

Ovum Humanum: Its Growth, Maturation, Nourishment, Fertilization and Early Development

Ovum Humanum was written and compiled by Dr. Landrum Brewer Shettles while he worked as a doctor in New York. The publication contains an atlas of photographs of the human egg cell that Shettles took while working at Columbia Presbyterian Hospital in New York City. Stechert-Hafner, Inc, a publishing company based in New York City, published the book in 1960. The book presents a collection of color photographs that shows detail of the human egg that had never been seen before, providing a reference for scientists and doctors that documented the anatomy of these cells.

Ovum Humanum, while in essence an atlas of photographs of egg cells, also includes brief textual descriptions of Shettles' experience compiling his photos and the methods he used. Shettles describes the many late nights he spent in the dark room of Columbia Presbyterian Hospital over a period of six years photographing eggs, obtained from his various patients at Columbia Presbyterian, at different stages of development both prior to as well as after fertilization. Shettles also describes the tools he used to capture these photographs, which included a Zeiss phase contrast microscope to which he attached a Leica camera. This setup provided unparalleled viewing and photographic documentation of the egg cells that Shettles compiled for his book. Shettles reports that during the six years he took photographs of over one thousand human egg cells in order to create a comprehensive compilation of these photographs. Once published, many of the book's readers viewed the photographs as equally significant as both scientific reference material and artwork. Many of the photos contain shapes and images that would later be compared to photographs of outer space as well as more familiar images like animals and faces.

After their publication, the photographs of Ovum Humanum were reproduced in many scientific textbooks of the time including The Book of Popular Science from Grolier Inc., Human Genetics and Its Foundations by Maurice Whittinghill, and Good Health by John Joseph Burt Benjamin F. Miller, as well as others. The most surprising reproduction of the photos appeared in the Catholic Youth Encyclopedia published in 1963. This came as a great surprise at the time because the Catholic Church was particularly outspoken regarding their disapproval of Shettles' work and embryonic research in general.

Shettles' original intent was for the book to be a scientific and medical reference, meant solely to provide new information. His expectation was no longer realistic once the book stirred a great deal of controversy regarding the morality and ethics of researching early human life and became notable instead for the progressive practices used to acquire its images and as a source of exciting and imaginative artwork. Despite these initial deviations from its goal, the book was eventually remembered as a significant contribution to science and embryology and Shettles is credited with providing the first detailed look at the early stages of embryonic life that could only be assumed prior to the publication of Ovum Humanum.

Although scientists before Shettles such as John Rock and Gregory Pincus provided photographs of the egg cell, Shettles' work was unprecedented in terms of clarity and thoroughness. Due to this, the photographs of Ovum Humanum became the standard visual reference used by scientists researching embryos and early human development at the time. In this way, Shettles inspired the further research of many of his contemporaries contributing to the understanding of early human life as well as providing valuable reference information for continued embryonic research.

Sources

1. Public Broadcasting System: American Experience: Test Tube Babies. "People & Events: The Publication of Ovum Humanum." Public Broadcasting System. <http://www.pbs.org/wgbh/american/babies/timeline/index.html> (Accessed April 15, 2008).
2. Henig, Robin Marantz. *Pandora's Baby*. New York: Houghton Mifflin Company, 2004.
3. Shettles, Landrum B. *Ovum Humanum*. New York: Hafner Pub. Co, 1960.