Kai Brandt-Templeton

DHC 180

3/8/2022

Book Review

The Sixth Extinction: An Unnatural History

*The Sixth Extinction*, written by Elizabeth Kolbert, is a nonfiction popular science book. Elizabeth Kolbert is an American journalist, author, and writer at The New Yorker since 1999. During her time at the New Yorker, she has also been a member of the Bulletin of the Atomic Scientist’s Science and Security Board from 2017-2020. For school, she attended Yale University and was later awarded a Fulbright Scholarship to study at [Universität Hamburg](https://en.wikipedia.org/wiki/University_of_Hamburg), in Germany. She has also won numerous awards for her work and participation in global change campaigns. To name a few, she won the American Association for the Advancement of Science Journalism Award in 2005, the Pulitzer Prize for The Sixth Extinction in 2015, the SEAL Environmental Journalism Award in 2017, and many more. Her book, *The Sixth Extinction* is about the possibility of a sixth extinction in the context of the five mass extinctions that have occurred throughout the history of planet Earth. Kolbert discusses the events that would have to occur to catalyze a sixth extinction and the roles of humans and the environment have on the process. She specifically discussed numerous events of scientific discoveries/theories of extinctions as well as human activities that have influenced extinctions. These discoveries, theories, and events have and continue to occur all over the world as the book mentions Arizona, Peru, Brazil, Australia, New York, etc.

Kolbert’s way of writing is naturally storytelling and informative. She covers various topics throughout the book and describes them all in a very similar way- she introduces the topic and provides the cause and effect, not always in that order, however. I found this way of writing to be a captivating way to learn about the topics surrounding extinctions. In her first couple of chapters, Kolbert introduces the concept of extinction. She begins by discussing the mass deaths of frogs by a bacteria known as *Bactrachochytrium dendrobatidis* (Bd). She shares this story to introduce extinctions and the differences between “mass extinctions” and “background extinction”, which I did not know of before reading this book. Notably, she used the story of frogs to segway into the many species of animals becoming endangered around the world and the main cause: humans. An additional piece of Kolbert’s writing I found helpful was the number of theories and ideas she included when retelling these events. Of course, in the field of science, numerous theories and hypotheses are linked to an idea or event. Kolbert does well to include all of the most significant and supported theories linked to an event she is writing about. For example, in her opening story of Bd, she shares that while some scientists argue that humans unintentionally spread Bd in the 1960s, others believe it was spread by the North American bullfrog after humans spread bullfrogs around the world.

Most of the first five chapters covered mass extinction, what it is, and some background of the history of Earth. In chapters 6 & 7, Kolbert really begins to delve into the pollution aspects of this possible sixth extinction as well as others before. She begins with the theory of the extinctions during the Ordovician era that glaciation killed off most species. However, she goes on to explain that rising levels of carbon dioxide caused climate change and large ice melts that rose sea levels which in turn, disturbed marine life. Not only did she mention this, she also mentioned an argument by scientists that around 252 million years ago, a mass extinction occurred due to a sudden increase in carbon dioxide levels in the atmosphere. This extinction caused around 90% of the world’s species at the time to go extinct (Kolbert, 2014). I liked that she included background dating back millions of years. I think it is important to show that the same issues humans are accelerating are the same issues that caused extinction before we were the top species on Earth. In chapter six, Kolbert continues to discuss the issue of carbon dioxide and how it effects the planet. However, this time it is in the context of human-emitted carbon dioxide. She can explain the issues of burning carbon and the negative consequences associated with it, as well as how it relates to other, more environmentally-caused, extinctions. Kolbert additionally goes into detail on projects such as Biosphere, which were intentionally created to study the effects humans have on the environment. She discussed some of the findings of scientists at Biosphere that proved that carbon dioxide can destroy coral reefs.

The last point I found important in Kolbert’s book was her discussion of how humans have negatively impacted biodiversity and ecosystems. She relates to the Pleistocene period of Earth when the planet became significantly cooler, causing species to migrate to other parts of the world in search of temperatures adequate for survival. Scientists today are worried that if temperatures continue to increase at their current rate, many animals will be incapable to migrate at a fast enough speed to survive, and will therefore become extinct (Kolbert, 2014). This is scary to think that animals will not be able to escape the changes of Earth caused by human consumption, production, and pollution. As for biodiversity, Kolbert explains the basic rule of ecology is the greater the size of an area, the more species are likely to live there (Kolbert, 2014). Unfortunately, humans decrease the amount of land available for species to inhabit. Due to this, scientists have estimated that between 30 and 50% of the world’s species will disappear by the year 2050 (Kolbert, 2014). It is crazy to me, that scientists have found evidence and causes of mass extinctions, books and articles have been written about them, movies have been made, and yet, the human population ceases to do anything of significance to prevent the progression of sixth mass extinction.

Overall, this book got great reviews. The New York Times wrote a piece titled “Without a Trace” specifically as a review and discussion of Kolbert’s book and the evidence she presented. They describe her as having a “distinctive and eloquent voice of conscience on issues arising from the extraordinary assault on the ecosphere” (Gore, 2014). Gore goes on throughout the article summarizing the book while continuing to throw in the occasional compliment towards Kolbert. Throughout his review, he refers to Kolbert and her writing as “meticulous”, “intellectual”, “well-written”, and “clear and comprehensive”. A second review I found of Kolbert’s book is from The Guardian and is titled, “The 100 best nonfiction books: No 1- The Sixth Extinction by Elizabeth Kolbert”. The author of the article, Robert McCrum, refers to the book as an “intelligent expression of this genre and also supremely well-executed and entertaining” (McCrum, 2016). Everything I have read about this book from highly respected news sources, to consumer reviews is nothing but enthusiastically positive. I, myself, do not disagree with many of the reviews. I thought she did a great job with the book. The right amount of context was provided for me to grasp slightly more than a basic understanding and follow along from the perspective of scientists. I thought she also did well to communicate her tone throughout the book; meaning, the urgency and severity of this issue were clear to me, as I hope it is to other readers. I would give the book a solid 5/5 because I did enjoy it and I thought the content was very well written.

References

Gore, A. (2014, February 10). *Without a Trace*. The New York Times. Retrieved March 8, 2022, from <https://www.nytimes.com/2014/02/16/books/review/the-sixth-extinction-by-elizabeth-kolbert.html>

Kolbert, Elizabeth. (2014). *The sixth extinction: an unnatural history.* New York: Henry Holt and Company,

McCrrum, R. (2016, February 1). *The 100 best nonfiction books: No 1 – the sixth extinction by Elizabeth Kolbert (2014)*. The Guardian. Retrieved March 8, 2022, from https://www.theguardian.com/books/2016/feb/01/100-best-nonfiction-books-of-all-time-the-sixth-extinction-elizabeth-kolbert

Wikimedia Foundation. (2022, February 17). *Elizabeth Kolbert*. Wikipedia. Retrieved March 8, 2022, from https://en.wikipedia.org/wiki/Elizabeth\_Kolbert