



Peter J. Le B. Williams, Dylan W. Evans, David J. Roberts, and David N. Thomas. 2015. *Art Forms from the Abyss: Ernst Haeckel's Images from the HMS Challenger Expedition*. Prestel, Munich, Germany, ISBN 978-3791381411, 144 pp., \$29.95, PB

Among scientists, Haeckel is probably best known today for his pioneering and controversial embryological work, as in "Ontogeny Recapitulates Phylogeny," or as the foremost contributor, to this day, to the taxonomy and systematics of radiolarians. Haeckel is also though quite famous in the arts and humanities for his influence in the realms of painting, sculpture and architecture as he was one of the major influences in the development of Art Nouveau, the great artistic movement that flowered from about 1880 to World War One. You might think you don't know the period, but familiar to nearly of us is the work of the artist and artisans of the period. They include the ultimate craftsman of glass Louis Tiffany and the jeweler René-Jules Lalique, the iconic painters Henri Toulouse-Lautrec, Gustav Klimt, Edvard Munch and the fanciful architect of the entrances to the Paris Metro stations Hector Guimard (Gontar 2000).

Haeckel's influence was largely through his publication of a series of 100 plates, *Art Forms in Nature* (*Kunstformen der Natur*), depicting organisms ranging from flagellates to humming birds but with a considerable emphasis on

planktonic organisms. The general public, many for the first time, were exposed to the fabulous morphologies and colors of radiolarians, acantharians, ciliates, dinoflagellates, medusa, copepods, and siphonophores among others. Many of the planktonic organisms shown were originally described and illustrated by Haeckel and the majority he found in material gathered during the Challenger Expedition (1873–1876). However, those depicted in the *Art Forms in Nature*, and now well known, are actually very small samples of Haeckel's work and especially with regard to his Challenger Reports. For the Radiolaria alone there are nearly 150 plates. The Challenger reports represent the major repository of Haeckel's illustrations. Physical copies are not widely available and if you get access you will find them massively large and heavy, so much so that they are difficult to manipulate. Even the electronic versions (e.g., the Biodiversity Heritage Library: <http://www.biodiversitylibrary.org/bibliography/6513#/summary>) are large enough to render navigation slow and most computer screens do not do justice to the illustrations. Consequently, the splendor of most of Haeckel's artwork has remained relatively obscure. The volume put together by Williams, Evans, Roberts and Thomas "Art Forms from the Abyss" aims to help remedy the situation by presenting a selection of Haeckel's illustrations from the Challenger Reports.

Williams and his co-authors obtained access to near-mint condition copies of the Challenger Reports and digitized a selection of plates from Haeckel's reports on the Siphonophores, the Medusa and the Radiolaria. The result is a large format book (24 × 30 cm) containing full page reproductions of 55 plates about equally divided between multi-color or monochromatic color plates and black and white plates. Prestel produced the book; a publisher specialized in books on art, architecture, design and photography. The intended audience is the general public as well as those involved in art and design who were consulted in choosing the reproductions.

The book begins with a short foreword (2 pp.) by the art historian Martin Kemp "Ernst Haeckel and the Art of Science." A substantial introductory text (17 pp.), richly illustrated, "Ernst Haeckel and the HMS Challenger Expedition"

places Haeckel's scientific and artistic contributions in their historical and cultural perspective as well the role of Challenger Expedition, justifiably considered by many as the beginning of Oceanography.

The first section is devoted to the Siphonophores, consisting of 17 chosen from the original 50 plates in the original (Challenger Reports vol 28), many simply stunning, especially striking is the white on black plate of *Anthemodes ordinate*, (now known as *Anthemodes ordinate*) also shown on the book cover. The second section is a set of 10 plates chosen from the 31 plates in Haeckel's report on the "Deep Sea Medusa dredged by the HMS Challenger" (Challenger Reports vol 4). Most of the medusa plates chosen will likely be unfamiliar but some contain recognizable images such as *Pectyllis arctica* (now known as *Ptychogastria polaris*) that can found for sale as a poster. The last and largest section is devoted to the Radiolaria. The authors chose 28 of the 148 plates in Haeckel's monumental opus on the radiolaria (Challenger Reports vol 28). Here are some of Haeckel's finest illustrations of astounding detail. While many of the species have not withstood the test of time (no longer considered as valid distinct species), the illustrations are eternal.

This book can serve different purposes. It will make a most excellent gift for giving by those of us who often have a hard time explaining a devotion to obscure marine life. It shows well that a scientist can be an artist and an artist a scientist. Hopefully it will introduce a new generation of artists and designers to the forms found in the plankton. Overall it is wonderful book and the authors are to be commended for their efforts.

## References

Gontar, C. 2000. "Art Nouveau". In Heilbrunn Timeline of Art History. The Metropolitan Museum of Art, New York. Available from [http://www.metmuseum.org/toah/hd/artn/hd\\_artn.htm](http://www.metmuseum.org/toah/hd/artn/hd_artn.htm) Accessed on August 01, 2015.

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