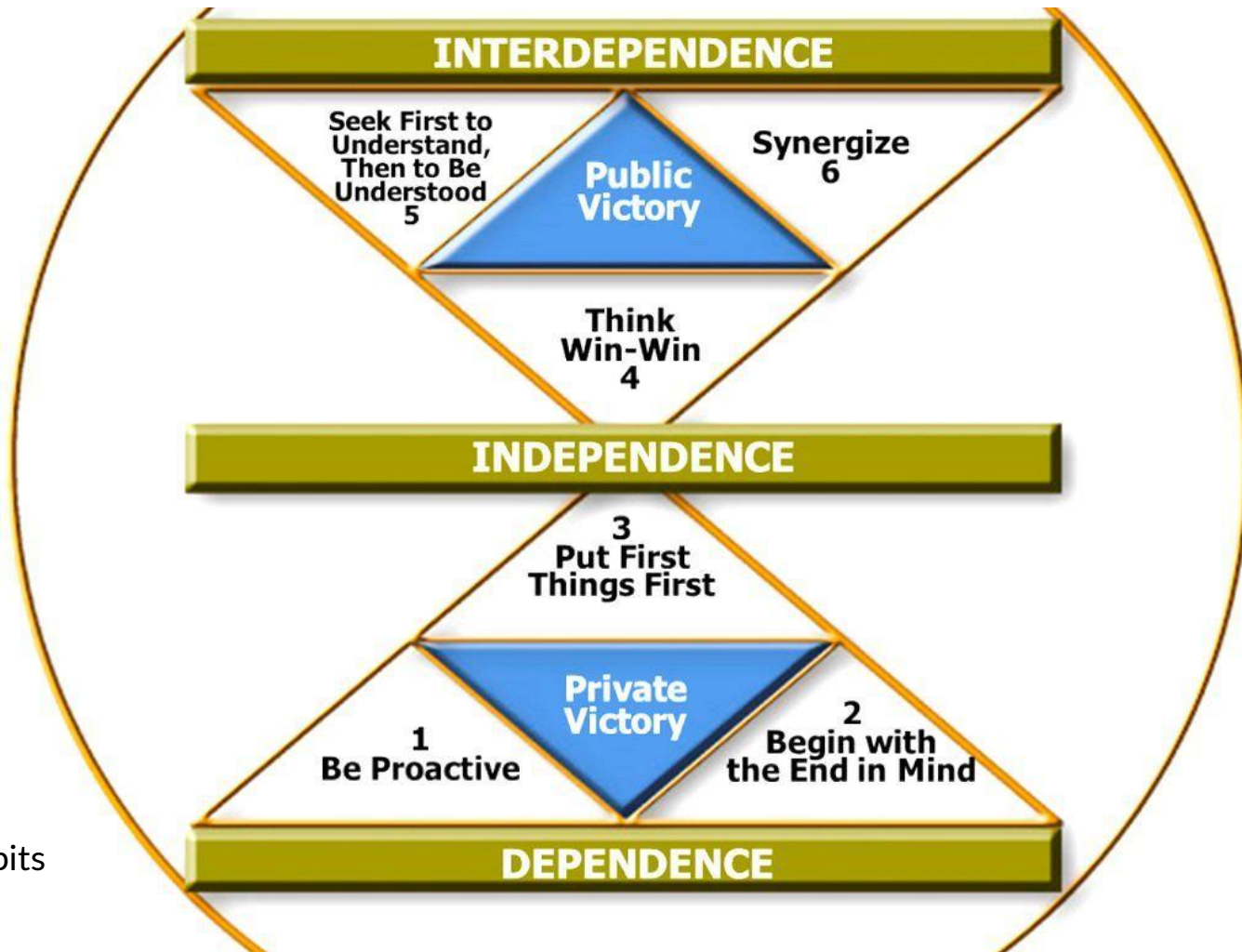
# It's about habits



Book Review / Recommendation of  
**The 7 Habits of Highly Effective People**  
by Stephen Covey

by Stephen Covey





Source: 7 habits  
model



## Given that...

You're biased...

Habits play a big role in your behaviour...

Your mind can't handle constant distraction...

Shifting focus costs energy....

# .....How do you learn?



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# Learning Techniques



**CHUNKING**

**DTSDOBAQLSDI**



# CHUNKING

DTSDOBAQLSDI

ATDSQLIOSBDD



# CHUNKING

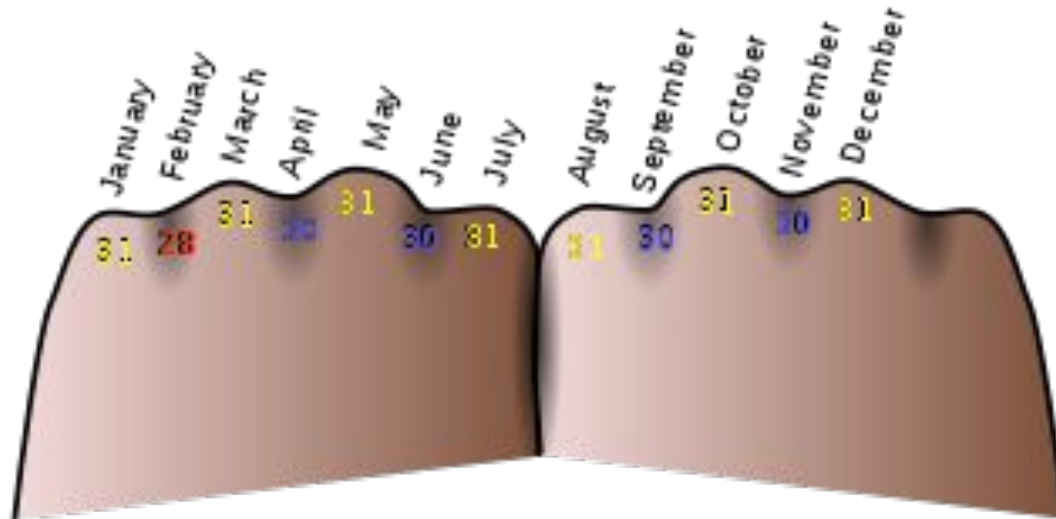
DTSDOBAQLSDI

ATDSQLIOSBDD

**ATD SQL IOS BDD**

# Mnemonics

aids information retention or retrieval



# FOCUSED vs DIFFUSED LEARNING

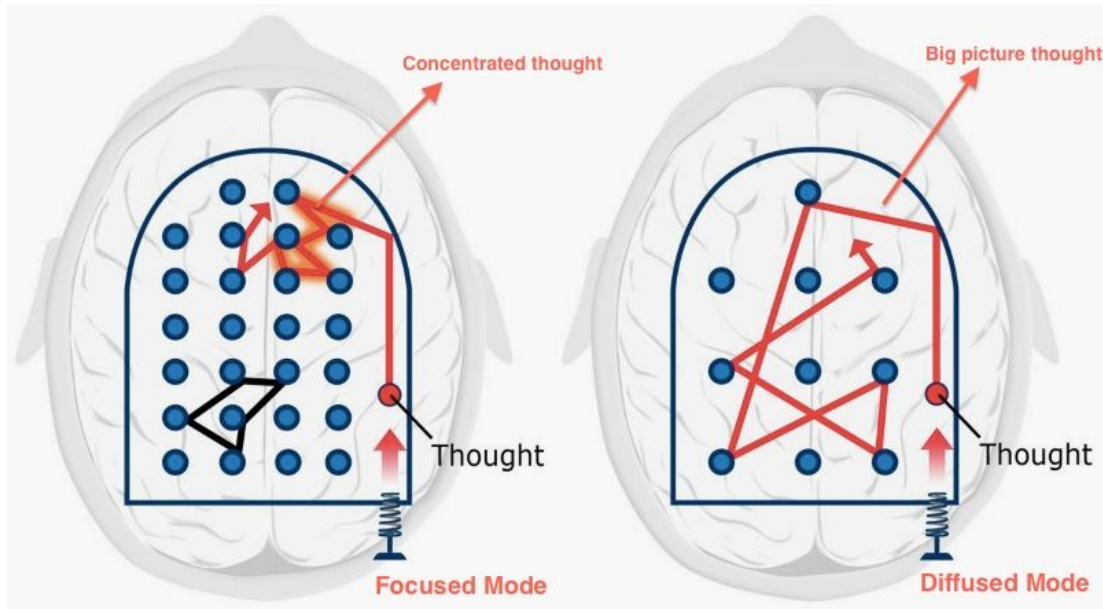
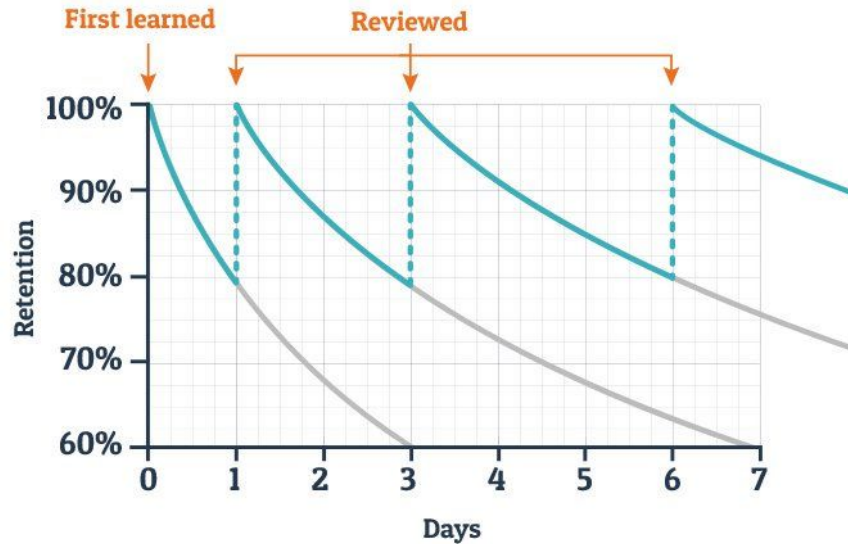


Image credit:  
Barbara Oakley  
Terrence Sejnowski

# SPACED REPETITION

Typical Forgetting Curve for Newly Learned Information



(Ebbinghaus forgetting curve)

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# Exercise: Chunking & Mnemonics, Japanese Style

Using: <http://www.tofugu.com/japanese/learn-hiragana/>



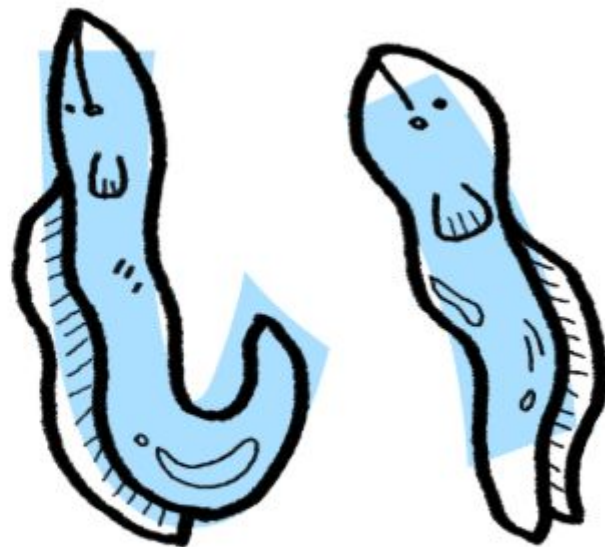
# The first five Hiragana characters

あ い う え お

あ

あ

い



う

う

え



お

お

## The next five Hiragana characters

か き く け こ

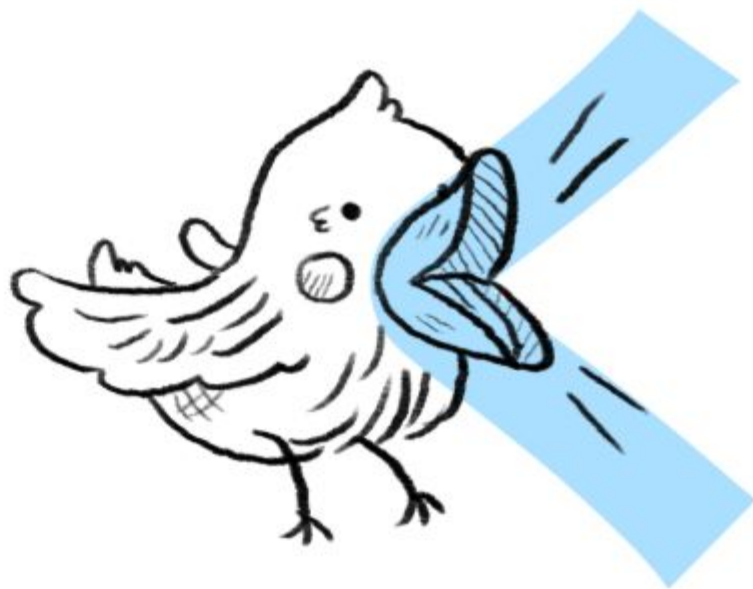
か





ち





け





Practice time!  
[realkana.com](http://realkana.com)

## COMBO HIRAGANA

にや	ちゃ	しゃ	きや
にゅ	ちゅ	しゅ	きゅ
によ	ちよ	しよ	きよ
ぎや	りや	みや	ひや
ぎゅ	りゅ	みゅ	ひゅ
ぎよ	りよ	みよ	ひよ
ぴや	びや	ぢや	しや
ぴゅ	びゅ	ぢゅ	しゅ
ぴよ	びよ	ぢよ	しよ

## DAKUTEN

ば	ぱ	た	ざ	が
び	ぴ	ち	ぢ	ぎ
ぶ	ぷ	つ	づ	ぐ
べ	ぺ	で	ぜ	げ
ぼ	ぽ	ど	ぞ	ご

## ORDER FROM TOP TO BOTTOM, RIGHT TO LEFT

な	た	さ	か	あ
に	ち	し	き	い
ぬ	つ	す	く	う
ね	て	せ	け	え
の	と	そ	こ	お
ん	わ	ら	や	ま
	り		み	ひ
	る	ゆ	む	ふ
	れ		め	へ
を	ろ	よ	も	ほ

## HIRAGANA CHART

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# Observing & Coaching others



## How good are you at observing?

*Coaching, Mentoring, Managing, Leading: start with observing!*

Use this fact to your advantage: **it's easier to observe others than it is to observe yourself**





## Observing examples from a testing perspective

Developer says: “It’s done”

Anyone who says: “just”, “it’s simple”, “it’s easy”

Team member who says: “I only have to do X”

Developer says: “I’ll be finished with the code tomorrow”

Manager who says: “Have you tested everything?”

Manager who says: “I want all testing to be automated”

Manager who says: “How do we know there aren’t any bugs?”



## I have observed: now what?

Remember the 7 habits? **Be Proactive!** A first step to being a leader

This is an opportunity to speak up, to address risk, risky thinking, improve collaboration



## **Risks while observing others**

Biases (Stereotyping, halo effect)

Projection (You project your own values onto others)

Assumptions (You don't have all the information others have)

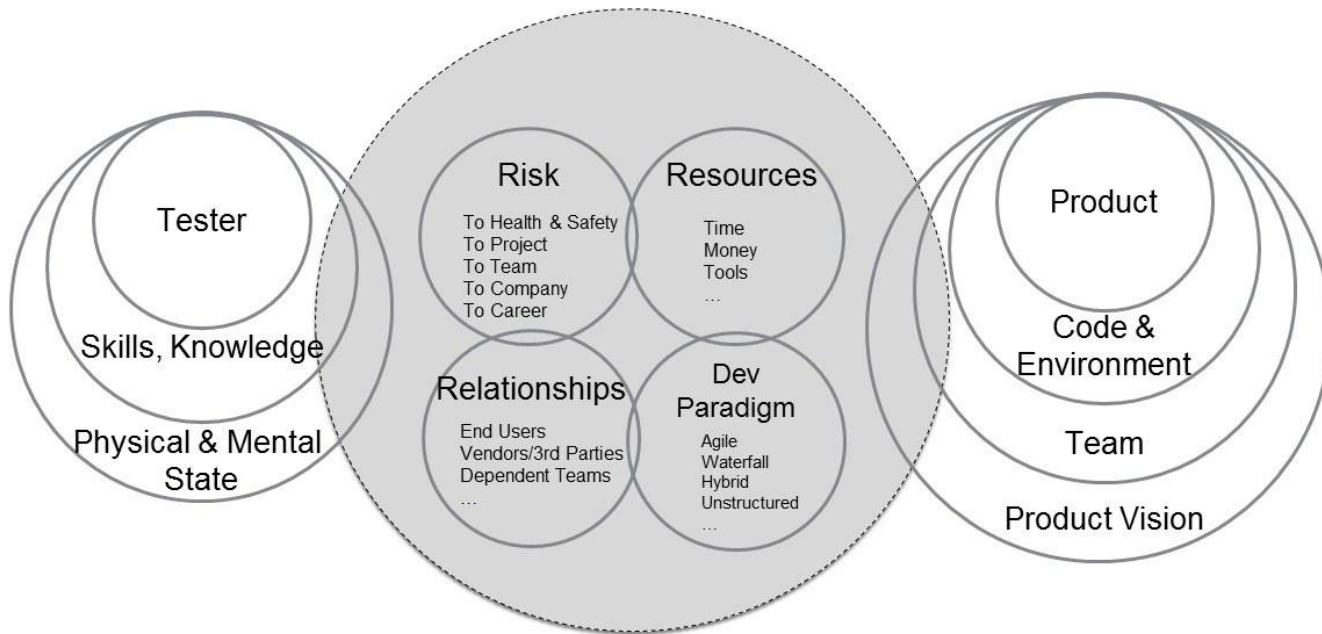
Pattern seeking (Fundamental Attribution Error)



You can both be right at the same time

# Dimensions of Testability

Context Drivers





# **Coaching, Mentoring, Managing, Leading**

Group exercise: What do you think is the difference between these concepts?



## Coaching Heuristics

1. Ask one question at a time
2. Opening question: “What’s on your mind?” (cut the small talk, no judgement)
3. Avoid leading questions and closed (yes/no) questions
4. Don’t give your solution

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# Exercise: Baby Steps in Coaching



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**What we hope you will remember**



## **Source material & Further Reading**

<https://github.com/Maaikes/cognitivebiasesresources>



**Thank you for joining our workshop!**

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