Book review: Fire: A Brief History (Second Edition) by Stephen J. Pyne

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Bookshelf,Series

This book review was written by Annika Spenger, one of the students in the Environmental Studies Certificate Program at the Rachel Carson Center.

By **Annika Spenger**

"We are truly a species touched by fire" (p. 24)—Stephen J. Pyne's book *Fire: A Brief History* focuses on exactly this relationship of mankind, fire, and nature. Published as part of the Weyerhaueser Environmental Books series by the University of Washington Press in 2019, the second edition adds to the first, from 2001, with a new chapter on the future of a world full of fire. Pyne suggests calling the world we are living in "Pyrocene"—a new concept inspired by and carrying onward the well-used term Anthropocene. Apart from this new chapter, Pyne revises his nearly two decades old first edition in the light of the ongoing fire research in transdisciplinary environmental studies. Yet he has kept the overall structure of the book the same, narrating "the entire human history of fire on Earth" (p. IX).

Before focusing on the new parts of the second edition, this paragraph will give an overview of the chapters one to ten that were already included in the first edition. Pyne starts the brief history of fire by explaining the basic needs of fire in this "grand cycle of fire on the Earth" (p. IX): spark, oxygen, and fuel. In its origins, fire could only start by chance, when all those criteria came together. As this fire did not need the intervention of any species, Pyne calls it *Natural Fire* or *First Fire*. In many places, fires occurred regularly and nature adapted to this phenomenon, known as fire regimes. The next stage in which fire appears is called *Anthropogenic*—or *Second—Fire*. With hominins learning to spread or initiate fire, they could widen the areas in which fire appears—even to places where it did not burn naturally before. The power of fire was essential for humans, especially for the development of agriculture, enabling controlled burning of landscapes in order to cultivate land for crops or cattle. With these regular cycles of burning, this time through

anthropogenic fire regimes, humankind could cultivate land for its preferred use and again, nature had to adapt to the fire regimes. Along with the human use of fire came the desire to control the burning in order to get the desired outcome. Eventually, this happens with what Pyne describes as *Third*—or *Industrial—Fire*. This type relies on the burning of fossil fuel and thus not only releases the power of past biomass, but also its carbon dioxide. In this stage, humans use this power without even seeing the burning process themselves and therefore become more and more alienated from open fires. Pyne concludes that in the world we are living in today, all three kinds of fire (co)exist, and that taking the fire away from an environment might be just as bad as bringing it to areas where it has not been before. Yet bad fires often outnumber the good fires and the burning continues to increase, in what Pyne describes as “The Long Burn” (p. 184).

In the newly added chapter eleven of the book, Pyne puts the concept of the Anthropocene in the context of fire history and raises the thesis that we “might equally call the era the Pyrocene” (p. 188), as the source of the environmental power humans have over the earth is fire. He also sheds light on current issues, describing bad fires—megafires uncontrollably destroying whole parts of continents—and good fires that are needed in certain areas. Furthermore, in the world today most fires—especially those of *Third Fire*—are invisible for humankind even though their impact on the environment is enormous. In this context, he also raises awareness that there are barely any academic disciplines dealing solely with the element that shaped our world the most: fire. Looking to the future, the book finishes with the outlook of human-fire relations: just as good fire made us humans, bad fire might end us.

Throughout the book, the text is supported and underlined with many different examples of human-fire interactions. These examples range from myth-building in different cultures, to the role of fire in the Enlightenment, up to national park fire policies throughout the centuries. Their form also differs, from studies visualized in graphs to pictures, or thrilling stories told as if the reader was sitting at an ancient fireplace. What is interesting about these examples is that they do not focus only on one country or period of time but are spread over every continent of the earth and all time ranges. Pyne shows the role of fire in many different religious rites, for example, and how cultivating land with fire happens in different parts of the world. Apart from illustrating Pyne’s theories of the importance of fire for humankind, these examples also demonstrate that those issues are not limited to a few parts of the world but paint a bigger picture in which the same practices appear everywhere around the world.

Pyne's elaboration is not only strengthened by examples. The chronological order of the book also helps the reader to follow the author along this walk through the history of fire. Every chapter covers its own time span, starting from the beginnings of the earth itself and ending with a glance to the future. Clarifying at the beginning how fire could first emerge makes it easier to understand the further modifications fire and human interactions could undergo. And even though some aspects intertwine and reoccur because they do not belong to one period alone (e.g. colonialism or Enlightenment thinking), this clear structure makes it easy to follow the author, especially when the three important key terms *First*, *Second,* and *Third Fire* come up one after the other.

Another positive aspect of the new edition is the way Pyne sets out the dependence of humankind on fire. It becomes obvious that we rely on fire in many ways, even though they might not seem obvious to us at first. He shows this, for example, by explaining that by living in a house in an urban area, one could possibly live many years without seeing an open fire, even though one uses *Third Fire* in nearly every aspect of life: in heating, electricity, or driving a car. He also clarifies that the negative results of bad fire cannot be ended by simply taking away the fire. In some areas of the world, the landscape has already adapted so well to the human-made fire regimes that taking the fire away—for example by creating national parks in which burning is strictly prohibited—could lead to the extinction of species if the ecosystem, which has adapted over centuries to the human fire regimes, cannot cope with the sudden lack of burning. The big impact fire has on the earth shows that the solution to all fire-related problems is not as easily found as it seems.

The biggest issue in the second edition of *Fire: A Brief History* is the concept of Pyrocene. Starting with the term Anthropocene, which describes the era in which the human impact on the earth becomes undeniable, Pyne widens this theory by claiming that power over the earth's environment only came about through the possession of fire, and that humans needed fire for every expansion they made. Thus he calls this era Pyrocene, synonymously to Anthropocene. Yet new terms, from Anthropocene to Capitalocene to Pyrocene, have been appearing regularly recently, and I see this term rather critically. Even though the impact of fire on the earth is undeniable and comprehensibly explained by Pyne, the important factor shaping the earth is still humanity. Obviously, fire can alter whole landscapes and shape parts of the earth, but the power it now has was activated only when it became used by humans. The driving force is still humanity, and therefore the term Anthropocene seems more fitting than Pyrocene.

To conclude, Stephen Pyne's second edition of *Fire: A Brief History* sums up the history of fire on the earth with a special focus on the human interaction with fire and its environmental impacts. As it is chronologically written and sprinkled with many examples, the book is an excellent read for scholars and students of the environmental humanities, as well as for anyone without a scientific background who is interested in the history of fire. Dividing the fires on the earth into three types—*First*, *Second* and *Third Fire*—is an especially important argument and recurring topic of the book. By coining the new term Pyrocene for describing the happenings on the earth of this era, Pyne provides an interesting and discussable term. This book sums up the different stages fire took thus: "Fire was myth, fire was science, fire was power" (p. 24).

Pyne, Stephen. 2017. Fire: A Brief History. *Second edition, Seattle: University of Washington Press.*

Further Reading:

Pyne, Stephen. 2007. Awful Splendour: A Fire History of Canada, Vancouver: UBC Press.

Pyne, Stephen. 1998. Burning Bush: A Fire History of Australia, Seattle: University of Washington Press.

Pyne, Stephen. 2004. Tending Fire: Coping with America's Wildland Fires, Washington, DC: Island Press.

Pyne, Stephen. 2001. Year of the Fires: The Story of the Great Fires of 1910, New York: Viking.