The first paragraph of Georg Northoff’s book *Neurowaves: Brain, Time and Consciousness* ends with the question: "But what is time itself? This is one of the most fundamental questions that generations of scholars have raised, especially philosophers and physicists in ancient and present times" (p. 3). As the author further discusses in his book, the topic of time has also reached psychologists and neuroscientists interested in how we perceive time and how time interacts with a wide range of human experiences. This topic has been explored in two recent books.

In *Neurowaves*, Northoff proposes investigating how temporal dynamics shape the connection between the world and the brain and generate mental features, focusing on self and consciousness. Throughout six chapters, the author, drawing from his extensive research, discusses parallels between the temporal dynamics present in the world and in brain activity and how these two dynamics interact. The chapters are full of examples of how similar dynamics are present within our brain, our body, and our environment. Critically, toward the final chapters he discusses how these dynamics are altered in states such as depression and mania. Much of the evidence presented and discussed in the book comes from the author's previous work, which looks at the variability of
brain activity across different time scales. *Neurowaves* is a reasonably short book with a direct message: "Our relationship with the world is essentially temporal, and this, in turn, shapes our mind" (p. 100). Due to its conciseness, some of the book's main arguments and empirical evidence results cannot be fully presented, and the reader has, in some moments, to accept the author's interpretations of the findings and conclusions. This is not necessarily a shortcoming, given that the complexity of the topic makes it hard to show all the methodological details of the experimental work. Still, the reader being familiar with some of the author's previous books and scientific work will help them grasp the arguments and results presented.

In *Just in Time: Temporality, Aesthetic Experience, and Cognitive Neuroscience*, G. Gabrielle Starr investigates a different aspect of time and experience: the temporality of aesthetic experience. As the author acknowledges, this is a difficult topic due to the complexity of both issues, temporality and aesthetics. The combination of both, as the author argues, comes with further challenges, such as the need to clarify what are the most critical timescales in aesthetics. This is one of the book's central and most intriguing premises: "aesthetic experiences are not bounded within discrete, self-enclosed, or self-sufficient windows of time, but ... they exceed the boundaries in which one might like to neatly encapsulate them. They begin before we ever encounter an artwork or perceive a flash of light or a tone of music" (p. 100). Whether and how the brief timescales often studied in neuroscience can capture what is essential in aesthetic life is thoroughly discussed in the book. In four chapters, the author discusses the principles of pleasure, how pleasure can direct attention, and the idea of goal time for aesthetic experiences. The book combines examples from different art forms and empirical evidence from the author's previous works. One could (naively) expect that time experience in arts would be discussed in the book mainly through music, dance, or movies, which have a prominent temporal aspect. However, the book contains examples from the visual arts, poetry, and literature. This serves well the author's main argument of looking at the time of the aesthetic experience. The work deals with an intricate topic, and it is challenging to fit, in a single book, an introduction to the subject and methodological details of how time and art can be investigated. However, the author does an excellent job presenting her previous work in a way that can be understood for her main arguments. The book is also an excellent introduction for readers interested in aesthetics in general and how it can be studied experimentally. The author is meticulous in presenting and discussing aesthetics and the main difficulties in studying it experimentally.

Both books, *Neurowaves* and *Just in Time*, offer insights into the intersection of time and neuroscience, making them relevant for readers interested in these subjects. While prior neuroscience knowledge is beneficial, one can still grasp the main points without a comprehensive background. However, readers familiar with neuroscience will gain a richer experience from the detailed discussions on methods like functional magnetic resonance imaging (fMRI) and concepts such as the default mode network. The authors provide sufficient context for readers to follow their arguments, but those with more expertise in neuroscience will find the content particularly rewarding. Both books provide excellent introductions to how neuroscience can shed light on complex topics like consciousness and aesthetics and their connection to the perception of time.
If there is additional discussion of this review, you may access it through the network, at https://networks.h-net.org/h-sci-med-tech


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