

IOTA is a creative agency that supports writing, curatorial research, and cross-disciplinary artworks in new media, the web, visual, interactive and performance art.

We aim to reach beyond the scope and duration of traditional art exhibitions, to create an environment that fosters research opportunities, multi-sector partnerships including technology, biology, and grass roots movements.

Between October 2018 and June 2019 IOTA Institute hosted a series of free public exhibitions, events and installations in Halifax, NS. Whether it's creating microbial art using yeast, or engaging with a full-body exoskeleton, **Bio Art** is a practice that transcends the fields of visual art, media art, and science — applied, social and political. This continuously evolving practice also tests (and sometimes breaks) the boundaries of these fields. .

INTERVIEW WITH RUTH MARSH

by Lisa Morse, 2020

For several years, multidisciplinary artist Ruth Marsh has been creating a series of artworks focusing on bee disappearance. In 2018, Ruth Marsh created Cyberhive, a stop motion, 360-degree, immersive-experience video through an IOTA Institute residency at the Seadome on the Halifax (NS) waterfront.

The denizens of this “cyberhive” are the found, dead bees they received from across Canada, then carefully taxidermied and repaired with bits from discarded electronics. Cyberhive subsequently ran at the Discovery Centre’s dome theatre from May 15 - June 15 2019. Ruth Marsh also participated as an artist in the IOTA Bio Art Series in the spring of 2019.

LISA MORSE: Your early work uses the ancient techniques of tempera and encaustic to depict bees and other animals in a manner recalling early Christian art. What prompted you to move into a more futuristic look and modern medium?

RUTH MARSH: I've always been very material conscious in my practice. In the case of the earlier paintings which were all painted with handmade materials, I was thinking about how those media had been first in the Fayum mummy portraits and then throughout Christian sacred painting as tools to memorialize and reify their subjects.

When I initially started painting I was thinking a lot about the way language was being used in the media to talk about the destruction of the environment and extinction of animals. It reminded me of the kind of apocalyptic language I had heard growing up in a religious household.

The connection that I felt between the materials and the endangered subjects I was depicting channeled the hopelessness I felt when taking in news media at the time. Making that work was a way for me to mourn for and create memorials of animals and nature; a way to express a kind of devotion.

Because I wanted to make something that felt like a worthy gesture of mourning, I chose materials that had a specific kind of sacred history; encaustic, egg tempera, gold leaf. Another aspect of the materials that I liked was how labour intensive and tricky they can be. It felt right to meditatively mix my painting every day before starting to work.

I used raw, unfiltered beeswax to make my encaustic paint and local eggs for my egg tempera. The beeswax had this incredible smell as I would melt it to prepare it and would often contain quite a number of bee carcasses.

Prepping egg tempera involves grinding powdered pigments with distilled water to create a paste, then you separate the egg yolk from the egg white, hold the raw yolk in your hand and then gently prick the membrane with a pin, only using the liquid part of the yolk to mix with the pigment paste.

This paint can only be used for two days maximum before spoiling. It's very delicate work. In the case of both

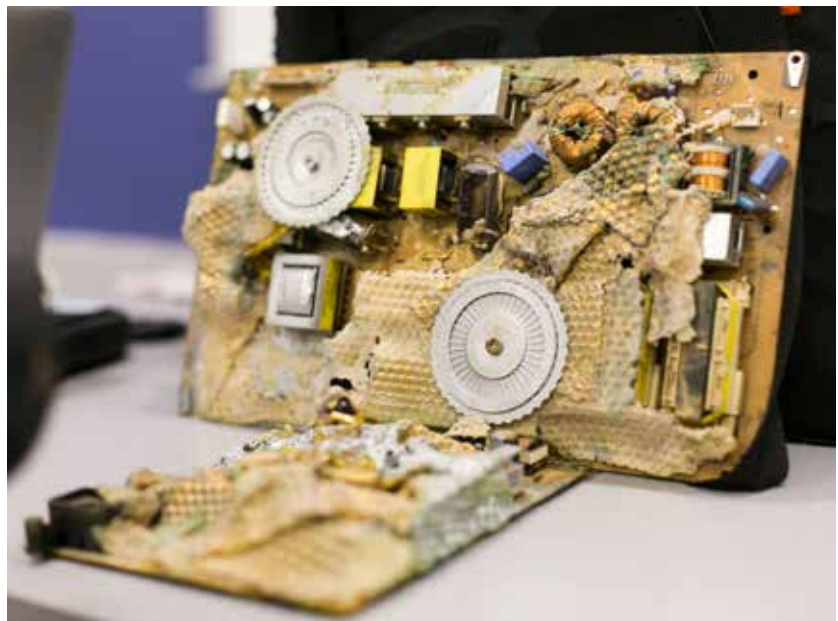
egg tempera and encaustic, you carefully build up layers over time to produce an image. It's very time consuming.

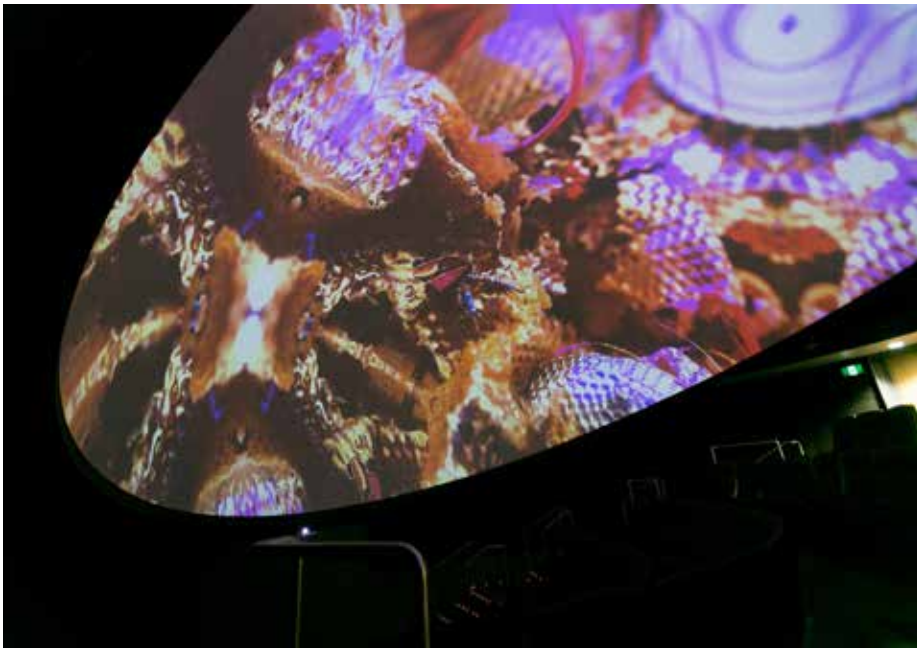
Working in these media became the starting point of a conversation I'm still having with myself in my practice about labour. Time and repetition are a way for me to express care in my work. I carry this sensibility forward in my current practice, which features a lot of stop motion animation which again is very labour intensive, repetitive and somewhat painstaking. The main difference in my mind is that I have shifted materials from painting and drawing to using dead bees as a medium.

As my interests were still focused on memorializing and paying tribute, it made sense to me to shift to taxidermy and then move to stop motion which became a wry way to not only just memorialize but to reanimate the bees as well.

I saw this as a way to bring in a thread of dark humour to the work and I shifted in my perspective of myself from a memorialist to a kind of Doctor Frankenstein: a well-intentioned but ultimately destructive character.

I chose to repair the bees using tactics like reusing and recycling. I imagined myself in this role as taking on the futile project of solving colony collapse by repairing the bees one at a time and then individually bringing them back to life. Because of this media shift, I moved in a very different, much more cyberpunk aesthetic direction which is currently present in my practice.





LM: What was the moment when the idea of bee taxidermy occurred to you? Was it an instant revelation or the outcome of a slow, deliberate work process? What was the first bee like?

RM: I was trying to make a shift from painting and drawing to a project that would connect me more directly with people one on one. I had been using beeswax as a material for several years and it occurred to me that I could cut out the middle man and just start working with bees directly.

I wanted to connect with people through a community-based research project so I sent out an open call for people to send me the dead bees they might find in their daily life. I saw this as a way to initiate conversation with the public about pollinator mass death.

A person could contact me via my Facebook community page when they found a bee and I would send them a bee kit in the mail containing a SASE, a matchbox (for the bee), a short questionnaire, a small gift (usually a tiny drawing or a custom designed button) and a set of instructions.

I started receiving bees in the mail almost immediately but initially had no idea what to do with them and they started piling up in my studio. One unanticipated effect was that it hadn't occurred to me that having quite a number of dead bees in a small, unventilated space could smell pretty bad and it really did! I hadn't seen them as creatures inhabiting a body of that much substance.

I started placing them in vials of rubbing alcohol as a sanitary measure. The process of bee taxidermy evolved from there, first by soaking them in alcohol for a week, then pinning them and drying them for a week, then taking them apart and filling their empty dried body cavities with glue, then reassembling them and replacing any parts which might be damaged or missing. I developed this method as I went.

The first bees I made looked more like pieces of jewelry because they incorporated mostly metal pieces from things like discarded earrings, broken necklaces etc. It was only after I started scavenging discarded electronics that they started to take on a more cyborg-like appearance.

LM: You have given a talk about your work in conjunction with Dr. Art Davis, a biologist at the University of Saskatchewan. Do you find there is a lot of interest in collaboration from the scientific community?

RM: During the course of my bee taxidermy work, I felt it was important to collaborate with researchers, beekeepers and activists whenever I was given the opportunity to give a talk about this work because I don't see myself as an expert in anything outside of my own practice.

Because this work has an underlying environmental concern, it felt important to me to facilitate conversation between audiences and experts. It was important to me that audiences taking in the work would be given information that could lead to positive action for bees and the environment. I was grateful to be given access to this information alongside them!

I can't speak for researchers generally but each bee ecologist with whom I have had the opportunity to collaborate has been a really generous and passionate advocate for environmental issues. I have experienced a great willingness from scientific institutions and individual researchers to raise awareness to the issues of climate change and I have been very grateful for this.

LM: You made several hive animations before completing the large-scale immersive dome projection. Were there any aesthetic considerations specific to this multi-screen, multi projector iteration?

RM: In all of the animated video installation work leading up to the immersive dome piece I had been moving toward a very particular kind of experience; I wanted people to feel that they were inside of a beehive, which had been enlarged to a human scale.

I wanted a person taking in the work to experience it viscerally and really feel it in their body. Immersive domes are designed to make you feel that you're a part of whatever video is being shown, they exist in 180 degrees of your vision, they can be overwhelming; they can even cause nausea.

It felt to me that making something that folks could feel in their body could be a way to intimately connect with an audience, to quite literally take them on a ride.



LM: Is there anything else I should have asked about your work, or anything you'd like to highlight?

RM: For the last few years I've been working with sound composer Jeremy Costello who has created original music for my last three projects.

He'll be creating music for my upcoming work as well. Working with Jeremy has been so inspiring and has allowed my practice to grow in ways I couldn't have anticipated. I feel deep gratitude for Jeremy.



I also had a collaborative practice called AIRHORN between 2016-2017 with Julie Hollenbach. This collaboration has been a big influence on the aesthetic present in my current work and really opened my eyes to drawing inspiration from a broad pool of contemporary artists. I feel deep gratitude for Julie and to all of my collaborators past and present.

LM: What next?

RM: I'll be developing these ideas further into the realm of immersive media. The next project I'll be making will be a series of virtual reality, interactive, stop motion films which will explore the human body.

Here's a statement that outlines what I've been thinking about for this new direction in my practice:

This work aims to investigate and describe the interiority of the body as both a physical space and as a virtual space; imagine Miss Frizzle of The Magic School Bus guiding travellers through a speculative, sci-fi journey through the human body.

My practice relies on an eclectic, handmade, DIY aesthetic. In making this work, I am thinking about contemporary artists like Marilyn Minter who pairs materials such as metallic pigments, makeup, glycerin, oils and candy with macro magnification to create images which transform bodies into dripping, scintillating dreamscapes.

I'm thinking about Nick Cave's sound suits which synthesize overwhelming assemblages of found objects into garments of powerful strangeness.

I am also borrowing from a long history of feminist DIY practices of learning about and representing the body.

I'm thinking about influences ranging from the practice of the vaginal self-exam by feminists in the 1970's (Our Bodies, Ourselves, 1970-present) to Octavia Butler's science fiction imagining of strangely tentacled future humans (Lilith's Brood, 2000) to Isabella Rossellini and Jody Shapiro's Green Porno web series (2009) which made use of handmade costumes and offbeat humour to talk about sex, pleasure, bodies and the natural world.

In making this work, I am interested in delivering an experience which connects the wearer and the VR



headset together in a way which mirrors the intimacy and fascination of gazing into one's own endoscope or speculum. Rather than trying to be scientifically accurate, however, this work aims to be deeply speculative; more a dream than a textbook.

This virtual body will include expected elements like neurons/synapses, villi/secretions, bones/biomes, viscera and sinew but will additionally include sci-fi elements like tentacles/coral-reefs, wormholes/slime-moulds, exoskeletons and computer systems.

I am imagining this body that I am assembling as an interactive site of speculation, sensation, symbiosis, fermentation, play and pleasure.

All images: IOTA Bio Art Series, Chantal Routhier photography, 2019

Ruth Marsh is a multidisciplinary artist based out of K'jipuktuk/Halifax, Mi'kma'ki/Nova Scotia. Their practice employs an absurdist approach which seeks to queer the intersections between DIY culture and science fact/fiction/fabulation/feminism to address absence, memory and healing in bodies and environments. They are interested in playfully exploring the ways in which effort, failure and repetition can translate into a study of enacted care and hopeful mourning.

Since graduating from the Nova Scotia College of Art and Design in 2006, their practice has spanned painting, drawing, taxidermy, video, performance, installation and stop-motion animation. Ruth's work has been shown in galleries, museums and festivals within Canada and internationally including The Confederation Centre of the Arts (Charlottetown, PE), The New Gallery (Calgary, AB), Trieste Science +Fiction Festival (Trieste, Italy), Labocine: The Science New Wave (online) and InScience International Film Festival (Nijmegen, Netherlands).

Lisa Morse is an amateur bee-watcher and analogue experimental animator

based in K'jipuktuk (Halifax). Morse's work, *A Nice Big Zero For You*, screened in 2019 at the Halifax Independent Film Festival. Her next film *Behemoth (six legs good, two legs bad)* is in post-production.