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Matter Matters: Surfaces

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ANTENNAE

The Journal of Nature in Visual Culture

Antennae (founded in 2006) is the international, peer reviewed, academic journal on the subject of nature in contemporary art. Its format and contents are inspired by the concepts of 'knowledge transfer' and 'widening participation'. On a quarterly basis the Journal brings academic knowledge within a broader arena, one including practitioners and a readership that may not regularly engage in academic discussion. Ultimately, *Antennae* encourages communication and crossovers of knowledge amongst artists, scientists, scholars, activists, curators, and students. In January 2009, the establishment of Antennae's Senior Academic Board, Advisory Board, and Network of Global Contributors has affirmed the journal as an indispensable research tool for the subject, now recommended by leading scholars around the world and searchable through EBSCO.

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Front Cover:

Lizan Freijzen, composite of mould carpets © Lizan Freijzen

Back Cover:

Anna Kell, *Pink Field,* 2017, reclaimed mattress fabric and upholstery tacks on gallery wall © Anna Kell

EDITORIAL

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From canvases and layers of paint, to classical and new materialities in contemporary art, surfaces have always played important and most often unacknowledged roles. Surfaces are slivers of materiality upon which we evaluate and judge everything around us. They are ultimately defined by our gaze as the first point of contact between us and matter. But surfaces only reveal the outermost layer of objects. Dissection of plant, human, and animal bodies only apparently provides access to matter in a deeper way. In truth, all that is revealed is more surfaces in the form of tendons, muscles, bones. And even when the flesh is sliced open, the process only leads to further surface-multiplication under our own very eyes.

Thin objects, like leaves or photographs appear to be essentially constituted by surfaces whilst in others, surfaces conceal a depth they have been grafted upon; they are veneers. Veneers claim membership to economic or historical realities that are extrinsic to the internal mass of the object they envelop. The deceit of the senses they perform exclusively plays out on an utterly superficial level.

More recently, an interest in the materiality of objects has arisen in philosophical and art historical discourses as the need to rethink the presence of an embodied human within a networked, material world has become more and more pressing. New Materialism aims to link current ethical and political concerns related to science and technology—climate change, global capital, population flows, biotechnological engineering, along with the digital, wireless, and virtual prosthetics that make our lives what they are today. Rethinking materialities in new ways, thus, also entails surpassing Cartesian conceptions of matter and the dualisms that has constructed nature as a quantifiable and measurable entity that can be subjugated and exploited. As a new focus on materialities is revolutionizing our understanding of art objects, recent developments theory and criticism begin to pose new critical questions about the neglect of materiality that has characterized art history.

The current issue of *Antennae* is dedicated entirely to the subject of surfaces while a second instalment to follow will focus on different notions of materiality. As per every issue, we have mapped new territories by juxtaposing works of art and texts that creatively provide opportunities to rethink surfaces in the context of non-human agency and the Anthropocene. As always, I am extremely thankful to all the contributors and collaborators whose time, skills, and patience have contributed to the making of another exciting and challenging issue of *Antennae.*

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LECANORA MURALIS

In Lecanora Muralis, *Cole Swanson examines how colonial systems and biological processes become agential in the transformation of art and architecture. Situated on the edge of an Atlantic rainforest in Ilhabela, Brazil, Swanson's mural traces the surface of a colonial laborer's quarters. Using locally harvested pigments to highlight the growth of microflora, Swanson's ephemeral work draws attention to intersections between biosystems, colonial histories, commerce, science, language, and art. The work attempts to illuminate the agency of covert actors – human and non-human – in order to challenge disciplinary strictures and engage with possibilities for cross-species collaboration.*

Text and Images by Cole Swanson

"No species, not even our own arrogant one pretending to be good individuals in so-called modern Western scripts, acts alone; assemblages of organic species and of abiotic actors make history, the evolutionary kind and the other kinds too." (Haraway 159)

The Island of São Sebastião is better known in Portuguese as Ilhabela, the "beautiful island." An archipelago off the coast of the state of São Paulo, Brazil, the popular eco-tourist destination was the site of an artist research-residency held over the cool, winter weeks of July, 2017.[1] Through an engagement with local organic and earth-based media, I created an ephemeral mural on the wall of a mid-twentieth century laborer's quarters. Titled after a species of lichen, the mural, *Lecanora Muralis*, (Fig. 1) illuminates the growth of microflora across the surface of the dilapidated substrate to critically examine relationships between biosystems, colonial histories, commerce, science, language, and art. The mural site is a locus of countless worlds wherein discursive practices and biological phenomena collide, transforming one another and evolving futures. Additionally, the process and materiality of the artwork – the harvesting, rendering, and application of colours – attempt to bring into focus those actors often made invisible by socio-cultural and biological forces. In the spirit of Donna Haraway, the following is a series of brief meditations on both human and non-human forms of agency from which the artwork is materialized.

On Colonization

The "beautiful island" has a repugnant colonial history. Following the arrival of the Portuguese in the sixteenth century, the costal trade in goods, slaves, and fisheries motivated a mass-deforestation of Atlantic rainforest (Bertolo et al. 117). A ruralization effort made way for slave-driven agricultural projects centered on sugarcane and coffee cultivation; however, by the early twentieth century, after the abolishment of slavery, a period of economic stagnation fell over the island. Only traces of agricultural legacies in the form of small, subsistence farms remained (Bertolo et al. 119). The laborer's hut upon which *Lecanora Muralis* is painted was originally constructed during this period of economic decline to service one of the few remaining colonial homesteads.[2] In the following decades, administrative efforts were undertaken to promote eco-tourism as a new economic

Cole Swanson

Fig.1.Lecanora Muralis. Unbound earth and bone char pigments on biofilm-colonized wall, Ilhabela, Brazil, 2017

strategy that would return the island to a "natural, wild, and untouched place to be exploited for its scenic beauty" (Bertolo et al. 119). The proliferation of microflora across the colonial wall, and the subsequent reclaiming of the structure by the forest itself, reflects the state's desire to shift focus from a sordid colonial past toward a future that appears, at least on the surface, to have an ecological conscience.

It is absurd to think that such biological processes happen solely because human beings allow them to. Lichens colonize despite the harshest conditions imposed on them, human-borne or otherwise. The fragility of human systems is revealed in the orgy of biological growth and destruction penetrating architectural façades dedicated to power systems, past and present.

Lichens are difficult to call to order for they are specific expressions of those eco-universes that are biofilms, organic systems composed of numerous bacteria, algae, and fungi. Lichens are not singular organisms, but symbiotic colonies of microflora resulting in different structural expressions (Warsheid et al. 347 – 348). The bioreceptivity[3] of a given substrate combined with numerous environmental factors provide the conditions for the growth of bio-matter like lichens (Miller et al. 1).

In contrast to its (human) colonial origins, the mural site and its richness of biological activity had, for me, a sacredness. Radiating shapes of lichen and oxidized mineral crusts in brown, gold, and orange contrasted against swaths of rich, blackened wall to create visual expressions of growth and transformation (Fig. 2). This structure was left to nature and to disappear into the jungle, yet it is precisely because of these biological processes that human eyes are beckoned to bear witness.

Minerals, Meat, and Microflora

The artwork was designed as both an illumination of colonial and biological activity as much as it was a collaborative experiment between human and non-human actors. Working with earth-based and organic media reflects the site's materiality and its relations with commodity systems. Scouting the island terrain, I harvested local iron-rich clays from Ilhabela's coastal and rainforest regions to produce a modest palette of minimally refined colours (Fig 3).[4] My inclusion of hand-rendered bone black, a hue produced from charred cattle bone, was an acknowledgement of the

Cole Swanson

Fig.2. Pre-production mural site documentation, Ilhabela, Brazil, 2017 © Cole Swanson

Fig.3. Colour Tests: Yellow Ochre. Unrefined clay-based pigment harvested from southwestern coastline, Ilhabela, Brazil, 2017 © Cole Swanson

state's ongoing and problematic history with cattle farming. Brazil has undergone immense deforestation in its efforts to meet an insatiable, global demand for beef, which, in turn, has contributed significantly to climate change and multiple species extinctions (Strassburg et al. 85).

The unpainted wall contained a wealth of bio-pictorial information used to map the work's composition. Among the many possible species of lichens and other microflora on the substrate, the most apparent appeared to be *Lecanora muralis*, a lichen form with a distinct rosette structure. Composed of both

Cole Swanson

Fig.4. Process documentation: *Lecanora Muralis*. Unbound earth and bone char pigments on biofilm-colonized wall, Ilhabela, Brazil, 2017 © Cole Swanson

fungi and cyanobacteria, lichens can be highly influential to the transformation of human-made substrates into soil (Warsheid et al. 353). Most interesting is the fact that crustose lichens like *Lecanora muralis* become fully integrated within the lithic substrate; they not only colonize the wall, they *become* the wall (de los Ríos et al. 1132).

By tracing the undulating microfloral shapes, increased visibility of biological activity is achieved, but the application of earthen media to the substrate also has potentially transformative effects.

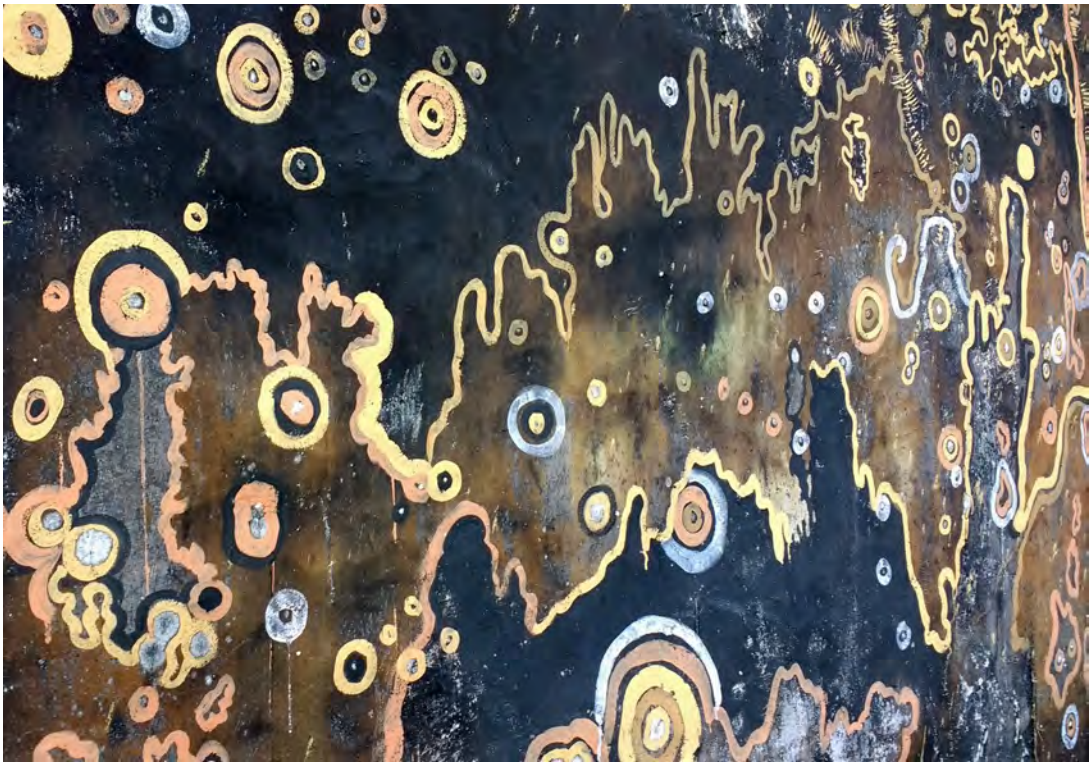
Iron is an essential element of stone-dwelling biofilms (Warsheid 353). The application of iron oxide-based clay colors on a lichenized surface (Fig. 4) offers an array of biological potentialities. For example, by mimicking protective crusts, iron-enriched clay produces an environment where bacteria can proliferate, safeguarded against a variety of environmental stresses. Bacteria found within crusts tend to further oxidize iron, and therefore, produce new expressions of colour (Danin et al. 414). Of course, since numerous environmental and biological factors determine biofilm activity, one can only speculate how an artwork like *Lecanora Muralis* might transform over time.

The Language of Lichens

The terminology used to identify the biological activities demonstrated by microorganisms often reflects specific cultural values. A review of research on bioreceptivity identifies competing terms associated with biofilm processes (Miller et al, 2). For example, the word "biodeterioration" refers to undesirable biological transformations or erosions of surfaces, especially on culturally revered spaces like heritage sites. In contrast, "biodegradation" is a positive term used to describe the same processes attached to the decomposition of unwanted matter, as in waste management (Miller et al. 2). Both words fail to account for the generative nature of microflora and the discursive practices that contributed to the making of the site and its subsequent artwork.

The decision to title the piece after a taxonomical distinction may seem contradictory to the spirit of this text; if one is beckoned to consider the broadest range of agents contributing to the making of an artwork, why turn to the narrow language of scientific classification?

I chose the title of the work based on two distinct thought processes. First, the



Cole Swanson
Fig.5. Lecanora Muralis (detail) Unbound earth and bone char pigments on biofilm-colonized wall, Ilhabela, Brazil, 2017

orbital shapes and patterns of *Lecanora muralis* (a particular species of lichen) were the primary agents in drawing attention to the site. Of course, covert were the millions of microorganisms proliferating on the wall surface that constituted the visuality of the space, yet it was the attractive, circular growth pattern that was the catalyst for the creative process (Fig. 5).

Second, there are several layers of meaning to be unpacked in the taxonomical distinction of *Lecanora muralis*. The root word "mural," translated from Latin to mean "on a wall," could be applied to many species of lichens, but the etymological association with painting methodologies revealed cross-disciplinary resonances that were difficult to ignore. The title of the artwork is a deconstruction of the intersection of language, science, and art, and therefore the standard binomial scientific form with its capitalized genus and lower-case species has been retired. Instead, *Lecanora Muralis* (all caps) is simply a "mural of lichen." It both acknowledges and destabilizes scientific knowledge. Taking things one step further, the new term "muralization"[5] can be used to account for all possible biological and artistic processes embodied in the site, while acknowledging without bias the manifold agents acting in the past, present, or future.

Postscript

Photographer Tamar Granovsky captured documentation of the artwork three months after the piece was completed (Fig. 6). It is difficult to assess what kinds of changes might have taken place at the microbial level, but the images reveal a different mural, subtler in hue and rife with growth.

It is challenging to resist subscribing to the belief that the artwork and its attempt to connect with incomprehensible worlds bore fruit so quickly and tangibly. In a biological sense, qualifying reproductive change naturally requires more ambitious study than a cursory glance, yet the keen gaze of human bystanders toward the wall and its living elements over the passing months is a quiet acknowledgement of the other, a small and meaningful performance in its own right.