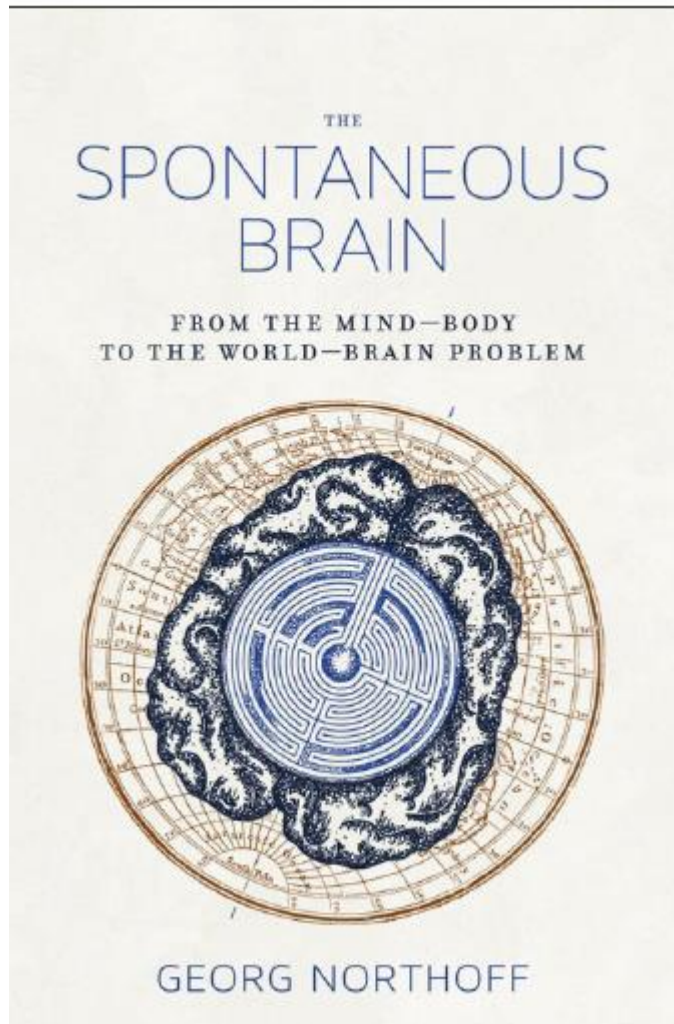


## Main arguments and theses of the book



**Georg Northoff (2018) The spontaneous brain. From mind-body to world-brain problem. MIT Press, Cambridge/Mass**

[www.georgnorthoff.com](http://www.georgnorthoff.com)

## **Main idea of the book**

Why do we have consciousness? Why is there a self? Mental features remain a mystery even after centuries of scientific and philosophical thought. Philosophers have long debated the question of the mind and its relation to the body, the so-called mind-body problem. More recently, neuroscientists have begun to search for the self and consciousness in the brain, but these investigations have so far failed to reveal the source of these elusive processes.

I argue that since we as biological animals are integrated within the world we must search in neuroscience not for how the mind relates to the body, but for how the brain relates to the world. That, in turn, allows us to replace the philosophical mind-body problem by what I call the “world-brain problem”. To consider our place within the world and subsequently the world-brain problem requires a monumental shift of perspective, amounting to nothing less than a Copernican revolution in neuroscience and philosophy.

## **From world and brain to mental features?**

What are mental features? Mental features such as consciousness, self, free will, and sense of the other determine our relation to the world and thus our very existence and reality within the world. Since mental features are central to our

existence within the world, we have an urgent need to understand their origin and mechanisms. Accordingly, to unravel the existence and reality of mental features, we need to understand their relation to the world.

Neuroscientists investigate the brain in empirical terms and search for neuronal mechanisms underlying mental features including consciousness, self, free will, and others. They mainly focus on the brain and its neural activity—however, that focus leaves out consideration of the world. Philosophers, in contrast, associate mental features with the mind. They subsequently raise the question of the existence and reality of mind and how it is related to the existence of the body, or what they term the mind–body problem. In shifting the focus from brain to mind, however, once again any relation to the world is left out. Despite the conjoint efforts of both philosophy and neuroscience, no conclusive answer to the question of the existence and reality of mental features has yet been proposed.

The central argument of this book is that we need to consider the world in both neuroscientific and philosophical investigations of mental features such as consciousness. That, as I argue, will change our focus from brain and mind to the world–brain relation as a necessary condition of mental features. We are then no longer confronted with the mind–body problem in our quest to understand mental features and are free to consider instead what I describe as a “world–brain problem”. This is the central thesis and argument in this book.

**Replacing the mind-body problem by the world-brain problem?**

Philosophers have long argued about the existence and reality of the mind when raising the metaphysical question of its relation to the body. This conundrum, especially in recent times, is complemented by the neuroscientists' search for empirical answers -neural mechanisms and correlates of consciousness, self, and free will.

I do not aim here to provide yet another answer to the question of the mind–body problem as such: instead, I question the question itself. I argue that the question of the mind and its relationship to the body is implausible on empirical, ontological, and epistemological-methodological grounds. Therefore, I consider the mind-body problem as the wrong path to tackle the question of the existence and reality of mental features.

How can we raise the question about mental features in a more plausible way? I argue that it would be better to raise the question of the existence and reality of mental features in terms of the brain's relation to the world. Empirical evidence suggests that the brain's spontaneous activity and its spatiotemporal structure are central for aligning and integrating the brain within the world - hence, the main title of this book, "The Spontaneous Brain".

## **Do we need a Copernican revolution?**

The shift from mind–body problem to world–brain problem is much more than just a shift from one problem to another. In the same way that Copernicus shifted our view of the Earth and the universe in a major way, the shift from mind–body

problem to world–brain problem shifts our view of ourselves and the world. We and our brains are no longer the centre of the world. Instead, our brain is just part of the world as whole. Such de-centering of the brain allows us to consider the relationship of the brain to the world as a necessary predisposition of mental features. This amounts to nothing less than a Copernican revolution.

Importantly, such allocentric rather than anthropocentric view will allow us taking into view the hitherto missing “common currency” between neuronal and mental features. Moreover, such Copernican revolution renders transparent the “fundamental principle” by means of which the brain and its mental features are part and integrated within the wider world. That profoundly changes our view of traditional philosophical problem like the mind-body problem which then can be replaced by what I describe as “world-brain problem”.