

## Book review

### About Time: A History of Civilization in Twelve Clocks

# About Time



## A History of Civilization in Twelve Clocks

DAVID ROONEY

‘Utterly dazzling, the best piece of history I have read  
for a long time . . . Moving and beautifully written’

Jerry Brotton, author of *A History of the World in Twelve Maps*

**Author**

**David Rooney**

Fellow of the Royal Geographical Society, United Kingdom; Research Associate At The London Science Museum, UK

**Reviewer**

**Assoc. Prof. Niyazi KAYA**

Eskişehir Osmangazi University, Faculty of Education, Department of Social Sciences Education, Eskisehir, Türkiye

**Publisher:** Viking

**Publication Year:** 2021, **Pages:** 336

ISBN: 978-0241370490

**Title and Author of the Book**

The name of the book to be introduced is *About Time: A History of Civilization in Twelve*, written by David Rooney. The author is a horologist and historian of technology and has worked at London's Science Museum and Greenwich Royal Observatory. He has written many articles and books on the history of cities, time, medicine and technology. His work has been awarded by many institutions such as the British Society for the History of Science and the Royal Institute of Architects.

**Purpose of Writing the Book**

The author gives information about the history of civilization, based on the twelve clocks that humanity has used to understand the time accurately, from ancient times to the present day. Through these twelve clocks selected from different eras and civilizations, it is explained how clocks helped to navigate the world, build empires, retain power, make money, manage citizens and control life.

In his book, the author uses the word clock in a broad sense, including all devices made by people to monitor the passage of time in the definition of clock. This includes sundials, hourglasses, water clocks, time-determining telescopes, time signals, pocket watches, wristwatches; In short, all the tools related to time.

**Content of the Book**

Apart from the introduction, the author has evaluated a time in a different geography in each chapter, within a fiction suitable for the purpose of writing the book.

The author gave the title of *Korean Air Flight 007, 1983* in the introduction section and explained how GPS entered our lives, never to be seen again, after a tragic event that resulted in the death of 269 people and then gave information about why he wrote this book.

In the first chapter, the author includes explanations about how the sundial, which was originally only one, was used to control daily life by rapidly increasing in number over time, based on the sundial that began to be used in the Roman Forum in 263 BC as the spoils of a

great victory achieved by the Roman forces in Sicily. He also included examples of how life began to be controlled in many cities of the world, as sundials began to be used in towers built in city centers, thanks to technological developments and newly invented clocks

In the second chapter, after making explanations about Cezeri's Castle Clock, the author gave information about how and where this clock was used for worship and religious education throughout the Muslim world 30 years after its invention. He also emphasized the role of clocks in all belief systems and explained with examples what clocks mean to Christians, Jews and Muslims in the context of belief and worship.

In the third chapter, the author gives information about when the hourglass was invented, based on the hourglass that was introduced in Siena in 1338, and then gives examples of how the idea of moderation that emerged in Siena influenced and transformed daily life, economy, politics, religion and literature.

In the fourth chapter, based on the stock market clock that was put into service in the Amsterdam Stock Exchange Building in 1611, the author includes explanations about the hours at which trading can only be done from one center from Monday to Saturday, when trading will start and end, and what punishment will be given to those who do not comply with these rules.

In the fifth chapter, the author gives information about the studies carried out for astronomical activities in the world, based on the sundial that will be located in the astronomical observatory built in Jaipur, India between 1732 and 1735. Starting from the observatory built in the city of Jaipur, it provides evidence of how the activities carried out in observatories established in different geographies of the world affect the developments achieved in space technologies today.

In the sixth chapter, the author includes arguments explaining how important time is in conducting trade safely, thanks to the observation sphere built in Cape Town in 1833. He explained the work done to determine international clocks, stating that clocks were very important for empires that derived their power from trade, and that the meaning of clocks was very important for empires that traded overseas, especially after the land became invisible. In these studies, examples are also given of how the chronometer developed by the Greenwich Royal Observatory shaped the world.

In the seventh chapter, the author gave information about Britain being the world's largest watch manufacturer throughout the 18th century, based on the clock mounted on the building of a watch brand in Cheapside, which was the most famous street of the period, as it was the center of trade in England in 1865. After explaining how this watch production affected the textile industry that developed with the industrial revolution in England, he made explanations about why it could not compete with the watch production that developed in Switzerland and why the watch industry collapsed.

In the eighth chapter, the author gave information about how electric clocks make daily life easier, based on the electric time system introduced in Brno, Czech Republic in 1907. He provided examples of how trains could standardize their departure and arrival times thanks to electric clocks and showed evidence that many applications we use in the banking system today are possible thanks to electric clocks. With the standardized time provided by electric

clocks, the behavior of those in power and everyone; He made statements that people can control life because it is possible to regulate when they go to bed and wake up, when they can drink alcohol or not, how long they can work in factories, how the length of the day changes according to the seasons.

In the ninth chapter, the author gave information about the opposition movements that opposed the control of human life with the introduction of clocks, based on the bomb attack on the tower where a telescope was located in Edinburgh in 1913. According to opposition movements, the discipline that was provided by whips against employees in the past was provided by hours today.

In the tenth chapter, the author includes explanations about how clocks affect our lives, based on a competition organized by the General Post Office in England in 1935 to identify the person who could tell the time to phone callers.

In the eleventh chapter, the author chronologically explains the information about the developments leading to the invention of GPS, starting from the miniature atomic clocks developed in 1972 for use in the lunar journey, and the use of these clocks in satellite technology.

In the twelfth chapter, the author includes explanations about why the plutonium chronometer, which was buried underground in Osaka, Japan in 1970 and will work for 5,000 years until 6970, was needed, in case the clocks did not work against the nuclear threat faced by humanity.

### **Evaluation of the book**

In this valuable book, which consists of thirteen chapters including the introduction, the author wrote his book by personally observing each watch he examines. While writing his book, the author benefited from an extensive bibliography consisting of 180 reference sources. Based on clocks, a lot of evidence has been presented about how clocks have influenced the civilization that humanity has created, what has become easier in our daily lives, what opportunities it offers to the power groups that govern us to control us, and how it has triggered civil society activities. For this reason, it is considered that it can be taught as a reference source in history and geography courses at secondary education levels, social studies, geography and history teaching undergraduate programs in education faculties of universities, and history and geography undergraduate programs in literature faculties.