

MAKING EVOLUTION VISIBLE AND PLAYABLE: HOW DOCUMENTARY TELEVISION AND DIGITAL GAMES ARTICULATE EVOLUTIONARY THEORY

In the biological sciences, evolution is accepted as a foundational theory underlying all scientific scrutiny of life's intricate organisation. Evolution through natural and sexual selection is a guiding principle that has been accepted as objectively true by professional biologists, yet laypeople often have a partial or warped understanding of what evolution means for humankind. Even so, scientists, naturalists, and documentary filmmakers try their utmost to make this biological process understandable for the ordinary viewer. The present paper investigates the rhetorical strategies of meaning-making in non-fiction television and computer gaming to express the significance of „descent through modification” that Charles Darwin and Alfred Russel Wallace first described, independently of each other.

By examining broadcasted and streamed moving images, such as the Royal Institution Christmas Lectures, including the 1991 lectures presented by Richard Dawkins, *Charles Darwin and the Tree of Life* (BBC One, 2009), *Darwin's Dangerous Idea* (BBC Two, 2009), *What Darwin Didn't Know* (BBC Two, 2009), and other documentaries, we can see the unfolding of a multifarious and intermedial set of strategies intended to convince viewers that evolution has in fact occurred and that the diversity of nature is best understood as a result of evolutionary processes. At the same time, the procedural nature and the algorithmic nature of natural selection is best evidenced by running computer simulations. With the advent of the personal computer and digital gaming in the 1970s, artificial life has become a subject of legitimate inquiry, from cellular automata, such as Conway's Game of Life, to high-profile computer game titles like *Spore* (Maxis, 2008) and indie darlings like *Niche* (Stray Fawn Studio, 2017).

In my analysis, I want to draw attention to how key concepts of evolution, like non-teleological development, unconscious agency, heredity, natural and sexual selection, and their meaning for life are conveyed through audiovisual and interactive means. I also wish to highlight where documentaries and digital games diverge on the path of meaning-making, with the former opting to use the full authority of narration and the latter subscribing to a more covertly persuasive technique of algorithmic convincing, of unit operations (Bogost 2006). I argue that documentaries and playful computer simulations have a symbiotic relationship, demonstrating the processes of evolution by allowing different forms of communication and interaction to shine in their respective mediums and building connections between propositional knowledge and felt experience.

Key words:

evolutionary theory, documentary filmmaking, game studies, agency of nature, biological naturalism, intermedial aspects

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