

The work of art and science essay

[Art & Culture](#), [Artists](#)



ART AND SCIENCE It is important to begin by having a brief overview of the biological revolutions namely; natural selection, germ theory and microcopy. To begin with, natural section is the process by which heritable traits become more common in successive generations of a population of reproducing organisms and unfavorable heritable traits become less common due to differential reproduction of genotypes. It is simply the observable characteristics of an organism such that individuals with favorable characteristics are more likely to survive and reproduce as compared to those with unfavorable phenotype. In other words, natural selection is the mechanism by which evolution may take place in population of a specific organism. Among some of its effects especially in line with the artistic work is the fact that it was and it has always been one of the cornerstones of modern biology and is widely applied in the explanation of adaptive evolution in a phenomenon. The study of natural selection has also brought a clear understanding of reproduction in organisms.

It has also led to the development and expansion of the medical fraternity for instance the development of antibiotic resistance in microorganism e. g. the discovery of penicillin in 1928 by A. Fleming has been widely applied in the fight against bacterial diseases. These are just but a few effects of the revolution that have since remained very visible. The other type of biological revolution is the germ theory. The theory involves the study of the various external agents that remain lethal to the body especially when the two come into contact. Germs play a big role in the spreading of diseases and as a result leading to lack of soundness in health; the germs act as a mode of disease transmission from one person to the other.

The theory gained popularity because the artists absorbed and therefore accepted the concept that infectious diseases arise from the agents of diseases or germs passed from one individual to the other. The theory has brought credence and more exposure to the role of laboratory science and as a result increased the concern and view of artists towards medicine. The emphasis on germs as a mode of disease transmission has also helped change the focus of public health to individuals as compared to the attention given to environmental hygiene. This has led to a new form of environmentalism that stresses the individual in the environment thus enhancing social behavior in addition to sanitarianism. The last type of biological evolution is microscopy; this is the technical field of using microscopes to view samples or objects. Microscopy has three well known branches mentioned thus; Optical microscopy, electron microscopy and scanning probe microscopy. Optical and electrical microscopy involve the diffraction, reflection and refraction of electromagnetic radiation interacting with the subject of study and the subsequent collection of this scattered radiation in order to build up an image easy to observe and interpret hence giving room for evaluation.

On the other hand scanning probe microscopy involves or is largely about the interaction of scanning probe with the surface or object of study.

Microscopy too under biological revolution has with it tremendous effects, the ones it has had on those who at one point or the other have come into contact with it, for instance, the development of microscopy has changed the lives of many an artists especially those within the medical fraternity i. e. by enhancing the revolution of biology. It therefore remains an important tool in

this science alongside other disciplines. Of all the techniques used in biology, microscopy is probably the most important; this can be confirmed by the single fact that majority of living organisms are too small to be seen in any detail by the human eye for example; the cells and their organelles which can only be seen using a microscope.

It therefore has contributed to the assembling of more efficient apparatus or machines which get improved every new day in order to achieve the dynamism with which the surrounding flows, this in turn has enhanced and expanded knowledge acquisition, learning and research work especially in the medical fraternity. For the second part of the question, I am going to talk about one artist whose work and style has gained renowned and relevantly revolves around the biological theme, she is Irene Abraham (Seattle Washington) She has painted for several years and this started when she was going soon with her initial education as a biologist and this continued even after. She started exhibiting her work that was always full of biological themes, the issue of life, growth forms of various forms or sorts including humans are always probed leading the viewer on a meditative journey of light color and image, these meditations are commonly based on biological form and function. She expresses beauty, joy and color in her works and these shapes give a reflection of our own bodies in and out. The art in this case is painting which to her a selective process is involving choices of what one needs to accentuate, or discard. Through this, she hopes to reflect and honor the development of growth and organism as well as push beyond their literal depiction of an imagined existence.

Both the world we observe daily through our innate senses and the microscopic world have their own reality and this is interpreted through our own individual visual and nervous systems. The factors discussed above therefore confirm the aspect of her work in connection with the biological themes like the ones stated earlier on. SourceLynn Gamwell . Art, science and the spiritual. Jm Coco, 2004.