# Liefde

voor

# Leren

Dr Martijn van der Spoel

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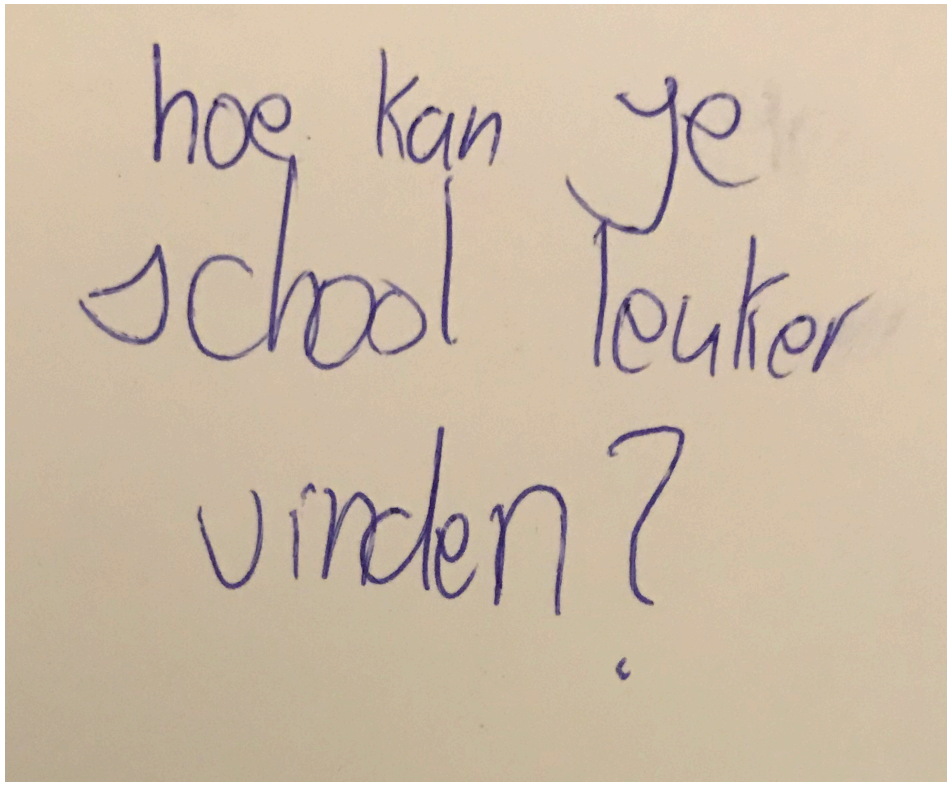


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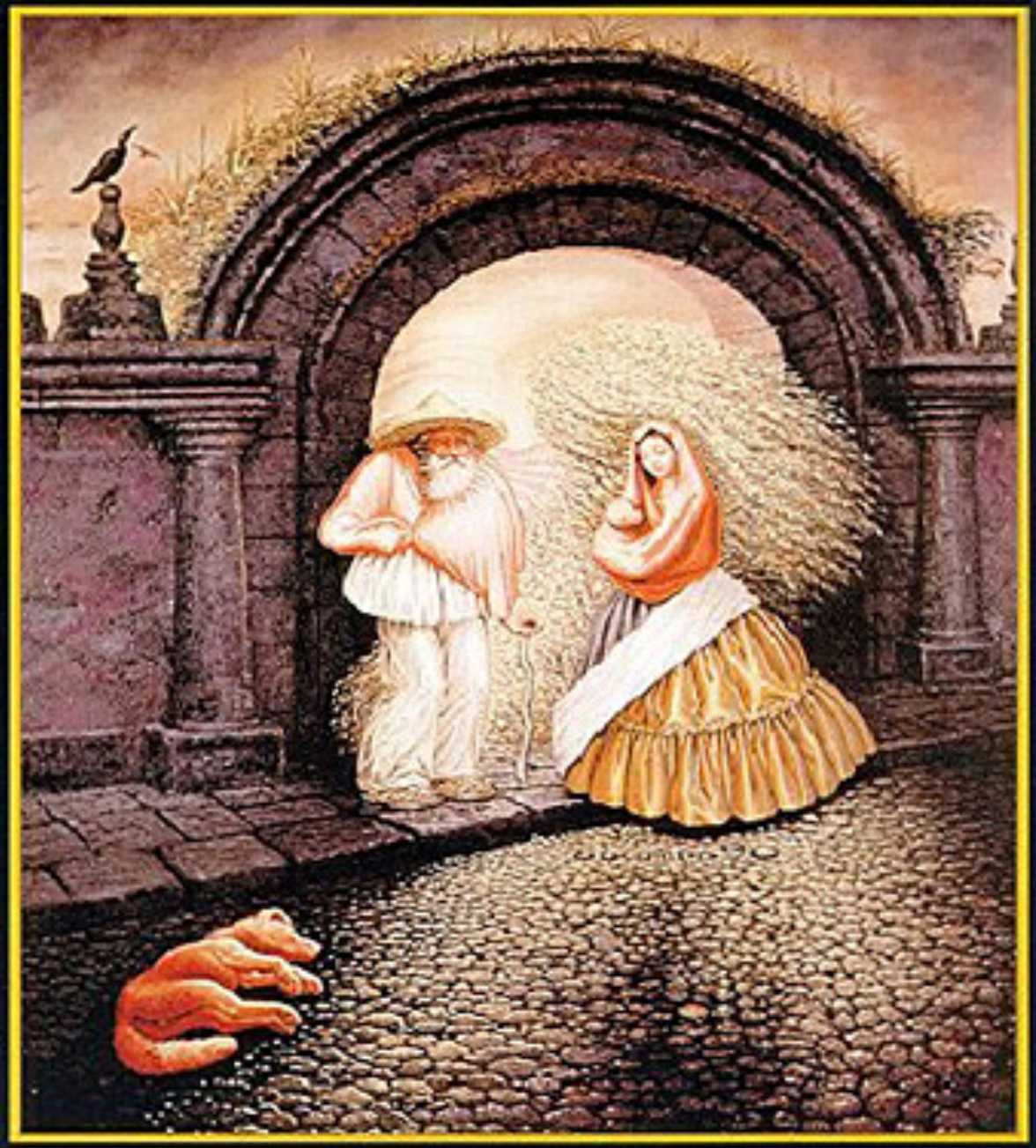

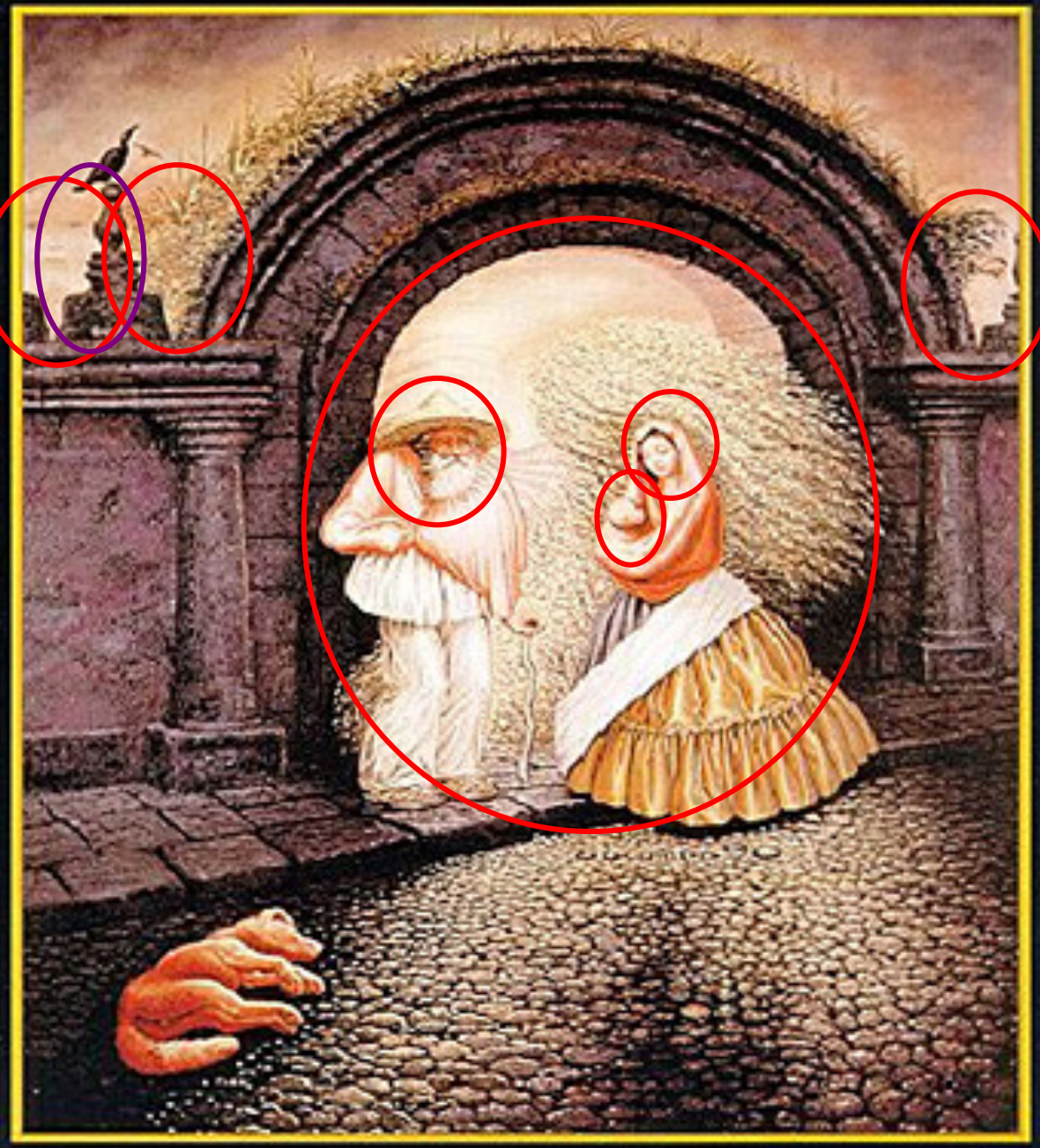

You are born with a love for learning

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Love for learning needs to feel good

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You can't just force it onto someone

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‘Walt did see it, that’s why you’re seeing it today’


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# Liefde

voor

# Leren

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# Liefde

moet je

# Leren

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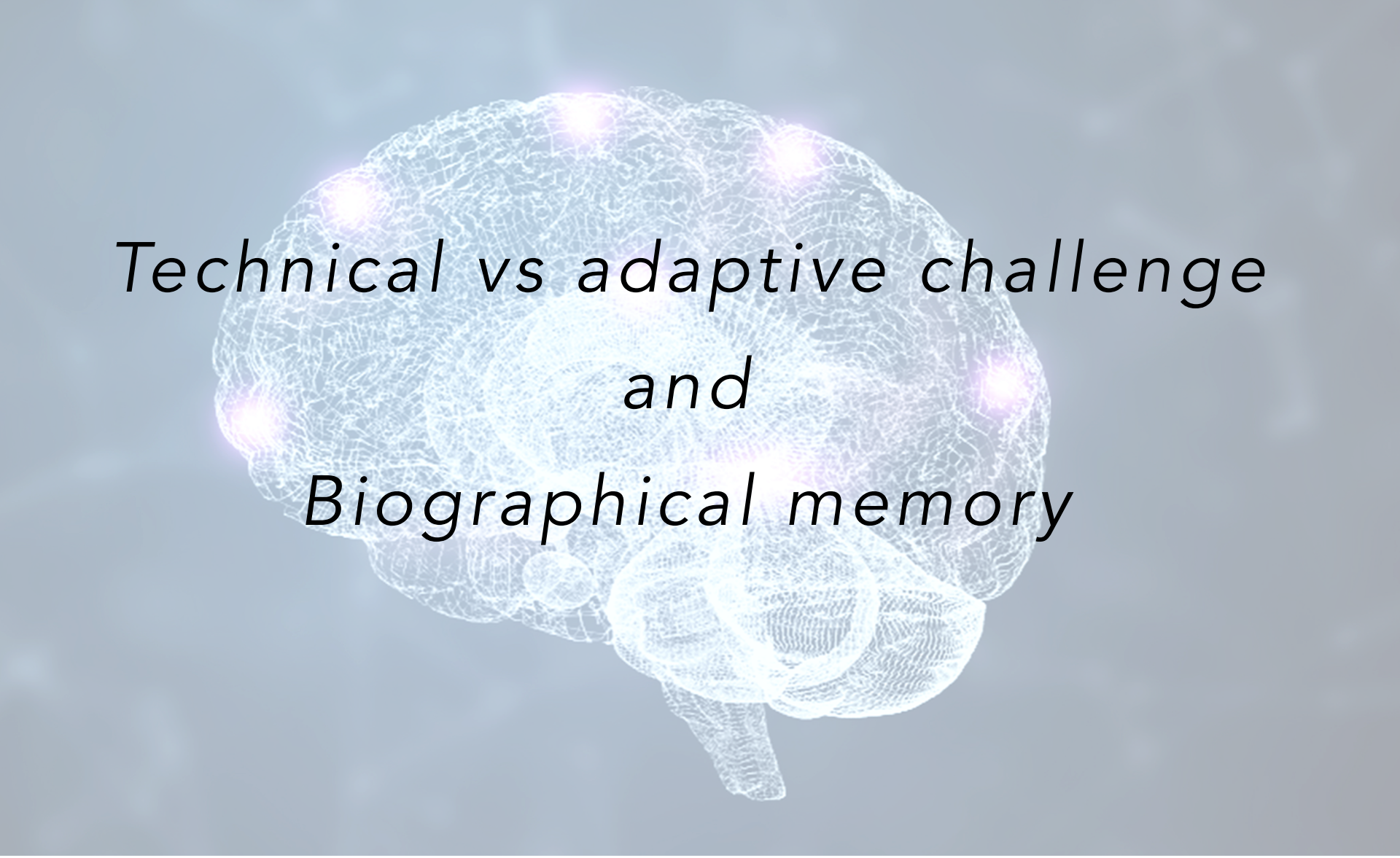

# Technical vs adaptive challenge and Biographical memory


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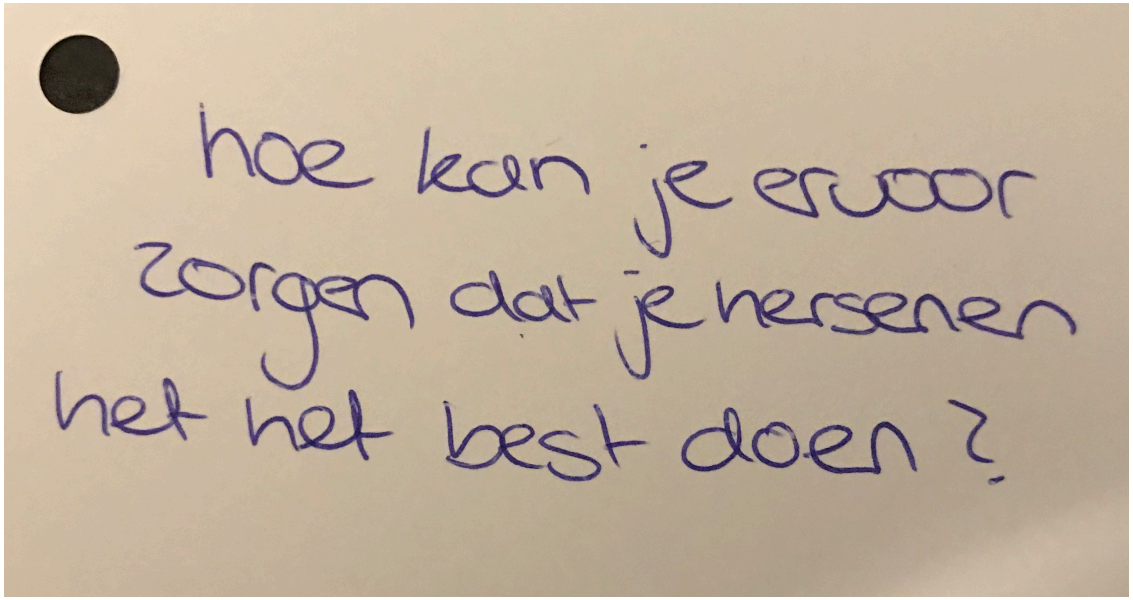



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# Ronald Heifetz

## Harvard University

## Technical vs. adaptive challenges


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# Adaptive challenge

Adaptive challenges speaks about situations where there are no obvious solutions to solve the problem. By nature adaptive challenges are adaptive, which also means that they are, at least to some extent, fluid and change with circumstances.

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# Technical challenge

## Operation!

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# Adaptive challenge

## How to live life!

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Seek to address adaptive challenges with technical solutions

Create bigger problems


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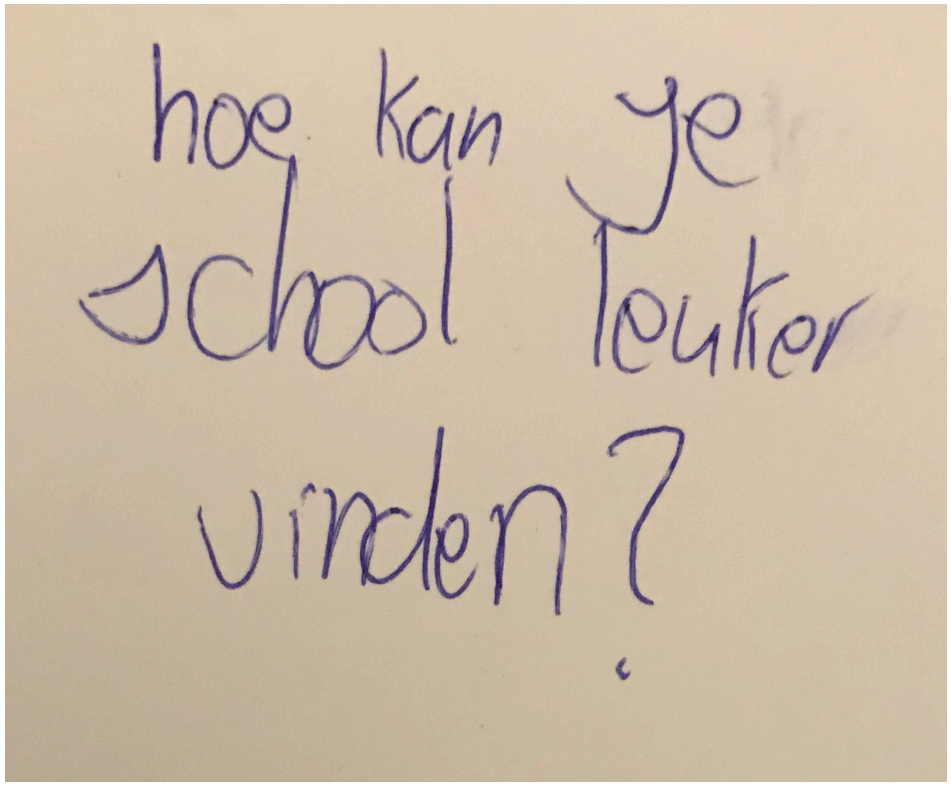


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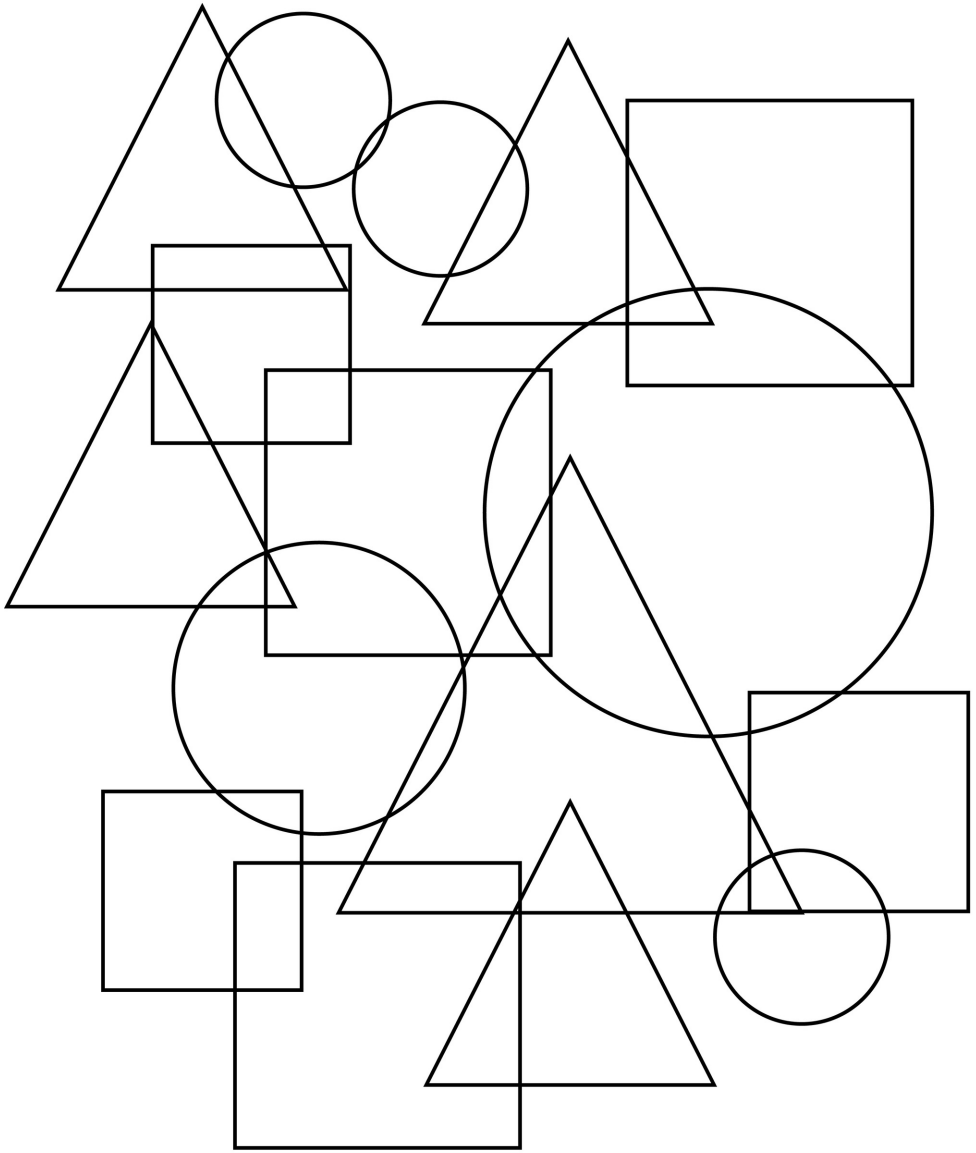
How many of each type?

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# Imagine you are from Pirahã in Amazonia…

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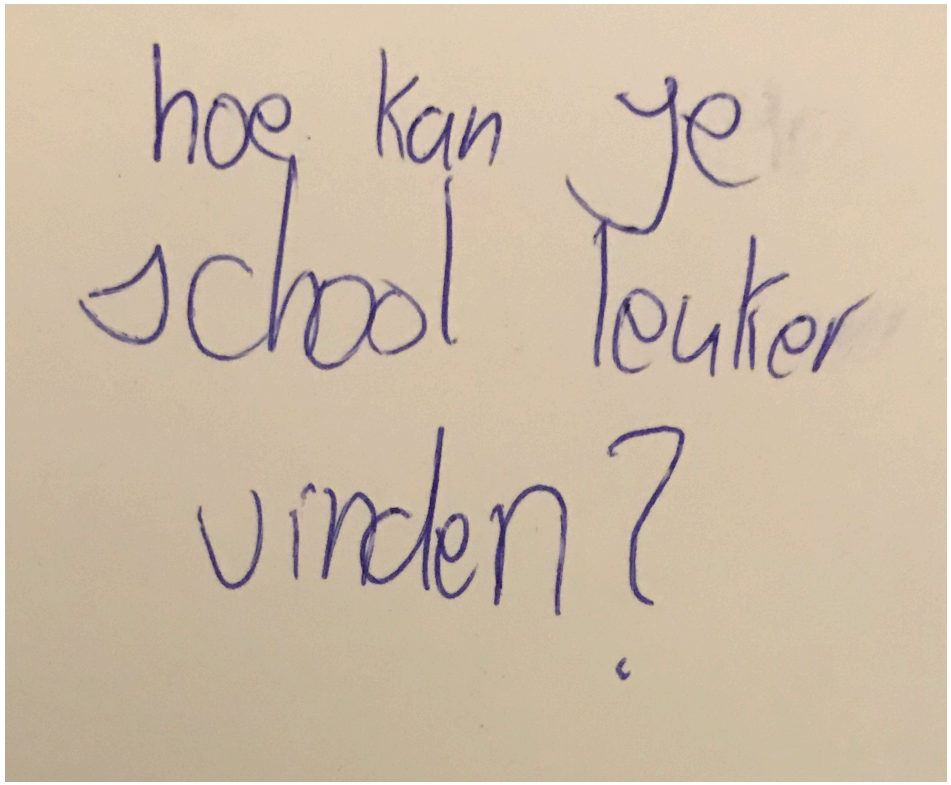


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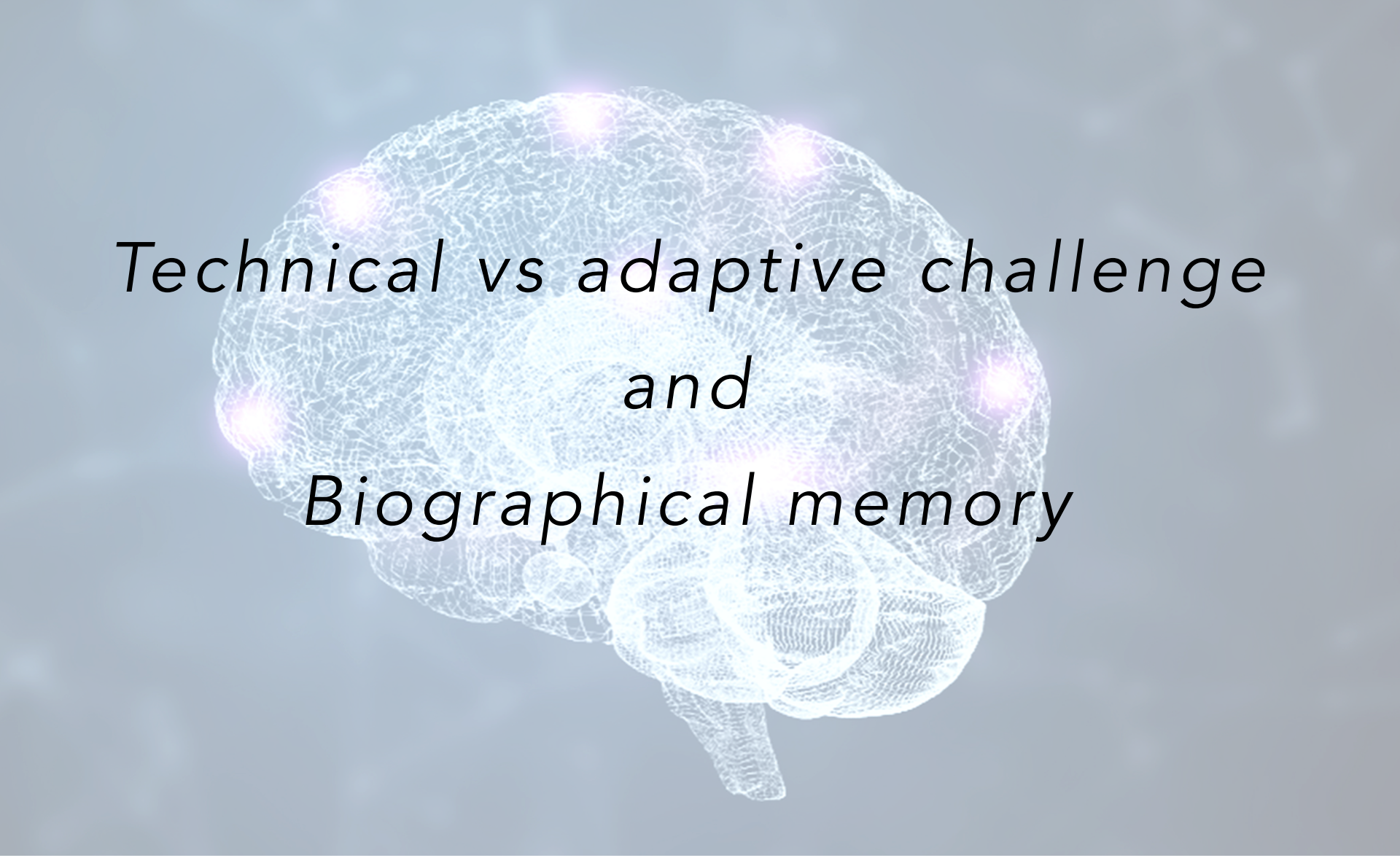

# Technical vs adaptive challenge and Biographical memory


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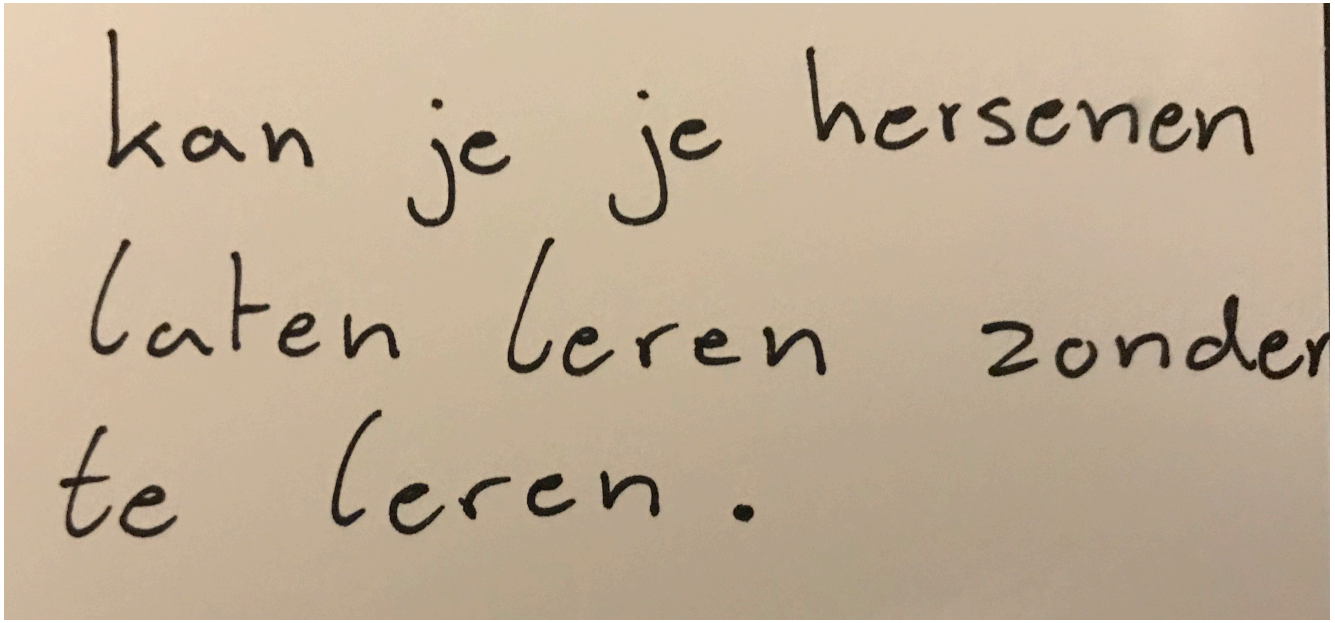


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# Science

(four words)

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# Tmaos

atoms

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# Xeeeprmitn

## Experiment


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# Big Lion

## Boiling


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# Pointer

Protein

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"Students who come to school loved, you can teach

-

those who don't you need to love first."

*Nicholas Ferroni*


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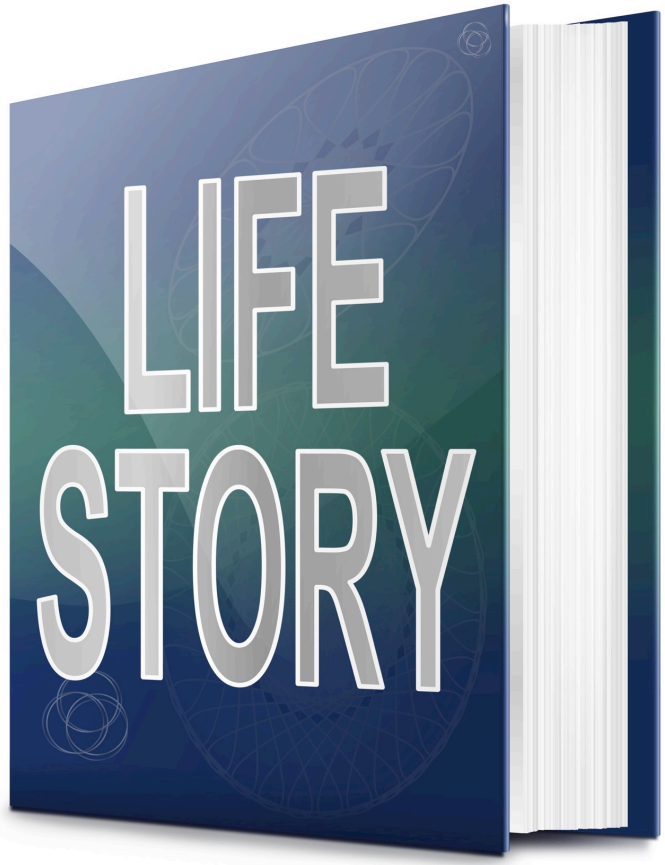
# Biographical memory





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You!

# Starts early


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# Limit unknown

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# Pictures


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# How do you strengthen your biographical memory?


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# Point

'I know why!'

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# Pace

I can can do it!'

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# Passion

'I want this!'


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# Point

'I know why!'

# Responsibility

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# How BIG is your world?

Point

'I know why!'

Responsibility


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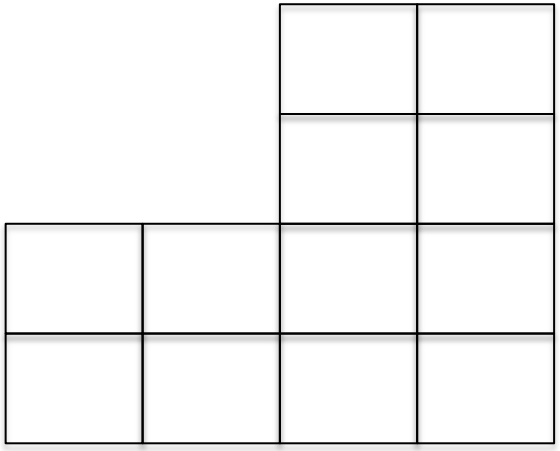
# Copy this shape



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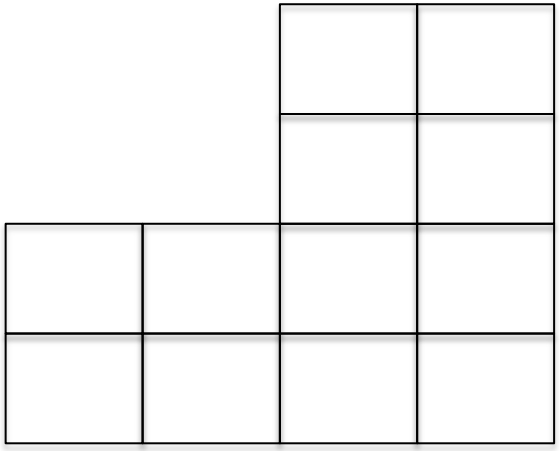
# Divide in 4 equal parts

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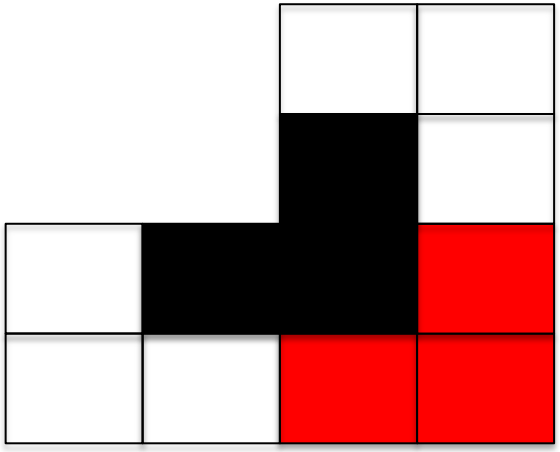


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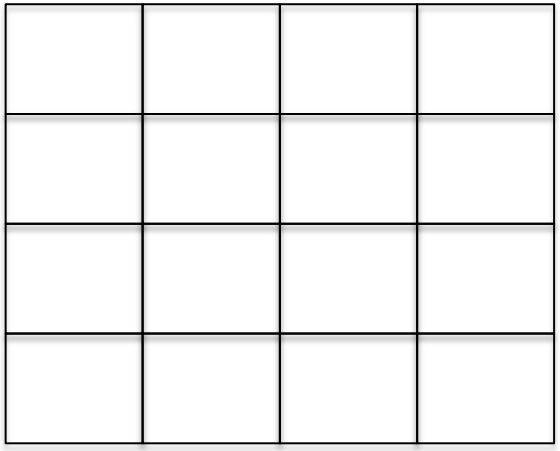
# Copy this shape



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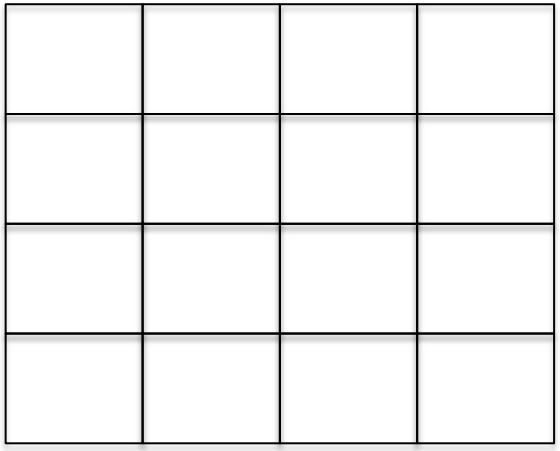
# Divide in 5 equal parts



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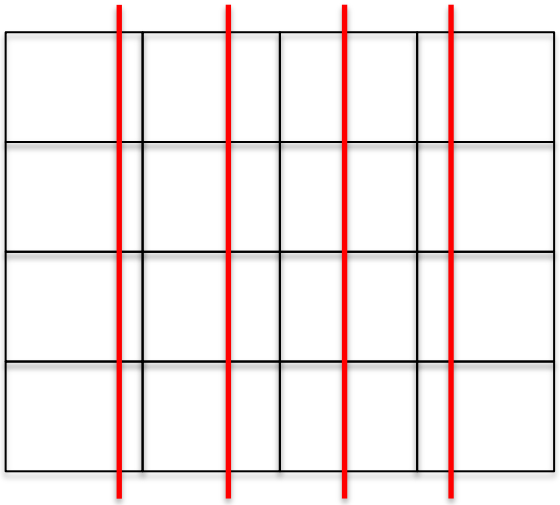
# Divide in 5 equal parts



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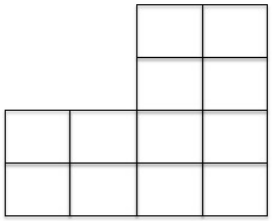
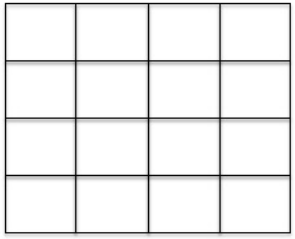
A → B

## Divide in 4 equal parts



## Divide in 5 equal parts



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# HOW?

How BIG is your world?

How can you discover it?

Point
'I know why!'
Responsibility


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# Grow my confidence

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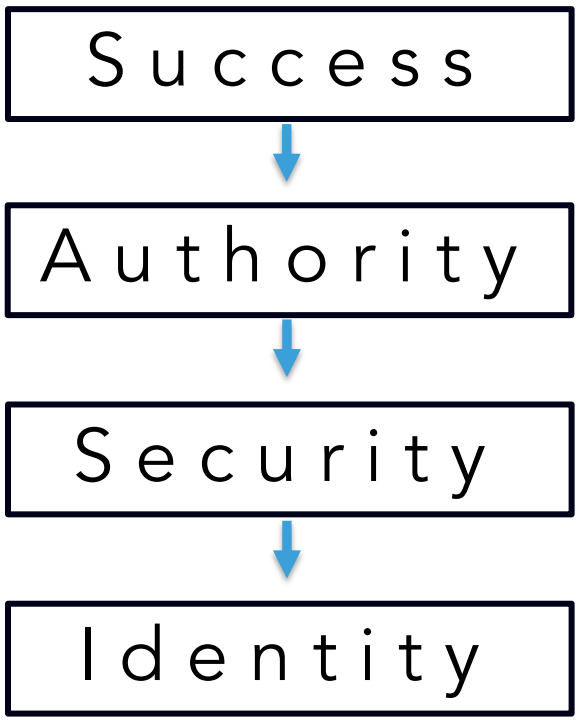
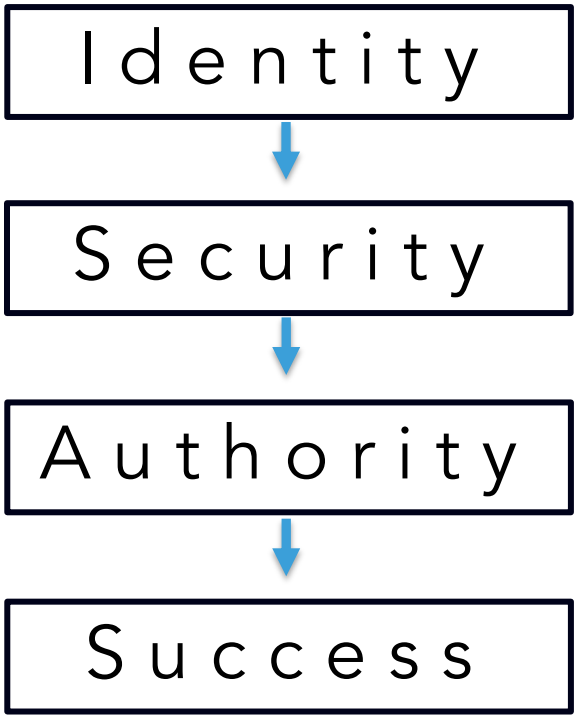
# Tasting of Success

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# Point

'I know why!'

# Responsibility

How BIG is your world?
How can you discover it?


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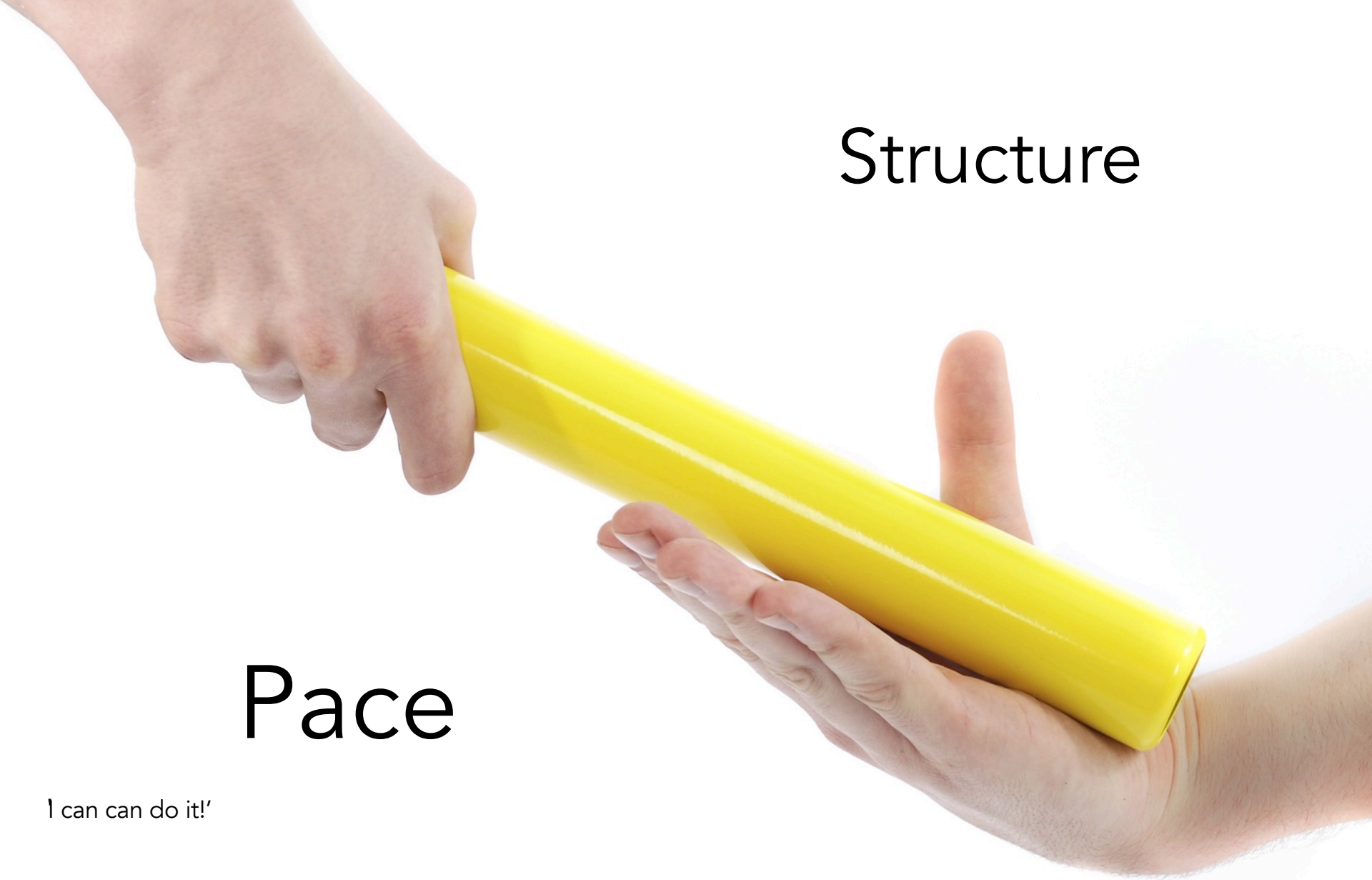


I can can do it!'


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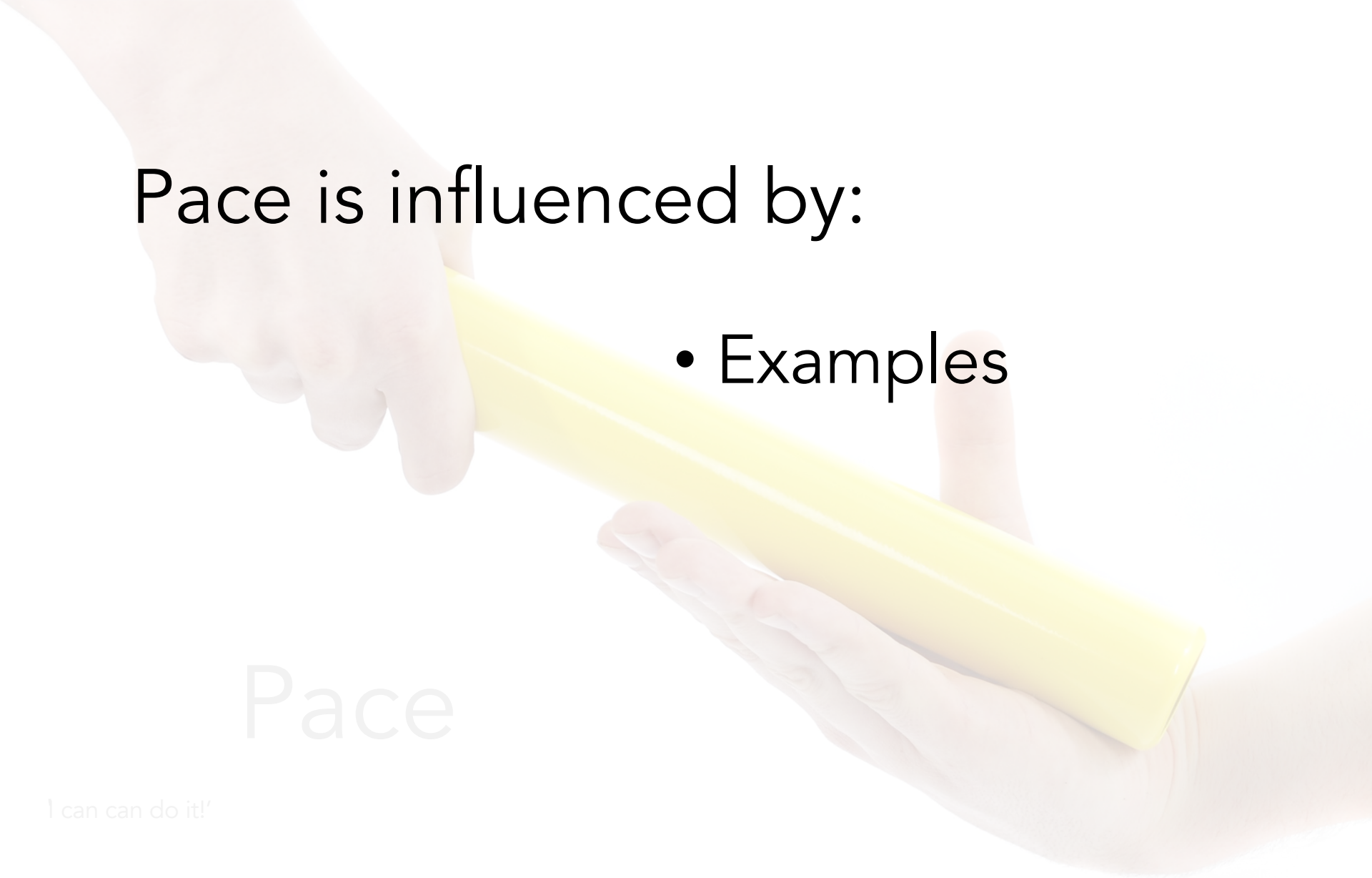
# Pace is influenced by:

- Examples





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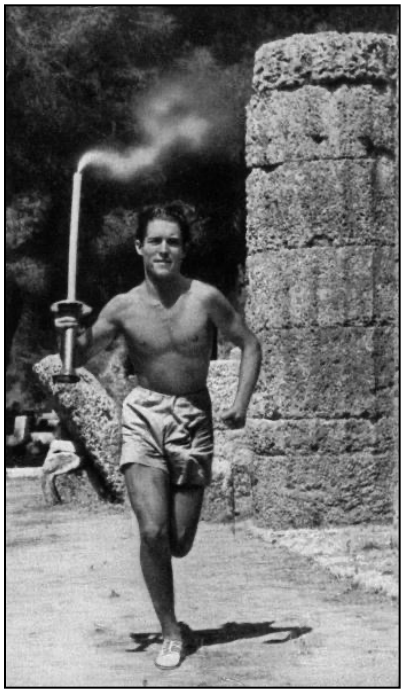
# The four minute mile

Who can do it?

# The four minute mile



Greeks tried their hardest!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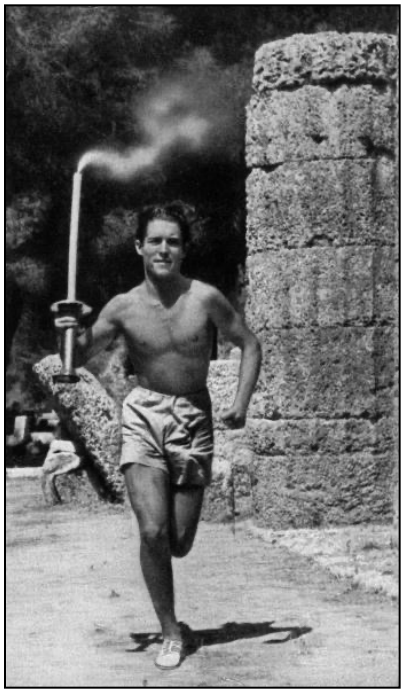
# The four minute mile



Lions chasing them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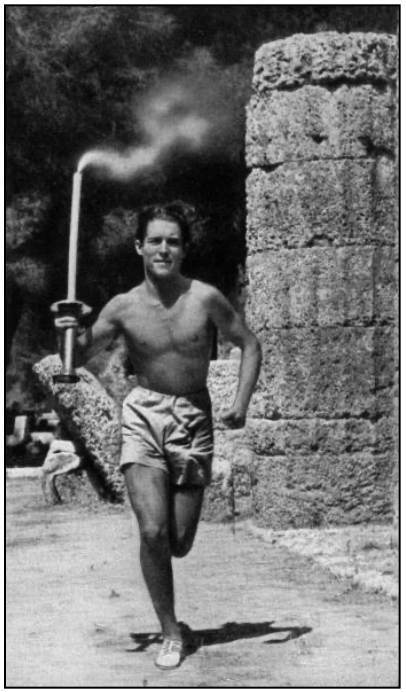
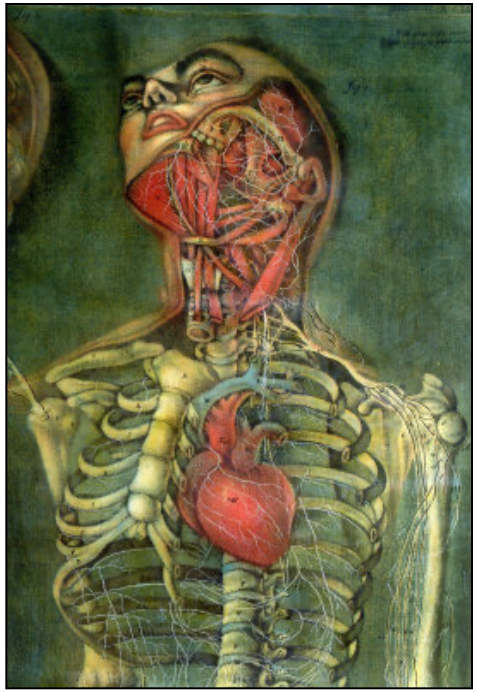
# The four minute mile





Your heart will explode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# Never give up

1954: Roger Bannister
Three minutes 59.4 seconds


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FINAL EDITION

# London Herald

FINAL EDITION

No.34201 FRIDAY 7th MAY 1954

# BANNISTER BREAKS FOUR MINUTE MILE

## Greatest Record in Sport Falls

Bannister's moment of glory at Iffley Road

### Miracle Mile for British Medical Student

By Tom Philp in Oxford

The greatest barrier in world sport was finally crossed yesterday when Roger Bannister became the first man to run a mile in less than four minutes.

Mr Bannister, a 25 year old medical student, broke the record on Oxford University's famous cinder track at Iffley Road, during a match between the University and the Amateur Athletic Association.

The four minute mile was once considered by experts to present an impossible challenge to the human race and has always been seen as the 'Holy Grail' of the middle distance runner. So the breaking of the world record held for nine years by the Swede, Gunder Haag, Bannister has secured for himself a permanent place in the pantheon of the greatest sportsmen of all time.

Bannister spent the morning at St Mary's Hospital in London, where he is a junior houseman, before taking the train to Oxford for yesterday's meeting, in which he was due to run at 6.00pm. During the afternoon conditions were poor, the wind was strong and gusty, and the atmosphere was dark, wet and cold. Nevertheless, it was widely known that the race would mean an attempt on the world record and, on the basis, the organisers had persuaded the international sports press to attend and the BBC to televise the meeting.

**Deadline**

As the 6pm deadline approached, the wind died down and the rain held off. At Gregory's Pog over the gravelled Iffley Road hung, weakly, enough to persuade Bannister and his two pacemakers, Christopher Chataway and Chris Brasher, that the record attempt was on.

Despite a false start, Brasher set the pace for the first two laps and the world-to-be had split-mark at the colossal time of bilious 54 seconds. As Brasher tired, Chataway accelerated around this point to set the pace for the third lap before Bannister crashed it with 250 yards from the tape. Bannister was a beacon as the member of the trio most likely to take the record on the grounds of his speed over the last 200 yards of the race and he certainly did not let his colleagues down.

**Exhausted**

Obviously totally exhausted, he drove his body to the extremes of human endurance over the final 200 yards before becoming the tape and collapsing into the arms of his supporters. For the record to be accepted three of the timekeepers

| The Route to the Record | | |
|---|---|---|
| May 1945 | J Wilson (Gb) | 4.06.8 |
| May 1942 | G Haag (Sw) | 4.06.2 |
| March 1945 | W Slijkhuis (Gb) | 4.04.6 |
| June 1870 | W Wade (Gb) | 4.04.5 |
| June 1882 | W Gregory (Gb) | 4.03.8 |
| May 1915 | JP Jones (Cal Ber) | 4.04.4 |
| October 1931 | J Lashmanyan (Ber) | 4.01.2 |
| September 1942 | G Haag (Swe) | 4.00.6 |
| July 1945 | A Andersson (Swe) | 4.02.6 |
| July 1945 | G Haag (Swe) | 4.01.3 |
| May 1954 | R Bannister (Gb) | 3.59.4 |

**OTHER NEWS**

**Teddy Boy sent to Borstal** – The Hove Juvenile Court yesterday declared yesterday that the problem of 'Edwardian', or Teddy Boys, was not widespread. p6

**Racial Segregation Set to be Outlawed in US Schools** – US Supreme Court is set to rule on the integration of white and black children in single schools in southern US states. p10

**Dim Bird Plus Stop Pours in a Chor** – Famous French Pattern-scholar Jean Marie is full in the Commons Chorus of the Year Mark within the next 48 hours. p26

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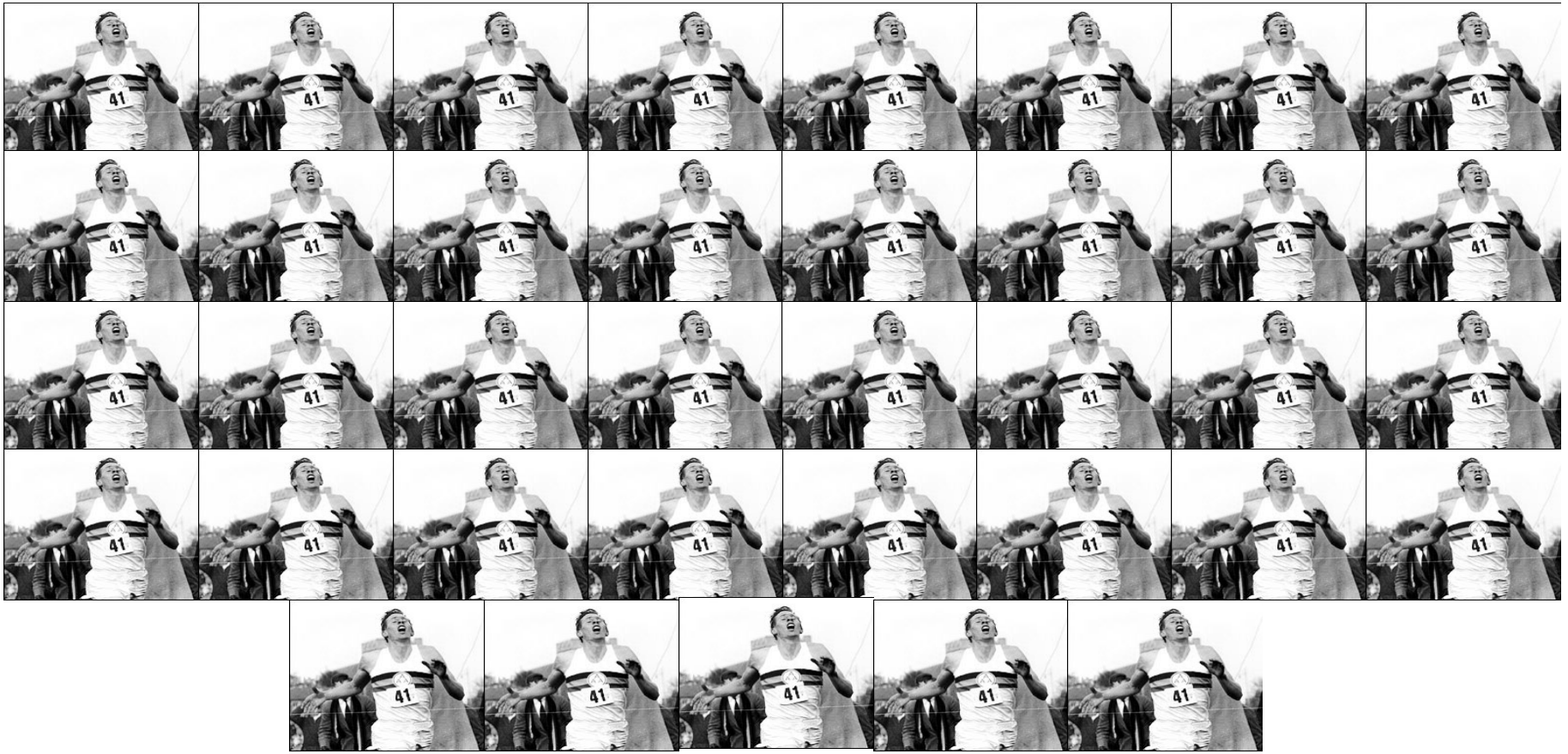
# One year later…

*…37 ran a mile in less than 4 minutes!*



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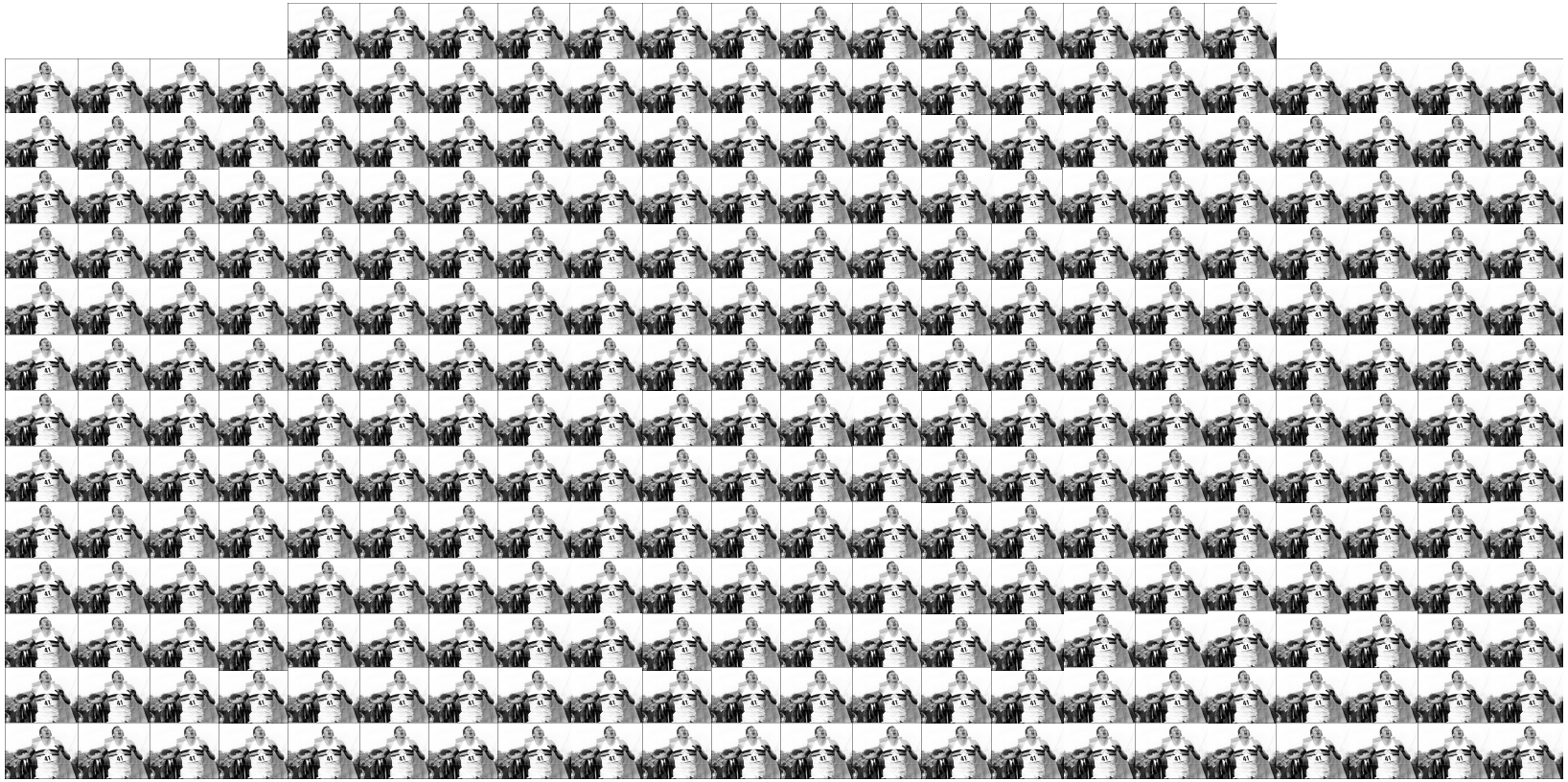
# Two year later…

*…300 ran a mile in less than 4 minutes!*

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# Pace is influenced by:

- Examples
- Surprises

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‘Columbo effect’

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# Pace is influenced by:

- Examples
- Surprises
- Risk

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# Thinking about risk...

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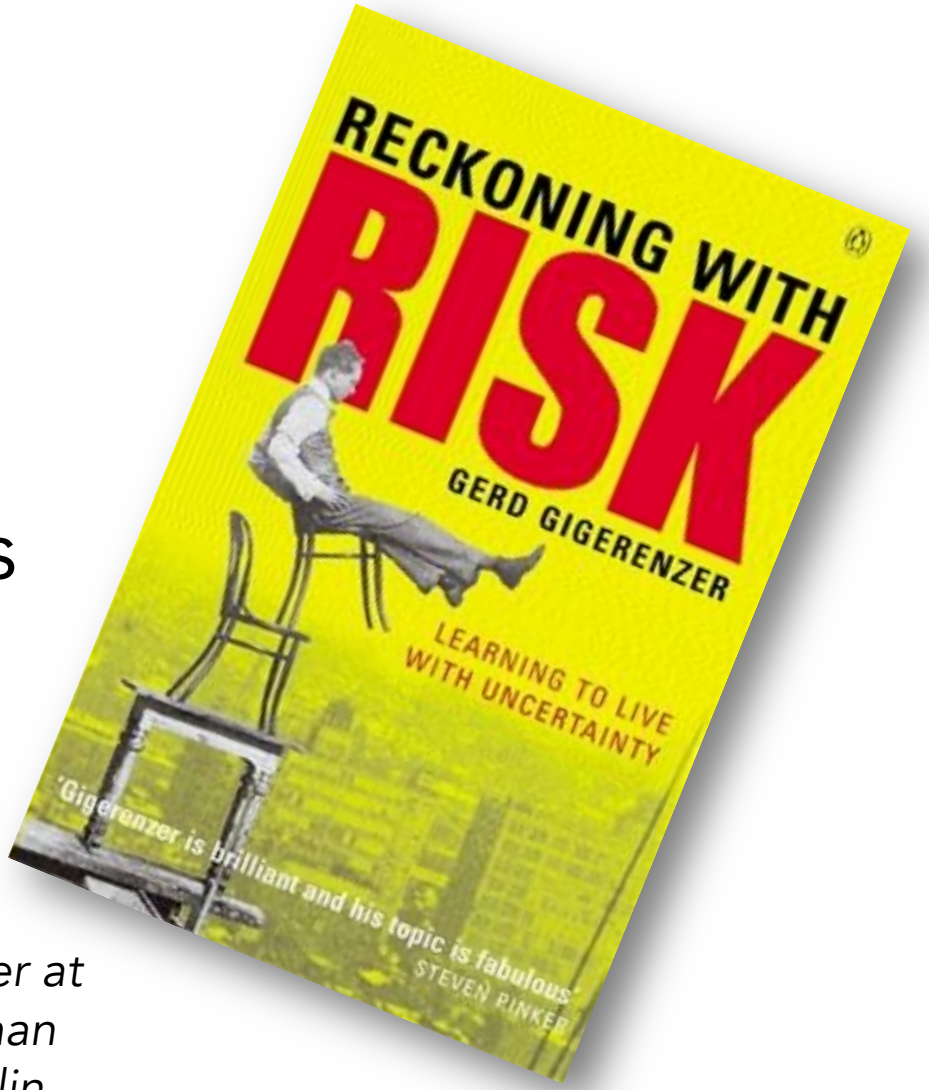
Society moves increasingly to making feeling driven decisions




*Psychologist Gerd Gigerenzer at Max Planck Institute for Human Development, Potsdam (Berlin, Germany).*

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# Challenge

... if you dare

# Reflection

There was an “I can’t do this” moment.

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# Passion

'I want this!'


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# Progress

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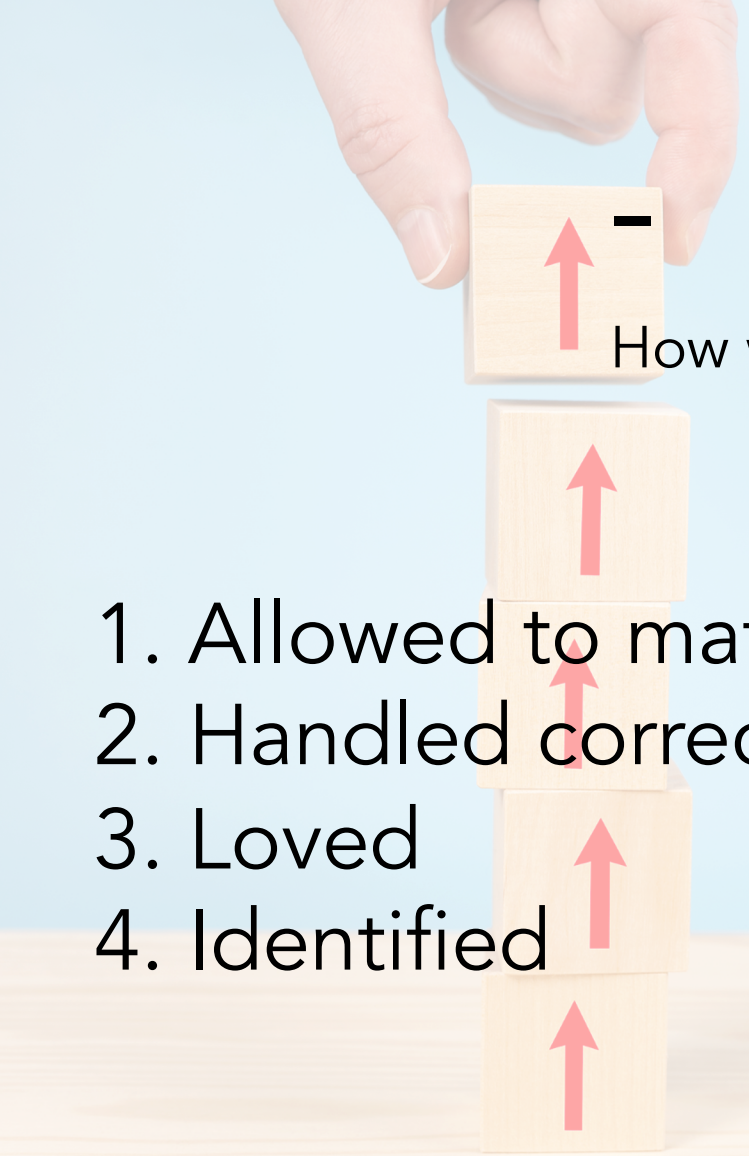
# - Activity -

How would you order this?



1. Allowed to mature
2. Handled correctly
3. Loved
4. Identified
5. Mastered
6. Practiced
7. Repeated
8. Understood

Learning process.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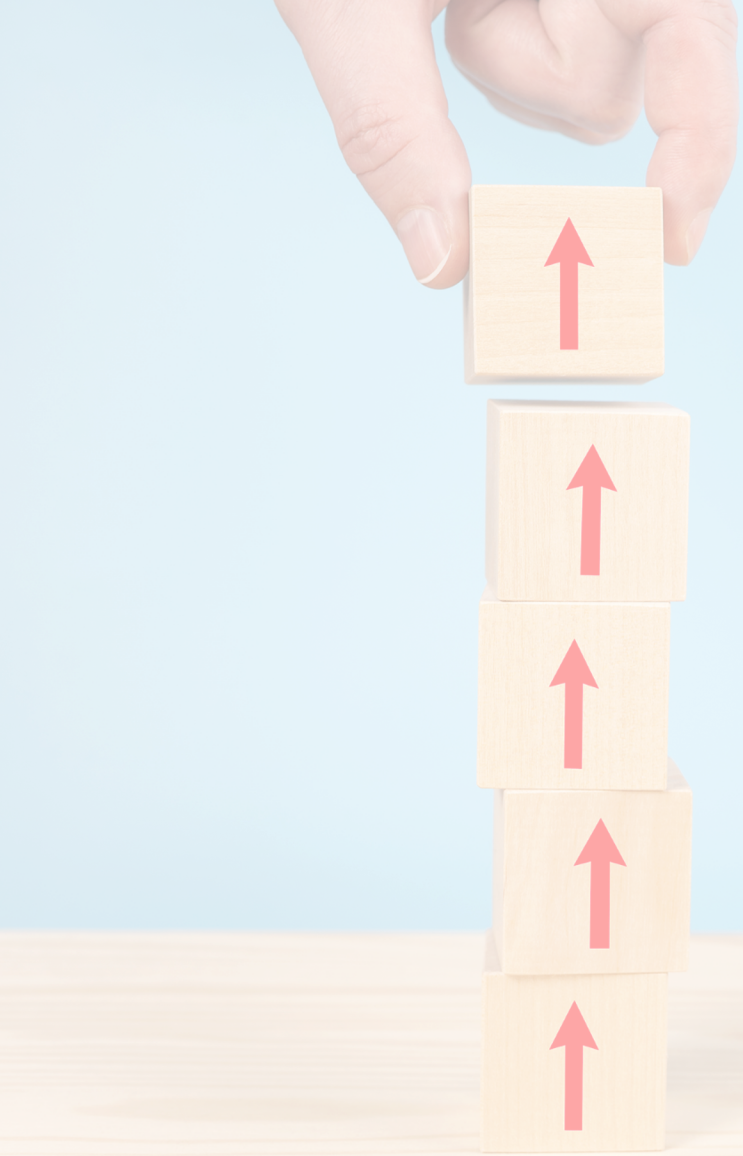

Loved
Mastered
Allowed to mature
Repeated
Practiced
Handled correctly
Understood
Identified


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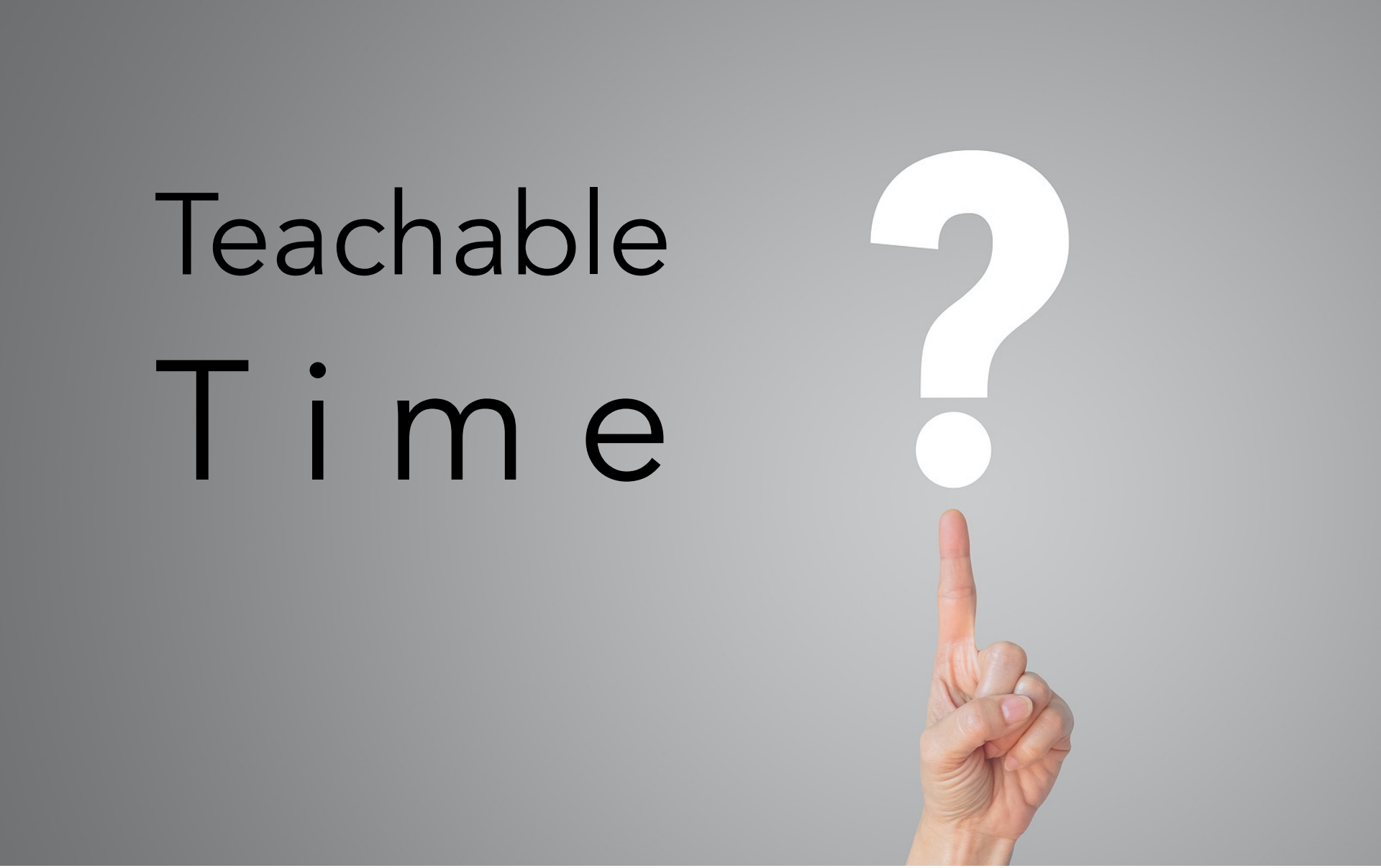
# Teachable Time

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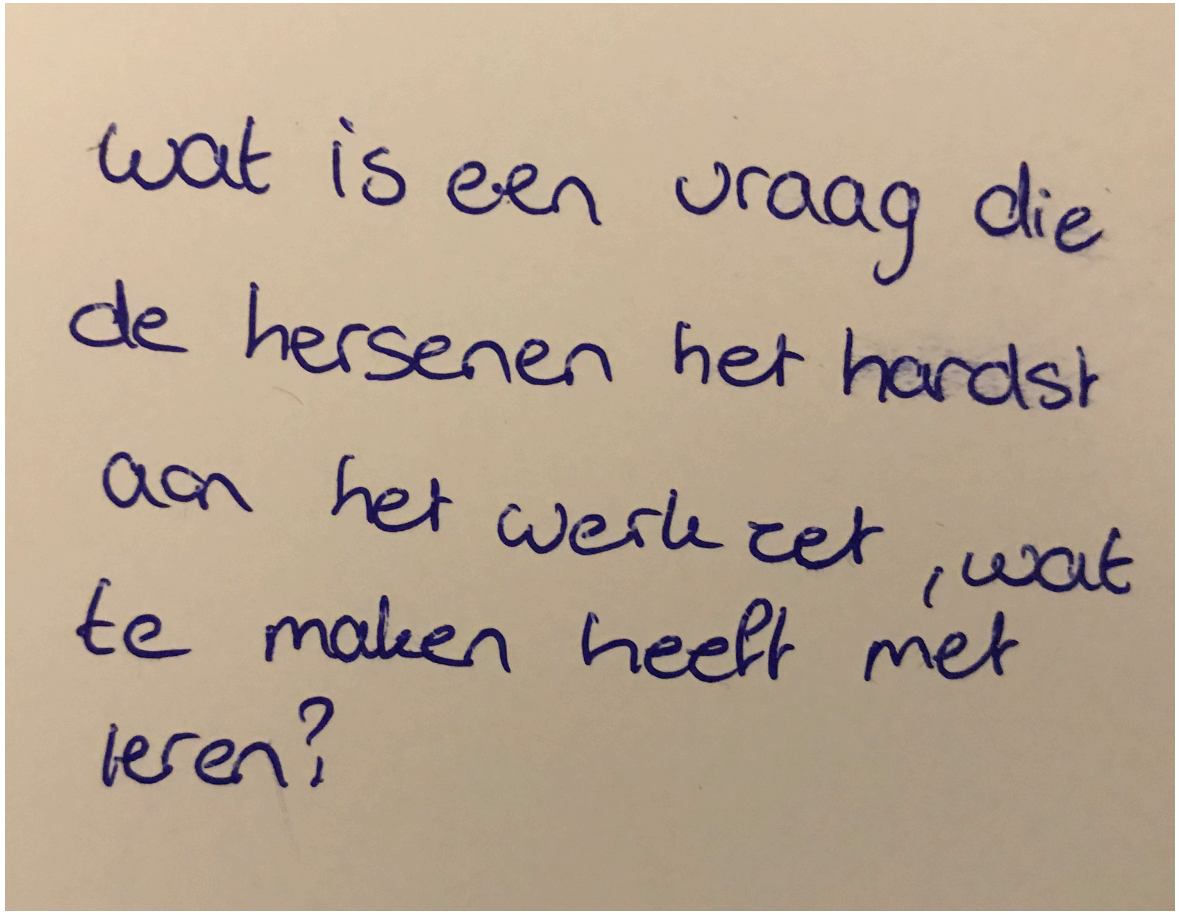



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