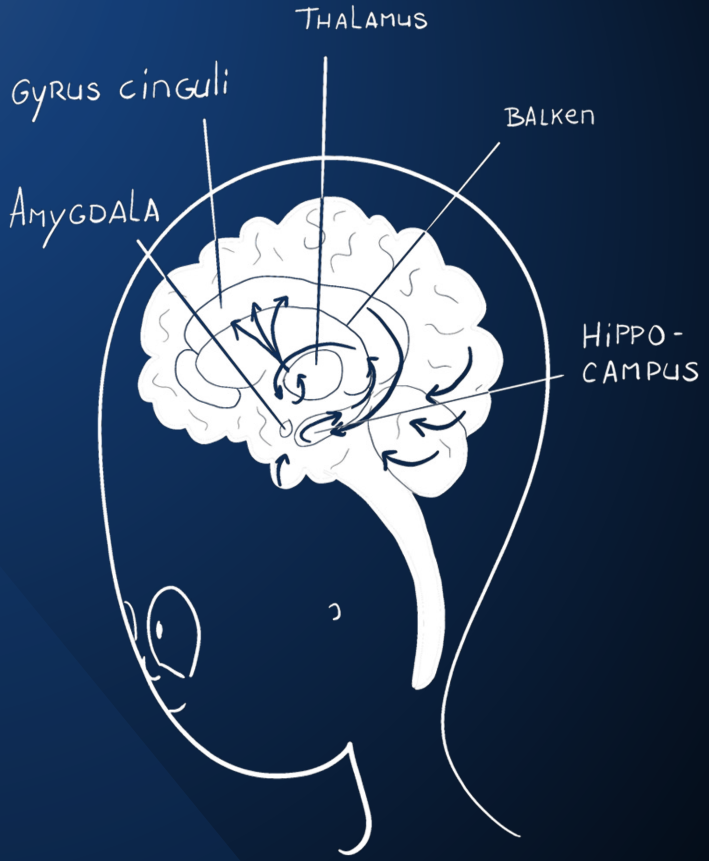
# Gedächtnispower

## Bringen Sie Ihr Gehirn auf Vordermann

**Dr. Boris Nikolai Konrad**

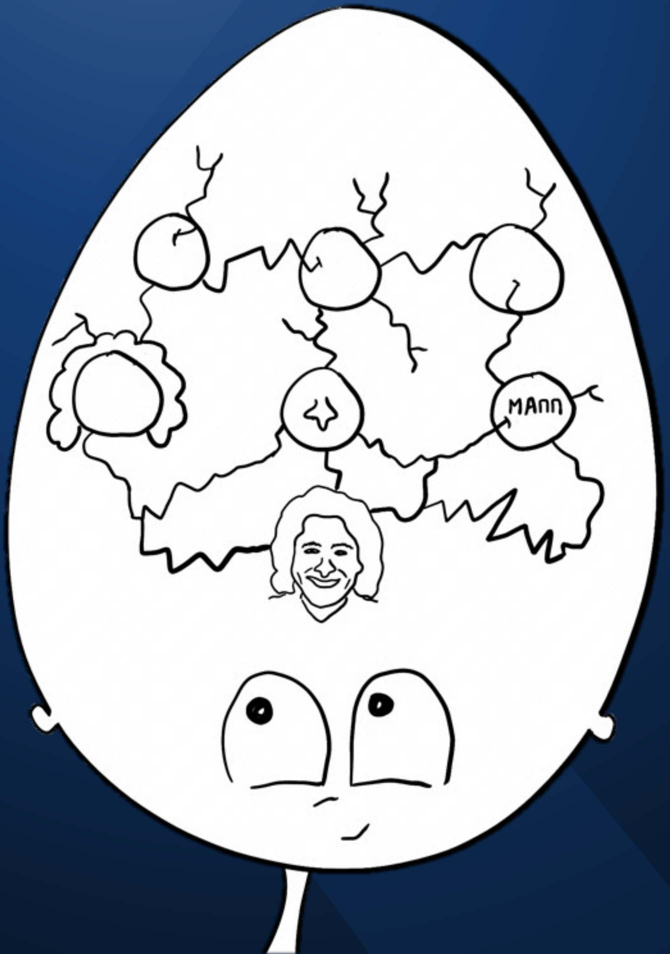
# Limbisches System

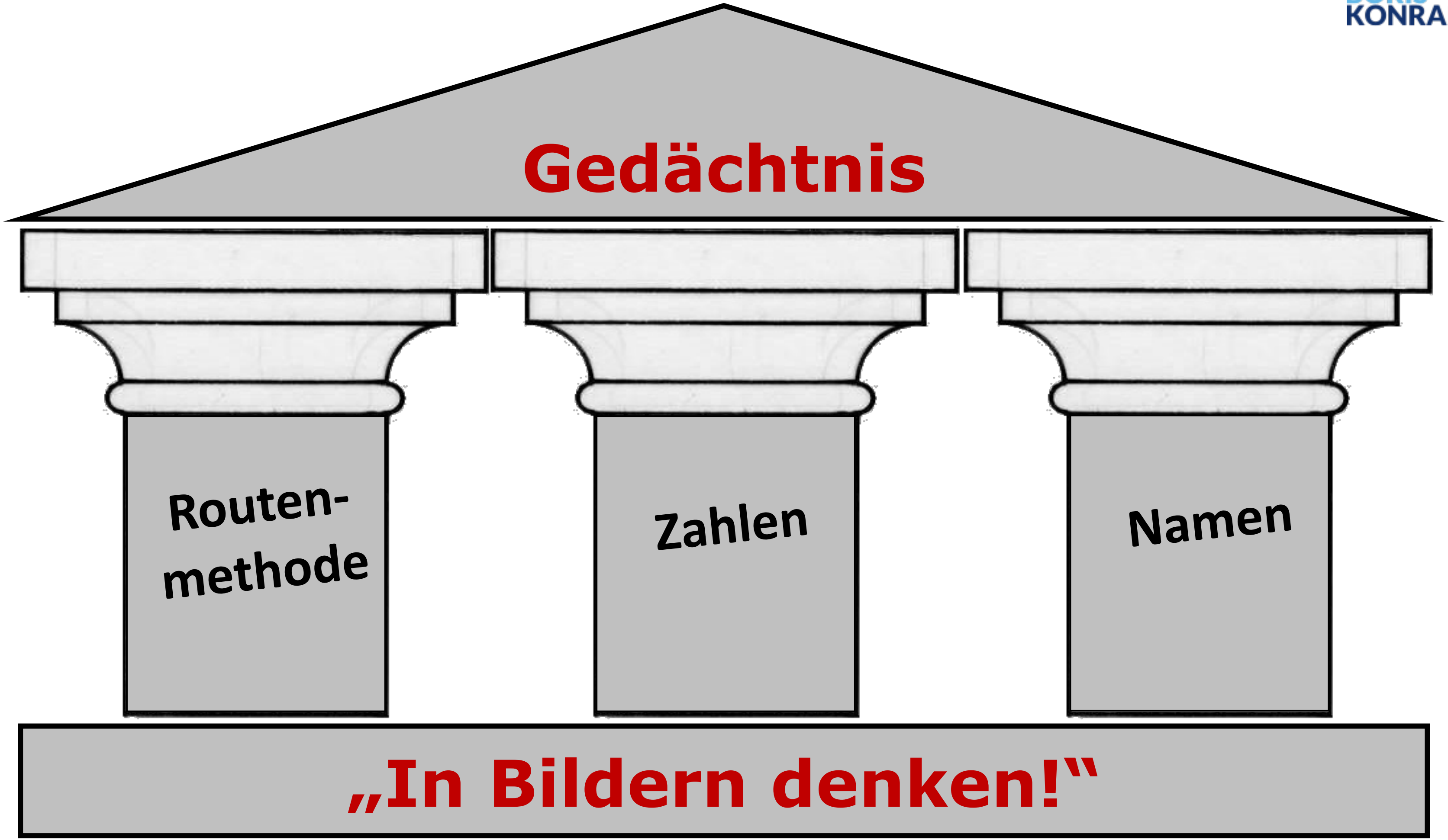

THALAMUS
GYRUS cinguli
BALKEN
AMYGDALA
HIPPO-
CAMPUS

Emotionen

Gedächtnis

STOP
START STOP
START STOP
STOP


MANN



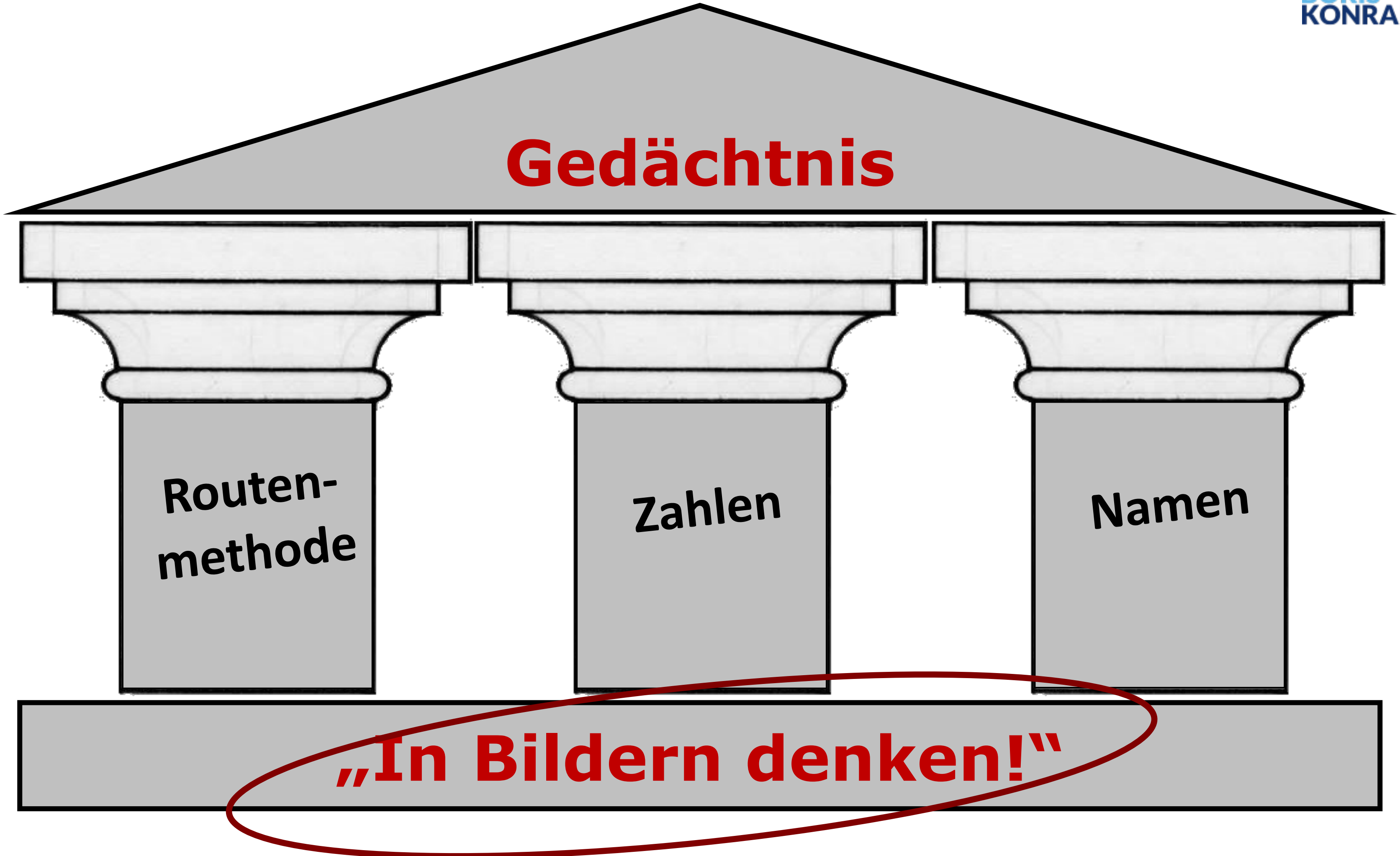
Gedächtnis

Routenmethode

Zahlen

Namen

„In Bildern denken!“



# Gedächtnis

Routen-methode

Zahlen

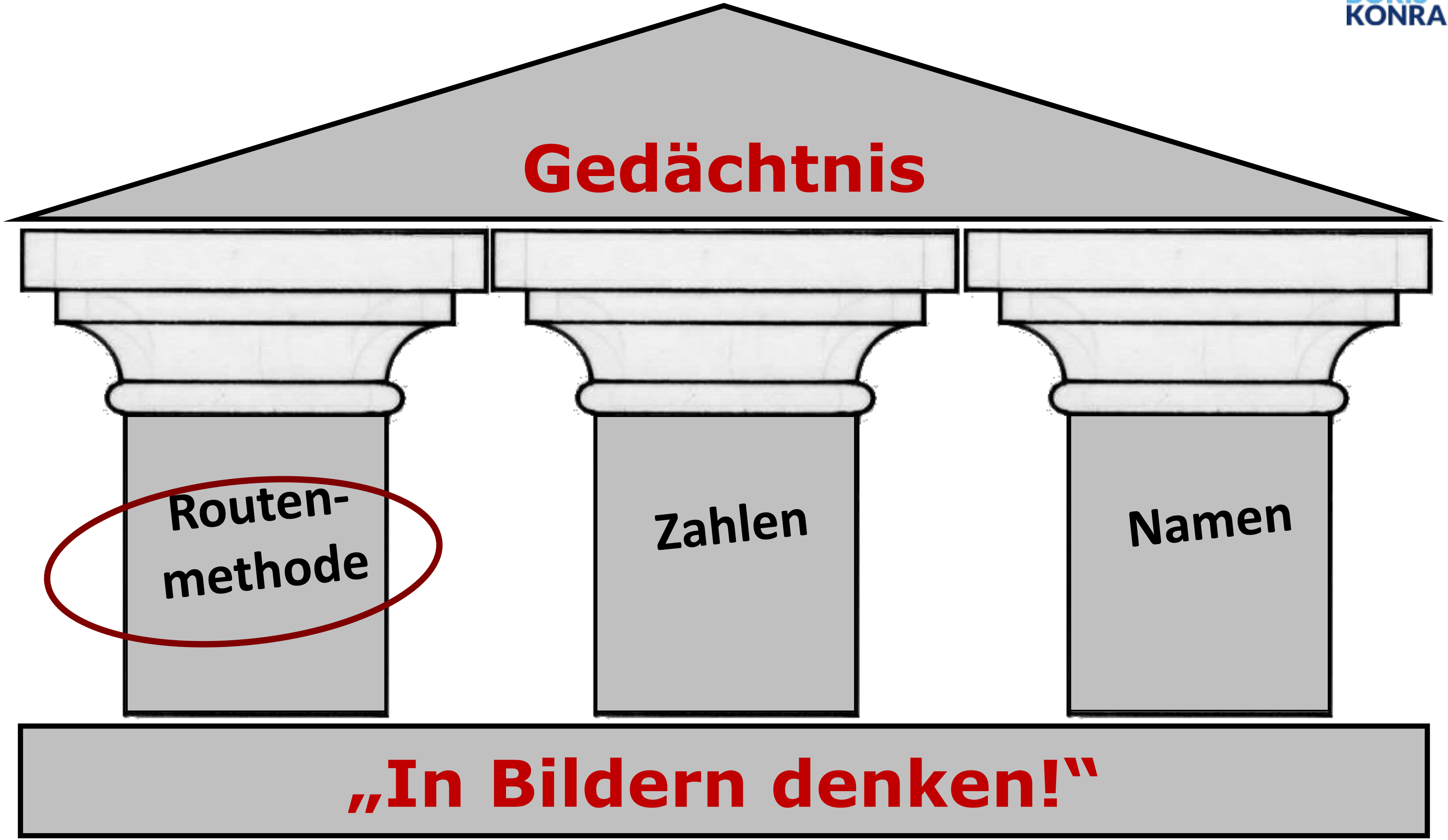
Namen

**„In Bildern denken!“**

# Merkworte

- Heu
- Lücke
- Hai + Mann
- Schielen
- Kasten
- Sack + Weizen
- Herzog
- Rau
- Kohle
- Wolf
- Gaukler
- Stein + Eier

| **Merkworte** | **Bundespräsidenten** |
|---|---|
| Heu | Heuss |
| Lücke | Lübke |
| Hai + Mann | Heinemann |
| Schielen | Scheel |
| Kasten | Carstens |
| Sack + Weizen | von Weizsäcker |
| Herzog | Herzog |
| Rau | Rau |
| Kohle | Köhler |
| Wolf | Wulff |
| Gaukler | Gauck |
| Stein + Eier | Steinmeier |



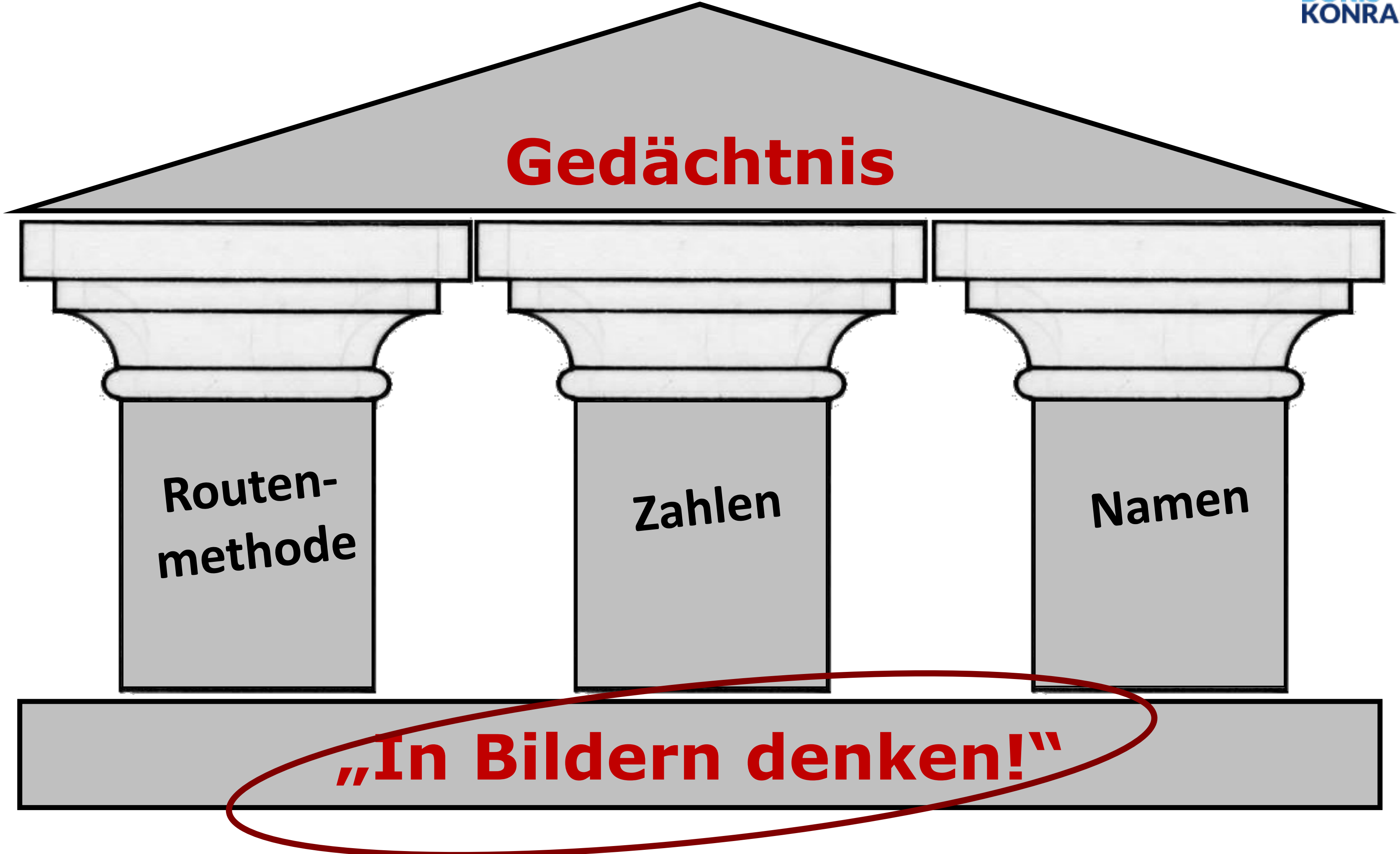
**Gedächtnis**

Routen-methode

Zahlen

Namen

**„In Bildern denken!“**



Gedächtnis

Routen-
methode

Zahlen

Namen

„In Bildern denken!“

1. Füße
2. Knie
3. Oberschenkel
4. Po
5. Bauch
6. Brust
7. Schultern
8. Hals
9. Mund
10. Augen

# Moos kauen

# Königin Glocke

# Glühbirne
# Bulle

# Peter
# Burg

# Bär
# Linie

# Made Reiter

# Papst Pizza

# Kiel
# Chef

# Liebe Eiffelturm

# Buch Arrest

Remember!

# Moos kauen

Moos

Moskau

kauen

# Königin Glocke

Königin

London

Glocke

# Glühbirne
# Bulle

Glühbirne

Istanbul

Bulle

# Peter
# Burg

# St

# Peter

# Petersburg

Burg

# Bär
# Linie

Bär

Berlin

Linie

# Made Reiter

# Made

# Madrid

# Reiter

# Papst
# Pizza

Papst

Rom

Pizza

# Kiel
# Chef

Kiel

Kiev

Chef

# Liebe Eiffelturm

# Liebe

# Paris

# Eiffelturm

# Buch
# Arrest

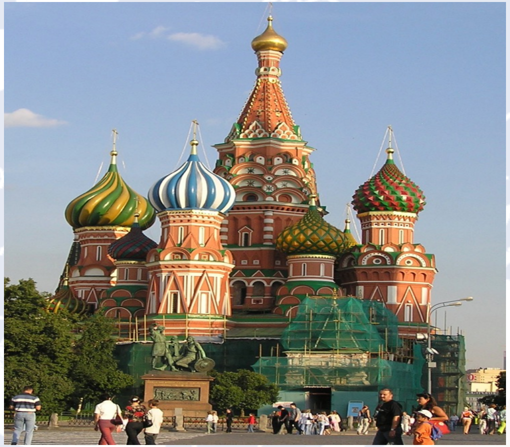
Buch

Arrest

Bukarest

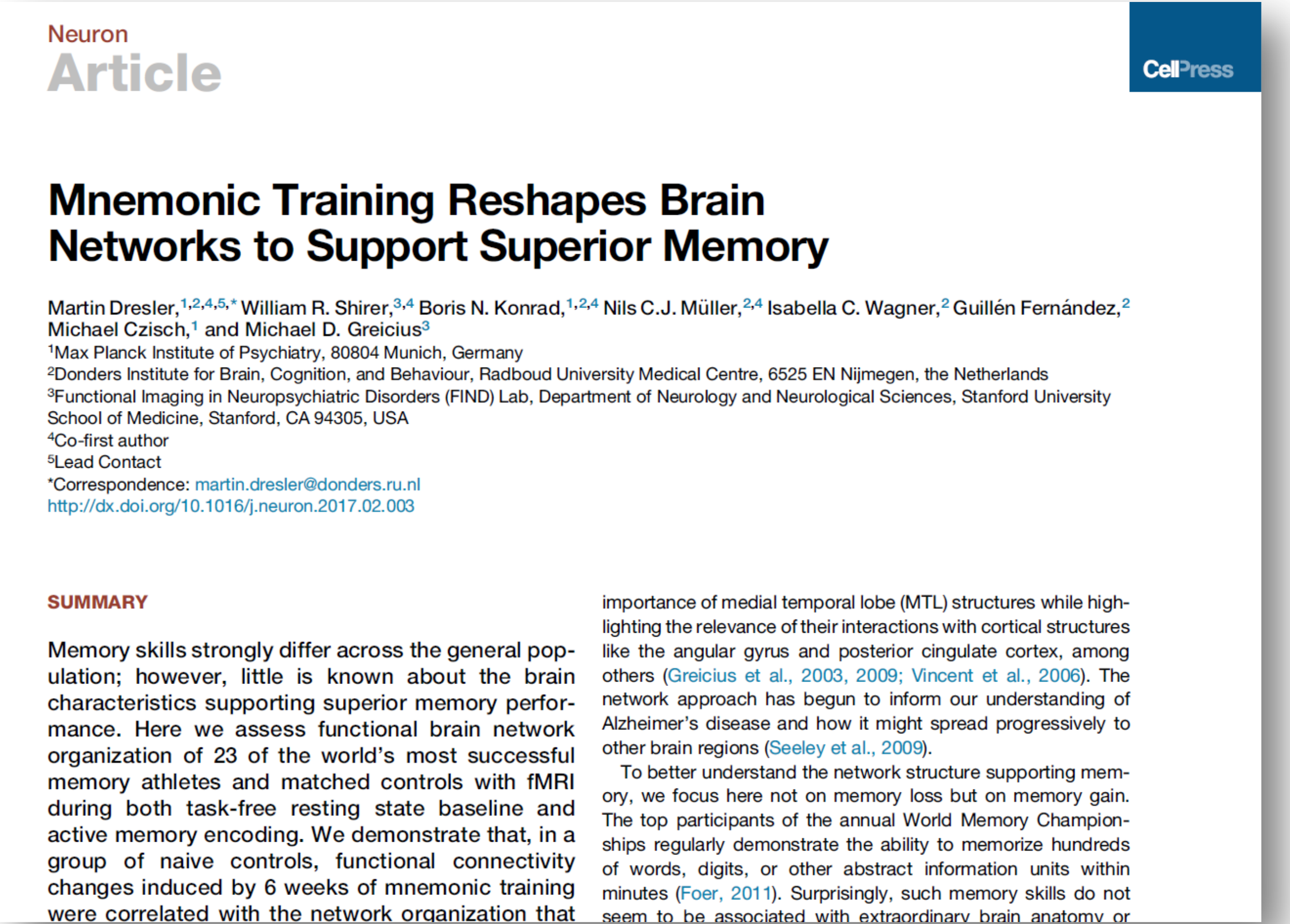
# Zehn größte Metropolen Europas

1. Moskau
2. London
3. Istanbul
4. St. Petersburg
5. Berlin
6. Madrid
7. Rom
8. Kiev
9. Paris
10. Bukarest



Source: World Gazetteer

HURRY UP
00:01:
START IN
02:58
boys don't cry



Neuron
Article

CellPress

# Mnemonic Training Reshapes Brain Networks to Support Superior Memory

Martin Dresler,[1,2,4,5,*] William R. Shirer,[3,4] Boris N. Konrad,[1,2,4] Nils C.J. Müller,[2,4] Isabella C. Wagner,[2] Guillén Fernández,[2] Michael Czisch,[1] and Michael D. Greicius[3]
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[2]Donders Institute for Brain, Cognition, and Behaviour, Radboud University Medical Centre, 6525 EN Nijmegen, the Netherlands
[3]Functional Imaging in Neuropsychiatric Disorders (FIND) Lab, Department of Neurology and Neurological Sciences, Stanford University School of Medicine, Stanford, CA 94305, USA
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http://dx.doi.org/10.1016/j.neuron.2017.02.003

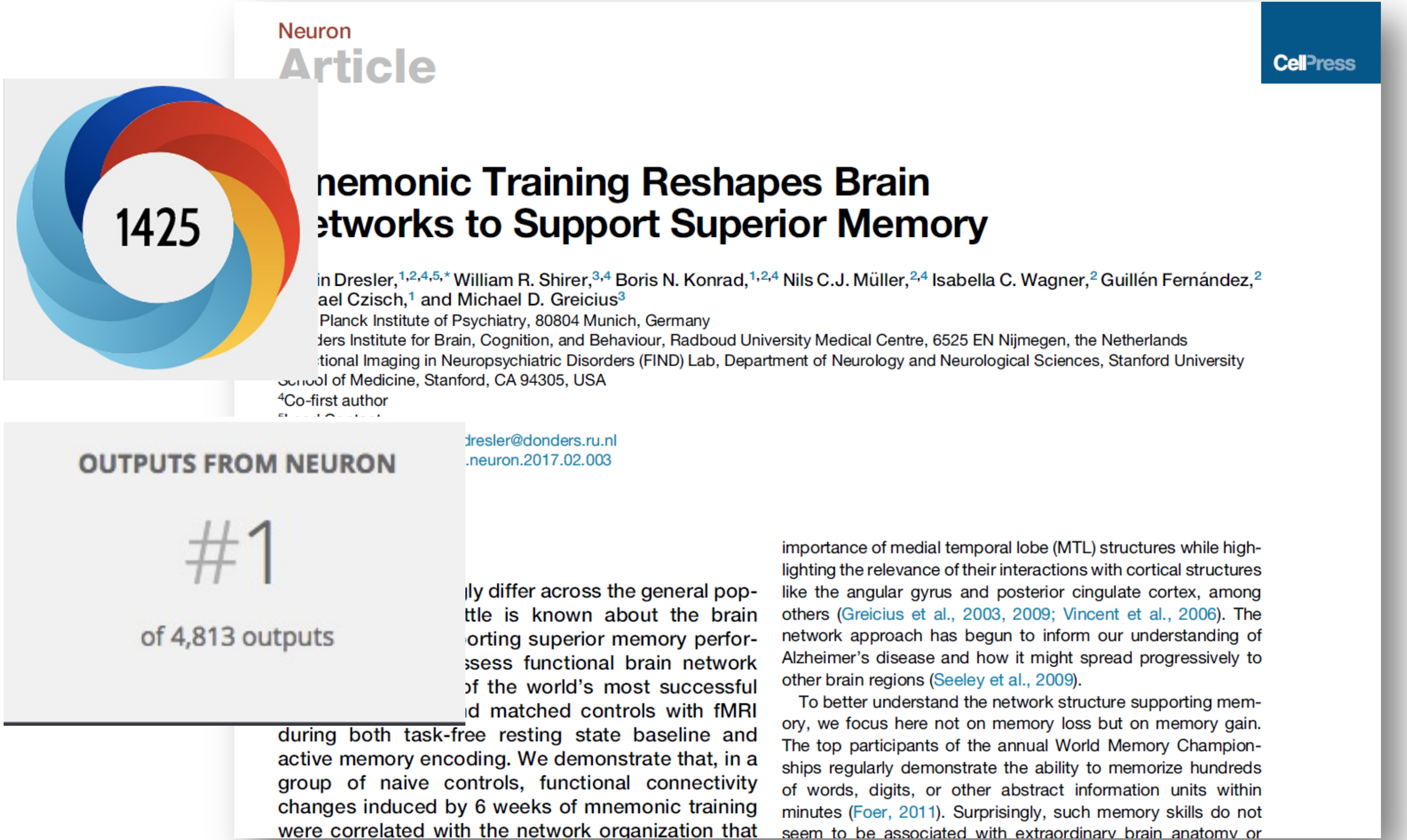
## SUMMARY

Memory skills strongly differ across the general population; however, little is known about the brain characteristics supporting superior memory performance. Here we assess functional brain network organization of 23 of the world's most successful memory athletes and matched controls with fMRI during both task-free resting state baseline and active memory encoding. We demonstrate that, in a group of naive controls, functional connectivity changes induced by 6 weeks of mnemonic training were correlated with the network organization that

importance of medial temporal lobe (MTL) structures while highlighting the relevance of their interactions with cortical structures like the angular gyrus and posterior cingulate cortex, among others (Greicius et al., 2003, 2009; Vincent et al., 2006). The network approach has begun to inform our understanding of Alzheimer's disease and how it might spread progressively to other brain regions (Seeley et al., 2009).

To better understand the network structure supporting memory, we focus here not on memory loss but on memory gain. The top participants of the annual World Memory Championships regularly demonstrate the ability to memorize hundreds of words, digits, or other abstract information units within minutes (Foer, 2011). Surprisingly, such memory skills do not seem to be associated with extraordinary brain anatomy or

Dresler et al., 2017



Neuron
Article

CellPress

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[4]Co-first author

dresler@donders.ru.nl
.neuron.2017.02.003

**OUTPUTS FROM NEURON**

#1

of 4,813 outputs

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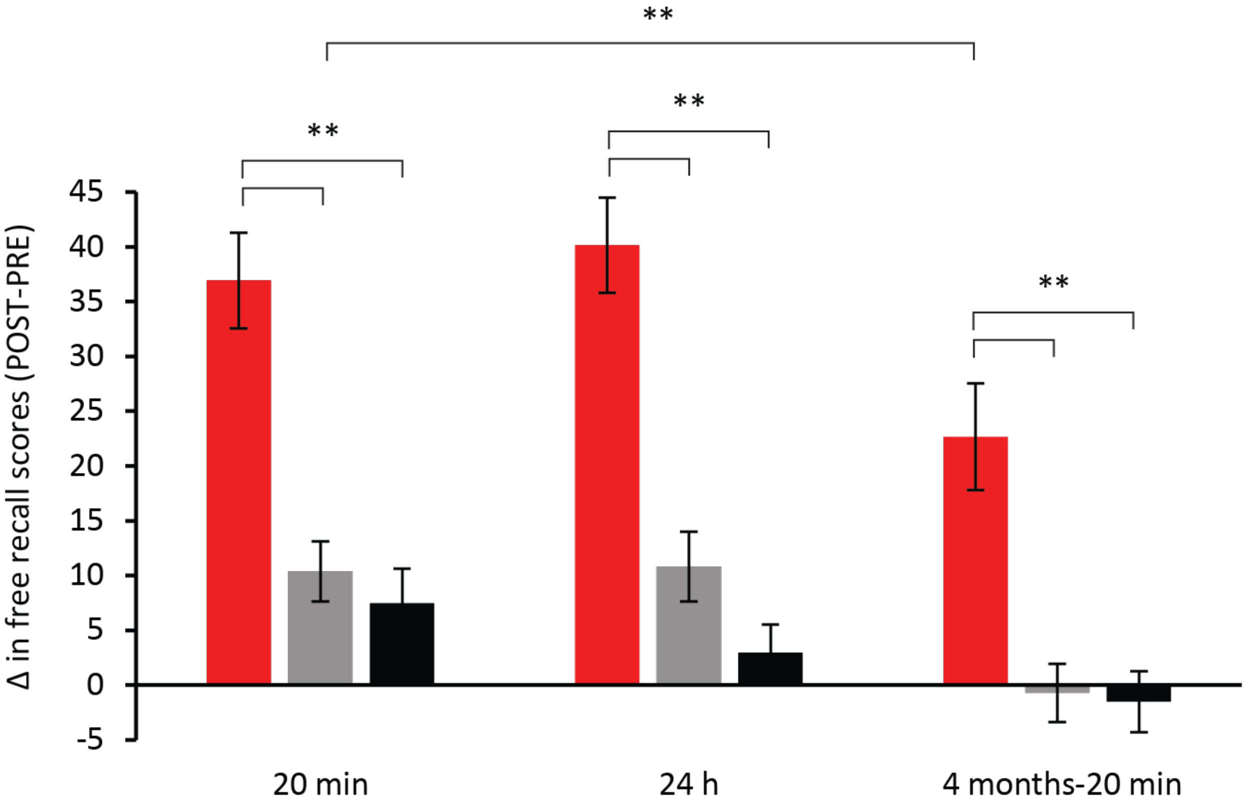
Dresler et al., 2017

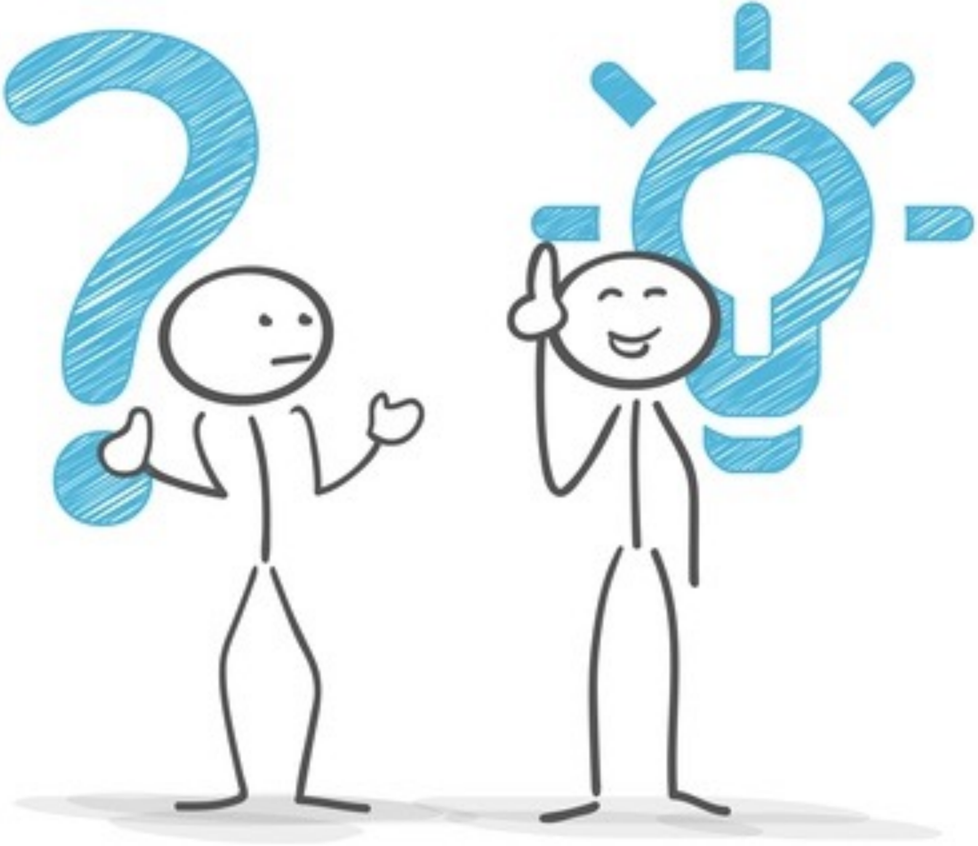
**FREE RECALL:** POST-PRE change in the number of words freely recalled

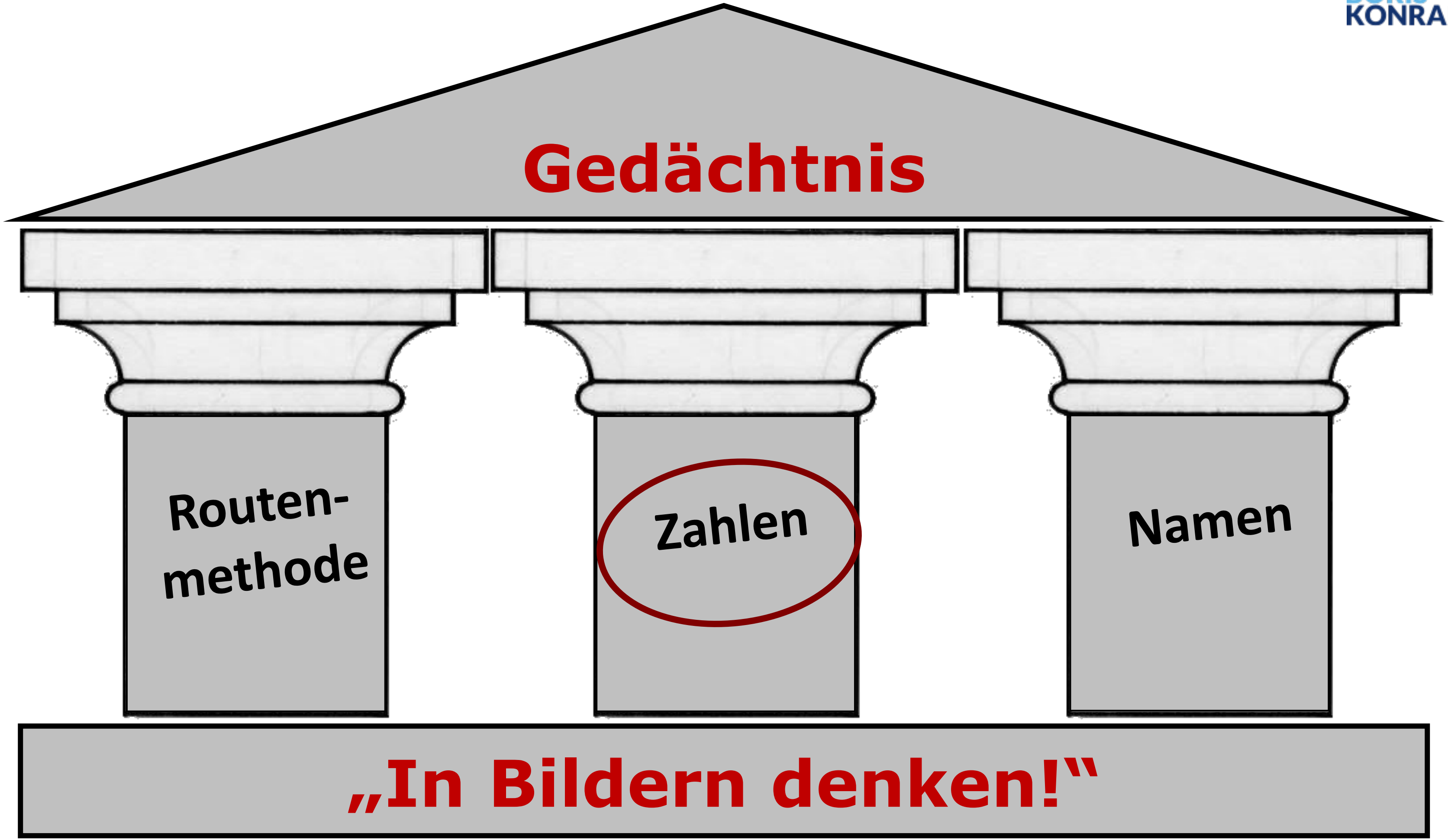


🟥 mnemonic training (MEM)
▨ active control (WMN)
⬛ passive control (CON)

** $P < 0.001$

# WIEDERHOLEN





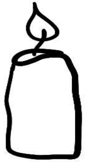
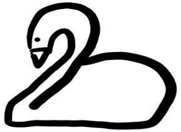
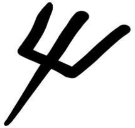
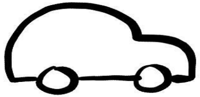
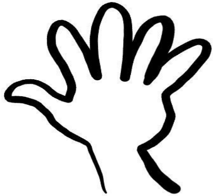
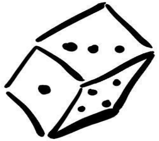
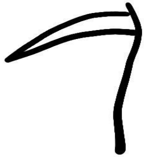
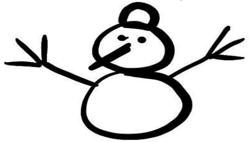
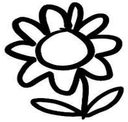
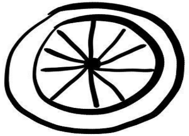
Gedächtnis

Routenmethode

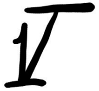
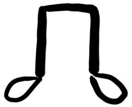
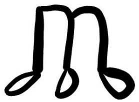
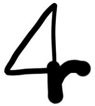
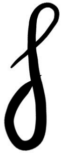
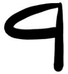
Zahlen

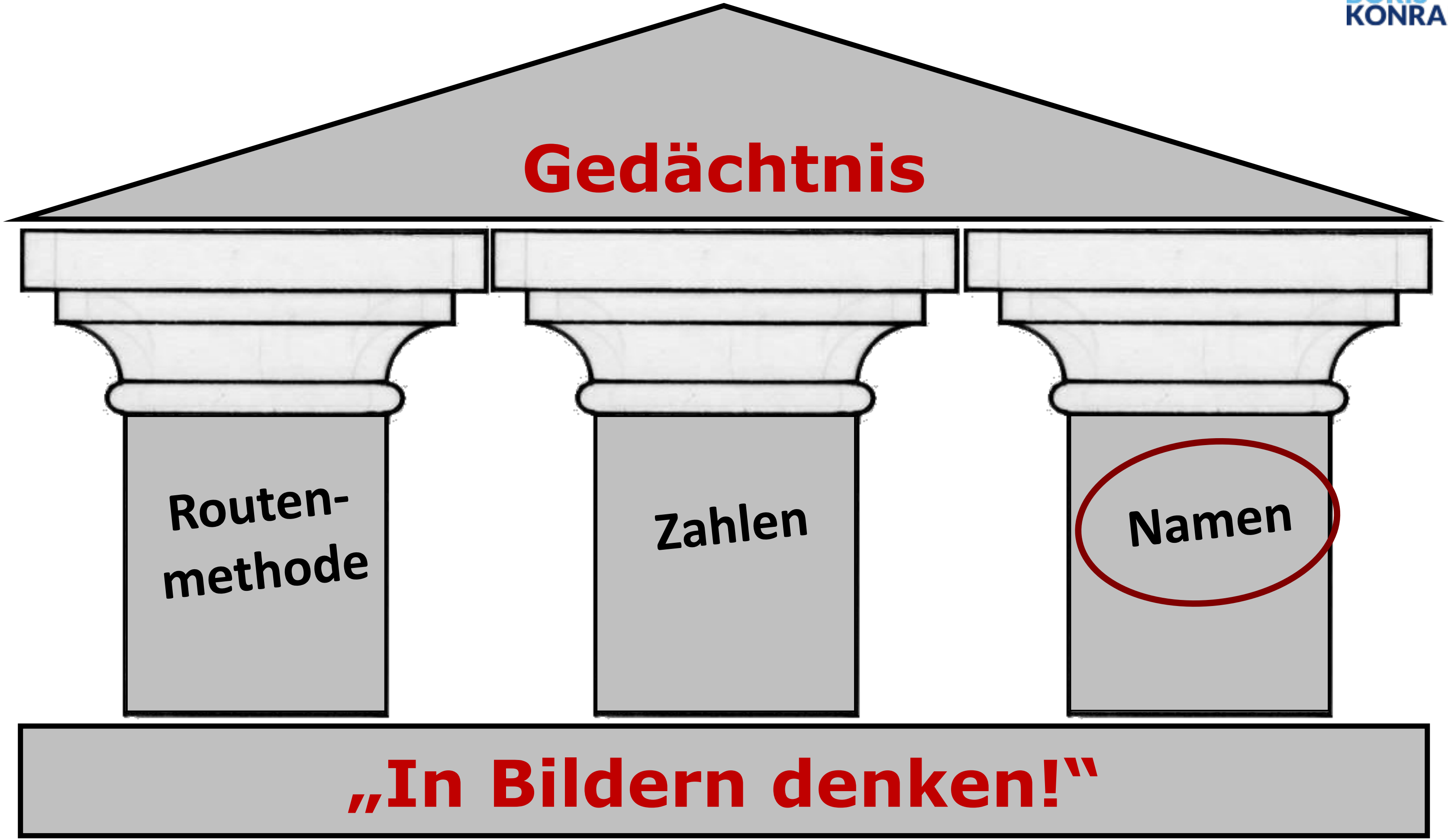
Namen

„In Bildern denken!“

| | | |
|---|---|---|
| 1 | Kerze |  |
| 2 | Schwan |  |
| 3 | Dreizack |  |
| 4 | Auto |  |
| 5 | Hand |  |
| 6 | Würfel |  |
| 7 | Sense |  |
| 8 | Schneemann |  |
| 9 | Blume |  |
| 0 | Reifen |  |

ABSA
VISA
MasterCard

| | | | |
|---|---|---|---|
| 1 | T, D | ähnelt dem T |  |
| 2 | n | hat zwei Füße |  |
| 3 | m | hat drei Füße |  |
| 4 | R | das kleine r steckt in der 4 |  |
| 5 | L | Römisch 50 = L | L |
| 6 | SCH, CH | das Wort | SeCHs |
| 7 | K, C, G | K zieht aus wie zwei Siebenen | K |
| 8 | F, V, W | das kleine f steckt in der 8 |  |
| 9 | P, B | g sieht aus wie ein gespiegeltes p |  |
| 0 | S, Z, ß | engl. zero = | 0 |



Gedächtnis

Routenmethode

Zahlen

Namen

„In Bildern denken!"

Frau
Meier

# Namen merken – 5 Schritte zum Erfolg

- Namen hören oder lesen und dabei verstehen
- Namen „verbildern“
- Person „verbildern“
- Verknüpfung
- Wiederholung

**Namen wie Berufe**

**Konkrete Namen**

**Klangähnliche Namen**

**Schwierige Namen**

Müller

Becker

**Namen wie Berufe**

Schmidt

Bauer

**Konkrete Namen**

**Klangähnliche Namen**

**Schwierige Namen**

**Namen wie Berufe**

Stein

Braun

**Konkrete Namen**

Berg

Jung

**Klangähnliche Namen**

**Schwierige Namen**

**Namen wie Berufe**

**Konkrete Namen**

Seiffert

Biermann

**Klangähnliche Namen**

Jauch

Steinke

**Schwierige Namen**

**Namen wie Berufe**

**Konkrete Namen**

**Klangähnliche Namen**

**Schwierige Namen**

Balinkoff

Aydin

Podolski

Spinczyk

# Berufe

Bauer

Schmidt

Müller

Schäfer

# Konkret

Kalb

Mast

Kranz

Flach

# Klangähnlich

Nüslein

Humme

Kaster

Höll

# Schwierig

Gradistanac

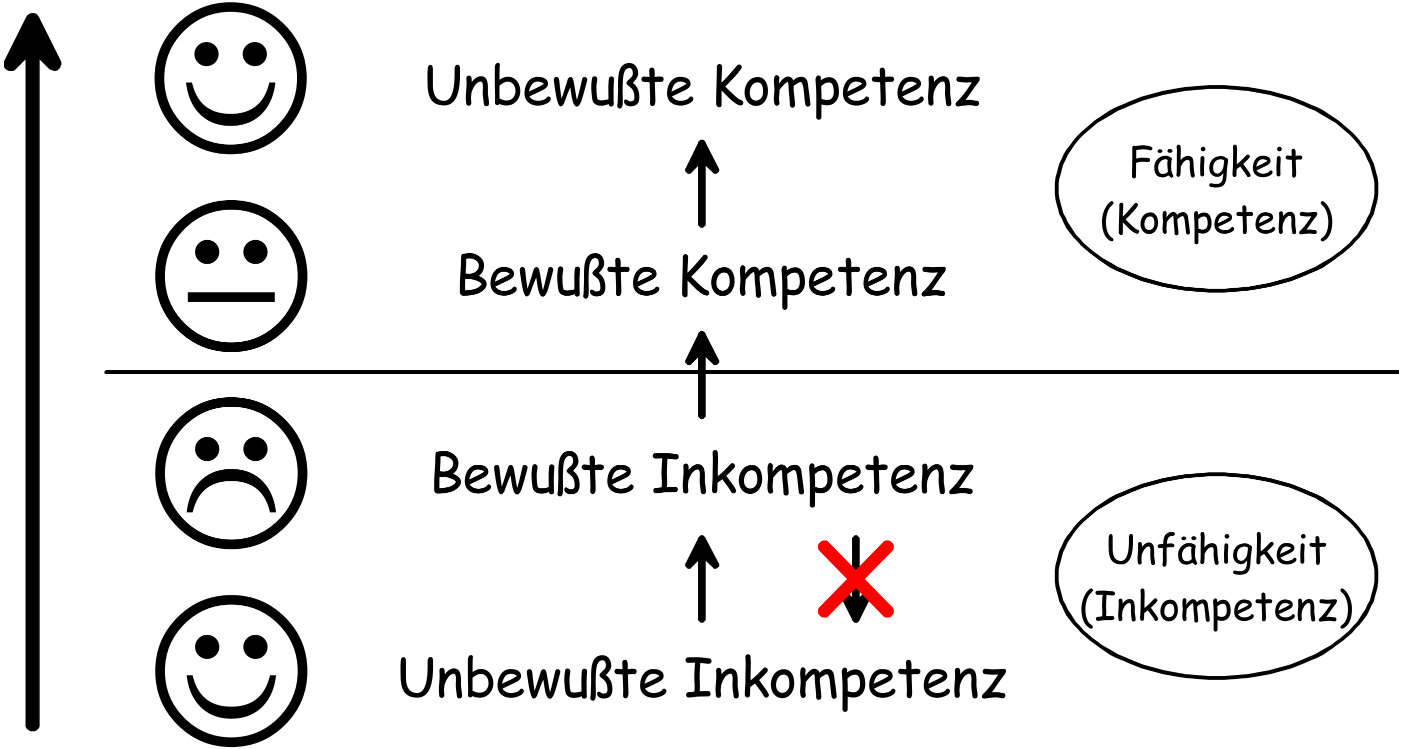
Aydin

# Sonderfall: Bekannte Namen

Luther

Merkel

# Und ... wer war das?



Unbewußte Kompetenz

Bewußte Kompetenz

Bewußte Inkompetenz

Unbewußte Inkompetenz

Fähigkeit
(Kompetenz)

Unfähigkeit
(Inkompetenz)

BORIS KONRAD

# Danke!

Boris Nikolai Konrad
Mehr Platz im Gehirn
Entspannt mit der Informationsflut und dem modernen Leben umgehen
Vom Gedächtnis-weltmeister erklärt
ARISTON

www.boriskonrad.de