

NATURAL HISTORY FILMS

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Summary

Tremendous advances in cinematographic, computer, video and DVD technologies in the last 30 years or so have revolutionized film-making. As a result today there is a growing wealth of well-made Natural History films as never before.

Apart from their entertainment value, increasingly Natural History films are regarded as a potent pedagogic tool in informal and formal educational curricula to inform and educate especially children about the natural world, how it works and about our fellow creatures. This trend is to be welcomed mainly because at a deeper subliminal level it has much potential for instilling the notion in the minds of the viewers that man inhabits the same continuum of consciousness and existence as all other things in creation, animate and inanimate. And hopefully the dawning of this realization would engender greater and genuine respect and care for nature to curb current relentless degradation of earth's life-sustaining natural environment by human activities.

This chapter briefly traces the evolution of Natural History films and describes their current status including an introduction to the works of the pre-eminent pioneers of modern Natural History films.

Discussion begins in Section 1 with a brief description of how Natural History has evolved in the last 150 years or so to satisfy man's innate curiosity to know about the natural world, and how knowledge of Natural History has potential to engender genuine respect for nature and thereby to promote environmental sustainability. Discussion then moves on to a brief account of the evolution of Natural History films with particular reference to how rapid advances in cinematographic, video, DVD and computer technologies in the last 30 years or so have revolutionized the making of Natural

History films. The pre-eminent pioneers of that revolution, Jacques-Yves Cousteau and Sir David Attenborough and their films are briefly described in Section 3.

Considering the growing obsession of today's children (and adults too) with computer and video games, clearly the challenge for educators and film-makers is to seek innovative ways in which Natural History films could be made more attractive, especially to children, so that their potential as a pedagogic tool could be realized in good measure. This issue is briefly discussed in Section 4.

1. Brief Historical Background to Natural History and Naturalism

In the Oxford English Dictionary the meaning of Natural History is given as “the study of animals or plants, especially as set forth for popular use”, and “an aggregate of the facts concerning the flora and fauna etc. of a particular place or class”. In popular perception Natural History refers to the study of both animate and inanimate things in creation, while in scientific terminology it is used as a generic term covering a number of academic disciplines such as biology (botany and zoology), ecology, geology and paleontology including certain related aspects of chemistry, physics and meteorology. A person interested in or concerned with one or more of these disciplines is called a “naturalist”.

Historically, Natural History evolved from man's innate curiosity to know about the world around him and to make sense of it. At its most basic, in both humans and animals of lower species curiosity acts as an essential element of their survival strategy which helps them to acquire knowledge of what can be eaten safely, what can be safely utilized for creature comfort, what is or can be dangerous or predatory and is to be avoided, and so on. At higher levels it has been driving the Humankind to find out how and why things work in the way they do, to abstract thoughts such as the nature of the Divine, to explore things beyond this world such as the extent and composition of the Universe and the nature of the Cosmos, and so on.

Modern Natural History may be said to have begun in the Nineteenth Century with Charles Darwin (1809-1882) and other naturalists of the time such as Sir Charles Lyell (1797-1875), Edward Newman (1801-1876), Thomas Lister (1810-1888) and Charles Kingsley (1819-1875) to name but a few. Interestingly, most of them were amateur naturalists, driven by their passion and curiosity and not by professional duty or obligation. As there was no rigid disciplinary compartmentalization at that time, scientific inquiry was more holistic than it subsequently became, and naturalists of the time possessed, and were receptive to, knowledge on a wide front. Typically, although Charles Darwin had originally trained as a medical student intending to become a clergyman, he also had consuming interest in many different aspects of Natural History such as biology, paleontology, geology and evolution. The focus of studies in Natural History had been how living things had evolved over geological time and, at the philosophical level, concerned with questions such as: is man the ultimate product of the natural evolutionary process in the Darwinian sense? As any affirmation of the latter collided with the prevailing strongly-held Judaeo-Christian belief that man, created by God in His own image, possessed divine attributes that other sentient beings in creation did not and was therefore supreme and separate from the rest of creation, many in the

established churches and even in the scientific community and elsewhere were disdainful of and even hostile to the Darwinian concepts of “natural selection” and “survival of the fittest” (Beer, 1996).

Following the industrial revolution, which began in the 1860s, the focus of scientific inquiry shifted significantly to exploring ways in which to apply natural forces and resources for improving people’s quality of life. Even so, Natural History and naturalism maintained their momentum. Interestingly, some of the scientific developments of the first half of the Twentieth Century, in astronomy, genetics, molecular biology, quantum physics and cosmology in particular, facilitated a better understanding of the quintessence of all living organisms and their mutual interactions and, perhaps more importantly, of man’s place in creation and in the cosmos. The concept of the “universal consciousness” in quantum physics, to which the individual consciousnesses of all animate and inanimate things are linked (Rae, 1993), merits particular mention in this context.

“Vedanta teaches that consciousness is singular, all happenings are played out in one universal consciousness and there is no multiplicity of selves”.

Erwin Schrödinger (1964, chapter 5)

The purport of the above, together with the concept of the universal consciousness, leads to the conclusion that it is the same consciousness that pervades the Universe and manifests in all things in creation, animate and inanimate. Therefore, as man inhabits the same continuum of consciousness and existence as everything else in creation, he cannot be separate from the rest of creation; and multiplicity of selves in the material world is only a human perception of reality and/or an illusion. An understanding of this oneness with nature and creation at large is essential to engendering *genuine* care, concern and respect for nature, without which it is hard to see how meaningful global environmental sustainability could ever be achieved to secure Humankind’s long-term future on the Planet (Nath, 2003; Sections 1.3 and 3 of *Curricula Development For Undergraduate University Students*).

In recent times Natural History and naturalism is increasingly seen in the wider context of environmental protection and sustainable development, especially since the 1972 Stockholm Conference on the Human Environment which placed these and related issues firmly on the international agenda.

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Biographical Sketch

Professor Bhaskar Nath received his Bachelor's degree in Civil Engineering from the Indian Institute of Technology, Kharagpur, India, in 1960, followed by the Ph.D. degree from the University of Wales, UK, in 1964. In 1983 he was awarded the D.Sc. degree by the University of London for his outstanding original research (according to citation) in numerical mathematics. In 2001 he was awarded the Doctor Honoris Causa (Dr.H.C.) by the University of Chemical Technology and Metallurgy, Sofia, Bulgaria, for his contribution to environmental education.

After having taught at the University of London for more than 27 years, currently Professor Nath is Director of the European Centre for Pollution Research, London; Executive Director of International Centre for Technical Research, London; Editor of *Environment, Development and Sustainability* published by Springer; visiting professor to several European universities, and consultant to a number of international companies and organizations. Professor Nath's research interests include Numerical Mathematics, Elasto-Hydrodynamics, Philosophy, Environmental Economics, Sustainable Development, and Environmental Education. He has more than 100 scientific publications in these and related areas including 13 books.