

# Artificial Life across Media, Simulated and Submarine

Stefan Helmreich

Anthropology Program  
Massachusetts Institute of Technology  
77 Massachusetts Avenue  
Cambridge MA 02139-4307  
sgh2@mit.edu

to be presented at *Animation and Automation*. Centre for Screen Studies, University of Manchester and the Centre for Science Studies, Lancaster University, March 26-27.

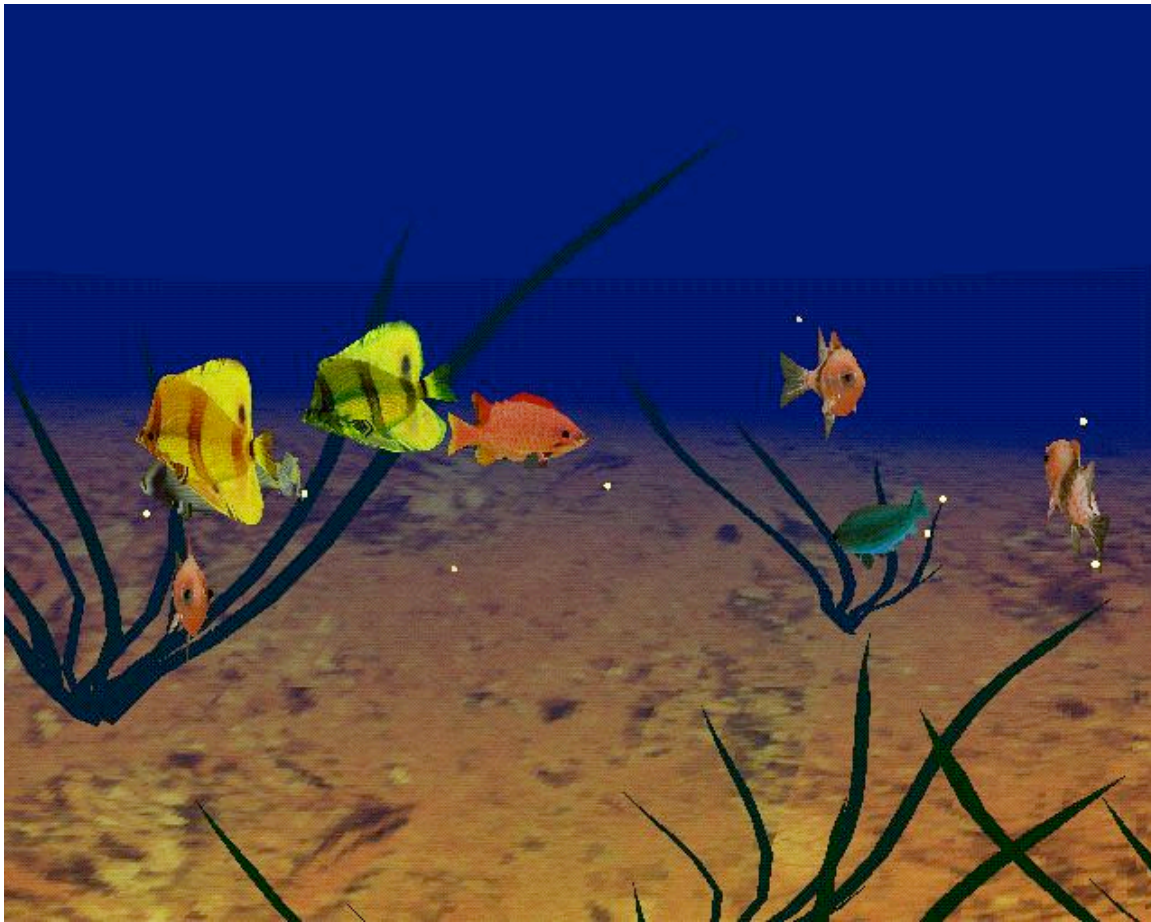


image from  
Terzopoulos, Demetri, Xiaoyuan Tu, and Radek Grzeszczuk. 1994. Artificial Fishes: Autonomous Locomotion, Perception, Behavior, and Learning in a Simulated Physical World. *Artificial Life* 1(4):327-351.

## *Synopsis*

How should we understand the object that Artificial Life scientists once hoped to simulate, or, more ambitiously, synthesize, namely “life”? In this paper, I suggest turning to media theory to think about how Artificial Life scientists in the 1990s imagined the possibility of life *in silico*. I analyze examples from Artificial Life research that made the claim that computers could be construed as *media for life* and that did so through recourse to simulations of aquatic worlds, simulations that rhetorically summoned up the symbolics of water as a medium for vitality. I center my attention on simulations with visual interfaces through which users were invited to “see” into virtual universes and I take as a key example computer scientist Demetri Terzopoulos’s simulated world, which offered viewers “artificial fish” visible through the computer screen understood as a virtual fishtank. Continuing by taking an orthogonal detour through some key moments in the philosophy of Artificial Intelligence (particularly Daniel Dennett’s “brain in a vat” thought experiment), I argue that “life” surfaces in an ontologically and epistemologically liminal — and *therefore*, to people interested in the boundary object that artificial life forms necessarily represent, persuasive — way when it is sited in virtual worlds imagined as fluid and watery zones. Transporting arguments about the philosophical status of artificial realities into the virtually aqueous domain of such simulations as Terzopoulos’s fish worlds, I argue that wateriness is an important rhetorical float for the suspension of belief in artificial life itself. Understanding artificial life depends on understanding the media within which it is imagined to manifest — and understanding those media depends upon considering the fluid meanings of the very notion of “media” as such.

This paper will extend arguments originally set out in

Helmreich, Stefan

2007 An Archaeology of Artificial Life, Underwater. In *Genesis Redux: Essays in the History and Philosophy of Artificial Life*, Jessica Riskin, ed. Pp. 321-333. Chicago: University of Chicago Press.