"Drama of Life Before Birth" (1965), by Life Magazine and Lennart Nilsson [1]

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Life Magazine's 1965 cover story "Drama of Life Before Birth" featured photographs of embryos and fetuses taken by Swedish photojournalist Lennart Nilsson [4] to document the developmental stages [5] of a human embryo. Included in this article was the first published image of a living fetus [6] inside its mother's womb [7]. Prior to this, embryos and fetuses were observed, studied, and photographed outside of women's bodies as non-living specimens. Laparoscopic photography and sophisticated technology contributed to the capturing of these images, which appeared to represent living embryos and fetuses in womb-like environments.

"Drama of Life? begins by discussing the process of fertilization [8]. Images taken in a laboratory of sperm [9] and an egg [10] were used to supplement the description. The next image is that of a three-and-a-half-week-old embryo. The article describes the visible bumps and protrusions of the embryo and tells the reader what the bumps will eventually become (limbs, etc.). The internal development of embryos and fetuses is documented throughout the article with detailed descriptions of the development of the heart, spinal cord, arteries, tongue buds, liver, and kidney. The article identifies eight weeks as the transitional time when a human embryo becomes a fetus [6].

Images and written descriptions demonstrate the role of the extra-embryonic tissues. For example, the amniotic sac [11] and placenta [12] are described underneath photographs of six-week-old embryos within the sac and placenta [12]. The inclusion of placenta [12], amniotic fluid, and umbilical cords represents a shift from previous images of embryos published in Life. Careful positioning of embryos and fetuses, state of the art lighting, and photographic technique enabled Nilsson to capture life-like images despite the fact that most of the embryos and fetuses photographed had been surgically removed from their mothers' uteruses for medical reasons.

A summary of an infant's transition to the outer world and an acknowledgment of the placenta's many beneficial roles during the developmental process serve as the article's conclusion. The inflation of the lungs, cutting of the umbilical cord [13], closing and opening of heart valves, and circulation of waste are all discussed in relation to the infant's reliance on its own organs after birth. The placenta [12] is presented as the intermediary mechanism that transfers nutrients from mother to fetus [6] while protecting the fetus [6] from harmful chemicals or immune system rejection. Finally the placenta [12] leaves the infant with a temporary set of immunities acquired from the mother.

The article's emphasis on fetal development was criticized by many feminists at the time who felt that society's focus on and study of fetuses were leading to a dismissal of the role of women's bodies during pregnancy [14]. Feminists highlighted Nilsson's portrayal of autonomous fetuses floating separately from the mother. Professors such as Paula Treichler
and Lynn Morgan described the process of using dead embryos and fetuses as representations of life as being grimly ironic.

“Drama of Life?” provides a more detailed representation and explanation of embryological development than any of Life’s previous embryological articles. The increasing sophistication in which photographs of embryos and fetuses were taken in conjunction with the increase in embryological knowledge available for descriptions of these photos is representative of the advances in embryology occurring as the twentieth century progressed. The photographs were so stunning that they quickly made their way into popular texts and secondary high school and college biology textbooks.

Sources


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Subject

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Topic

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