

Consciousness is a phenomenon that over the years was studied by philosophers. Nowadays, consciousness is an important research topic in neuroscience. Although the research about the biological basis of consciousness have been conducted for last twenty years, still little is known about the neural correlates of consciousness.

One possible reason for this is the fact that previous research did not take into account other mental processes that might confound the studies about consciousness, such as attention or working memory. That is why we do not know whether the neural correlates of consciousness that was described in scientific literature are the true neural correlates. Based on recent findings there is doubt that fronto-parietal networks play a role in consciousness and are rather related to the process that follows consciousness. This hypothesis will be verified in current project. Electroencephalography recording will allow to track the brain activity with high, milliseconds resolution and therefore show through backward masking experiment that indeed fronto-parietal networks are related to specific aspects of decisional process (control monitoring), but not consciousness per se.

This is next and important step necessary to reveal the neural correlates of consciousness.