

A Brain-Computer Music Interface (BCMI) for Mindfulness

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谢谢

Questions for you.

Why do I do BCMI?

How do I do BCMI (past/present)?

Q/A

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What is BCMI?

BRAIN
COMPUTER
MUSIC
INTERFACING

What is mindfulness?

MIND
FULLNESS

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Since the age of 14 I have been interested in:

different states of mind;
learning to control these states;
the power of music;

Can I make music with my mind?



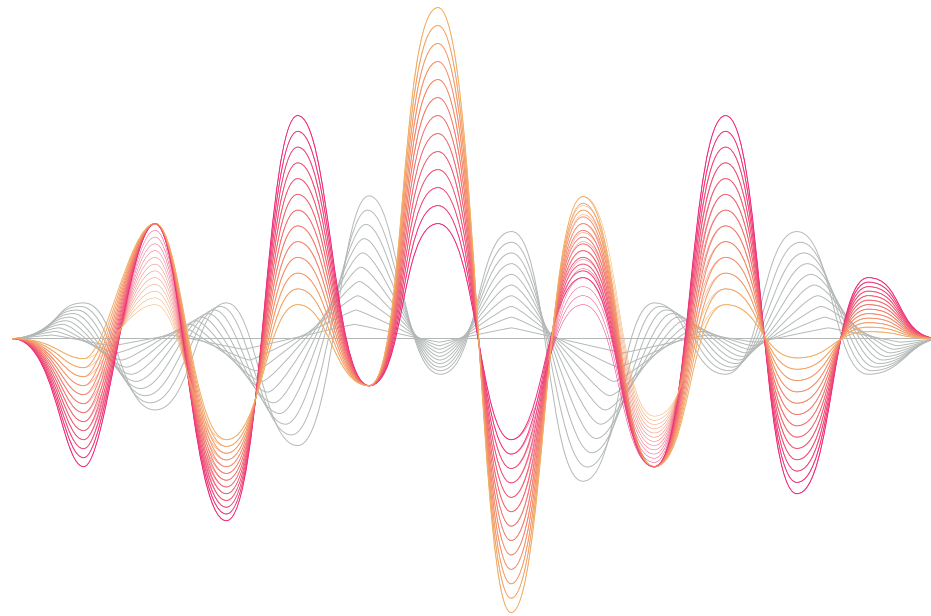
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EEGs used



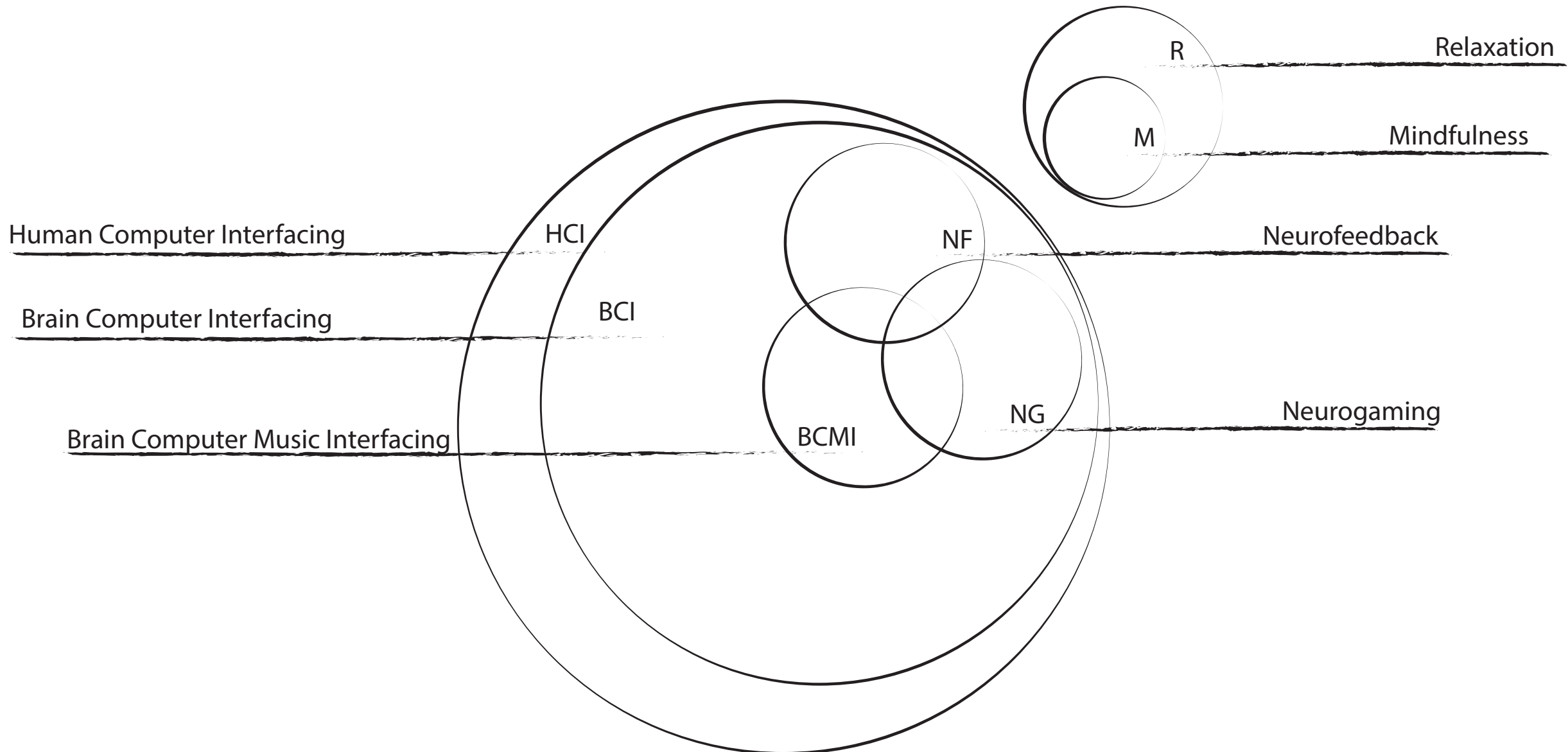
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Real time EEG demo
[IBVA]



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Orientation



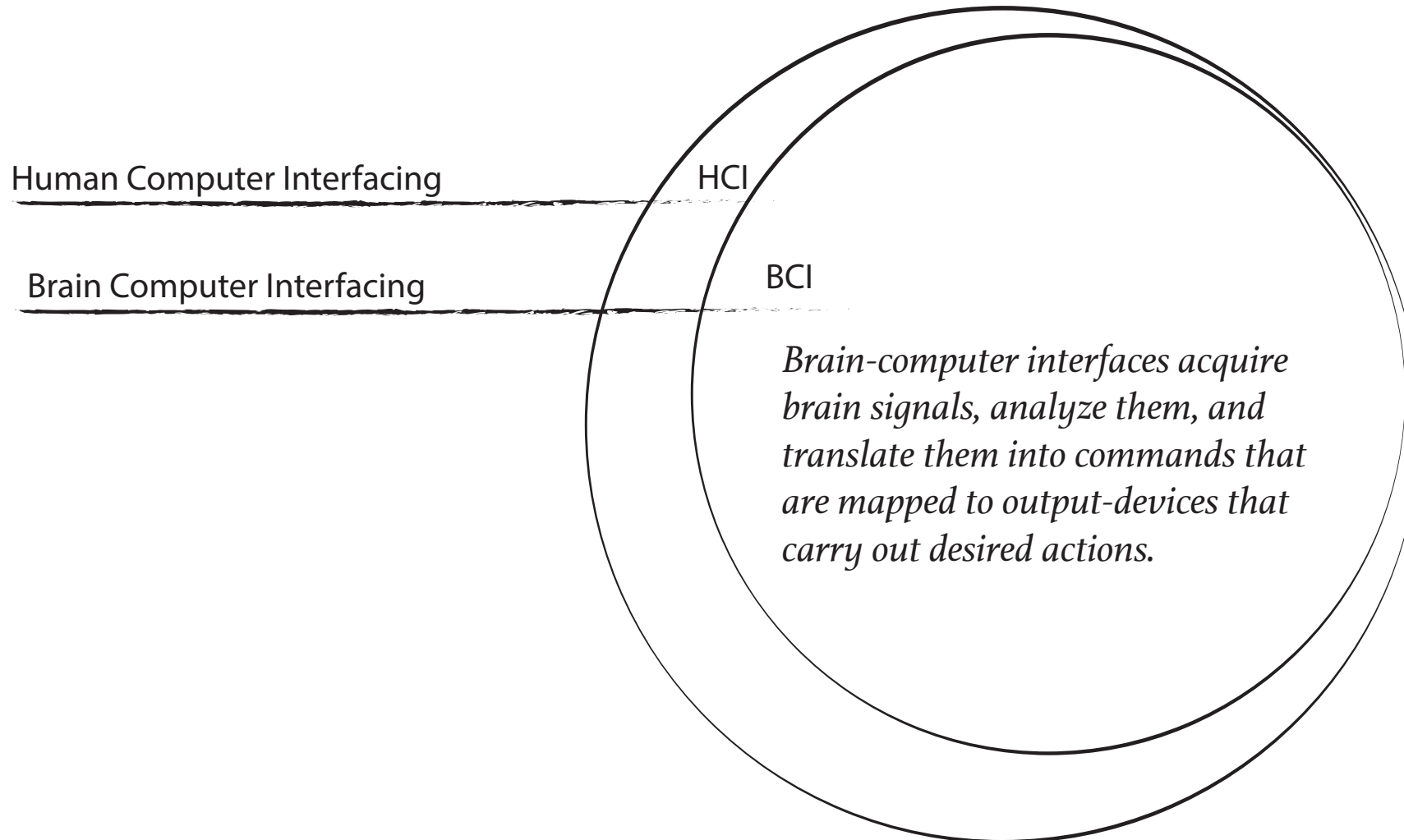
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Human Computer Interfacing

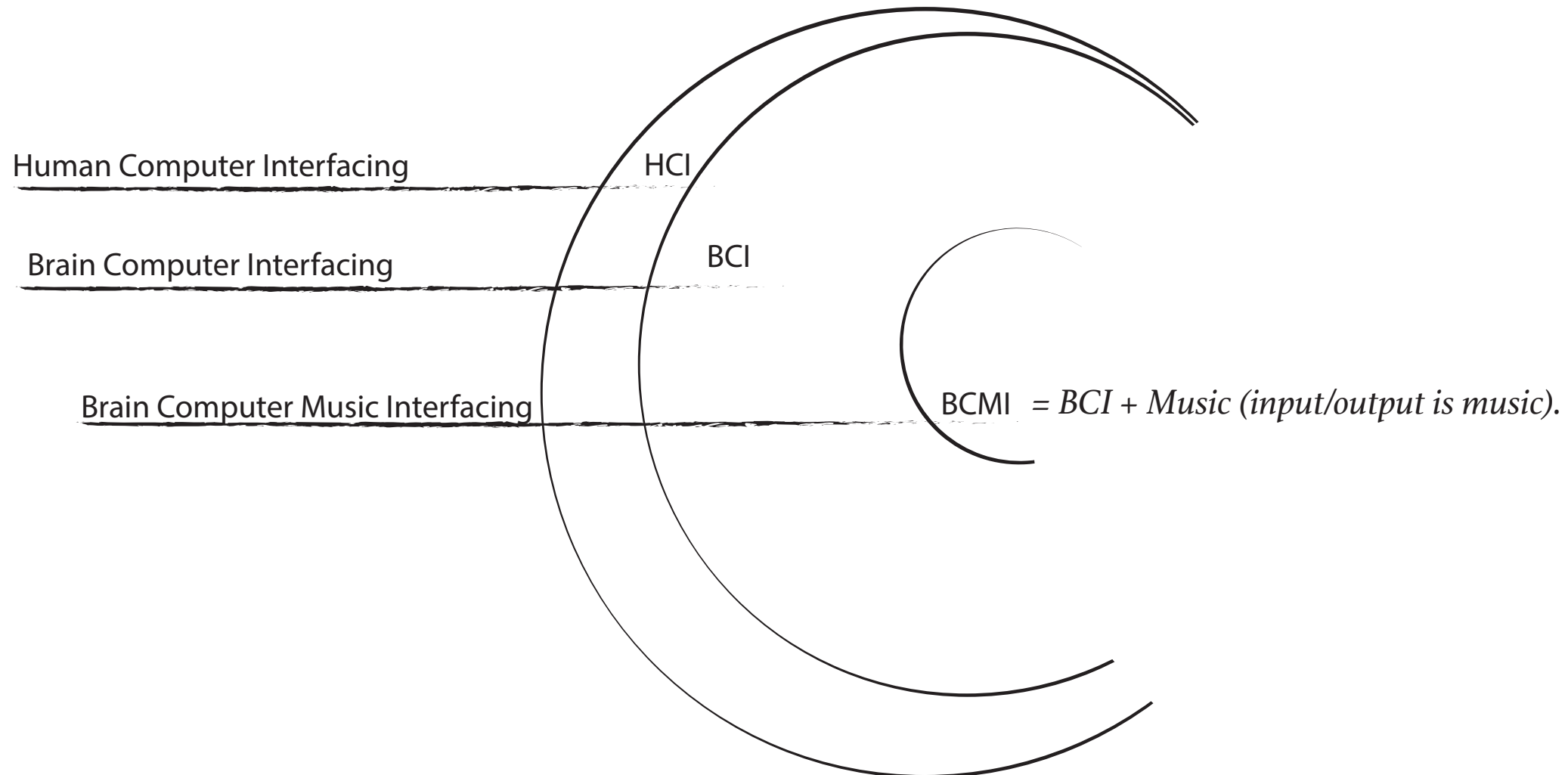
HCI

Human–computer interfacing researches the design and use of computer technology, focused on the interfaces between people and computers.

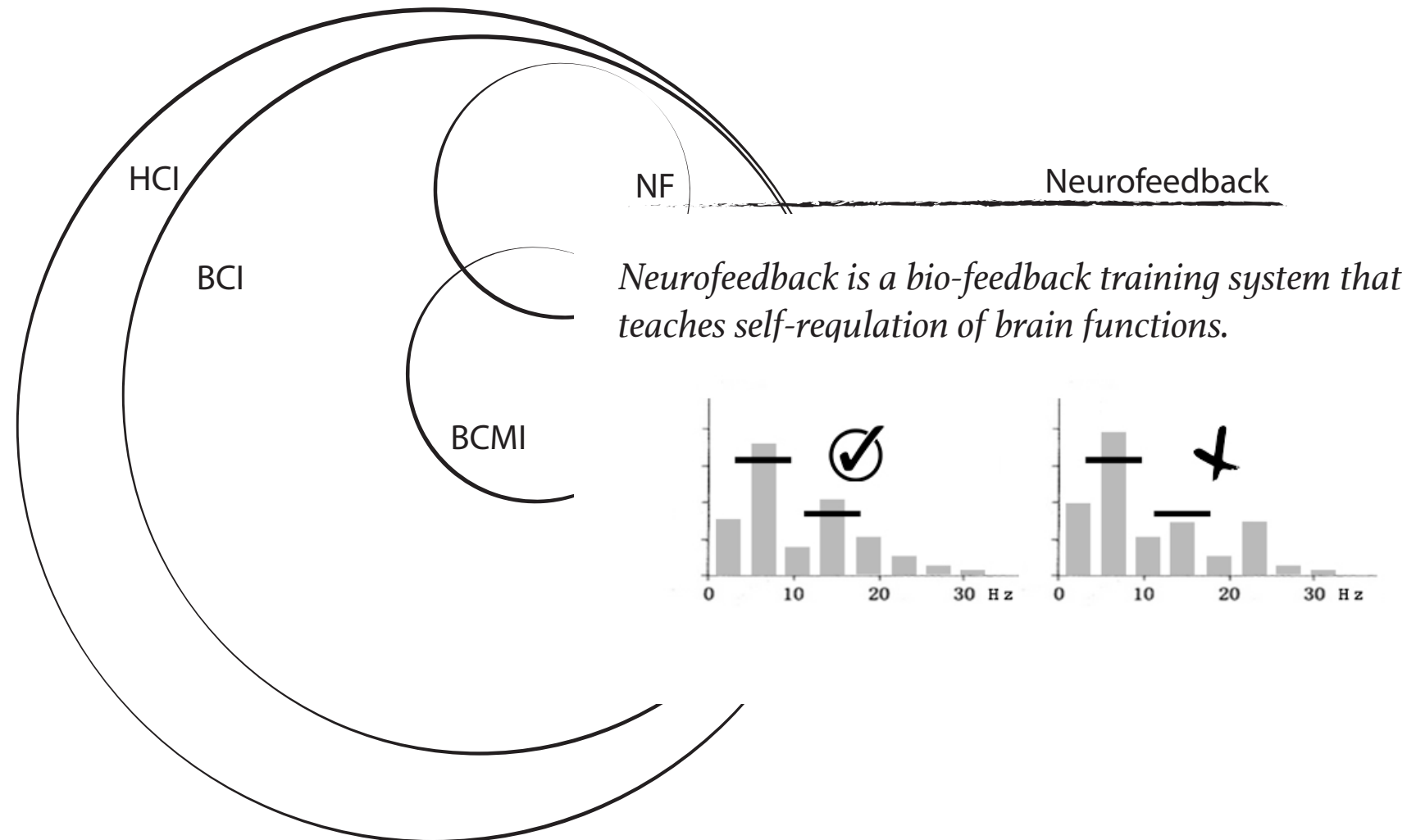
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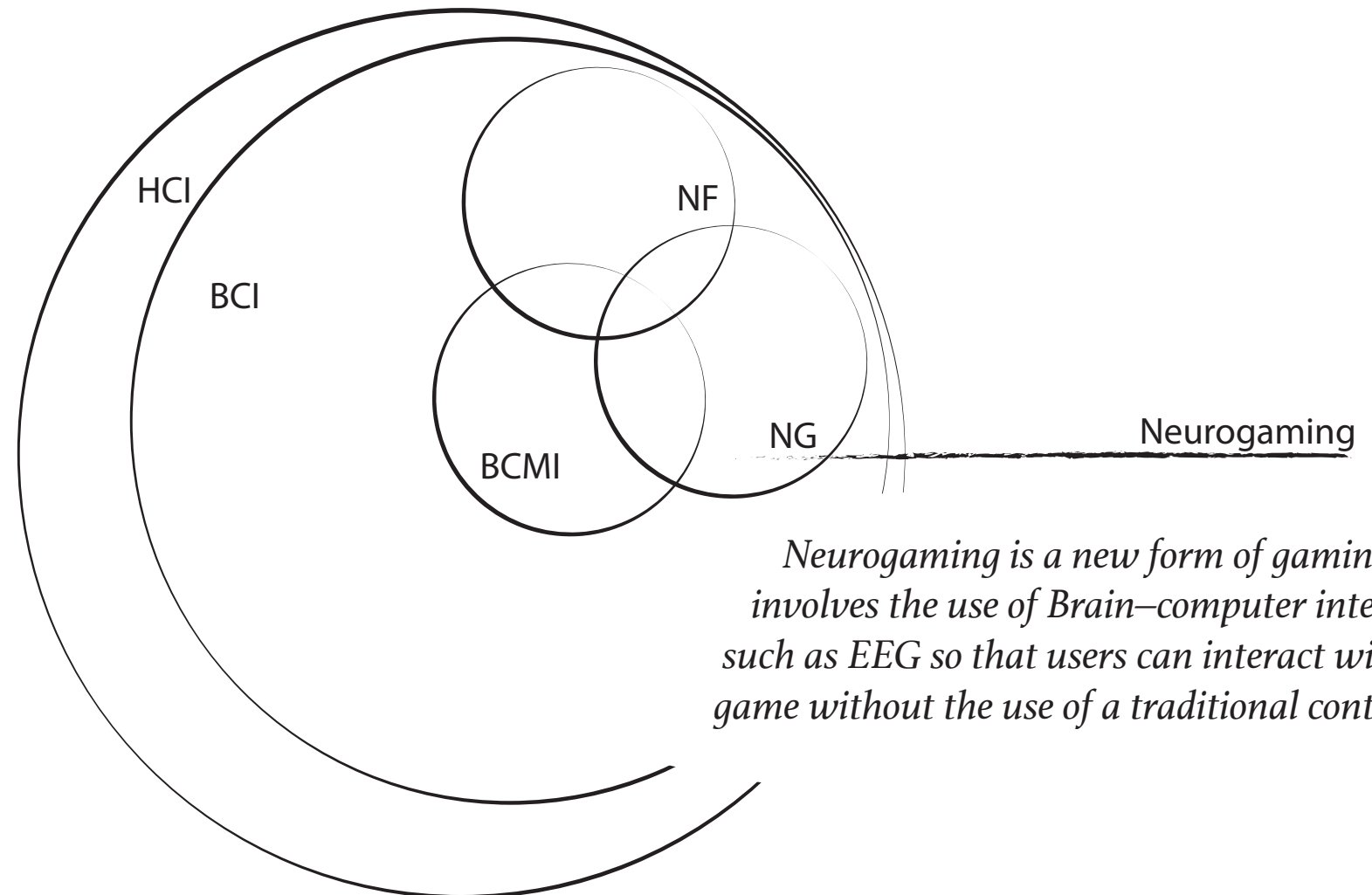
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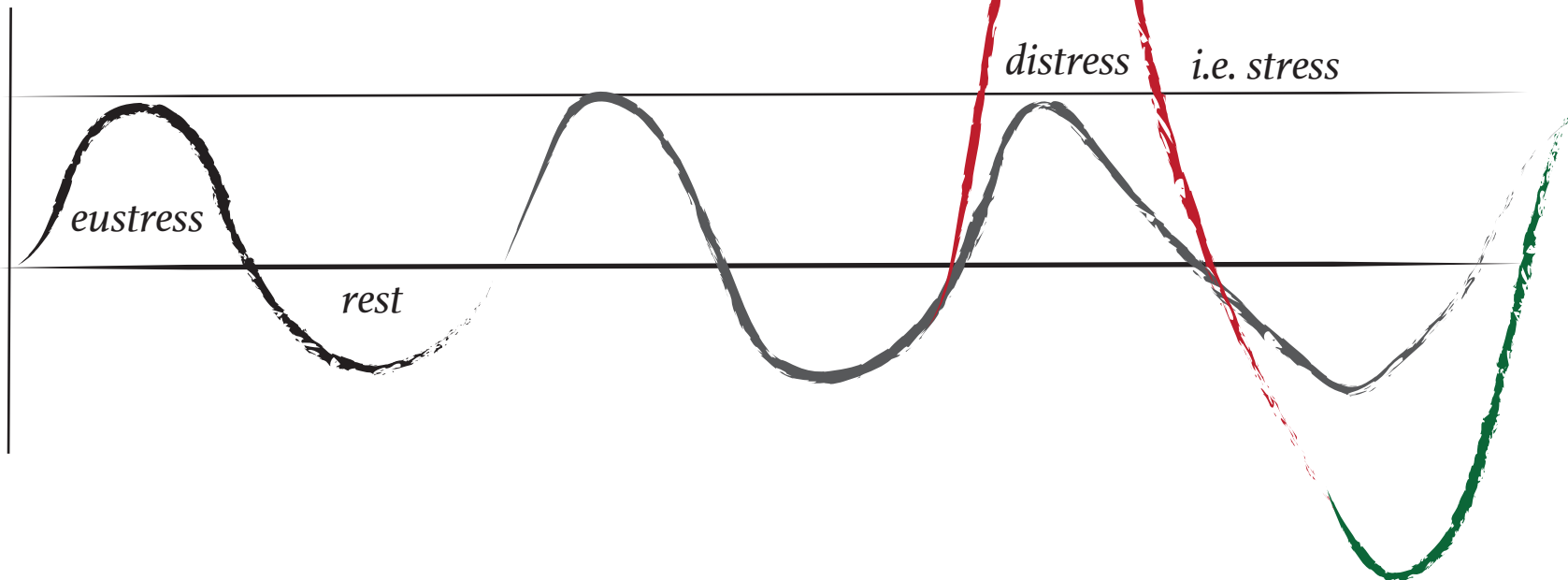
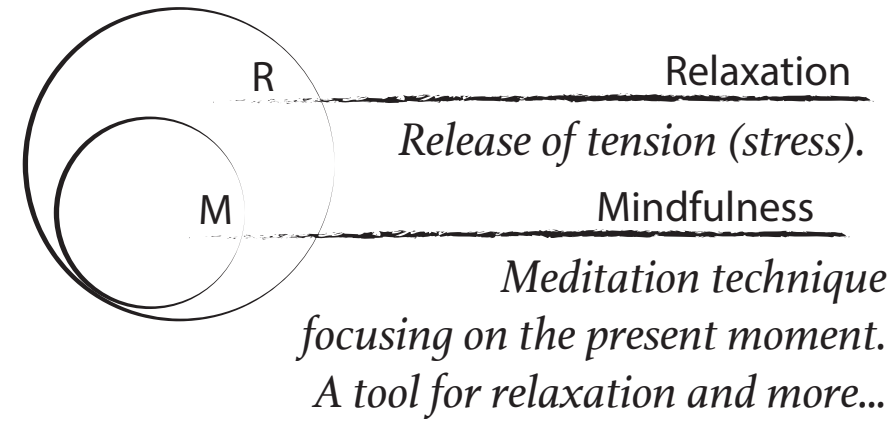


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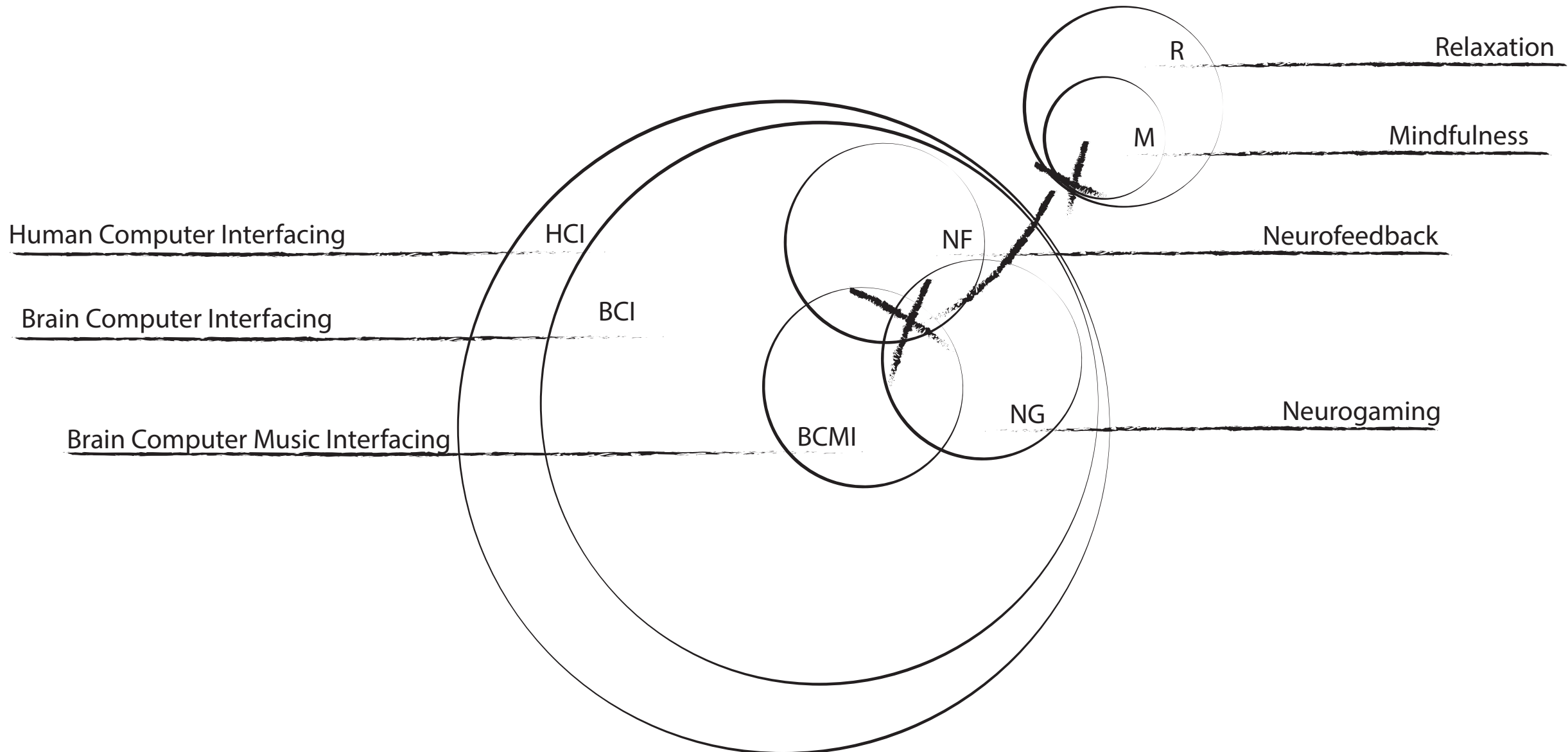


Neurogaming is a new form of gaming that involves the use of Brain-computer interfaces such as EEG so that users can interact with the game without the use of a traditional controller.

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Focus prototype demo
[Neurosky]

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How can sound/music evoke mindfulness?

[pitch, tempo, rhythm, density, tonal/atonal, preference, anticipation, ...]

How can choices be implemented in generative soundscapes?

How do we see mindfulness in EEG?

Sonification vs musification



...

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Focus group

Test groups (A, B, C, D)

Output:

- concerts e.g. with InScore;
- compositions;
- software (perhaps hardware);
- public engagement;
- paper(s);
- mobile app (later)

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