Book Review


Nowadays, global warming is one of the most hotly debated topics in our society. However, some people still think that global warming only affects the ecological system and it is not related to their daily lives. Fagan would like to raise the attention of the general public to climate change through illustrating how climate shaped human civilisation and culture in this book. By using the example of the little ice age in the pre-modern Northern Europe, he provided a valid explanation on how climate affected human civilisation and humans’ everyday lives. His main argument was that climate has a huge impact on civilisation. He presented his arguments in four sections, the first three of which were about how climate-shift in different periods led to changes in human civilisation, while the last section contained his concerns on modern global warming. In the first three sections, he presented his arguments mainly in chronological order, explaining first how the Medieval Warmth Period enabled the rise of Norsemen, and then how the climate-shift in the late twelfth century transformed Northern European civilisations and how the extreme climate of the seventeenth century affected modern human civilisation. This structure was simple but the discussion was in depth.

In the first section, he used the rise of Norsemen as an example to illustrate how civilisations and cultures were affected by the continuous warm climate in the Late Middle Ages. The author argued that warm climate favoured people living in the North as the usually frozen ocean became available for sailing and the land became more productive. Since the climate became warmer in the late eighth century, the currents in the North Atlantic Ocean enabled Norse settlements in Iceland and Greenland.1 Also, the highlands in Northern Europe, such as the Lammermuir Hills in Scotland, and the Dartmoor and Pennine Moors in England, became available for agriculture.2 Norsemen could obtain food more easily from both land and sea, so

2 Ibid., 17.
they became a stronger power and one of the major players in the Middle Ages. The author used this example to show the close relationship between the development of human history and the climate. The author also used Norse culture as an example to illustrate how warm climate shaped human cultures. For instance, during the era of the warm climate, codfish became more abundant in the North Sea and the North Atlantic Ocean, and thus became one of the major sources of food in Norse culture. Therefore, codfish became the major sacrificial item in ritual ceremonies.

Another example of how the warmer climate shaped European culture was the unique characteristic of Gothic architecture. The good harvests caused by the continuous warm climate from the late eighth to the twelfth century was understood to be a blessing from God. To maintain these good harvests, people believed that they should dedicate more to God through building higher and more magnificent churches to praise God. Therefore, lots of Gothic churches were built in the late Medieval Period. Through these examples, he argued that the warm climate can explain historical processes and the formation of particular cultural artefacts in the Middle Ages.

In the next section, he demonstrated how climate-shift in the fourteenth century gradually ended the Middle Ages and started the Maritime Age, again illustrating the importance of climate change to human history. Since the mid-thirteenth century, the world had entered a little ice age. Therefore, the average temperature decreased and patterns of rainfall fluctuated significantly. As a result, famines happened more frequently. From 1315 to 1319, there was a great famine in Europe, and famine appeared again from 1321 to 1336 due to drought. The extreme weather caused a massive wave of death in Europe, and thus weakened the feudal system, which required a huge agricultural population to sustain. To make matters worse, the cold climate favoured the spread of the Black Death and caused even more death in Europe. The massive death led to the collapse of the feudalist structure due to a lack of manpower, which ended the Middle Ages. The author argued that the end of the Middle Ages resulted from the impact of the little ice age. Moreover, in this section, the author argued that the colder climate started the Maritime Age. The author explained that the cooling climate made codfish migrate southward, from the North Atlantic Ocean to the East Coast of the Americas, which led to a reduction of the amount of codfish caught in the North Sea and the North Atlantic. As aforementioned, codfish had become important in both religion and daily lives since the Middle Ages. People had to use salt and spices

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3 Ibid., 13.
4 Ibid., 17.
5 Ibid., 18-21.
6 Ibid., 79-82.
7 Ibid., 81-83.
8 Ibid., 71.
to preserve codfish and other fresh meats to avoid spoiling, so spices became more important in Europeans’ daily lives. However, spices were not produced in Europe so they had to be imported from Asia. The routes of spice trading were controlled by the Islamic empires, so Western Europeans were keen to find alternative routes to obtain spices. Therefore, they started to explore the oceans and started the Maritime Age. In this section, Fagan emphasized that the climate shift in the fourteenth century was one of the key factors ending the Middles Ages and starting the Maritime Age.

In the third section, the structure of the argument differed slightly from the previous two sections. In the previous sections, he mainly argued how climate shift caused significant changes in European history while in this section, he linked records of extreme weather from the seventeenth to the nineteenth century to major historical events. His main argument was that although there were a variety of causes for historical events in pre-modern Europe, the extreme weather also had an impact. Since society was mainly agricultural before the eighteenth century, significant fluctuations of weather and rainfall could affect society substantially in terms of productivity and stability. For instance, before the French Revolution, there was a long period of poor harvests, which increased discontent in French society, of which over three quarters were peasants and over four fifths of these sharecroppers. Snowstorms and droughts could have colossal impacts on the agricultural economy and harm the stability of the country. Therefore, the climate should be included when considering the causes of the French Revolution. He also argued that the climate-shift could affect economic structures and human behaviour. In the Low Countries, since the extreme climate caused the rise of sea levels and flooding of the land, developing technology to construct seawalls and windmills for pumping out seawater became important and led to the rise of technological enterprises. Through these examples, Fagan argued that we should pay more attention to extreme weather and climate shifts.

The last section, the conclusion, emphasized again that climate always plays an important role in transforming human civilisation and affects historical processes. Fagan believed that even with our modern technologies, our economy, society and civilisation are still vulnerable to climate change. Moreover, owing to the excessive use of fossil fuels, humans nowadays produce more greenhouse gases, which affects the climate. Since the author believed that there is a close

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9 Ibid., 61-78.
10 Ibid., 77.
11 Ibid., 158-66.
12 Ibid., 106-8
13 Ibid., 216-17
relationship between climate and civilisations, he stated his worries in the last section and tried to convince readers to pay more attention to climate change.

Throughout the book, Fagan aimed to convince readers of the importance of the climate for human activity through using the history of Northern Europe as an example. The author, who specialises in African history and archaeology, is very concerned about the environment.\textsuperscript{14} Therefore, he started to write about environmental history in the 2000s. This book was his second book in environmental history, but he has since written several books on climate history.\textsuperscript{15} Nonetheless, this book contributed to both environmental history and World History, in terms of using clear and understandable terminology to explain complicated phenomena in climate history, providing a convincing explanation on how the climate affected historical processes while admitting the existence of other factors, and emphasizing how human decisions were affected by climate.

One of the major contributions of this book is integrating a variety of complex sources and explaining them in the simple words. Like other World Historians, Fagan not only made use of a variety of sources, from ancient poems to scientific sources\textsuperscript{16} but also explained those sources clearly without using jargon. The bibliography shows lots of scientific articles about the solar convection zone, maritime currents and solar activities.\textsuperscript{17} Also, he used some raw data from the Northern Atlantic Oscillation and National Climate Data Center to support his arguments. However, in the presentation of his arguments, rather than using technical jargon and scientific explanations, he used clear and simple graphs and maps to explain those scientific phenomena; this makes it easy for readers without scientific knowledge to understand his explanations. According to Warde, the book was one of the most accessible climate history books for people without a deep understanding of science.\textsuperscript{18} The avoidance of complex concepts and jargon made this book comprehensible for beginners in climate history.

Another important contribution of this book would be its convincing argument on how civilisations are affected by climate change. The book focused on how climate change affected the lifestyles, culture and the development of history in Northern Europe. Through using a variety

\begin{footnotesize}
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\item Ibid.
\item Fagan, \textit{The Little Ice Age}, 219–33.
\item Ibid., 222-33.
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of ancient records, like poems and tales, the author demonstrated how ancient European looked at climate and how people’s lives were affected by the climate. Also, he linked several major turning points in history to changes in climate to show that climate highly influences civilisations. For instance, he explained how codfish migration, caused by climate change, would end the Middle Ages and start the Maritime Age through using a variety of historical records emphasizing the importance of codfish in European lives. Although similar explanations could be found in other climate history books, some of those books do not mention other factors while Fagan tried to balance his arguments and argued that climate was one of many factors affecting human behaviour. For instance, the author admitted that other factors caused the French Revolution in 1789, but also argued that climate worsened the situation in 1788-1789. His avoidance of environmental determinism treating natural factors as the only or major factors affecting historical development. It was also praised by other scholars, like Brachfeld and Cunniff. They believed that admitting the existence of other factors made the arguments in this book more plausible. Cunniff mentioned that some climate historians and environmental historians sometimes over-emphasize the importance of nature by arguing that other factors, like human decisions, were less important, while Fagan stroke a good balance. Since things are full of complexity, it is impossible to conclude any event to be caused by any one factor. Therefore, admitting the existence of other factors made this book more valuable.

Although this book offered a broad picture of how climate affected historical processes in Europe, it also looked at how climate affected individuals. Similar to other World Historians, Fagan did not treat society and nations as the basic players in history. He argued that climate affected the everyday lives of individuals and thus shaped different cultures in human history. His argument could be classified as World History and his argument supplemented other World History narratives, in which historical development is believed to be the result of many decisions made by individuals and negotiations between different individuals. This book provided an argument on how individuals' decisions are affected by not only other individuals' decisions, but also the constraints of nature. For instance, since the eighteenth century, the food culture of

19 Fagan, The Little Ice Age, 61–78.
22 Environmental-determinism means that some historians treat natural factors as the only or major factor affecting historical development.
24 Cunniff, Review, 184.
Ireland and parts of England has transformed quickly from wheat to potatoes. The book argued that this transformation might not be due to the preference of individuals, but to the poor harvests caused by the extremely cold climate in the late eighteenth century. As choosing what they experienced in the past would be the safest option for people, people were willing to change their habits only when they were forced to change. After a long time, their unchanged habits have become their unique culture. This book provided explanations of the formation of different cultures, which could supplement World Historians’ explanations on why individuals in different places may make different decisions in similar circumstances. Through explaining how individuals’ decisions and behaviours were affected by the climate change, the book added another piece to the puzzles of World History.

In spite of the great contributions of the book, there were several minor problems with it. Firstly, since the maps provided in the book were drawn by hand, some of them lacked accuracy. For instance, the scale of the map on page 30 showed the Iberian Peninsula larger than its actual size, and was missing the islands in the Baltic Sea. Other maps in the book had different problems. To make things worse, they had no latitudinal ranges, so it was more difficult for readers to understand some of those maps. The maps are crucial for the main arguments of the book as the author uses them to illustrate complicated scientific phenomena, for example how climate affected maritime currents and rainfall; therefore, the lack of clarity in the maps may affect readers’ understanding. Brachfeld also criticized the maps in the book, which did not indicate latitudinal ranges, which she found difficult to follow. She also added that latitudinal ranges were important for historians to compare maps in different publications. It would be much better to replace hand-drawn maps with scientific maps with ranges and a correct scale.

Another problem with the book would be its title. The title, The Little Ice Age: How Climate Made History, 1300-1850 is not actually reflective of the content. The book focused on a longer period than the one indicated in the title; the explanations for the Medieval Warmth Period climate history are also among the main arguments of this book. However, this book provided a clear and persuasive explanation on how the continuous warm climate enabled the rise of Norsemen and the formation of medieval culture. Therefore, it would have been better to include the Medieval Warmth Period in the book title. It would be a pity if someone skipped this book only because of the inaccurate title. Also, the terminology “Little Ice Age” suggests no

26 Ibid., 30.
27 Brachfeld, Review, 251-52.
geographical scope. In China, the Little Ice Age during the late Ming Dynasty weakened agricultural production and led to the fall of the dynasty. With this title, I expected to read about how climate change affected historical development in Asia and the Americas. However, the book only focused on Northern Europe without providing explanations on how climate change affected other places in the world. It might give readers wrong expectations of the book content without specifying in the title that the book focuses on Europe. For instance, Cunniff’s review criticised the book as Eurocentric as he expected a broader geographical scope than Northern Europe. It would have been better if the author had specified that the focus of the book is on climate change in Northern Europe.

To conclude, among all other climate history books, his publication would be recommended to beginners to climate history. Fagan avoided using technical language in this book so as to enable readers without any science background to understand climate history. Therefore, the book would be suitable for beginners of climate history. Also, his main argument was well explained and supported by lots of examples. Despite some limitations of the book, his argument was strong and convincing, and I am looking forward to reading Fagan’s other works.

Bibliography


28 Cunniff, Review, 184