## Libraries, Local and Gutenberg

There are certain moments in science of remarkable insight that are wonders of human accomplishment. The remarkable insights include the heliocentrism of our planetary system by Copernicus in the 16<sup>th</sup> century, Darwin's evolution by natural selection in the 19<sup>th</sup> century, Watson and Crick's unravelling of the structure of DNA in the 20th, and Doudna and Charpentier's CRSPR gene-editing in the 21st.

There are more examples of course, but this list alone is so impressive that we should take a moment every now and then to pat "ourselves" on the back. We should certainly want to read about how these insights came to be. I am drawn to that, and, in some cases, needing to find original, cited resources, locally and/or on-line.

I recently read Alison Bashford's "The Huxleys: An Intimate History of Evolution" (2022). The genealogical diagram on two pages before the book's Introduction to the Huxley family, spanning the 18<sup>th</sup> through 21<sup>st</sup> centuries, is impressive enough; it overlaps some of the above notable examples. More than that, the Huxleys are integrally part of the story about the biological revolutions from the 19<sup>th</sup> century forward. Primarily, Bashford speaks to that by focusing on Thomas Henry Huxley (1825-1895) and grandson Julian Huxley (1887-1975). Perhaps these two shine a little brighter than all the other so accomplished Huxleys in science and the arts. Many were avid writers, and such was their influence. Julian's brother Aldous wrote acclaimed novels. Half-brother Andrew won a Noble Prize in Physiology or Medicine.

Thomas Henry, zoologist and anatomist, was close younger friend to Charles Darwin, and was his avid "bulldog" in the scientific community of the time, even if he was slow to fully adopt the part about natural selection. Darwin was anything but bulldog. Julian was no less a Darwinian, with a mind to educate the public about environmental issues and extinction of species in real time.

Bashford cites many Huxley books throughout her text, but two classic ones in particular led me to try and find access to both in their original forms. The first is T.H. Huxley's "The Crayfish: An Introduction to the Study of Zoology" (1880). It is classic for its cray dissection illustrations, which exhibit the surgical skills of T.H. Huxley, leading to projections from specific observations to more general understanding about life forms.

The second is H.G. Wells, J.S. Huxley, and G.P. Wells, "The Science of Life" (1931), a three-volume book set that first of all surprised me for its co-authorship. I did not know that H.G. Wells and Julian Huxley ever collaborated, moreover that H.G. Wells was the driving force for writing such a book as this. It speaks to Wells' own driven self for being a prolific author, well beyond the bounds of science fiction, for which he is best known.

"The Crayfish" does not appear in the WLN catalogue, but it is a Gutenberg project e-book, with 82 original illustrations, the vivid example of the attention to detail and skills of Thomas Henry Huxley. "The Science of Life," remarkably, is available in the WLN catalogue, in a single-volume print version; on-line for purchase, there are only used

Published in the Penn-Franklin News on July 31, 2023.

copies to buy, suggesting that no publisher has chosen in many years to reissue the work. So there you have it, in a nutshell, the case for Libraries of all kinds, small and large, print and electronic, local and Gutenberg. We are indeed fortunate as readers for such free access. Amen!

Charles B. Greenberg Board Director, Murrysville Community Library Foundation