The Unsettling Eros of Contact Zones and Other Stories

Tarsh Bates
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Tarsh Bates was born in 1973. She completed a Bachelor of Science with Honours from Murdoch University in 2000 and studied contemporary art at Edith Cowan University between 2003 and 2005. In 2012, she became Master Bates* after living in a public art gallery for 3 months with eight other scientific model organisms, exploring the aesthetics of care and alterity. She has worked variously as a pizza delivery driver, a fruit and vegetable stacker, a toilet paper packer, a researcher in compost science and waste management, a honeybee ejaculator, an art gallery invigilator, a raspberry picker, a lecturer/tutor in art/science, art history, gender & technology, and counter realism, an editor, a bookkeeper, a car detailer, and a life drawing model. Tarsh is currently a PhD candidate at SymbioticA, The University of Western Australia, where her research is concerned with the aesthetics of interspecies relationships and the human as a multispecies ecology. She is particularly enamoured with *Candida albicans.*

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ALSO BY TARSH BATES

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TARSH BATES

The Unsettling Eros of Contact Zones

And Other Stories

WITH AN ESSAY BY
Dr Laetitia Wilson

&

FEATURING A POEM BY
Shannon Williamson
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Two characters are entangled, *Homo sapiens* and *Candida albicans*. If it were a love story, it would be unrequited. Candida shyly hides under folds and becomes ferocious once its environment, us, changes, whereupon it is felt, disliked and attacked. Like many love stories, this drama is complex. Candida has many faces, and shifts from being an innocuous companion to causing great irritation. The ways we comprehend our entanglements with this particular microorganism is the subject of Tarsh Bates’ artistic practice.

The concept of eros lies at the heart of Bates’ art, as a means of understanding the Other. Eros operates at the nexus between materials/bodies: in the case of Candida, between it and the surfaces it adheres to. It is about sensuality and sensations that are both pleasurable and uncomfortable. Plato considered Eros to be a figure somewhere between human and divine. He referred to Eros in Greek myth as a benevolent *Daimon*, in contrast to the Christian formulation of malevolent *Demons*. Candida itself thrives in indeterminacy as a shape-shifter, between *Daimon* and *Demon*, relative to the conditions of its habitat. Sexuality is at the core of this polymorphism; Candida exhibits multiple reproductive strategies. When cultured on a petri dish, it is benign, asexual (*Daimon*); within a host body Candida is omnisexual, shifting shape and becoming a highly promiscuous parasite (*Demon*).
Beyond Plato and such dichotomies, however, Bates draws from philosopher Luce Irigaray’s idea of eros as an ‘affective desire for interconnection and interaction’ that calls upon multiple forms of intimacy and sexual expression. Bates embraces the queerness of Candida, its ambiguity, its androgyny and its fecundity. She posits the relation as a complex mutual ‘caress’ between human and biome, rather than between human and good (daimon) or evil (demon). In the work Ereignis, Gelassenheit and Lichtung: A love story, for example, individual Candida cells are subtly projected onto the skin of viewers. Once within the room, viewers have no choice, they are ‘infected,’ yet this infection is as soft and gentle as air caressing a surface.

Candida not only has the misfortune of unrequited intimacy, but is culturally and scientifically misunderstood. It is imbued with many, mostly antagonistic, cultural and scientific assumptions that contrast with its own complex language of actualisation. It is labeled a ‘women’s problem,’ and as noted by Bates, ‘any attempts to observe or experiment on Candida impose spatio-temporal conditions on its behaviour and hence its worlding.’ In response, she creates a living still life using the first scientific illustration of Candida drawn by mycologist Charles Phillipe Robin in 1853. Surface Dynamics of Adhesion manifests as decorative wallpaper, as a rich red flocking-like pattern that is initially neatly composed upon a surface. Interaction with this surface causes the living Candida to escape the design. This piece questions the discipline and control of bodies, and the discomfort
that occurs when bodies stray from the norm as leaky excess. It allows Candida to ‘perform’ as the complex microorganism it is—living, animated, disorderly, rather than the fixed entity depicted in Robin's illustration.

Bates considers, cultivates and provokes sensory responses with her art. In The Unsettling Eros of Contact Zones, the yeasty properties of Candida are used in the creation of bread. The notion of breaking and eating bread takes on an entirely new resonance with the knowledge that it has been prepared using maligned and icky body bugs. An everyday food is made strange, thus provoking consideration for the foods that we eat. Even though the Candida is dead, the bread still incites physical reactions and thoughts on the nature and various effects of minute, invisible ingredients in our food.

This unflinching art practice brings a misunderstood and disliked biome to the forefront of a discourse about bodies, sexualities, cultural and scientific assumptions. Candida is cared for, presented as beautiful and edible, and visualised in various states of being and becoming. Bates embraces ambiguities, opens up debate, and teases out and perverts complex cultural meanings.

Laetitia Wilson, 2015
A digital time-lapse video of *Candida albicans* reproducing and changing shape, taken on a live imaging microscope, fills the room, contaminating the architectural space (and any bodies within it) with animate images of *Candida albicans* cells. The title of this work combines terms used by the philosopher Martin Heidegger, whose work redefined understandings of “being-in-the-world.” *Ereignis* [trans. an event] describes the coming into being of “things” which is only possible through their relationships with each other. *Gelassenheit* [trans. letting-be] expresses the acceptance of the mystery of being-in-the-world, and *Lichtung* [trans. a clearing; illumination] refers to the necessity to clear a space in order to understand how it is to be-in-the-world. This work suggests that all three are intertwined, even in our own bodies.
A zoetrope rotated using a hand-crank arouses static images of *Candida albicans* cells, which come alive, dancing and changing shape. The viewer observes the contained images from a safe distance, completely in control – a stark contrast with the unruly contamination of *Ereignis, Gelassenheit and Lichtung*. The simplicity of the analogue apparatus materialises the gaps in seeing between scales and explores the role of motion in seeing and knowing an Other.
Encased in a series of acrylic boxes, living *Candida albicans* grows in a pattern adapted from the first drawing of the organism by Charles Philippe Robin in 1853 and reminiscent of those popular on the wallpaper of parlours and art galleries in Europe at the time. The *Candida* grows on blood agar, a nutrient source that contains the blood of the human artist. The acrylic containment frames the artwork as an un-still-life and minimises the risk of contamination or infection. Within this containment, the living *Candida* escapes the constraints of the patterning during the exhibition, disrupting attempts to discipline it.
Many of the foods we consume are produced with or contain a variety of microorganisms, including the basics: cheese, bread, milk, and beer. The artist offers bread leavened with *Saccharomyces cerevisiae* and *Candida albicans*, brie, blue cheese, and hummus to share, inviting consideration of assumptions about microorganism, our bodies and the food we consume. All microorganisms used to leaven the bread are killed by the baking process, including the *Candida*, which is already present in or on most of us.
An artist’s book in the form of a pack of 52 cards with digital micrographs of the polymorphism of *Candida albicans* cells and colonies. The diversity and adaptability of this organism is revealed, compellingly sumptuous and repulsive. Translational ambiguity of RNA codons into multiple amino acids is thought to be detrimental to living organisms, but *Candida* has a high tolerance for the translational ambiguity of the leucine CUG codon into both serine and leucine. This ambiguity tolerance is associated with morphological changes and pathogenesis and confers on *Candida* a highly dynamic adaptability to its environment (us).
Where do I begin?
An opening; A tale of two bodies
(aA) other and a waxing mouth.

I open with lips against pin-pricks
a thickening behind the breast
somatic anchors that root and bloom like an artery

I open with the tale of a third party
second hand
Lamina/lamina
lopsided lovers bound in mutual defeat

Shannon Williamson, 2015
SURFACE DYNAMICS OF ADHESION PROTOCOL

1. Prepare Sabouraud Dextrose broth
   1.1. Prepare SAB broth
   1.2. Autoclave media
2. Prepare Blood agar
   2.1. Prepare blood base agar media
   2.2. Autoclave media
   2.3. Collect 20mL whole blood using EDTA anti-coagulant
   2.4. Mix blood into 50°C base agar
3. Sterilise customised growth dish and lid
   3.1. Soak dish and lid in 4% bleach for 10 minutes
   3.2. Rinse each with 600mL sterile DDI water
4. Pour blood media into dish and leave O/N at RT to set
5. Prepare *C. albicans* culture
   5.1. Inoculate 100mL SAB broth with *C. albicans*
   5.2. Incubate at 37°C with shaking for 18 hours
   5.3. Harvest cells by centrifugation 3,000xg for 5 minutes
      5.3.1. Transfer broth culture to 50mL centrifuge tubes
      5.3.2. Pelletize cells by centrifugation
      5.3.3. Wash pellet with 0.5vol sterile DDI water
      5.3.4. Pelletize
      5.3.5. Wash pellet with 0.05vol sterile DDI water
      5.3.6. Pelletize
      5.3.7. Wash pellet with 0.05vol sterile DDI water
      5.3.8. Pelletize
      5.3.9. Resuspend cells in 0.05vol SAB broth
6. Prepare artwork
   6.1. Autoclave stencil
   6.2. Place stencil on agar and press gently
   6.3. Pour *C. albicans* suspension onto stencil
   6.4. Incubate dish overnight at 30°C
   6.5. Remove stencil and soak in 4% bleach for 10 minutes
7. Sterilise base and outer lid in bleach solution
8. Assemble containers and add dessicant
9. Display
THE UNSETTLING EROS OF CONTACT ZONES PROTOCOL

1. Autolyse
   1.1. Mix flour and water and let stand for 15 minutes at room temperature
2. Prepare leavening agent
   2.1. Activate fresh yeast (*S. cerevisiae*) in warm water
   2.2. Add generous loopful of *C. albicans*
   2.3. Allow to ferment for 15 minutes
3. Mix dough
   3.1. Add leavening agent and salt to dough and mix
   3.2. Transfer to greased bowl
   3.3. Cover and proof for 20 minutes at 30°C
4. Fold dough
   4.1. Uncover and fold dough
   4.2. Cover and proof for 20 minutes at 30°C
   4.3. Repeat
5. Bulk ferment
   5.1. Uncover and fold dough
   5.2. Cover and proof for 2 hours at 30°C
   [or 1 hour at 30°C then overnight at 4°C]
6. Pre-shaping
   6.1. Split dough and form into 3 logs
   6.2. Mist with spray oil
   6.3. Cover and stand for 15 minutes at room temperature
7. Shaping
   7.1. Shape into batards
   7.2. Fold top down and seal
   7.3. Fold bottom up and seal and turn over
   7.4. Roll from middle out to extend into baguette shape
8. Final proof
   8.1. Preheat oven to 210°C
   8.2. Transfer dough to baguette pan
   8.3. Cover and proof for 30 mins at RT
9. Uncover and score
10. Insert temperature probes into loaves
11. Bake at 210°C for 20 minutes
12. Test for *C. albicans* inactivation
13. Cut and serve
Tarsh Bates explores what it means to be human when we recognise our bodies as multi-species ecologies, with a particular focus on the relationships between Homo sapiens and Candida albicans. She uses scientific and artistic methodologies to explore physical, emotional, cultural and political relationships between humans and Candida. Works comprise sculptural, photographic and filmic works, dead and living organisms, and were developed during Bates’ PhD research at SymbioticA and the University of Western Australia.