### **BZ-WISSENSFORUM 2023**

**Hybrider Vortrag** | 01.06.2023 | 19.30 Uhr



MERKVERMÖGEN

Gedächtnispower

Bringen Sie Ihr Gehirn auf Vordermann

Dr. Boris Nikolai Konrad Gedächtnisweltrekordhalter



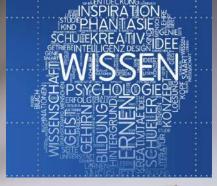
Badische Zeitung

BALLHAUS FREIBURG











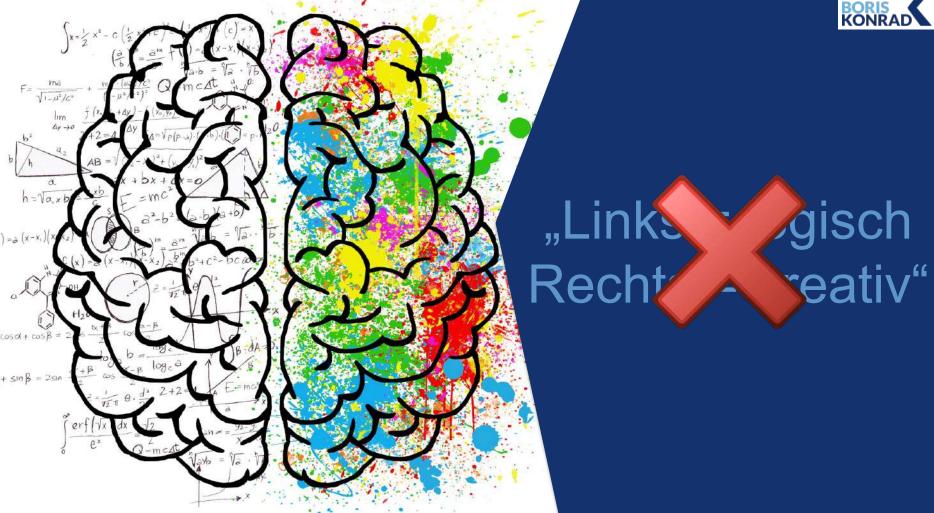
#### **Mehr Platz im Gehirn**

**Dr. Boris Nikolai Konrad** 







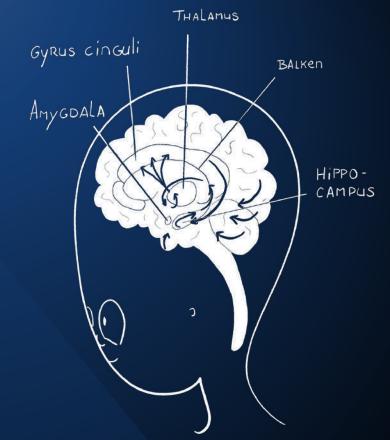




Limbisches System

**Emotionen** 

Gedächtnis

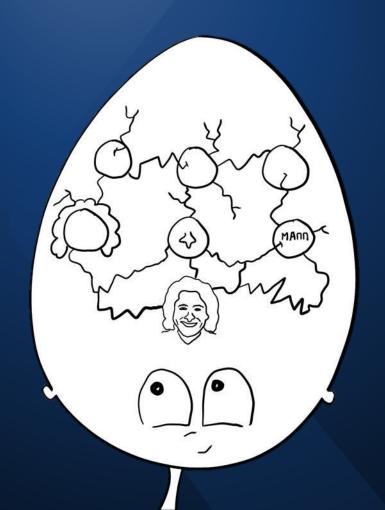




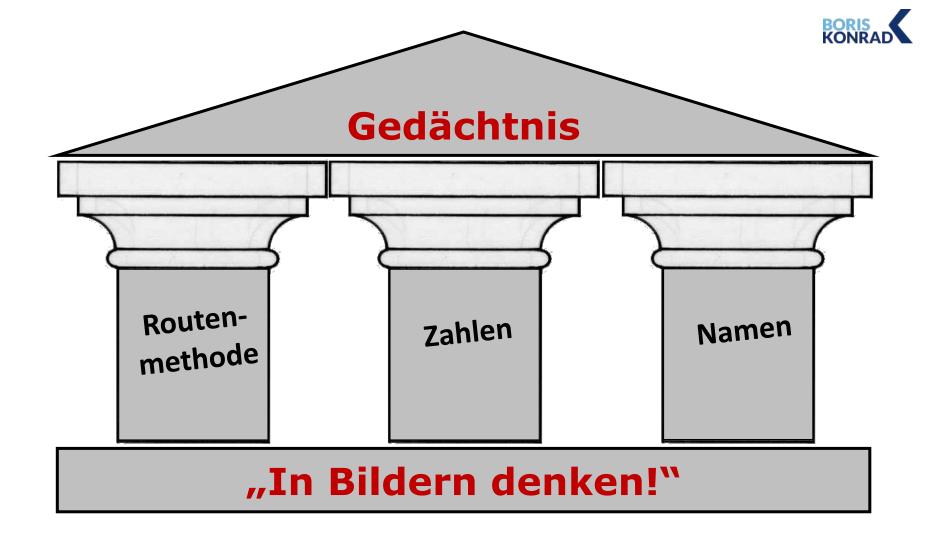




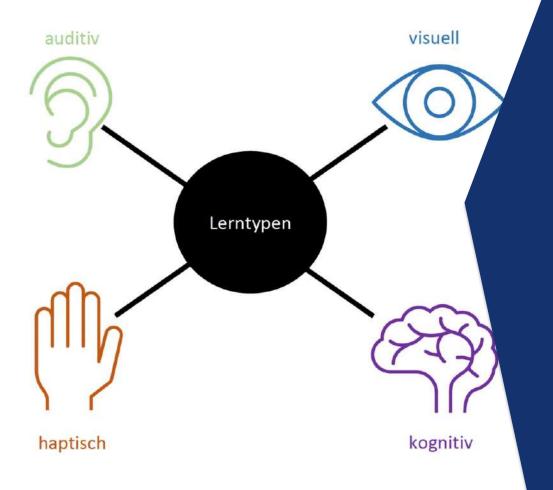




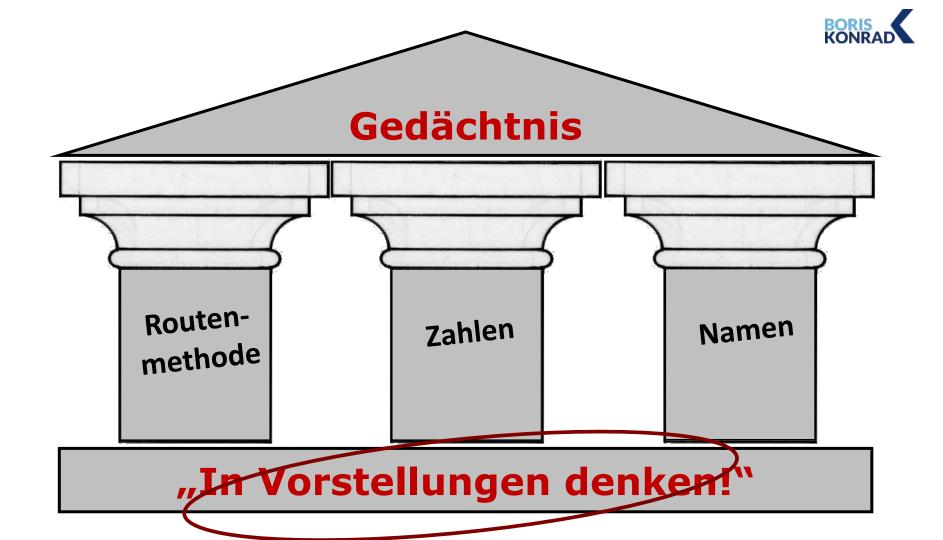














### **Merkworte**

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

#### Bundespräsidenten Heuss

- Lübke
- Heinemann
- Scheel
  - Carstens
  - von Weizsäcker Herzog
    - Rau
- Köhler
- Wulff
- Gauck
- Steinmeier







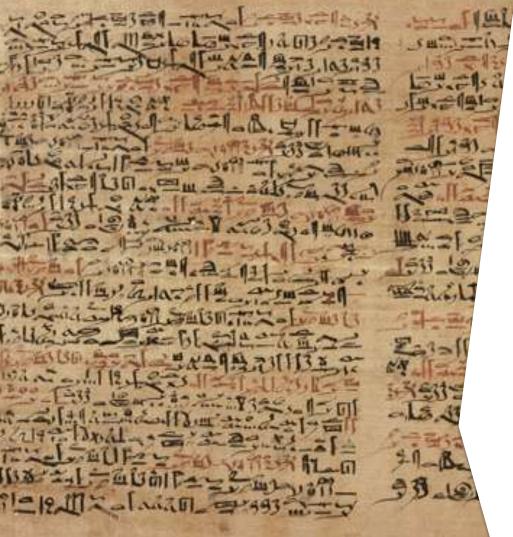


Erste **Nervenzellen** – 650 Millionen Jahre

Erste **Säugetiere** – 200 Millionen Jahre

Erste "Menschen" – 8 Millionen Jahre

Moderner **Mensch** – 0,2 Millionen Jahre





Moderner **Mensch** – 200.000 Jahre

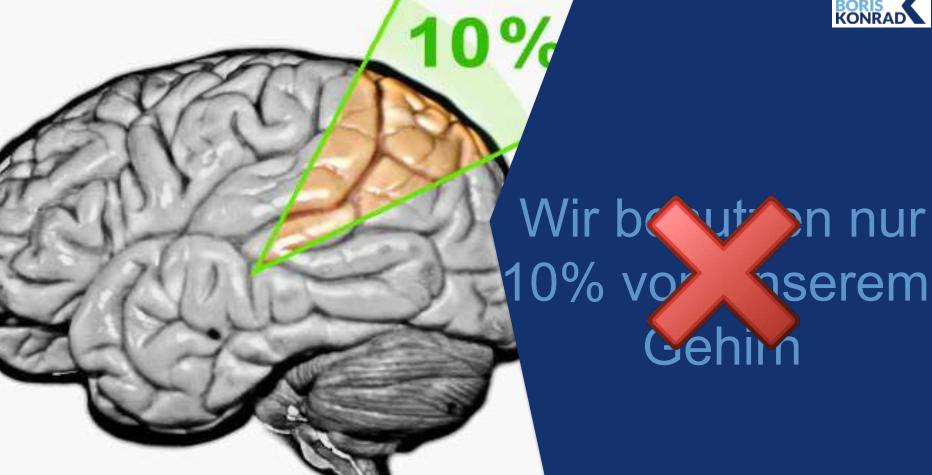
Einfache **Sprache** – 100.000 Jahre

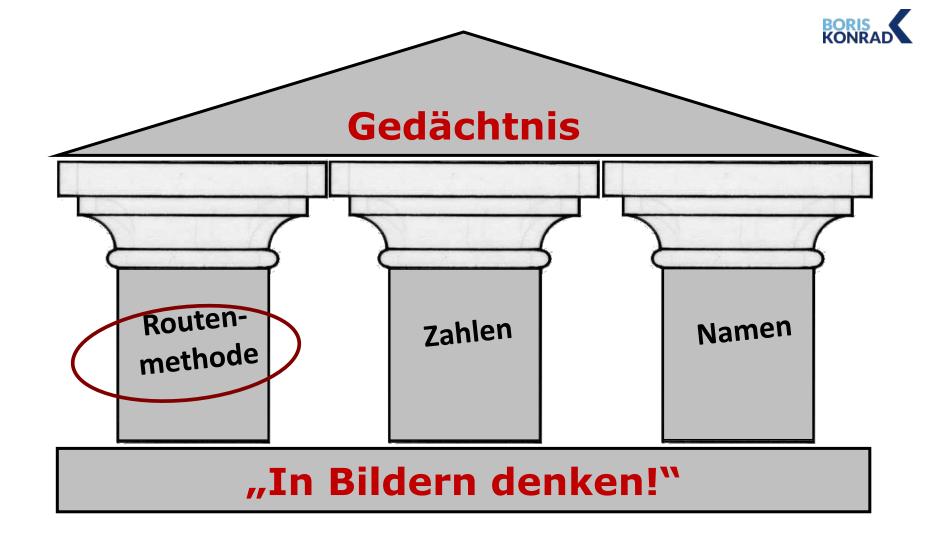
Moderne **Sprache** – 35.000 Jahre

Schrift - 5.000 Jahre

Buchdruck - 500 Jahre







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







## Moos kauen



# König Glocke



# Glühbirne Bulle



# Peter Burg



# Bär Linie



# Made Reiter



# Papst Pizza



# Kiel Chef



## Liebe Eiffelturm



## Buch Arrest





### Zehn größte Metropolen Europas

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



Source: World Gazetteer

### **WIEDERHOLEN**











#### 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. Greicius3

#### 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

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<sup>4</sup>Co-first author

#### **OUTPUTS FROM NEURON**

dresler@donders.ru.nl .neuron.2017.02.003

#1

of 4,813 outputs

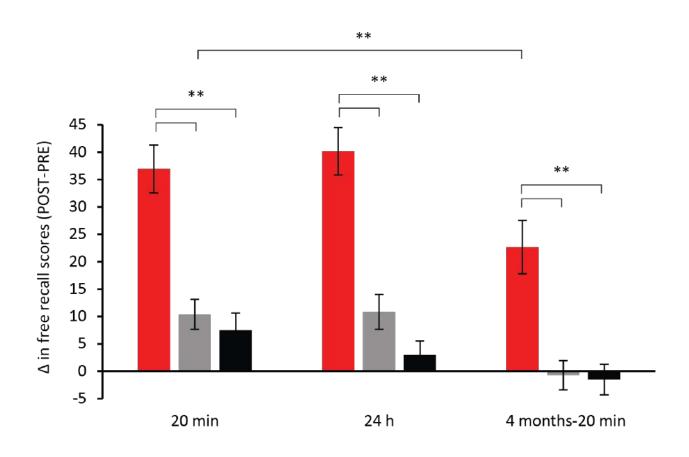
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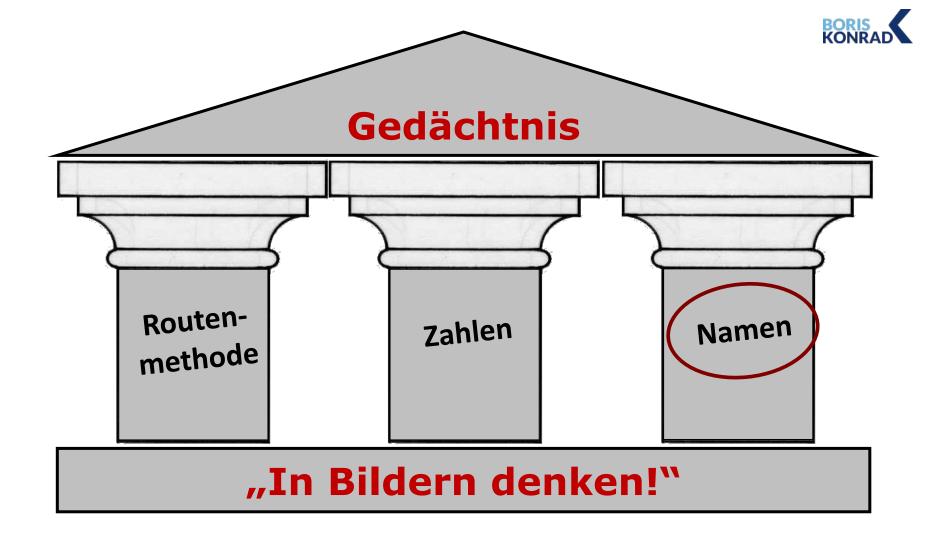


mnemonic training (MEM) active control (WMN)

passive control (CON)

\*\* P < 0.001







#### Namen merken – 5 Schritte zum Erfolg

- Namen hören oder lesen und dabei verstehen
- Namen "verbildern"
- Person "verbildern"

- Verknüpfung
- Wiederholung





Prof. Dr. Volker Busch









www.boriskonrad.de

