

What EEG tells us about creativity during hypnosis

Dr Rachel Gillibrand

Director: Clinical Hypnotherapy School

**And grateful thanks to Dorothea Read, amazing
woman and creator of scripts!**

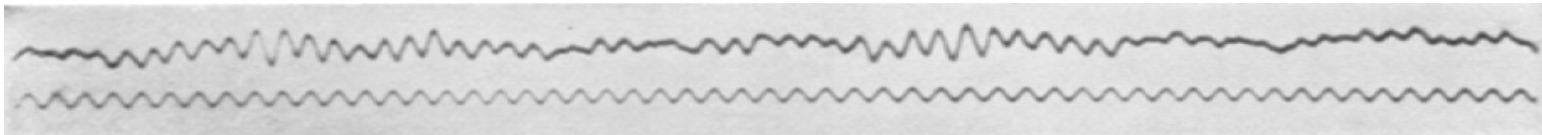


Structure of the talk

- What is EEG?
- Brain waves, how they differ and what function do they have?
- How do we measure brainwaves?
- Watching a brain in trance!
- What does this mean to users of hypnosis?
- Discuss

What is EEG?

- Electroencephalography or EEG is a method of recording electrical energy in the brain.
- Electrodes are placed on the scalp and fluctuations in electrical energy are recorded usually on a graph.



The first human EEG recording obtained by [Hans Berger](#) in 1924. The upper tracing is EEG, and the lower is a 10 [Hz](#) timing signal.

Your brain is made up of cells called neurons. When your brain performs neurological functions, neurons transmit information to each other via electrical signals. These signals produce rhythms or wave patterns, which are known as brain waves.

Brainwaves

Brainwaves are measured in Hertz – the number of cycles per second:

- Delta (0.5-4Hz) – indicating deep sleep and restfulness
- Theta (4-8Hz) – indicating deep meditative states, daydreaming and automatic tasks
- Alpha (8-15Hz) – indicating relaxed alertness but restful and relaxing, not anxious
- Beta (15-30Hz) – indicating wakefulness, alertness, mental engagement and conscious processing of information, can be associated with anxiety
- Gamma (30Hz+) - associated with high levels of thought and focus, high levels of gamma waves mean you tend to be happier and more receptive

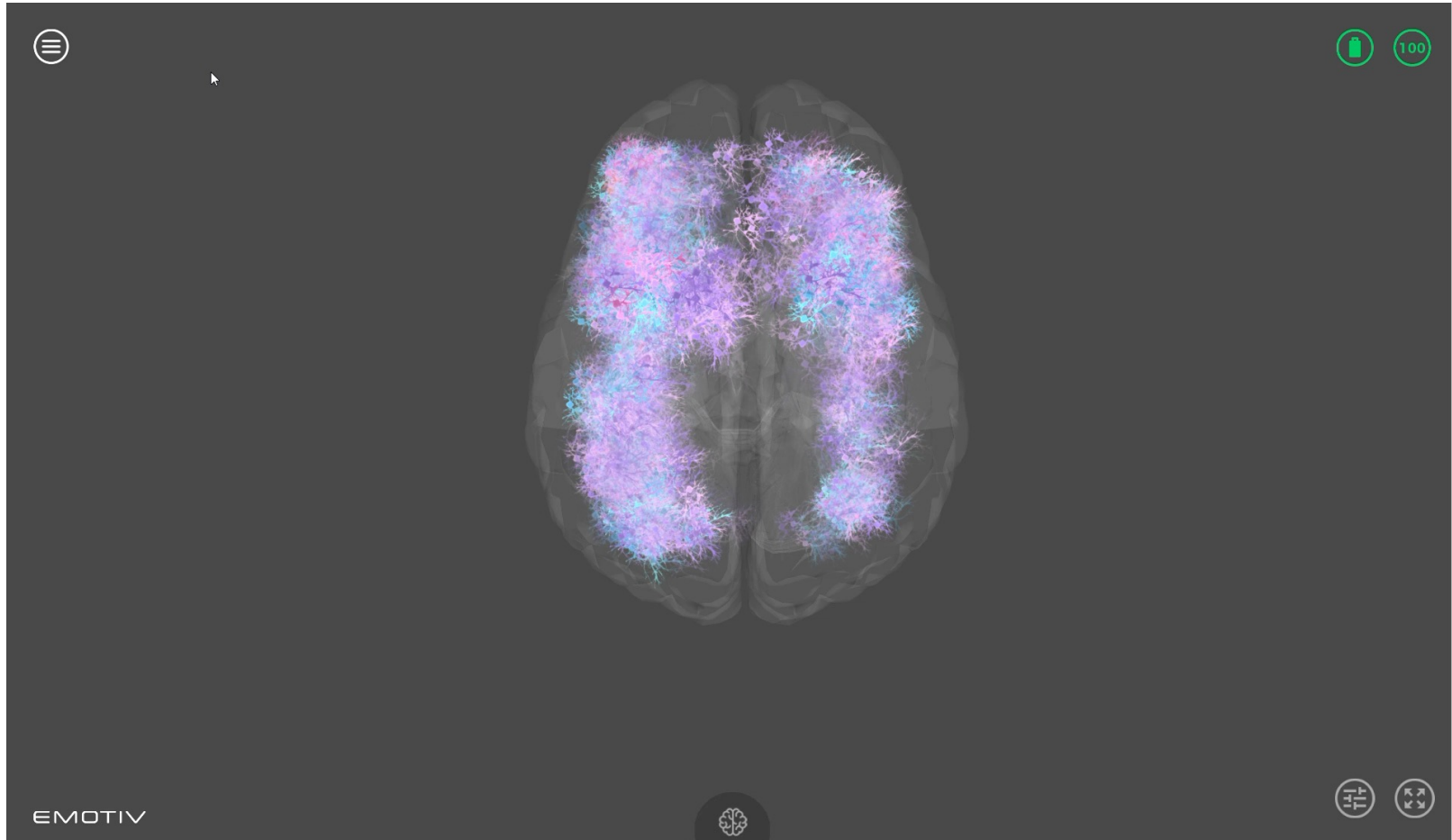
How do we measure brainwaves?



What does EEG look like?



EEG data processed: the difference between creative thought and distress





Watch a brain in
trance!

So, what happened?

During the PMR

- A lot of alpha
 - Visualising the message to relax
- Theta builds up
 - Entering into the meditative state
 - Responding to “you can choose to be relaxed too...”

During the deepener

- Brain continues visualizing the message to relax
- We enter into a deeper meditative state
- Some sensory motor area activation as the brain actions relaxation
- Surge of emotion “you can fully relax... knowing you are in complete control.”

During the guided imagery

- The sensory detail excites the brain and gives it something to 'latch' on to
- This helps the brain develop a more immersive experience
- Detailed imagery starts the process of creative thinking
- The brain LOVES hypnosis, it wanders between receiving and processing information (LHS), to getting all excited and emotional (RHS) to just wandering off and that's ok.
- When the brain gets distracted it enters into default mode and the solutions start to be formed.

Summary

- EEG is providing us with evidence that trance encourages idea generation and idea evaluation
- Trance creates the ideal conditions for problem solving and creative thinking
- The different elements of a trance have different effects on the brain
- The use of metaphor and story telling stimulates the solving of problems via the creativity processes
- Hypnosis can ‘turbo-charge’ therapy and help the client find their solutions faster without falling into the trap of “yes, but that wouldn’t actually happen in real-life would it?”

Thank you!

Dr Rachel Gillibrand & Dorothea Read
Director: Clinical Hypnotherapy School

Do get in touch!

admin@clinicalhypnotherapyschool.com

<https://www.facebook.com/ClinicalHypnotherapySchool>

Would you like to purchase the script and other lovely things?

www.clinicalhypnotherapyschool.com/shop