

# THE LEFT ATRIUM

## Lifeworks

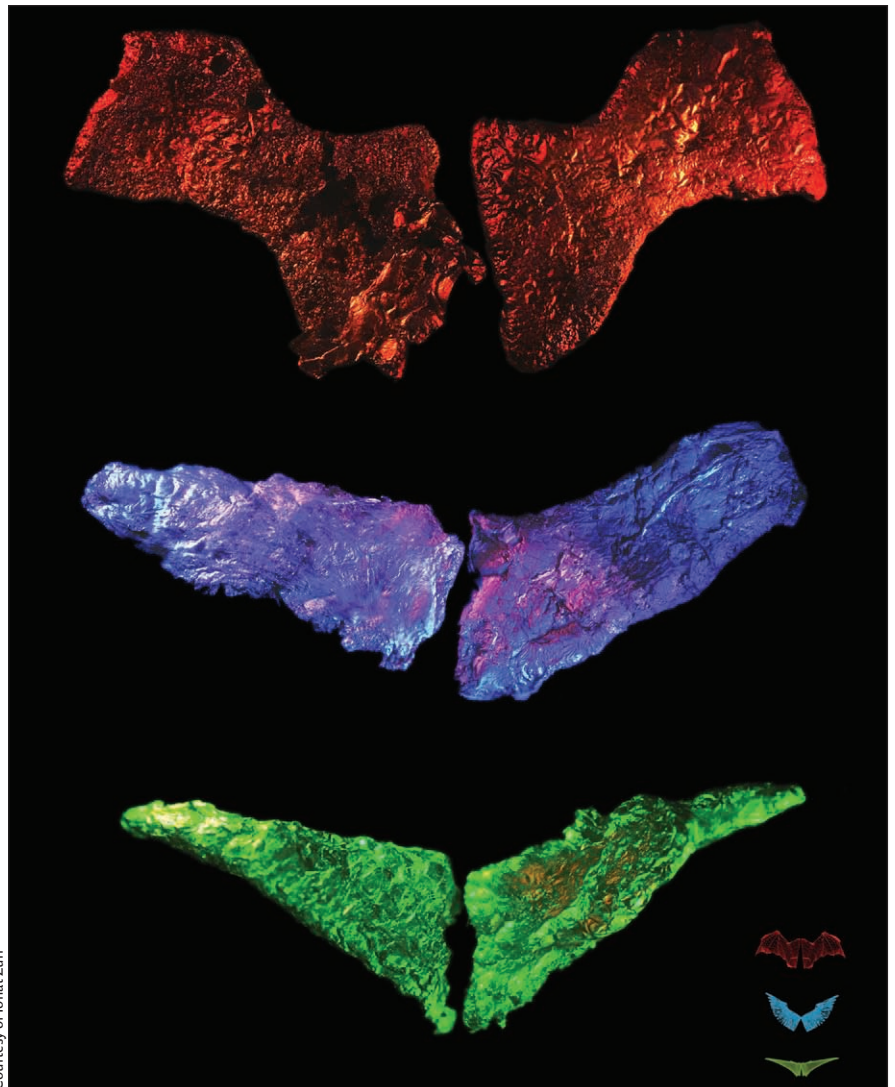
### Borders and boundaries

Oron Catts and SymbioticA presentation  
Subtle Technologies Conference  
University of Toronto, Toronto, Ont.  
May 24–7, 2007

Throughout history, art has been framed by conventions situated in cultural and aesthetic values. These values, in turn, comprise a series of negotiated borders that demarcate acceptable and unacceptable practices. In the West, artistic representations often have fluid and porous borders, which allow artistic expression that teeters on the knife's edge of society's tolerance.

For the past decade or so, some 30 artists worldwide have been pushing the boundary of artistic representation by choosing to work with animal and human tissue as their creative medium. One such artist is Oron Catts, the artistic director of SymbioticA, "the first research laboratory of its kind, in that it enables artists to engage in wet biology practices in a biological science department."<sup>1</sup> Established in 2000 at the School of Anatomy and Human Biology, University of Western Australia, Perth, SymbioticA is a "curiosity-based, non-utilitarian" research facility dedicated to exploring and developing the links between life science, biotechnology, society and the arts. It also offers a "new means of artistic inquiry, in which artists actively use the tools and technologies of science, not just to comment about them, but also to explore their possibilities."<sup>1</sup> Bio-art is one such endeavour.

The forms of bio-art vary substantially. In 1997, Paul Perry was the first artist to exhibit living tissue culture in a gallery, in 2003 artist Kira O'Reilly used



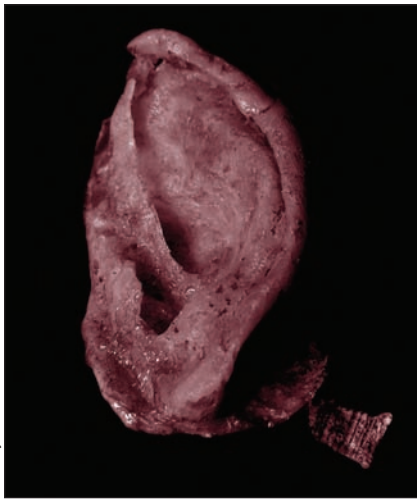
Courtesy of Ionat Zurr

**Pig Wings (2000–2001).** By The Tissue Culture & Art (Oron Catts and Ionat Zurr). Pig mesenchymal cells and biodegradable/bioabsorbable polymers (PGA, P4HB). 4 cm x 2 cm x 0.5 cm each.

her own tissues to create in vitro "living lace." The Sept. 15, 2007 Australian exhibition, *Still, Living*, will feature a two-headed worm searching for the right direction, a bleeding angel and architecture

that is literally growing. Catts, who spoke at a panel discussion during the recent Subtle Technologies Conference in Toronto, has shown his "living sculptures" around the world, occasionally as

Courtesy of Ionat Zurr



**Extra Ear — 1/4 Scale (2003).** By The Tissue Culture & Art (Oron Catts and Ionat Zurr) in collaboration with Stelarc. Biodegradable polymer and human chondrocytes. 3 cm x 1.5 cm x 1.5 cm.

part of “fully functioning labs” created for his installations.

During the conference, Catts showed a 1996 piece he co-created with Ionat Zurr that involved “growing epithelial cells on glass figurines ... designed to correspond to different aspects of human technology (e.g., cogwheels, bombs, etc.)” The work evolved to include hydrogels and muscle and nerve cells.

Currently Catts is working on “NoArk.” It is, he says, “designed to maintain and grow a mass of living cells and tissues that originated from a number of different organisms.” This “collection of living organisms” will be contained in what Catts calls a “surrogate body” (i.e., the environment where the tissues grow). NoArk’s purpose is to examine the taxonomy of organisms by creating a “unified collection of unclassifiable sub-organisms.” Catts foresees future bio-artists creating living or “semi-living autonomous tissue sculptures.”

If one accepts the notion that art and artists presage how we will see our world, one could argue that bio-art reflects a *Zeitgeist* to come, just as the Impressionist and Dada movement artists gained acceptance only when their world view and that of the general public’s were in accord. Our modern-day preoccupation with science, as evidenced by daily headlines touting the latest development in synthetic biology,

the human genome project and in vitro maturation, may foreshadow a world in which bio-art reflects everyday realities. And so it may be that bio-art will eventually gain widespread acceptance.

Regardless, bio-art raises some ethical and legal issues that are decidedly unique. Dr. Bartha Knoppers, chair of the International Ethics Committee of the Human Genome Organization, is concerned that bio-art may be associated with a lack of respect for the human body. She observes that there is an “understanding of respectful uses of the human body. The law recognizes that the human person has symbolic value beyond a corpse and that freedom of expression is not total. All human rights run up against the ultimate arbiter of human dignity.”

And when human tissue is isolated from a donor’s body, legal issues arise as to who retains rights over its current and future forms. Dr. Bernard Dickens, professor emeritus of health law and policy at the Faculty of Law, University of Toronto, cited Canadian property law when considering this issue. He comments that once human tissue has left the body it is deemed as “abandoned” (in most circumstances) by the law. Furthermore, he adds, if the tissue is the recipient of scientific, intellectual or artistic development, then the accrued value and ownership belongs to the “developer.”

Research using human or animal tissues is governed by strict frames or codes of ethics within an institutional context. One wonders, however, to what lengths artists will manipulate animal or human tissues. In 2001, for example, Toronto art students were charged with cruelty to animals and mischief for allegedly torturing a cat and making 70 videotapes of that act, which they claimed was art.

Bio-art also raises the question of whether the use of human tissues for art should pre-empt possible medical uses of these tissues. The commercial exploitation of human and animal tissue for entertainment value is also a concern. The plastination of human bodies by Gunther von Hagens’ Bodyworlds set a modern precedent for publicly displaying human bodies for commercial gain.

Underlying all this is a fundamental question: Is bio-art art?

“As a culture we use the term ‘art’ indiscriminately,” says Christina Ritchie, director of the Contemporary Art Gallery in Vancouver, when asked to comment about bio-art. “Something that is creative is not a discourse about art. In the same way that a dissection does not mean that medicine is being practised.” In other words, merely because something is new and creative and draws upon techniques used in art and medicine, it does not mean that activity is necessarily art or science.

In my opinion, bio-art consists of creatively presented experiments that challenge the defined boundaries of laboratory work. Following Ritchie’s opinion, I must conclude that the technically astute manipulation of living tissue is not art. Art must do more than shock or surprise, which were my reactions to Catts’ slides of living tissue formed into a simulacrum of a human ear and into living “steak.”

Sir Herbert Read, a renowned art critic, wrote that “the whole history of art is a history of modes of visual perception: of the various ways in which man has seen the world.”<sup>2</sup> In my view, bio-art does not add to the ongoing narrative of art discourse, nor does it expand our perception of ourselves.

Art should offer a frisson of revelatory insights into the human condition, and an emotional and intellectual insight into an artist’s interior state and society as a whole. Although bio-art fulfills some of the functions of art, such as being provocative and challenging, it is essentially a science-based process involving the application of technical skills within a laboratory environment. Art is more than invention, technique and manipulation. Bordered by intuition and emotion, art has as its core the sublime. This cannot be replicated in a laboratory.

**J. Lynn Fraser BA(d) MES**

Freelance writer and textile artist  
Toronto, Ont.

#### REFERENCES

1. The University of Western Australia. Symbiotica. Perth (Australia). Available: [www.symbiotica.uwa.edu.au/](http://www.symbiotica.uwa.edu.au/) (accessed 2007 Aug. 7).
2. Herbert R. *A Concise history of modern painting*. New York: Praeger, 1975.