

Life Cycle of a Common Weed
Reciprocity, anxiety and the aesthetics of noncatharsis

by

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Submitted to the Department of Architecture in partial fulfillment of the requirements of the degree of Master of Science in Visual Studies at the Massachusetts Institute of Technology

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Abstract

This document is a condensation of research into an artistic practice of transation and dialogue. Through the staging of an artwork, I offer encounters with fractured biopolitics and forms of social engagement. Written in three parts, this document may be read as separate yet interdependent components of a distributed narrative.

The first section begins with a straightforward description and documentation of an artistic concept that evolved during my time at MIT. The artwork, *Life Cycle of a Common Weed*, is a fertile encounter between plants and humans. The material transfer of nutrients is the critical locus of this exchange: blood from a human body nourishes dandelions with nitrogen and the root and leaves of the dandelion provide nutritious and medicinal sustenance to the human. Liminaly present in the exchange are pathogenic viruses and empathy. *Life Cycle of a Common Weed* is not an object-based artwork, and as such exists as a performance, visual documentation, an event, and a perpetual cultivation.

In the second section, I describe the emergence of *Life Cycle of a Common Weed* from a rhizomatic web of embodied knowledges, multispecies encounters, cultural symbols and practices, dialogues and lateral transfers. I have infected the philosophical abstractions of the artist's statement genre with a situated ethnography that joins the artwork to nodes of questions and contexts, but by no means circumscribes its entire network of connectivity.

The final section identifies the work of other artists as important antecedents, as well as audience encounters that provoked reflection on my approach. In relation to my other work and the unfolding narrative of its creation, *Life Cycle of a Common Weed* is situated as a turning point within my artistic practice.



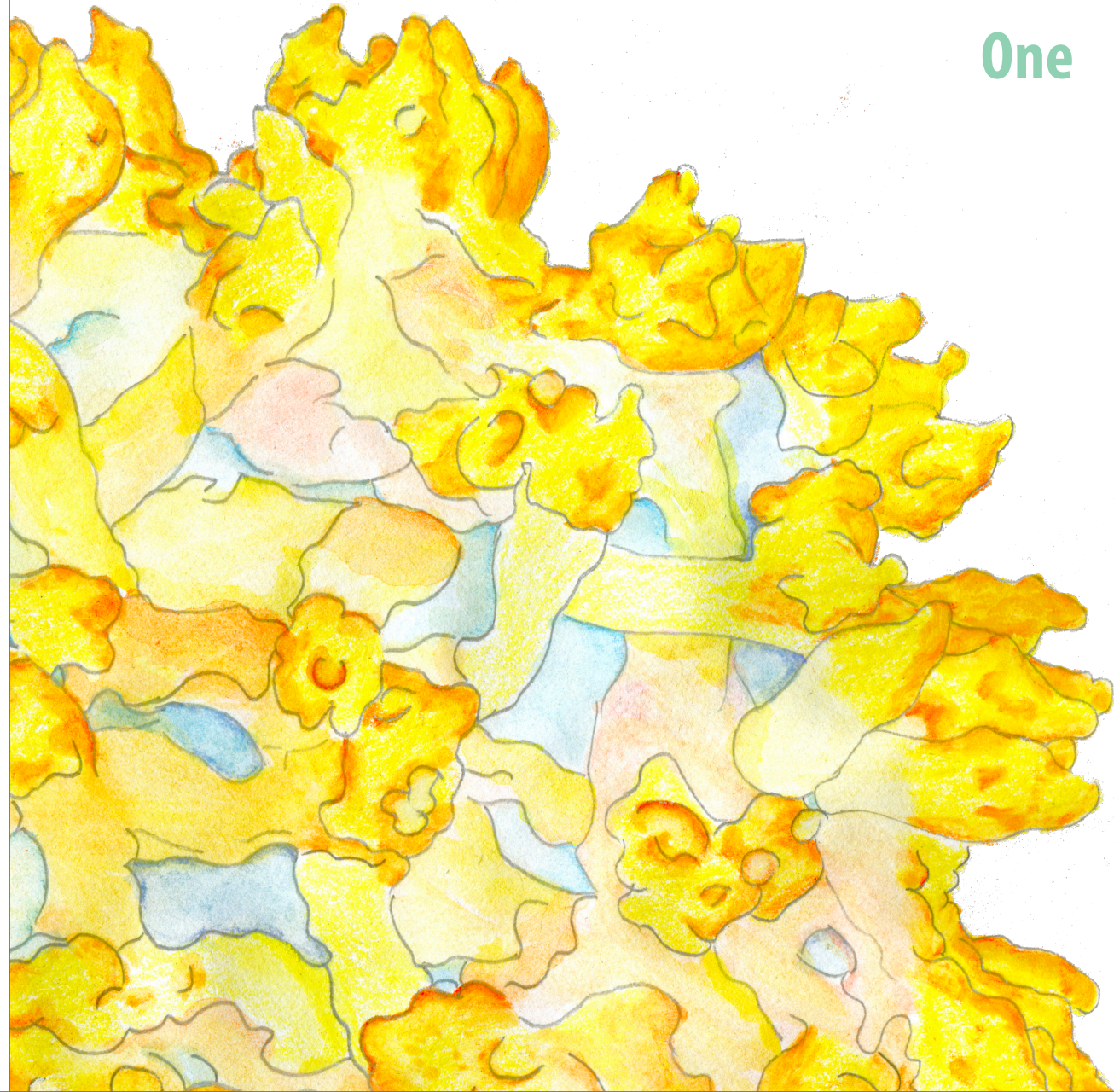
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Life Cycle of a Common Weed is a fertile encounter between plants and humans. The material transfer of nutrients is the critical locus of this exchange: blood from a human body nourishes dandelions with nitrogen and the root and leaves of the dandelion provide nutritious and medicinal sustenance to the human. Liminality present in the exchange are pathogenic viruses and empathy. *Life Cycle of a Common Weed* is not an object-based artwork, and as such exists as a performance, visual documentation, an event, and a perpetual cultivation.



Above & previous page:
Life Cycle of a Common Weed
(2007) performance documents.
Photos: Alia Farid

The artist's contaminated blood

serves as a source of nitrogen-giving fertilizer to the common dandelion, itself a source of therapeutic and nutritional value. Dandelions populate sidewalks, industrial wastelands, fields, alleys and even the manicured lawn. Each part of the dandelion is edible & extremely nutritious, and can be processed for tea and herbal remedies. Every day I take dandelion root for the treatment of chronic hepatitis C, a mostly incurable virus transmitted in the blood. In a gesture of reciprocity, I cultivate the dandelions and fertilize them with my own blood. My blood adds nitrogen to the soil, important to the growth of dark leafy greens. The dandelions can benefit from the nutritional value of my blood but cannot be infected with the hepatitis C virus. I can give to the dandelions what would be a danger to any human, in a reciprocal plant-human exchange of sustenance.



Above: *Life Cycle of a Common Weed* planter (2009). Live dandelions, small quantities of human blood, wood & steel. 64 x 86 x 30" Installation at the Mills Gallery, Boston. Opposite: *Study for planter* (2008). Ink & watercolor pencil on vellum. 8 x 4"

The planter is designed as an embellishment of the universal biohazard symbol (Dow Chemical & National Cancer Institute, 1967) with Bodoni ornaments (Giambattista Bodoni, 1798).



Above & following: *Life Cycle of a Common Weed* (2009) public fertilization of dandelions with human blood in exchange for a dandelion sprout. At the Mills Gallery, Boston. Photos: Gina Siepel and Sara Smith

The public is solicited to fertilize

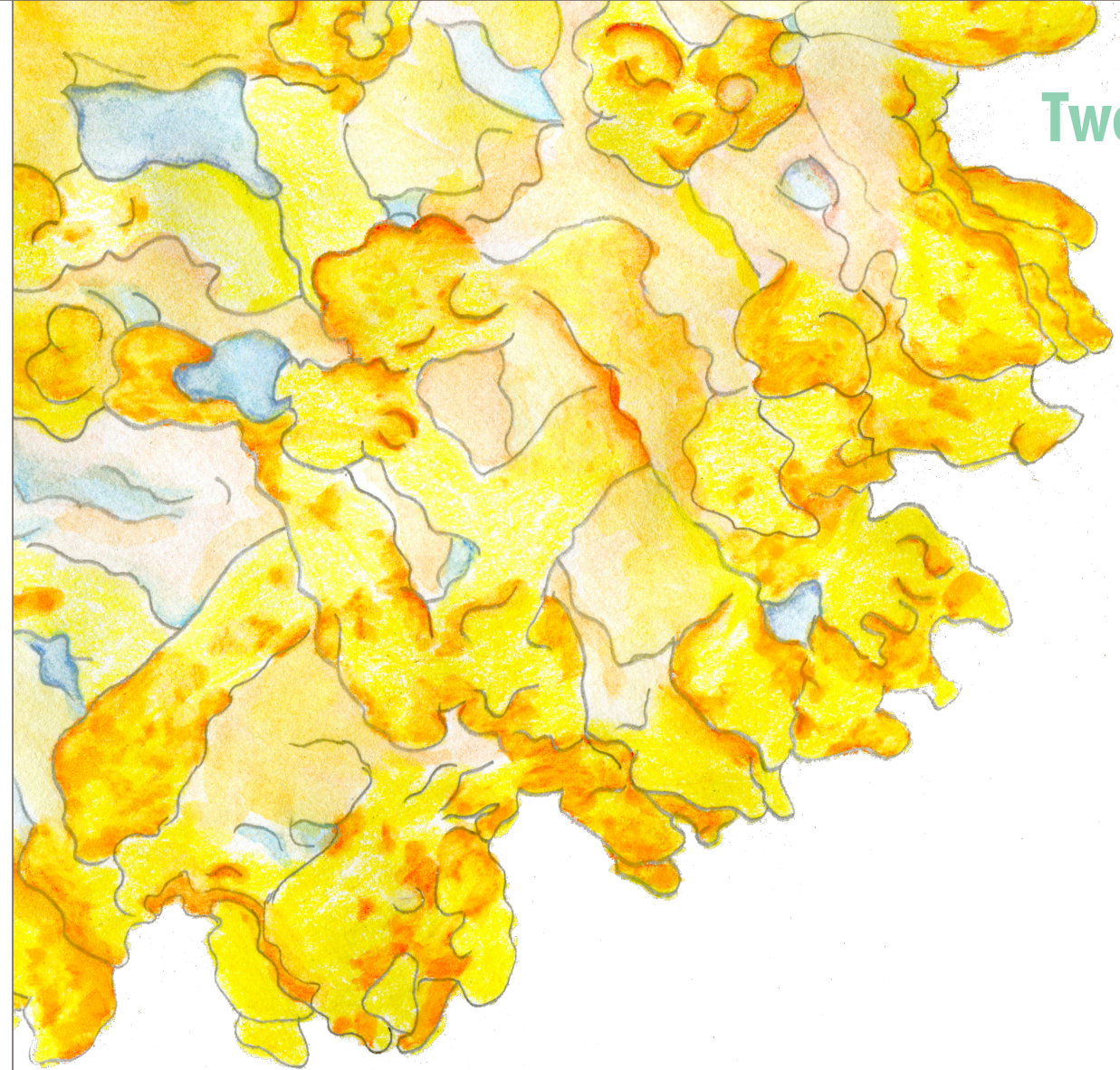
dandelions with their blood, in exchange for dandelion root tea and seedlings. The collective pooling of blood from the audience transforms *Life Cycle of a Common Weed* into a site for the private and public to converge; a space to encounter and analyze anxieties. Intimate dialogue is a natural consequence of this interface.

In the collective action of drawing out blood from our bodies and feeding it to weeds, the permeability among bodies is presented. It facilitates lateral transfers on several levels, including communication, contagion, interspecies material minglings and incorporation. The disruption of bodies facilitates other disruptions: subjective disturbances that place us in a zone of uncertainty and anxiety—a productive liminal space.





Two



Reciprocity, anxiety and the aesthetics of noncatharsis

It was like a scene from *Repo Man*

(1984) in which all the products are brandless and packaged with the same blue-on-white text, indicating exactly what they are and nothing else: milk, beer, corn flakes. The hardware and garden supply in my Western Massachusetts farm community sold 40 lb bags labeled "DRIED BLOOD" in generic red-on-white text. The huge bags were piled by the door, as if to remind you to grab one on your way out among other sundries like chewing gum, flashlights and pocket screwdrivers. I marveled to think that more than my own body weight in dried blood slouched by the cash registers, and wondered what functional purpose it served to belong in a hardware store? The explanation came from my mother, an amateur botanist: blood is a fertilizer high in nitrogen for vegetation, whose leaves yellow and pale in deficient soil. Like urine, another nitrogen-rich fertilizer, blood must be diluted with water to avoid burning plants with excess ammonia. The generic bags of blood sold at my hardware store at the beginning of the twenty-first century were a by-product of industrial slaughterhouses. But blood has long been used in agricultural systems. The observation that slain and sacrificed animals and humans sprout lush gardens is ancient knowledge (Stanley 1993; Bynum 2007), referenced in the Talmud (Martin et al 1992) and in 12th century Persian poetry (Khayyám 1901). The blood of mortal wounds from protagonists of ancient Greek tales gave rise to hyacinths, violets, crocuses and mythological plants, such as the *prometheion* and the *moly* (Conticelli 2001). I have long been enamored of blood as a substance and symbol of vitality. But as a lifelong carrier of the hepatitis C virus, my own blood carries with it the sinister potential of seeding another person with disease. Although I was not tempted to buy the bags of dried blood for gardening, I was intrigued that my own blood—



Viral Domes (2007)
Wood, steel, nylon & mixed media.
Dimensions variable.



hazardous to humans—could nonetheless be useful to plants.

This nugget of horticultural information lay dormant until the concept for an artwork germinated, five years later in 2007. The artwork, *Life Cycle of a Common Weed (LCCW)*, is a fertile encounter between plants and humans. The material transfer of nutrients is the critical locus of this exchange: blood from a human body nourishes dandelions with nitrogen and the root and leaves of the dandelion provide nutritious and medicinal sustenance to the human. Liminality present in the exchange are pathogenic viruses and empathy. *LCCW* is not an object-based artwork, and as such exists as a performance, visual documentation, an event, and a perpetual cultivation. In the punctuated narrative that follows, I describe the emergence of *LCCW* from a rhizomatic web of embodied knowledges, multispecies encounters, cultural symbols and practices, dialogues and lateral transfers. I have infected the philosophical abstractions of the artist's statement genre with a situated ethnography that joins the artwork to nodes of questions and contexts, but by no means circumscribes its entire network of connectivity.

In the summer of 2007, I was commissioned by Beam, a children's summer camp, to design a collaborative outdoor sculpture project. The invitation was extended after one of the Beam organizers saw my work *Viral Confections* (2006-07), edible chocolate truffles that represent the protein structure of the hepatitis C virus. I serve *Viral Confections* in public settings to invite freeform and non-didactic discussion about chronic illness, hepatitis C, art, medicine and whatever actively productive yet ephemeral exchange ensues. The arrangement facilitates open and public conversation about matters typically confined to private medical settings,

and the chocolate viruses serve as agents of information rather than infection. A growing fatigue with the militancy and limited vocabulary of tactics used to address the contemporary environment of human-viral encounters led me to develop *Viral Confections* among a series of artworks, including *Tea Party to Befriend a Virus* (2007-08), *Viral Shelter* (2007-08) and *The Knit Virus* (2008). The artworks engage what anthropologist Heather Paxson (2008) posits as “post-Pasteurian” *microbiopolitics*. Paxson extends Foucault’s concept of *biopolitics* (1976), which frames the institutional governance of human populations, in order to problematize microbial-human relations. Her post-Pasteurian *microbiopolitic* describes the “potentialities of collaborative human and microbial culture practices” (Paxson 2008, 17) among cheesemakers who cultivate the triumph of tasty and edible bacteria over pathogenic ones. My own endeavor is to make space to air the complicated antagonisms, co-dependencies and evolutions in our relationships to pathogens. The friend-or-foe model hardly suffices for human inter-relationships, how could it possibly suffice for human-microbial relations? In these artworks, I seek not to normalize viral encounters, but to amplify them such that microbial “actors” (cf. Latour 2005) must be recognized as part of what being-in-the-world is about.

As a way to introduce this model of antagonistic coexistence to the Beam summer camp, I designed several large *Viral Domes* for them to build and inhabit. Many of the protein capsids that envelope viral genetic material are organized into geodesic architectures. Among these are the hepatitis C virus, HIV, the rhinovirus (cold-flu) and herpes. Each virus was constructed into a geodesic dome greenhouse that sheltered therapeutic herbs to treat the ailments they caused. The *Viral Domes* presented a massive shift in scale, becoming the

campers’ shelters, playspaces and activity centers. While the domes fostered pedagogical discussions about infection with the children, they sparked at least as many debates among adults about what to reveal to the children (including a heated controversy about whether it was socially acceptable to build a herpes dome). I selected plants that could be grown and used as herbal therapies for each virus. Among the therapeutic plants to be cultivated within the hepatitis C dome was the common dandelion, *Taraxacum officinale*. Despite its place in ancient and modern pharmacopeias, the dandelion is listed among weeds of the U.S. (USDA 2009), making it to many a pernicious plant suitable only for uprooting. It was thus difficult for the Beam crew to find a nursery that cultivated dandelions to bring back for the viral greenhouses. In the context of intentional cultivation, dandelions are rare. An excessively prolific weed that contaminates lawns in one context, the dandelion is a rarified medicinal commodity in another. The dialectic of the dandelion matches the dialectic of blood, which is a contaminant in one context and a rich source of nutrition in another. I wanted to bring together the dualisms of blood and dandelions within an artistic project to touch upon the ambiguities of living with chronic illness, the concept of which was to feed virally contaminated blood to the dandelions as a cultivation of reciprocity. The disputed merits of the materials would foreground how relating to bodies and diseases are just as complex, codependent and antagonistic—layered with tenderness and brutality.



Dandelion / *Taraxacum officinale*

The common dandelion, *Taraxacum officinale*, populates sidewalks, industrial wastelands, fields, alleys and even the manicured lawn. The long taproot is brittle and runs deep into the earth, making it difficult to uproot. Each part of the dandelion is edible and extremely nutritious. The flowers can be fermented and made into wine, the bitter leaves are best picked in early spring and late fall to add to sautés and salads, and its taproot and leaves can be processed for tea and herbal remedies. Dandelion is a safe and popular medicinal plant that promotes the flow of bile and reduces inflammation in the liver and gallbladder. It is higher in beta-carotene than carrots, has more iron and calcium than spinach, contains many B vitamins, C, E, P, D, biotin, inositol, potassium, phosphorus, magnesium, zinc and inulin. Dandelion root is a helpful remedy for hepatitis C, all kinds of liver conditions, kidney disease, diabetes, hypoglycemia and stress. There are no poisonous look-alikes. The heavily toothed leaves always grow in a basal rosette, and flowers spring directly from the center of the plant, never in a branching formation. (Brill & Dean 1994; Balch & Balch 2000)

Native to Europe and Asia, the dandelion is widely recognized as a medicinal plant, first noted in 10th century Persian medical manuals (Carr et al 1998, 141). European colonists intentionally introduced dandelions into the United States circa the 17th century as a hardy plant to stave off scurvy and malnutrition at the end of the winter (Gade 1991; Mack & Erneberg 2002; Mack 2003). It is among the first greens to emerge from the snow, possessing many nutritional and medicinal properties. Dandelions propagate easily in disturbed and impoverished environments, swiftly proliferating and persisting in the tender soil of lawns and empty urban lots. Today, over half a million pounds of herbicides are purchased in the United States (EPA 2004, 20) and applied primarily to the country's largest irrigated crop: the lawn (Milesi et al 2005). Dandelions are among the key targets of this monoculture, with fertilizer companies running advertisements that tell consumers "Don't Eat 'Em Defeat 'Em" (Robbins & Sharp 2003, 431).

Contagion / Cultivation

Hepatitis C is a blood-borne virus

for which there is no vaccine—a virus that, according to the World Health Organization, accounts for chronic liver illness in 3% of the world's population (WHO 1997). This totals over 200 million people if one calculates for the 2009 figure of global population. Chronic infection develops in 75-80% of individuals, which can lead to cirrhosis, end-stage liver disease and hepatocellular carcinoma. Among the top ten causes of death in Americans aged 24-74 ((St. John & Sandt 2005), hepatitis C kills at least 15,000 people per year in the United States (Manos et al 2008). Although it is the most common, chronic, blood-borne viral infection (St. John & Sandt 2005), it is not particularly visible to the public eye within the United States. With a confusing and bland name, hepatitis C affects motley demographics: people with a history of injection drug use, health and emergency workers, veterans, incarcerated persons, blood transfusion recipients and kidney dialysis patients prior to 1992. No other forms of social identity are dominant among these groups that might otherwise band them together. Following Rabinow's (1996) concept of *biosociality*—collective identity grounded in a shared, technoscientific biological experience—the distributed and heterogenous social demographics of hepatitis C have failed to coalesce a biosocial conscience that might materialize vocal patient advocacy. This contrasts to HIV, which made its public emergence among gay men predominantly in the U.S., a well-organized demographic already engaged in issues of social justice.

Hepatitis C does not have what cultural historian Priscilla Wald calls an "outbreak narrative" (2008) along similar lines as other "emerging infections" that sent frissons around the globe at the end of the twentieth and beginning

of the twenty-first centuries, foretelling apocalypse accomplished by microbial actors. The typically xenophobic narratives of HIV, SARS, Ebola, West Nile, Bird Flu, H1N1 swine flu, etc., make a crash and burn entrance from non-Western, pre-industrial spaces—suspicions abounding about an unholy proximity between animals and humans—and threaten the clean, modern spaces of the West by entering the promiscuous circulation of the global economy. Hepatitis C, on the other hand, had a slow and insidious emergence over twenty years, with research equally sluggish. Like the dandelion, hepatitis C is relatively inconspicuous, yet it is all around you once you open your eyes to it. It is this ubiquitous, weedy quality of the hepatitis C virus that I wished to instrumentalize in my artwork. Lacking an outbreak narrative, hepatitis C could perhaps serve as a model for being-with microbes once their outbreak narratives have cooled into complacency. Often reinforcing social stigmas, xenophobia and moralized behavior, the outbreak narrative favors a rhetoric of battle, fear and heroic drug innovation. Yet the questions of contagion, proximity, communication and communicability remain unresolved and underexamined. Wald reminds us that “the interactions that make us sick also constitute us as a community” and diseases dramatize “the most basic of human narratives: the necessity and danger of human contact” (Wald 2008, 2).

This necessity and danger is evident at the moment of writing, as the *New York Times* headlines proclaim the ban on hugging in some secondary schools. Its frequency among teenagers is deemed “needless” by New Jersey junior high school principal Noreen Hajinlian, who warns that “touching and physical contact is very dangerous territory” (Kershaw 2009). Sharing the headlines, alarm about the H1N1 pandemic has become hyperbolic monotony and the

signs posted around my academic institution begin to curl and tear, their bold black text still legibly urging us to “AVOID CLOSE CONTACT.” Schools in the Boston area, renowned for their transmission of ideas, were the most visible in the local media coverage of H1N1 closures and casualties. WHO Director-General Margaret Chan, upon declaring H1N1 a global pandemic, spoke of the “balance between overreaction and complacency” (Knox 2009) in human relationships to disease. Indeed, the troubling matter of human contact and negotiations outlives the outbreak narrative, as people continue to share ideas, touch and communicate. What remains are these questions of commingling and becoming.

As a blood-borne virus, the story of hepatitis C is mediated through the context of the HIV narrative, which continues to have immense impact on how we relate to viruses. In recent years, we have seen a marked global decline in deaths from HIV/AIDS, thanks to the persistence of activists and caregivers to provide expensive and complicated antiretroviral therapy to those in need. The life-extending possibilities of these drugs have prompted many to pronounce the development of HIV from an “inescapably fatal destruction of cell-mediated immunity into a manageable chronic illness” (Kim & Farmer 2008, 2-4). The repetition of astonishing before-and-after portraits in the social medicine arena displays a truncated drama, from an emaciated near-death AIDS patient in one frame to a plump and smiling survivor (with chronic illness) in the next. The density of human and political interactions that produced such a transformation is snipped into a breathtaking “ta-da!” of pharmacological wonder. One would like to conclude the outbreak narrative on such a note, and indeed optimism has been a long time in coming, but it is clear that complacency is part of the story, with resurgences of the HIV epidemic on the rise among certain populations

The information in this brochure is intended for public education and discussion. **Please share.**

For medical advice and to **get tested for hepatitis C** please speak with a medical professional at your local health facility. Many hospitals have monthly hepatitis C support groups.

Would you like to befriend the virus?

For more information about hepatitis C and to make a difference in a global health crisis, visit:

www.HCVadvocate.org
www.lola-national.org
www.LiverFoundation.org
www.HarmReduction.org
www.HCVinPrison.org
www.HIVandHepatitis.com

written & designed by **Caitlin Berrigan**
www.membrana.us

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To my dear
Virus,

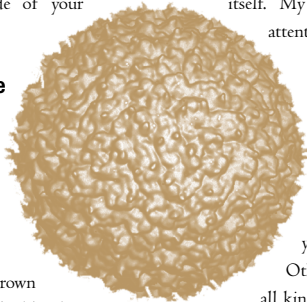
hepatitis C

Once inside the bloodstream, you seduce my liver cells. You belong to the elusive *Flaviviridae* family of viruses, along with West Nile & Dengue. You like to share your string of recombinant DNA (RNA) that you store inside of your

The liver cells become enamored of you. They replicate your RNA as if it were their own, making many viral copies that go on to seduce more liver cells.

The liver is a large, reddish brown organ that filters toxins from the blood, produces bile as an important part of digestion, & metabolizes fat. The liver can regenerate itself if damaged. But Virus, you are so distracting to the liver. It is so busy obeying your whims that

it forgets to filter the blood, releases the wrong things into the bloodstream, stores fat around itself instead of metabolizing it, & becomes so hot, bothered & inflamed that it can't regenerate itself. My liver is now paying more attention to you than it is to me.



Virus, do you know how that makes me feel?

Sometimes, you make me feel nothing at all. I could ignore your presence completely. Other times, you make me feel all kinds of things: mild to extreme fatigue, nausea, abdominal pain, itchy skin, gassiness, fever, & you color my skin & eyes yellow with jaundice.

You got in somehow. My body was permeable to the world, and you let yourself in.

I know that you came in through the blood. You are just 50 nanometers small, & the bloodstream carries you & your millions of copies very efficiently.

You find your way from one person's bloodstream to another when injection needles are shared, or at times razors & cocaine straws. Occasionally when a tattoo or piercing is performed with unsterilized equipment. Rarely you may find your way in when two people have unprotected sex that ruptures the skin & releases blood. Before 1992, you found your way in through blood transfusions & kidney dialysis. **No vaccine can protect us from you.**

Anywhere infected blood meets directly with fresh blood, you can find your way in to the body.

In this way, you have entered the bodies and bloodstreams of 200,000,000 people worldwide.

In the USA there are over 4 million people living with you inside of them. Most don't know it. Roughly 15-20,000 people die because of you each year in the US.

You are found in the blood of 65-85% of people who have ever used injection drugs. Where needle exchange is supported by the local government, this rate of infection goes down. In prisons, where hygiene is poor & health care is scarce, about 34% of inmates have you in their bodies, as opposed to 2% of the general population (which is still impressive for a virus).

How many MORE bodies & WHOSE bodies will you have to enter silently before the world takes notice?

I don't drink alcohol, do drugs, eat unhealthy foods or expose my body to other toxins because my liver is paying so much attention to you that it wouldn't be able to manage the others. It could get cancer or become so laced with scars from the inflammation (fibrosis) that it develops cirrhosis & stops working at all. That is when some people try to transplant a new liver, & when others die. Yes, you are terribly seductive, Virus.

I am trying to befriend you. Perhaps my attention to you will give my liver a break from your distractions.

Some people are able to take the standard Western medical treatment of interferon injections with ribavirin, which decreases the number of viruses in the blood & allows my liver to get back to its job & begin to regenerate itself.

That treatment is effective only in about 50% of the people who try it. For everyone else, we must find ways to keep you from distracting our livers so much. Herbs like Milk Thistle, dandelion root, & schisandra berries are helpful, as well as exercise, drinking lots of water, acupuncture & relaxation. **It is important to do the best we can.**

You can see all the accommodations I am making for you. I am trying to relate to you by getting to know everything about you, visualizing you, seducing you. I know that I have no choice but to live with you now. We are inextricably connected, sharing traces of one another's genetic information.

Why fight when we can be friends with each other?

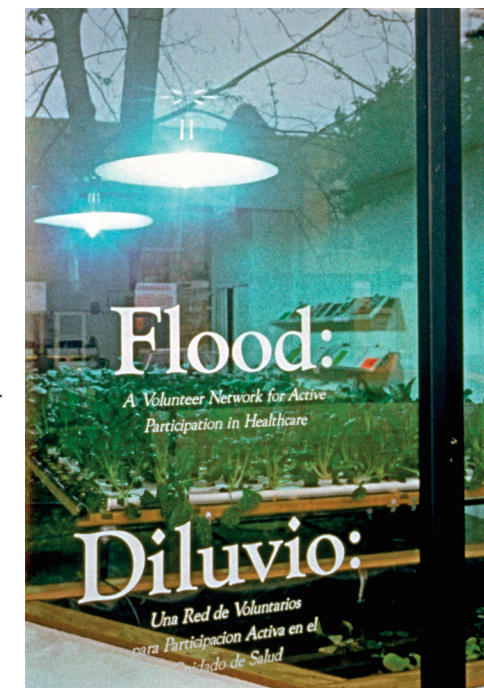
*Letter to a Virus (2007-08).
Offset, double-sided, folding
brochure. 11 x 4.25"*

in the United States (UNAIDS 2006, 2008; Fears & Vargas 2009). Activists and health educators struggle with strategies of how to maintain a vigilant public as the drill of “threat level orange” loses its potency, to borrow a color-coded terminology of fear from the U.S. Homeland Security Department. Notably missing are the diverse accounts of these patients’ experience with an ongoing negotiation of chronic illness. It is an account less easily encapsulated within a narrative structure or a statistical paradigm. The relationship to chronic disease and ongoing social-viral encounters is more humble, mundane and ambiguous, one that I sought to interrogate through the medium of art.

Life Cycle of a Common Weed is a gesture of reciprocity in which I cultivate dandelions and fertilize them with my own blood, contaminated by the hepatitis C virus. The dandelions benefit from the nutritious nitrogen of my blood but cannot be infected with or become a vector for the hepatitis C virus. I can give to the dandelions what would be a danger to any human, emphasizing the fertility of contaminated blood and the nourishment of weeds in a reciprocal plant-human exchange of sustenance. Standard Western treatment for hepatitis C has evolved little in the past 10 years. It remains expensive and unaffordable to the majority of the insured and uninsured alike, and is only about 50% effective. *LCCW* circumnavigates Western medicine and returns to the weeds as a way to reconsider our relationship to viruses, the material possibilities of our own bodies, and vegetal empathy. It was important to the symbolic intentions of the project that I draw my own blood the medical way, with venipuncture. I wanted the system to exist on the margins of Western medicine and alternative remedies, to subvert and complement the biopolitical role of clinical medicine. What barred me from drawing my blood if others did it all the time? Learning to draw my own

blood was achieved with some maneuvering within medical territory that patients do not typically traverse.

A generous friend in medical school taught me venipuncture in her apartment-style dorm. The apartment was packed with pharmaceutical swag, from Viagra soap dispensers clearly labeled “Does not dispense Viagra” to folding Levitra ballpoint pens that erected to full stature with the touch of a button. Doctors are notorious for their own illicit drug use, and apparently the apartment building had begun to provide sharps disposal containers due to multiple needle stick incidents from the garbage disposal. My friend had brought me my own sharps container to take home. Despite the elusiveness of my veins and the frustration they have caused many phlebotomists, I managed to succeed in drawing a tube of blood on the first try. When I told a friend, who makes immense drawings with her own blood, that I had learned venipuncture, she was thrilled and jealous. She found a way to become a certified phlebotomist through a one-day course in a hotel near the La Guardia airport, which enabled you to buy your own butterfly needles and tubes. I signed up as well, and learned the principles of phlebotomy. We practiced on disembodied silicone arms modeled after those of a beefy, Caucasian male and piped with Kool-Aid. Soon, I was a self-





sufficient phlebotomist and patient of my own becoming.

Creating an illusion of self-sufficiency, *LCCW* is an introverted cycle between two parties: the plants and me. It closes off social and political indifference, pharmaceutical profiteering and the tired rhetoric of battling disease. The dandelion, a trodden and disparaged weed, has much to offer the diseased person—stigmatized and ignored. *LCCW* is what I call a “pathetic political gesture”: genuine in its reach towards empathy and self-care, yet inevitably deficient. It emphasizes the DIY nature of the action as a kind of micro back-to-the-land form of medication. Following a similar ethos but at a different scale, from 1992-95 the art collective Haha initiated *Flood: A Volunteer Network for Active Participation in Healthcare*, during the height of the HIV epidemic in the U.S. *Flood* was an indoor hydroponic garden that provided bacteria-free greens to immune compromised people living with HIV. Part of *Sculpture Chicago*, *Flood* was located in a storefront in the neighborhood of Rogers Park, existing somewhere in between the art world and the community. A network of volunteers sustained the project long after *Sculpture Chicago* had ended. In the absence of effective treatment and feeling the urgent need to *do* something, the community mobilized in this gesture, which was as much a means to cultivate plants (after all, not that many) as it was to cultivate dialogue, community engagement and empathy. Both *Flood* and *LCCW* share the ethos of what has recently been dubbed “tactical biopolitics” (cf. da Costa & Philip 2008) to renegotiate biopower within the art context. As artist Laurie Palmer reflects, *Flood* was “somewhere between usefulness and metaphor” (Palmer 2008, 1994, 65). The intention of *LCCW* is to catalyze the usefulness of metaphor. It is a micropolitical tactic that, at this modest scale, casts into relief the larger context of our social relationships to disease, anxiety and growth.

Opposite: Haha. *Flood* (1992-95).
Hydroponic garden, Chicago, IL.

Matter Out of Place

As Life Cycle of a Common Weed entered the public realm, I began to realize even more how this quaint, closed transaction disrupted the biopolitical order and the codes of taboo that regulate bodies. The work made its public debut in the fall of 2007 during a residency at the Rensselaer Polytechnic Institute's Center for Biotechnology and Interdisciplinary Studies, as part of the BioArts Initiative spearheaded by artists Kathy High, Daniela Kostova and Rich Pell. The Initiative began as the first formalized collaboration between art and biotechnology in the United States. It was aligned with the practices of artists such as the Critical Art Ensemble, SubRosa, Adam Zaretsky and the Tissue Culture & Art Project (cf. Kac 2007; Hauser 2008; Pandilovski 2008). These artists, among others, have worked directly with biotechnical materials and processes in order to question modes of biopower from within and on the margins of institutions. My performance documents were exhibited alongside large, geodesic dome viral capsids and a few pots of dandelions. The plants were not cultivated from seedlings, but foraged from corner plots in my Cambridge neighborhood, including parking lots, laundromats and a Jewish temple whose landscapers were delighted and perplexed to have me de-dandelion their lawn. I had no time to fertilize the plants with my blood before they were installed.

The images of me sticking a butterfly needle into my arm provoked concern, and the Officer of Biosafety at the CBIS paid me a visit, accompanied by the Operations Director. His first question was: "When was the last time those dandelions had blood?" He had conducted research on the Centers for Disease Control website regarding the length of time the hepatitis C virus can remain viable outside of the body (estimates range from 4 hours under casual

circumstances to 4 days in supportive environments, such as a syringe). When I explained that transmission occurs only through direct blood-to-blood contact, he suggested that someone might decide to plunge their wounded fists into the dirt of the potted weeds and be put at risk for infection. Furthermore, although the plants were exhibited in an open public area well removed from the territory of the laboratory, he asserted that the dandelions violated the biocontainment protocol of Biosafety Level 2 in the Center's labs (cf. DHHS 2007), and that the entire exhibition should be shut down. I tried to argue that it is reasonable to expect that no one with an open, bleeding wound on their hand will plunge

it anywhere other than in the sink to clean it. To expect differently is to verge on paranoia in a world teeming with microbial life and the proliferation of risk. My arguments being ineffective, I surrendered by admitting that the dandelions had not yet been fertilized with my blood, and tried to explain the function of metaphor and material substance to the two concerned administrators. Although my installation was allowed to continue after Kathy and Daniela negotiated with them behind closed doors, senior administrators abruptly ended the BioArts Initiative in the fall of 2008, despite the continued availability of funds and public interest.

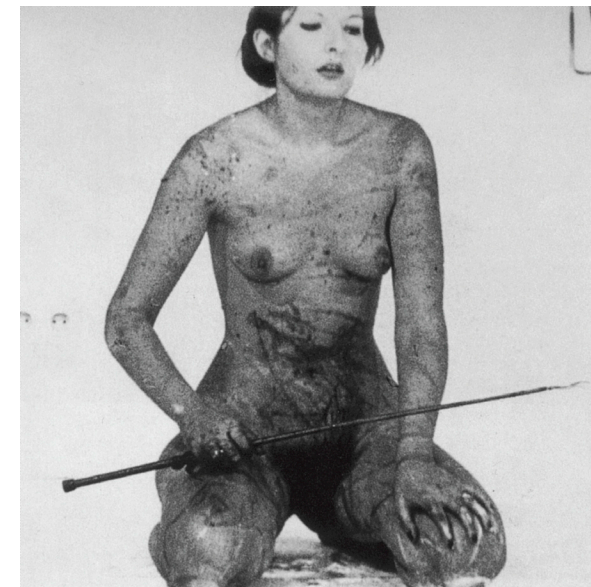
It is not that the gesture of piercing my own body with a butterfly needle and extracting blood is "shocking" or "extreme." Squeamishness towards needles aside, *LCCW* is rather benign as performance art. Artists such as Marina

Ana Mendieta. *Untitled (Death of a Chicken)* (1972). Performance.



Abramovic, Orlan, Chris Burden, Ana Mendieta and countless others extend the possibilities of bodies in far more painful and voluminously bloody public performances. Ron Athey famously ignited anxieties specifically about the spread of HIV when, in 1994 at the Walker Art Center, he tattooed a performer and suspended bloodstained tissues above the live audience. Although there was no danger to the public, battles over the appropriate disbursement of NEA funding ensued. Ritual, catharsis, taboo and the sacred all figure strongly into the work of these performance artists. The art context, as an institutional framework and a public space, can be the stage of conflicting biopolitical agendas. Bodies and biota are spatialized and configured according to what anthropologist Mary Douglas calls "a systematic ordering and classification of matter," and that which is a "contravention of that order" is threateningly ambiguous (Douglas 2002, 44). Such "matter out of place" (art, questionably pathogenic blood, fluids, weeds), is managed through the symbolic system of taboo, which "confronts the ambiguous and shunts it into the category of the sacred" (Douglas 2002, xi). The sacred space of ritual and ceremony is the designated site within the symbolic system that a subject becomes, according to anthropologist Victor Turner, "undifferentiated raw material" (Turner 1967, 98)—an ambiguous figure undergoing

Marina Abramovic. *The Lips of Thomas* (1975). Performance.



cathartic transformation. In the sense that the “shock of the new” is a ritual under modernity, the contemporary art context is such a designated sacred space as it explores, exposes and reconfigures the taboo, especially within performance art. In making explicit the perimeters of normalcy and comfort, the performance of the taboo and the dramatization of ambiguity offer the catharsis of transgression within the delimited zone of art exhibition.

LCCW, on the other hand, confronts ambiguous “matter out of place” and shunts it into the category of the everyday by de-sensationalizing the act of opening up the body. The sanctioned, medicalized action of drawing blood is appropriated, displaced and recontextualized within the quotidian activity of plant cultivation. During the incident at RPI, *LCCW* worked to blur boundaries among public space / private space / laboratory, where permeable human bodies, microbes and vegetal matter all circulate. *LCCW* was not a sensational transgression of taboos and the sacred *per se*. Instead, it embodied a kind of relational aesthetic (cf. Bourriaud 1998; Bishop 2004) of “matter out of place” by serving as “the linking element, a principle of dynamic agglutination” (Bourriaud 1998, 21) in the realm of human / microbial / social relations. *LCCW* engages the relational aspects of biopolitics by giving rise to anxieties about the containment of bodies, fluids and infections. Yet once the situation is empirically analyzed, these fears may have little to do with actual dangers. The contained, potted dandelions in the lobby may be no different from having sanitary napkin disposal units in the restrooms. But the dandelions disrupt the spatial circulation of risk. There is an ambiguous spectrum of response to risk that ranges from paranoia to precaution to harm reduction

to complacency. Biosafety regulations represent the decisions made along this ambiguous spectrum about the equally tenuous

Opposite: *Life Cycle of a Common Weed* (2008).
Multispecies Salon, Playspace
Gallery, San Francisco, CA.

boundaries of public and private bodies. I began to see *LCCW* less as a closed, private transaction between the plants and me, and instead as a site for the private and public to converge and make apparent the biopolitics of boundaries and relations. It is a space where we can scrutinize ambiguity, sift through and analyze fear. It is a site for a post-Pasteurian revision of the outbreak narrative in order to contend with each other, microbial actors and vegetal cohorts as we circulate through public and private space. I decided it was important to invite other bodies into this system of circulation. *LCCW* then became another transaction, one in which the public is solicited to fertilize the dandelions with their blood in exchange for dialogue, dandelion root tea, and seedlings.

The first public enactment of *Life Cycle of a Common Weed* took place at the Multispecies Salon in San Francisco, as part of a panel and art exhibition



organized by Eben Kirksey and Marnia Johnston at the fall 2008 American Anthropological Association conference. After serving dandelion root tea and sharing information on the cultivation and consumption of the nutritious weed, I invited members of the audience to fertilize pots of live dandelions with their blood. Licensed venipuncture, performed either by me or by a nurse, was out of the question due to the lack of liability insurance. Instead, I provided each of the ten volunteers in the audience with over-the-counter supplies of the variety used by diabetics to measure glucose: a sterile lancet and a spring-loaded launching device. I demonstrated the technique of massaging the fingers to increase circulation to the tips, cleaning off the skin with an alcohol wipe, administering the lancet and squeezing a few drops of blood into a small cup of water to properly dilute the potent substance. When the lancet sprung and I squeezed out a dark droplet of blood from the tip of my finger, there was a curiously quiet tension in the crowd and a frightened sob from a small child. As I led the volunteers through the procedure, anxiety and anticipation within the crowd commingled with uncertain, skeptical judgments and the jovial generosity of the participants, many giggling through this unfamiliar activity. My own nonchalance was challenged as I vigilantly watched each of the volunteers to ensure they were not making a mess out of things. To de-sensationalize the procedure was the goal, not to normalize or be complacent about the very real potential for infection if certain protocols were not followed. One audience member who had originally volunteered declined after seeing that everyone had to have individual plastic launching devices and plastic cups. She wanted to share with someone else to reduce the carbon footprint of the fertilization. Of course I would not allow it, as there is a place for waste when it comes to establishing hygienic boundaries to prevent sharing blood-borne pathogens. Once all the volunteers had squirted

their drops of blood into the cups and packaged up their tiny wounds, I poured all the individual collections of blood together into a single cup, and poured it unceremoniously into a pot of dandelions. The action was utterly noncathartic. The dialogue it generated, however, was distributed and enduring.

The dandelions I had shown at RPI brightened my studio for several months, bringing gnats with them, and served as my venipuncture practice beneficiaries until they were negligently abandoned during a holiday and starved. As for the dandelions of the Multispecies Salon, some of the plants were littered by the roadside as their pots were reclaimed for other uses, others were taken home and died of root rot, and some of the dandelion roots were taken to a Pomo Indian reservation to spread the word about the healthful benefits of toasted dandelion root tea...

Anxiety as a Political Tactic

As a collective activity, drawing out blood from our bodies and feeding it to weeds facilitates lateral transfers on several different levels, including communication, contagion, interspecies material minglings and incorporation. The disruption of bodies facilitates other disruptions—subjective disturbances that place us in a zone of uncertainty and anxiety, which I argue is a productive liminal space. *LCCW* enacts a being-in-the-world that acknowledges its fluidity and communicability, facilitating a transaction that follows art critic Grant Kester's "dialogical aesthetic" that locates "meaning 'outside' the self; in the exchange that takes place, via discourse, between two subjects. Moreover, the identities of these subjects are not entirely set, but rather, are formed and transformed through the process of dialogical exchange" (Kester 1999, 6). The communicable elements of *LCCW* are thus indistinguishably material, conceptual and time-based.

Venous blood is not an excretion or a secretion but a bodily fluid associated with disruption (here I am observing the categorical and chemical distinctions from menstrual blood (Farage & Maibach 2006, 150-160)). Our bodies must be disrupted in some way in order to facilitate its flow. The mythic associations with blood are stripped of their magic in *LCCW* ruptured blood is not spilled on an altar or strewn all over the place, but recycled into the routine of gardening. Human blood is functionally identical to the blood meal by-product of meat consumption used for centuries in the cultivation of plants as a nutritious fertilizer. Yet blood is not a by-product in *LCCW*, it is an intentional extraction that inevitably maintains its symbolic layers. In this way, there is a lateral material transfer of human matter to-be-incorporated into plant matter to-be-incorporated into human matter that

describes the functional fluidity of interspecies comestible encounter.

This intentional gesture is disproportionate to the scale of the system, and emphasizes the operational poetics of the artwork. An aesthetics of pathetic absurdity pervades *LCCW*, encapsulating a genuine desire for transformation in the face of apparent insurmountability. I am not farming humans for dandelions, and a small prick from the finger is not quite equivalent to being uprooted, chopped, toasted and made into tea. Yet the absurd intentionality of extracting blood to feed a weed provokes conversation about the possibility of empathic interspecies encounter. Empathy describes a stepping-outside-of-oneself that enables an imaginative alter-subjectivity. *LCCW* encourages empathy for the dandelion through an excessively caring gesture of intentional blood transfusion. It imagines the dandelion as a reciprocal empathic subject that offers its own vegetal matter as a similarly disproportionate remedy for a diseased person within a vacuum of social responsibility and health care. Nevertheless, this transaction is not a utopia without antagonism, or inevitably becoming embroiled in the fruitful dialectic of consumption. *LCCW* also entails the eventual and complete destruction of the dandelion-as-autonomous-plant for its use as nutrition, exactly the dilemma of human exceptionalism and interspecies encounter problematized by Donna Haraway in *When Species Meet*: "Trying to make a living, critters eat critters but can only partly digest one another. Quite a lot of indigestion, not to mention excretion, is the natural result, some of which is the vehicle for new sorts of complex patternings of ones and manys in entangled association" (Haraway 2008, 31). The mutuality of these associations is what Haraway calls "becoming with," a departure from Deleuze & Guattari's more macho concept of "becoming."

One of the dyspeptic elements in the *LCCW* transaction is the viral matter *not* incorporated by the plants. The symbolism of the blood as a gift (rather than poison) persists because human viruses do not (so far) infect plants (Pokorny 2004). Viruses are actors in the interspecies evolutionary bramble, facilitating lateral genomic transfers across organisms in what microbiologist Lynn Margulis and writer Dorion Sagan describe as symbiogenesis, or the development of new species through the acquisition of entire, microbial genomes (Margulis & Sagan 2002). After the human genome was sequenced in 2003, endogenous retroviruses were found to account for 8% of the volume of human genetic material, as parasitic symbionts that laterally integrated with humans (Ryan 2004). These viral, non-living others are what anthropologist Stefan Helmreich describes as "alien to vitality yet enmeshed with it," as an antagonistic, relational becoming-with across the microbial fluidity of the ocean and animals:

In the baroque history of evolution, viruses have not only or merely parasitized organisms in which they have taken up tenancy but also laterally contributed—think tangled tree of life—to the genomes of those creatures, as viral material has been transduced into host DNA... Viral genes usher the liminal, putatively nonliving, into the genetic center of "life" itself. (Helmreich 2009, 192)

Helmreich reformulates Margulis and Sagan's "symbiogenesis" to propose a "symbiopolitics" to rethink the social relations of micro- and macrobial worlds. It is this liminal, unseen, exogenous other that I ask us to consider becoming with in *LCCW*. We are not battling disease, but enmeshed with it. Contagion is everywhere all around us as our permeable selves come into zones of proximity with each other and potential contaminations. In supervising the circulation of

the unseen within a fluid world, which boundaries do we claim? Which circuits do we block? Acknowledging the liminal presence of viruses and contagion is to dissolve the molar scale of plant-human transaction to the micro scale. Deleuze & Guattari argue that desire and contact, the force of "becomings," are "already molecular": "This principle of proximity or approximation is entirely particular and reintroduces no analogy whatsoever. It indicates as rigorously as possible a zone of proximity or copresence of a particle, the movement into which any particle that enters the zone is drawn" (Deleuze & Guattari 1987, 272-273). "Becoming molecular" is to become particulate in our interrelations, to frame social relations symbiopolitically. I formulated *LCCW* as a zone of proximity for material, corporeal transaction as well as for intersubjective empathic encounter and dialogical transformation. In these circuits of consumption and digestion, the audience itself becomes a medium within the artwork. The dialogical exchange vertiginously doubles as the audience is incorporated into the artwork, and the artwork only becomes realized within the material medium of the audience. The zone of proximity in *LCCW* enables a kind of "becoming endogenous," whereby the audience and the artwork become indistinguishable.

Both the disruption of boundary formations and the liminal presence of contagion produce anxiety. It maneuvers what Caroline Bassett playfully terms the "yuck factor" of conceptual art or "the *idea* you cannot stomach. This form of the yuck factor is a visceral response to a discursive construction" (Bassett 2006, 239). Artist and forensic scientist Teresa Margolles employs this tactic of anxiety in *En el Aire (In the Air)* (2003), in which delicately beautiful bubbles populate, float about and vaporize in the gallery. Childlike pleasure derived from the bubbles quickly vanishes when the viewer learns that the bubbles are made from the sanitized

water used to wash the dead in Mexico City's morgue.

During an exhibition opening at the Boston Center for the Arts Mills Gallery, the crowd lingered by the food table near the *LCCW* dandelions in a large, sculptural planter. Someone read the artwork label that lists "small quantities of human blood" among the materials, and said, "Oh there's blood in there. Maybe viruses." Someone else wondered aloud, "Where do you think the blood is?" People in the vicinity gently cupped their hands over their drinks, as if the blood had pervaded the air and fluid around them. In *LCCW*, there is anxiety produced by commingling as biotic material is eaten and transformed; anxiety produced by the potential of dialogue and empathy to initiate intersubjective alterations; and anxiety produced by the virus—the exogenous actor with unknown metamorphic potential. The destabilizing drive of anxiety has productive political potential.

I am more interested here in disruption as an artistic strategy rather than the catharsis of shock. The intention to shock is manipulative and aggressive, funneling the audience to one margin or another and narrowing the nuance of response. More often than not, the most interesting issues raised by shocking artworks are silenced because the audience is preoccupied with the emotional tumult of offense, the smugness of identifying with the naughty perpetrator, or disinterest because the artwork was not extreme enough. Polarization fails to recognize the tendency of individuals to waver, to be hypocritical and uncertain, to fail even amidst our best intentions, to be stumped. These are the messier aspects of behavior that we struggle to sift through and comprehend.

Certainly, *épater la bourgeoisie* is sometimes the necessary and effective approach,

and shock is measured with an entirely subjective Geiger counter. But for the insidiousness of everyday biopolitics, discomfort and ambiguity are richer political territory. Anxiety is a noncathartic feeling that has had no legacy of inspiring Greek tragedies, operas or epic novels. It is among literary theorist Sianne Ngai's taxonomy of "ugly feelings" that "could be said to give rise to a noncathartic aesthetic: art that produces and foregrounds a failure of emotional release (another form of suspended 'action') and does so as a kind of politics" (Ngai 2005, 9). In her analysis of anxiety, Ngai draws upon works by Alfred Hitchcock, Martin Heidegger and Herman Melville to trace the spatialization of anxiety not as a matter of interiority, but as a vertiginous in-between of unarticulated insides and outsides. The self-reflective agitation of anxiety, she argues with some contempt, has become the "distinctive 'feeling-tone' of intellectual inquiry itself" in the modern era (Ngai 2005, 215). Anxious intellectual inquiry turns rationality into an inconclusive oscillation. It is the antecedent to absurdity, which is similarly noncathartic in its complete suspension of reason and failure to cohere.

Artworks that reveal the boundaries of our anxiety without pushing us to one edge or another instead make us sit with ourselves, in a festering confusion, in order to bring us to a place for becoming-with. Although the artist has developed a site of potential with concern and responsibility, the resolution of intellectual inquiry becomes the task of the audience. The artwork may not facilitate satisfaction, does not give you the opportunity to absolve guilt, and may remain perpetually frustrating. But in precipitating anxiety and revealing layers of ambiguous emotions, the artwork opens a space of potential to confront uncertainty and form responsibilities in an embroiled world of permeable, distributed biota. Anxiety is illuminating.

Reciprocity and Alliance

Two days before another public

fertilization, this time as part of the exhibition at the Mills Gallery in the spring of 2009, I received an apologetic message from the curator, J., informing me that the event was canceled: "I just heard back from someone from the Department of Public Health that I contacted like two weeks ago, and it is illegal to handle human blood if you are not a certified nurse. And also an inspector from the Department of Public Health *must* be present. I'm really sorry, um, give me a call please. I don't know, maybe we can come up with a plan B." There was, of course, no time to make new arrangements. Naturally, I was confused, but not surprised. Perhaps I had not inspired confidence in him, because he had contacted the Department of Public Health (DPH) without my foreknowledge; therefore I do not know how the procedures were communicated to them. I had gone through biosafety trainings in multiple facilities and read the Cambridge and Boston laws on biohazard regulation. One does not have to be a registered nurse to draw blood, but simply a certified phlebotomist, which I am. Regardless, everything would be self-administered, directed by me, as I had detailed in writing a month prior to the event. It would be nearly identical to the fertilization in San Francisco, during which participants would voluntarily draw a few drops of their own blood using sterile materials typically used for glucose monitoring, purchased over the counter at any pharmacy. I would even go beyond current sanitation laws and dispose of the sharps at a special facility, rather than simply in a sealed plastic container in the regular garbage. I responded by asking, "could you please forward me any communications you have had with the DPH? Did they cite any specific code? I do not, by any means, wish to do any illegal activity or endanger anyone. Which is why I carefully researched these methods and

their uses. I am still unclear about what is specifically illegal about my proposal. I do not want to put you in a strange position or to fiercely challenge this disappointing news. However, seeing as I could have made other arrangements, I would at least like to know specifically why an RN and a public health official would be necessary."

Disappointed but optimistic, I imagined an interesting bureaucratic dialogue to emerge that might ensnarl public and private spaces, fluid trafficking and institutional unintelligibles. The evidence of this encounter might produce a tidy, nonsensical paper trail that could be framed and exhibited, like Gordon Matta-Clark's *Fake Estates* (1973) or Jill Magid's contract in futurity, *Auto Portrait Pending* (2005). Instead, J. admitted that his own anxieties about discussing the event with the non-profit board of the gallery had prevented him from discussing it at all. The blood fertilization was one potential liability among many in an exhibition that already contained frozen spit, fire code hazards, false alarms, a moving column, live plants, a sharp sword and suspended sculptures. He had simply gotten uneasy and, at the last minute, contacted the DPH. After discussing the procedure again, it was clear that nothing was illegal. He courteously gave me the option of proceeding with the fertilization, with the understanding that it would put him in a potentially "awkward" and jeopardizing position. In soliciting the advice of colleagues, I wondered how insistent I should be upon actualizing the event. Maintaining artistic integrity and professional compassion is, after all, a delicate performance. In the end we all agreed that despite the dangers of hitting a nerve in the institutional ganglia, *LCCW* was not just about laying bare the anxieties and micro workings of biopolitics in a fastidious dialogue between me and representatives of various institutions. Rather, this anxiety-producing zone

of contagion and proximity is the site of potential for intimacy, alliances and reciprocity. It necessitates the audience for its realization. I went ahead with the public fertilization at the gallery in the presence of J., collecting drops of blood from volunteers one at a time, including the curator himself. Some were nervous, others bold, and many carefully chose which of the dandelions in the planter looked like they needed the most attention.

The material and symbolic comminglings of the audience with the artwork can form shifting relations among the audience members themselves and with me, as the administrator of the gesture. Giving blood has a symbolically rich history linked to nation-building (Titmuss 1971; Starr 1998; Waldby & Mitchell 2006) and international acts of solidarity during moments of great catastrophe. The overwhelming response of blood donation after the events of September 11, 2001 in New York attests to the identification of self within the substance of blood—the gift of one's own vitality for another—as opposed to other "abjects" such as hair, urine, placenta, etc., which as "waste" do not nobly carry the specter of the donor (Waldby & Mitchell 2006)—except, perhaps, the specter of its own abjectness. This "already alien" characteristic of abjects makes them more easily commodifiable, although symbolically weighty substances such as blood, organs, eggs, umbilical cord blood, etc. are equally entrenched in global circuits of commerce that belie the notion of the "gift" (Scheper-Hughes 2002; Waldby & Mitchell 2006; Landecker 2007; Cooper 2008). Urine is as nitrogen-rich a fertilizer as blood. Artist Jae Rhim Lee played with this concept in *N=t=NPK=KIMCHI=N* (2006). Lee optimized her diet to excrete a maximum of plant nutrients in her own urine, which she diluted and fed to napa cabbages, from which she made kimchi and fed to the public. Lee opens up the

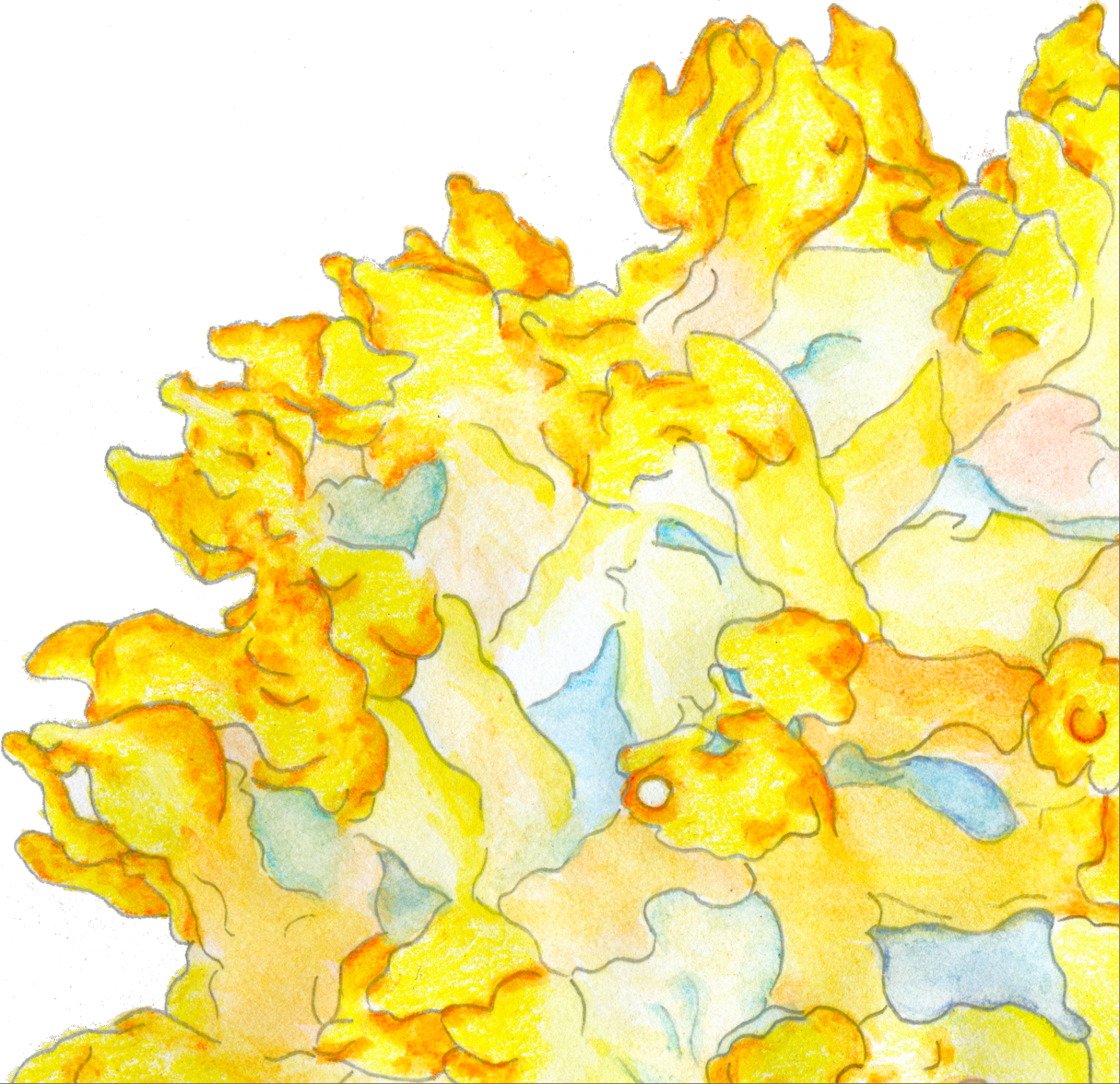
transformative potential of abject waste, but the question of intersubjectivity does not figure into this substantive encounter as it might with blood. For the act of giving blood can facilitate social transactions and alliances outside of hereditary "blood bonds," however ephemeral (cf. Weston 2001).

Narratives of altruism and civic participation, which bestow virtues upon the giver, promote the extraction of blood even if, as Catherine Waldby and Robert Mitchell's (2006) extensive analysis of Titmuss's *Gift Relationship* shows, the National Blood Service's process of fractioning blood "maximized the use value of the donation but also diluted its ontological and civic value, making it more like a pharmaceutical substance and less like a gift from one citizen to another" (Waldby & Mitchell 2006, 43-44). Yet this does little to change the dynamics of blood donation on the supply-side, as powerful imagery of the gift relationship persists. Anthropologist Steffen Dalsgaard, in his study of blood donation in Denmark (2007), is interested in what keeps people coming back to maintain a stable base of blood donors, or what he calls "strategies of reciprocity." In the absence of a one-to-one transaction of whole blood to a patient in need, and excepting moments of crisis like 9/11, what maintains donors' motivation? Dalsgaard identifies how a connection is established with the grateful and hospitable nurses, who acknowledge donors as whole beings, provide treats such as juice and chocolate, and serve as surrogates of reciprocity by accepting the blood donation. Reception of the blood is critical, Dalsgaard argues, because "the donor is accepted when his or her gift is accepted, and a certain degree of reciprocity is intrinsic in the acceptance and reception itself. This is why it is said that giving is a gift in itself" (Dalsgaard 2007, 112). The human staff that constitute the medical arena are the symbolic and material mediators of fluid

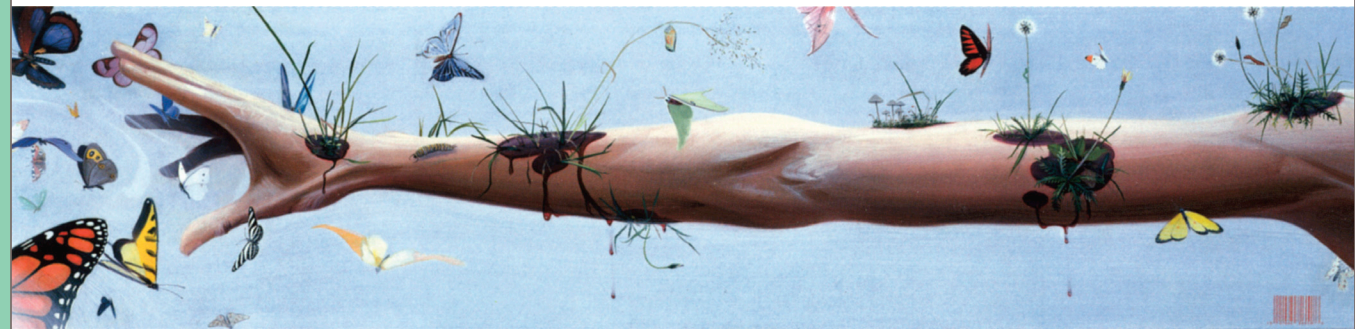
transfers enabled by technoscientific advances. In a philosophical account of his own liver transplant precipitated by hepatitis C, Francisco Varela describes the entanglement of the medical "team," the technoscientific stewards, with his own embodied experience and the offered body, the organ that "came tumbling down a complex social network from a recently dead body to land into my insides in that fateful evening of June 1" (Varela 2001, 260).

As the artist of *LCCW*, I am the agent of reciprocity between the public and the dandelions. My role in creating a safe, welcoming environment and clear, methodical instruction helps to establish trust. Pedagogy is integrated into the activity itself, showing-by-doing requisite biosafety procedures, explaining the mutually nutritious properties of blood and dandelions, and allowing ample opportunity for questions and discussion among the participants. Some are more interested in blood as a fertilizer, others more interested in dandelions as medicine, and still others want to identify all potential pathways for a multiplicity of viral infections. It is a dialogical encounter initiated by the audience's altruism to accomplish my artistic intentions. Like the staff at Dalsgaard's bloodbank, I am the agent of reciprocation, acknowledging each member of the audience as a whole person, accepting the gift of their participation, engaging in dialogue, and giving them dandelion root tea, recipes or seedlings to take home and cultivate. This public encounter forges an alliance—however temporary—among me, the audience, the artwork, and the social issues to which the artwork alludes. In a continuing cycle of reciprocation, the audience cultivates further, unanticipated layers of meaning, dialogue with others, and everyday encounters with microbiopolitics.

I have reports that some of the dandelion seedlings from the exhibition are sprouting and continue to be nourished with human blood at home. The dandelions in the planter, most of which were bought from an Italian farm and had new, tender taproots, were taken by friends to the 34th floor of an apartment building overlooking the Boston harbor. They were mixed with wild dandelions dug up around Cambridge, which likely infected the whole planter with gnats. The hosts fought with the gnats for weeks before surrendering and said, "the gnats! At a conceptual level, they add a nice twist to the art work. The dandelions are fed with the blood, and this whole community of gnats lives with the dandelions. And then we go to war with the gnats, so this biohazard symbol becomes an inter-species battlefield..."



From Embodiment to Evaporation



A dynamic energy sweeps across

the narrow horizontality of Frank Moore's painting *Release* (1999) to arrive at an outstretched hand that commands a flurry of colorful butterflies. An extended arm grounds the horizon line, suspending a budding platform of verdant earth within a limitless uniformity of blue sky. Where pools of blood have erupted from the skin, scrawny weeds sprout and bloom: wild grasses, mushrooms, dandelions. *Release* was part of an exhibition curated for Visual AIDS by Barbara Hunt McLanahan. She shared the catalogue with me in 2004, one year after Moore had died of AIDS at age 48. *Release* is a sweet *memento mori* that foretells how the earth will accept the stigmatized, virally infected blood and body in death, and regenerate new life from it. To me it spoke of self-acceptance mixed with the unflinching sting of being captive in one's own body, a fleshy container for blood that circulates a force of life and a force of death at one and the same time.

Release stirred in me the desire to address the complexity of living with viral disease. I was weary of the machismo, militancy and heroism that pervade the languages of medicine and activism. Conquests, cures and noble battles seem to

Above: Frank Moore. *Release* (1999). Oil on canvas on wood panel. 22.6 x 95"

be the only socially acceptable forms of dealing with disease. You are supposed to keep your chin up, maintain a positive outlook, yell and scream for justice when necessary, and be grateful for the lessons it teaches you. There is little room for humor, banality and the plain admission that it just sucks. Disease is not glamorous or heroic.

I countered these engrained social behaviors with sentimentality and domesticity in a series I called *Tea Party to Befriend a Virus* (2006-2008) in which I produced kitschy sculptures of food, clothing and shelter based on the geometric architecture of the viral capsid of hepatitis C. A strong component of this series is its interface with the public. Each material element is a conversation piece that structures a tea party, during which I am hostess to sprawling dialogue that is actively productive yet ephemeral. The tea parties are not utopias but what Nicholas Bourriaud calls concrete spaces and social interstices, where what is produced "is relations between people and the world, by way of aesthetic objects" (Bourriaud 1998, 42). The tea parties are more than just relational aesthetics. They include an unstructured politics and casual pedagogy by making room for laughter and offering myself as an information source and person through whom to identify the virus. The informality of the encounters is unsettling to some who prefer the clear demarcations of performer / audience, but the noncathartic discussions are subtle and enduring. I do not provide a donation bucket to benefit research for a cure; a gesture of buying social responsibility that has become automatic and instantly gratifying. Instead, I ask for the audience's time, devoted towards dialogue. Some resist, some relish, some abstain, and others replicate. In this way, the audience becomes part of the artwork, and the art itself is ingested, inhabited and incorporated by the audience. The audience

Opposite: *Tea Party to Befriend a Virus* (2007-08) Transforming the protein structure of the hepatitis C virus into a site for shelter & discussion, Gallery 400 Chicago.



Viral Confections (2006). Chocolates shaped into the molecular protein structure of the hepatitis C virus. 2 x 2 x 2"



Viral Shelter (2007-08). Geodesic dome, painted wood & gold organza. 12 x 12 x 6'

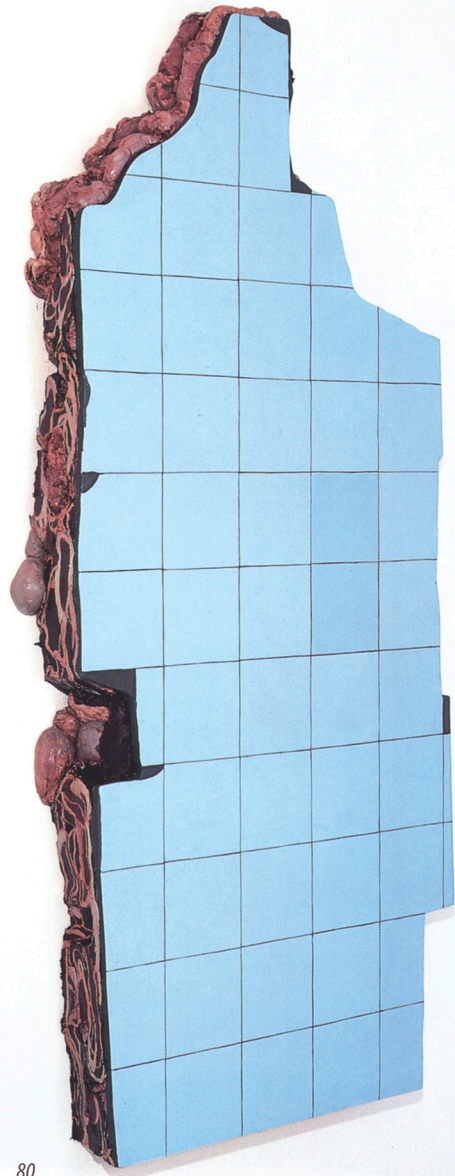


commingles and merges with the virus through metaphor and knowledge sharing.

A similar mechanism of ingestion occurs in my subsequent work *Hepatophagy* (2008). *Hepatophagy* is an artist's multiple commissioned by the Whitney Museum's "Initial Public Offerings" series. An audience of over 150 people were invited to partake of my body in the form of miniature chocolate replicas of my liver, cast from a 3D MRI and served on a porcelain coupe plate. Although it is just chocolate, the form of the liver creates a moment of disjuncture, when you connect it to the person from whom it materialized, through digital fabrication. It is a metonym for my internal viscera in this miniature, edible form. It is a moment that amplifies the coexistence of pleasure and a transgression of corporeal boundaries that is present in both cannibalism and eroticism. The multiplicity of mouths consuming my liver mimics the slow gnawing destruction of liver disease. In this way, the seductive materiality of the form solicits the activation of an experience that is slightly grotesque, diseased and taboo.

I appropriated the style of Dutch delftware porcelain to illustrate the coupe plates with a self-portrait of autosarcophagy. The illustration refers to the depictions of Brazilian Tupi practice of cannibalism, which were sensationalized by Hans Staden, a Dutch explorer in the 16th century and formed an essential part of the narrative of European conquest. Chocolate, like porcelain, is a component of colonial exchange. The name *Hepatophagy* refers to eating the liver and also makes homage to the 20th century Brazilian concept of cultural hybridity and *antropofagia* in art, articulated by Oswald de Andrade's *Manifesto Antropófago* (1928). In *Antropofagia*, colonialism and Western hegemony are devoured, digested and excreted into new forms of art and abjection. It is interesting to note here





the binding of emotions, digestion and expulsion in the term *catharsis*: according to the Oxford English Dictionary, its root meaning from the Latin is “purgation of the excrements of the body; esp. evacuation of the bowels,” prior to its use as “the purification of the emotions by vicarious experience” (Simpson et al, 1989). Reading into this etymology and de Andrade’s manifesto, we can see how hybridization is itself a cathartic process. *Hepatophagy* references hybrid cultures as well as hybrid material art forms in which the presence of the artist’s body comes together with the presence of the audience’s bodies in an aesthetic-material encounter.

In his controversial memoir *Keep the River on Your Right* (1969), American Tobias Schneebaum shares his Spanish friend Manolo’s erotic fantasy of being cannibalized by natives where they live in the jungles of Peru, a fantasy that is eventually realized. For Manolo, the violence is foremost about love and energy:

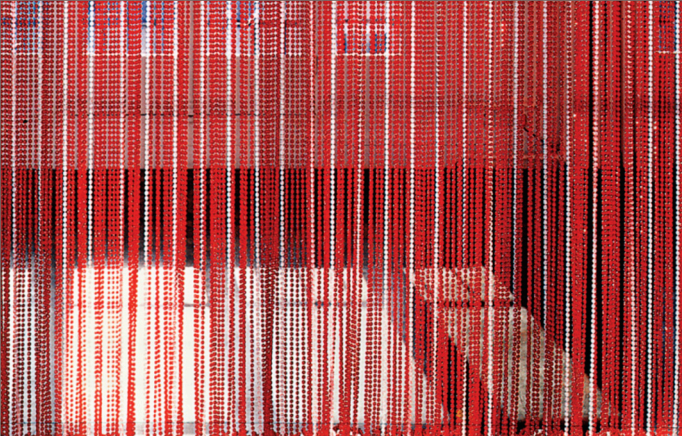
Left: Adriana Varejão. *São Paulo jerked-beef ruin* (2000). Oil on wood and polyurethane. 14 x 168 x 69.5 cm

I’ve always wanted myself to be really useful in some way, and frankly I’d have liked it to be in a loving, sensual way, almost in the way that the body of Christ is used in communion, and filling souls with love. I want, for a change, instead of someone else filling me with love, for me to fill someone completely, even if it literally means that my flesh and blood must enter into another body... I’ve had dreams of my body being eaten by men and it thrilled me in such an indescribable way that I had an orgasm... (Schneebaum 1969, 149)

Manolo’s fantasy mirrors the regenerative energy of Moore’s *Release*, but the communion takes place within human bodies rather than with the natural world. He insists upon fleshy presence when he tells Schneebaum to burn his notebooks because he prefers “to live in a friend’s memory, rather than on paper” (Schneebaum 1969, 1954). This dialogical and antagonistic energy (communion / anthropophagy

Right: Valeska Soares. *Untitled (from Intimates)* (1994). Wooden ex-voto, fabric and vaseline. 72 x 12 x 30”





Top to bottom: Félix González-Torres. *Untitled (Blood)* (1992). Plastic beads and metal rod. *Untitled (Lover Boys)* (1991). Cellophane-wrapped blue-and-white candies, endless supply, ideal weight 355 lbs. *Untitled (Public Opinion)* (1991). Cellophane-wrapped black licorice candies, endless supply, ideal weight 700 lbs.



/ encounter / ingestion / contamination / transaction) stems from a desire to connect and merge with others in ways that are indistinguishably sensual and conceptual. This current dominates my practice. It has been strongly informed by artists of the Latin Americas equally inspired by de Andrade, such as Lygia Clark, Valeska Soares, Lygia Pape and Adriana Varejão, among others. Their visually arresting works reach out to viewers by directly interacting with them (Clark), seeping out of their frames (Varejão), liminalizing risk (Pape) and sensualizing shared space with fragrant and leaky materials (Soares).

Félix González-Torres engages this anthropophagic metonym of the body and pleasure with his portraiture in the form of mounds of candy. *"Untitled" (Loverboys)* (1991) is an endlessly replenishable ready-made pile of candies, with an ideal weight of the combination of the artist's weight and that of his lover. González-Torres solicits viewers to eat the pile one by one. The swirling blue candies allude to erotic union. Not just the homoerotic union of two lovers, but also the body and appetite of the viewer. The activation of the artworks, their progressive diminution as people consume the candies one by one, is necessary to their resolution within the bodies of the participants themselves. The solicitation is a seduction, and the activation of the artwork is an erotic transgression of corporeal boundaries. He says, "It's a metaphor... I'm giving you this sugary thing; you put it in your mouth and you suck on someone else's body. And in this way, my work becomes part of so many other people's bodies. It's very hot. For just a few seconds, I have put something sweet into someone's mouth and that is very sexy" (Spector 2007, 147, 150).

However, the loneliness and weight of contested politics foreground the ef-

fortlessly consumable and pleasurable works of González-Torres. The piles of candy enact loss. "Untitled" (*Blood*) (1992) is sparkles and sadness in the implicit presence of HIV. The gleaming blackness of an imposing 700 pounds of licorice candy in "Untitled" (*Public Opinion*) (1991) speaks to the bittersweet antagonisms of interfacing with the public and negotiating personal politics. Like the work of González-Torres, my work begins from a very personal place and extends out into the horizons of social-political dialogue. The presence of our own bodies is an essential agent to make the work political. Unlike González-Torres, whose work Bourriaud says "assaults neither eye nor feelings" (Bourriaud 1998, 63), I like to inject a little anxiety and discomfort into my work. Perhaps it is a lingering effect of feminism that makes me insist on not giving it all up. I want a little something back from the audience—a transaction—and I do not want to deliver what is expected. Many times people have suggested that I get my message across about hepatitis C by blaring the sad facts of an ignored epidemic and representing the virus as something hideous, threatening and foul. Yet it is exactly this form of representation that I resist. Already viruses are represented in this cliché format. I am interested in the other possibilities of encountering viruses, chronic disease and social stigma. I prefer gold organza, silk and chocolate. Just the idea of infection is enough sometimes.

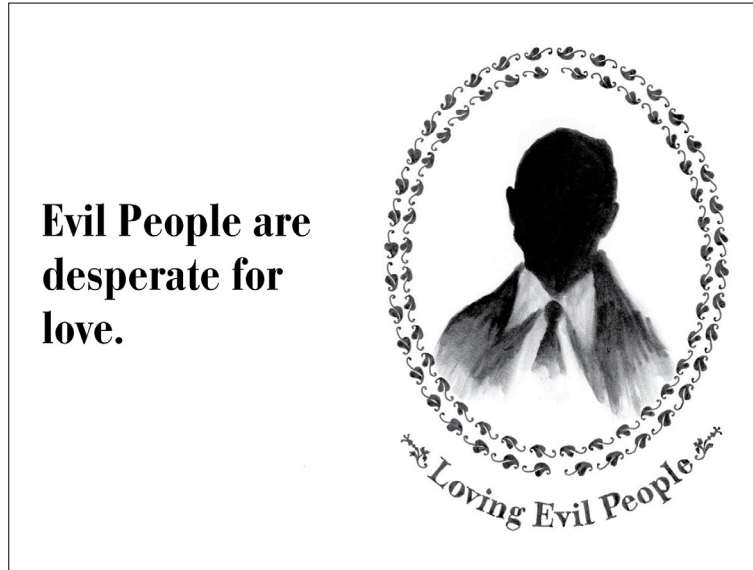
Yet all this presence and personal politics can be exhausting. Making one's self an instrument of the artwork makes criticism all the more targeted and direct. More than aesthetic objects placed in space and even more than performance art with a live audience, I had intimate dialogical encounters with my audiences. I offered my self and my story to the audience for questions and information, and I received in exchange the energy, stories and opinions of

others. I saw it as an effective way to reach a generalized audience and inspire conversations in public that are otherwise kept very private. It was not just about awareness, it was about rethinking modes of relation to biota and each other. Although this tactic was largely successful and resulted in numerous rich encounters and media attention, it made me vulnerable. It is difficult to be a spokesperson for things we like to ignore. Admittedly, I felt my gesture was naïve at times, encouraging humble forms of social responsibility by asking for little more than conversation about silent epidemics, when the United States invasion of Iraq left over a million people dead and garnered little popular outcry. During a residency at the Skowhegan School of Painting & Sculpture, I produced videos that spoke to this feeling of political incapacitation in the face of capitalism and brutality, *The Marshmallow Suicide* and *Marshmallow Crash* (2008). I found respite in being pigeonholed as "Marshmallow Girl," because it certainly outclassed my previous moniker, "Hepatitis Girl."

Most tedious of all perhaps was the insinuation that my projects were a kind of personal psychotherapy. Once, when I answered this suggestion by saying that talking about myself was an exhausting and difficult exercise from which I gained nothing, the critic wryly replied, "isn't that exactly what therapy is?" I designed the artworks as social interstices by which to access millions of other people and a field of political issues, with my self and the aesthetic objects as the central agents. The appetite for lurid details and the desire to psychoanalyze artwork through the biography of the artist was, at times, deflating. I had to defend hepatitis C in my artwork only to have to defend myself from it in daily life.

Despite these doubts, many insisted that I continue making the work, because

Loving Evil People (2008). Folding black & white brochure. 4.25 x 11"



no one else was. *Life Cycle of a Common Weed* (2007-2009) represents a shift in my practice, one in which I sought to prevent the audience from being sidetracked by me and focus more explicitly on issues of global importance. In a hapless attempt to form an empathetic alliance with a plant, I nourish the plants that nourish me. The initial response to the documentation of me drawing my own blood was so strong that I decided it must be done in public. I rejected the idea of sensationalizing the action by turning it into a live public performance. The intention, after all, was to make disruption seem prosaic. I thought that the natural progression of the scale would be from pots of plants to a community garden, and from a single person to many public bodies. An agent in the transaction, more emphasis is placed on the public and my story is no longer quite so central.



The Marshmallow Suicide (2008).
Performance for video, 8 min.
Production still: Monika Sziladi.

I carefully scouted Boston and New York for community gardens in neighborhoods of mixed income where injection drug use is significantly present, as hepatitis C is now mostly transmitted by sharing needles. I designed a large, sealed planter box in the shape of a baroque biohazard symbol in which to grow dandelions for the treatment of liver disease. Inspired by the testings for HIV and hepatitis C held in public art spaces by artist Eric Avery, I planned to hold a public garden feeding and hepatitis C testing in collaboration with healthcare professionals. From the blood drawn, the audience would be invited to fertilize the plants. Dandelion root tea and educational materials would be offered. The action was designed to gain visibility for hepatitis C among the affluent with the privilege to mobilize, and equally among community members who share the same city streets and yet who are more vulnerable to injection drug

use and the spread of communicable disease. The action would create a site for the private and public to converge; a space to encounter and analyze fear.

Negotiating such a space proved extremely tricky, although I did receive support from Le Petit Versailles, a privately owned, street-accessible garden in the Lower East Side with a history of exhibiting radical, queer artwork. Then there was the question of who would pay for the tests (unlike HIV, free and confidential testing for HCV does not exist), and who would insure the healthcare workers from lawsuit. The more I researched the details of the event, the farther removed the project became from the original poetics of nourishing medicinal plants with infected blood. In discussing the work with my colleagues, the affluent with privilege could not understand why I wanted to target them and not the stereotypical profile of homeless junkies. There are many avenues to disassociate from a social problem. They encouraged me to focus on providing a service for an affected population, rather than democratizing social responsibility and ushering quieted subjects into the public art context. I decided to drop the public testing to concentrate instead on pooling the blood of multiple bodies in one site for a communal, anthropophagic encounter. This is the release, the regeneration, the sweet death of Frank Moore's painting.

I ask a lot of the audience. Not only do I ask for their time, I ask for their trust, and I ask for their blood. Intimate dialogue is a natural consequence of this interface. In turning the emphasis upon the multiplicity of bodies, the fluid becomes more mysterious, unknown and communal. Rather than a particular body, the permeability among bodies is presented. I sought to animate this destabilizing dispersal of bodies in two following works, *Traces* and *Transfers* (2009).

Opposite: *Traces* (2009). Powder-coated aluminum, kidney cast in frozen spit from a 3D MRI. 8 x 8 x 4"



Traces is a renewable sculpture of my disembodied kidney, cast in frozen spit. Every two hours a new frozen organ is refreshed, cupped in my hands cast in aluminum, only to melt and drip away. The last ends of the kidney slip onto the floor, and a wet mess remains. I materialized the kidney by laboriously tracing the topography of my internal organ from a 3D MRI, consisting of hundreds of sequential medical images. I conceived of *Traces* as a poetic deterritorialization of medical biotechnologies, organs without bodies and fleshy displacements. It calls attention to the alienability of body parts and the vast global industry that sustains the promise of an infinitely repairable body. *Transfers* depicts two performers transferring one full pitcher of milk through the interface of their mouths, to fill an empty pitcher. The action repeats when the first pitcher is emptied and the other is full. This simply choreographed performance evokes tender embraces and the nurture of milk. Yet the transfer of fluids from mouth to mouth and back again adds a layer of repugnance, gently pushing the boundaries of bodily transactions and emphasizing the infinite transferability of biotic material.

In these works, my presence is further diminished and literally evaporates into suggestions and grimy traces. It is an approach, I hope, that is no less political, but more dynamically poetic. My practice joins the questions of locating the interactions of subjectivity with permeable, distributable bodies. Through quiet, viral pathways, the work enters indistinguishable orifices and without much spectacle, it becomes present. It leaks its way in to spaces of domesticity / the public / academia / digestion / medicine / waste. By gently contaminating these sites with bodily fluids, material transformations and metaphorical exchanges, the work (re)negotiates corporeal boundaries. The anxiety produced by this vertiginous deterritorialization becomes a productive

Opposite & following: *Transfers*
(2009). Video stills. High definition
video, 30 min looping, silent.





space for empathy, dialogical encounters and pre-articulate political agencies. The work finds its way in to the bodies of the audience, resolving the material and conceptual transfer to create a third space in which the boundary between the artwork and the audience is itself permeable and indistinct.

Works Cited

- Balch, Phyllis A. and James F. Balch. 2000. *Prescription for Nutritional Healing*. New York: Avery.
- Bassett, Caroline. 2006. Yuck factor. In *Sensorium : Embodied experience, technology, and contemporary art.*, ed. Caroline A. Jones. 1st MIT Press ed., 238-240. Cambridge, MA: MIT Press.
- Bishop, Claire. 2004. "Antagonism and Relational Aesthetics." *October*(110): 51-79.
- Bourriaud, Nicolas. 1998. *Esthétique relationnelle [Relational Aesthetics]*. Dijon: Les Presses du réel.
- Brill, Steve, and Evelyn Dean. 1994. *Identifying and Harvesting Edible and Medicinal Plants in Wild (and not so wild) Places: [the essential guide to finding and using delicious wild edible plants for nutrition and better health]*. New York: Harper Collins.
- Bynum, Caroline Walker. 2007. *Wonderful Blood: Theology and practice in late medieval northern Germany and beyond*. Philadelphia: University of Pennsylvania Press.
- Carr, Anna, William H. Hylton, Claire Kowalchik and Rodale Press. 1998. *Rodale's Illustrated Encyclopedia of Herbs*. Emmaus, PA: Rodale Press.
- Conticelli, Valentina. 2001. "Sanguis Suavis: Blood between microcosm and macrocosm." In *Blood: Art, Power, Politics, and Pathology*, eds. James M. Bradburne, James Clifton, MAK Frankfurt and Schirn Kunsthalle Frankfurt, Munich, New York: Prestel.
- Cooper, Melinda. 2008. *Life as Surplus: Biotechnology and capitalism in the neoliberal era*. Seattle, WA: University of Washington Press.
- da Costa, Beatriz and Kavita Philip. 2008. *Tactical Biopolitics: Art, activism, and technoscience*. Leonardo. Cambridge, MA: MIT Press.

Dalsgaard, Steffen. 2007. "'I Do it For the Chocolate': an anthropological study of blood donation in Denmark." *Distinktion: Scandinavian Journal of Social Theory* 14: 101-17.

Deleuze, Gilles and Félix Guattari. 1987. *A Thousand Plateaus* [Mille plateaux]. Minneapolis: University of Minnesota Press.

Douglas, Mary. 2002; 1966. *Purity and Danger: An analysis of concepts of pollution and taboo*. London ; New York: Routledge.

Farage, Miranda A., and Howard I. Maibach. 2006. *The Vulva : Anatomy, physiology, and pathology*. New York: Informa Healthcare.

Fears, Darryl and Jose Antonio Vargas. 2009. "HIV/AIDS rate in D.C. hits 3%." *Washington Post* (March 15, 2009): A01.

Foucault, Michel. 1976. *Histoire de la sexualite*. Bibliothèque des histoires. Paris: Gallimard.

Gade, Daniel W. 1991. "Weeds in Vermont as tokens of socioeconomic change." *Geographical Review* 81, (2) (Apr.): 153-69.

Haraway, Donna Jeanne. 2008. *When Species Meet*. Minneapolis: University of Minnesota Press.

Hauser, Jens, and FACT (Great Britain). 2008. *Sk-interfaces : Exploding Borders: Creating membranes in art, technology and society*. Liverpool: Liverpool University Press.

Helmreich, Stefan. 2009. *Alien Ocean: Anthropological voyages in microbial seas*. Berkeley: University of California Press.

Kac, Eduardo. 2007. *Signs of Life: Bio art and beyond*. Cambridge, MA: MIT Press.

Kershaw, Sarah. 2009. "For teenagers, hello means 'How about a hug?'" *New York Times*

(May 28, 2009): A1.

Kester, Grant. 1999. "Dialogical Aesthetics: A critical framework for littoral art." *Variant Supplement*(9).

Kiely, Timothy, David Donaldson and Arthur Grube. 2004. *Pesticides Industry Sales and Usage: 2000 and 2001 Market Estimates*. Washington, DC: U.S. Environmental Protection Agency.

Kim, Jim Yong, and Paul Farmer. 2008. "Global Issues in Medicine." In *Harrison's Principles of Internal Medicine*, eds. Anthony S. Fauci, Tinsley Randolph Harrison. 17th ed. New York: McGraw-Hill Medical.

Knox, Richard. 2009. "WHO declares swine flu a pandemic," *All Things Considered* (June 11, 2009). National Public Radio.

Landecker, Hannah. 2007. *Culturing Life: How cells became technologies*. Cambridge, MA: Harvard University Press.

Latour, Bruno. 2005. *Reassembling the Social: An introduction to actor-network-theory*. Oxford; New York: Oxford University Press.

Mack, Richard N. 2003. "Plant Naturalizations and Invasions in the Eastern United States: 1634-1860." *Annals of the Missouri Botanical Garden* 90, (1) (Winter): 77-90.

——— and Marianne Erneberg. 2002. "The United States Naturalized Flora: Largely the product of deliberate introductions." *Annals of the Missouri Botanical Garden* 89, (2) (Spring): 176-89.

Manos, M. M., W. A. Leyden, R. C. Murphy, N. A. Terrault and B. P. Bell. 2008. "Limitations of conventionally derived chronic liver disease mortality rates: Results

of a comprehensive assessment." *Hepatology* 47, (4) (Apr): 1150-7.

Margulis, Lynn and Dorion Sagan. 2002. *Acquiring Genomes: A theory of the origins of species*. New York: Basic Books.

Martin, Deborah L., Grace Gershuny and Jerry Minnich. 1992. *The Rodale Book of Composting*. Emmaus, PA; New York: Rodale Press; St. Martin's Press Distributor.

Milesi, Cristina, Steven W. Running, Christopher D. Elvidge, John B. Dietz, Benjamin T. Tuttle and Ramakrishna R. Nemani. 2005. "Mapping and modeling the biogeochemical cycling of turf grasses in the United States." *Environmental Management*. 36, (3): 426.

Ngai, Sianne. 2005. *Ugly Feelings*. Cambridge, MA: Harvard University Press.

Omar Khayyám and F. York Powell. 1901. *Quatrains from Omar Khayyám*. Oxford: H.W. Bell.

Palmer, Laurie. 2008; 1994. "Dirt / Flood / Leaks." In *With Love from Haba: Essays and notes on a collective art practice.*, eds. Wendy Jacob, Laurie Palmer and John Ploof, 58-65. Chicago, Ill.: WhiteWalls: Distributed by University of Chicago Press.

Pandilovski, Melentie, Experimental Art Foundation (Australia) and Adelaide Festival of Arts. 2008. *Art in the Biotech Era*. Adelaide: Experimental Art Foundation.

Paxson, Heather. 2008. "Post-Pasteurian Cultures: The microbiopolitics of raw-milk cheese in the United States." *Cultural Anthropology* 23, (1): 15-47.

Pokorny, Kym. 2004. "Experts soothe worries about using bone, blood meal." *The Oregonian* (01/07/04)

Rabinow, Paul. 1996. *Essays on the Anthropology of Reason*. Princeton, N.J.: Princeton

University Press.

Robbins, Paul and Julie T. Sharp. 2003. "Producing and consuming chemicals: The moral economy of the American lawn." *Economic Geography*. 79, (4): 425.

Ryan, Frank P. 2004. "Human endogenous retroviruses in health and disease: a symbiotic perspective." *Journal of the Royal Society of Medicine* 97, (December): 560-5.

Scheper-Hughes, Nancy. 2002. *Commodifying Bodies*. London: Sage Publications.

Simpson, J. A., E. S. C. Weiner, and Oxford University Press. 1989. *The Oxford English Dictionary*. Oxford; Oxford; New York: Clarendon Press ; Oxford University Press.

Spector, Nancy, Félix González-Torres, Solomon R. Guggenheim Museum, Centro Galego de Arte Contemporánea, and Animation-Recherche-Confrontation. 2007. *Félix González-Torres*. New York: Guggenheim Museum.

Stanley, Autumn. 1993. *Mothers and Daughters of Invention: Notes for a revised history of technology*. Metuchen, N.J.: Scarecrow Press.

Starr, Douglas P. 1998. *Blood: An epic history of medicine and commerce*. New York: Alfred A. Knopf.

St. John, T. M. and L. Sandt. 2005. "The Hepatitis C Crisis." *Ethnicity & Disease*. 15, (2): S2,52-S2-57.

Titmuss, Richard Morris. 1972; 1971. *The Gift Relationship: from human blood to social policy*. New York: Vintage Books.

Turner, Victor Witter. 1967. *The Forest of Symbols: Aspects of Ndembu Ritual*. Ithaca, N.Y.: Cornell University Press.

- UNAIDS. 2008. *Report on the Global AIDS Epidemic*. United Nations Joint Programme on HIV/AIDS, <http://www.unaids.org/en/KnowledgeCentre/HIVData/GlobalReport/2008> (accessed June 14, 2009).
- . 2006. *Report on the Global AIDS Epidemic*. United Nations Joint Programme on HIV/AIDS, <http://www.unaids.org/en/KnowledgeCentre/HIVData/GlobalReport/2006> (accessed June 14, 2009).
- U.S. Department of Agriculture. PLANTS profile for *Taraxacum officinale* (common dandelion) | USDA PLANTS. Available from <http://plants.usda.gov/java/profile?symbol=TAOF> (accessed June 23, 2009).
- U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention and National Institutes of Health. 2007. *Biosafety in Microbiological and Biomedical Laboratories*. Washington, D.C.: U. S. Government Printing Office.
- Varela, Francisco J. 2001. "Intimate Distances: Fragments for a phenomenology of organ transplantation." *Journal of Consciousness Studies* 8, (5-7): 259-71.
- Wald, Priscilla. 2008. *Contagious: Cultures, carriers, and the outbreak narrative*. Durham: Duke University Press.
- Weston, Kath. 2001. "Kinship, Controversy, and the Sharing of Substance: The Race/Class politics of blood transfusion." In *Relative Values: Reconfiguring kinship studies.*, eds. Sarah Franklin, Susan McKinnon, 147-174. Durham, NC: Duke University Press.
- World Health Organization. 1997. *Weekly Epidemiological Record* 72: 341-348.

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- p. 43-44 Haha. *Flood* (1992-95). Hydroponic garden, Chicago, IL.
In *With Love from Haha: Essays and notes on a collective art practice*. Wendy Jacob, Laurie Palmer and John Ploof. Chicago, Ill.: WhiteWalls: Distributed by University of Chicago Press.
- p. 48 Ana Mendieta. *Untitled (Death of a Chicken)* (1972). Performance.
ArtStor: The Image Gallery: University of California San Diego.
- p. 49 Marina Abramovic. *The Lips of Thomas* (1975). Performance.
In *Blood: Art, Power, Politics, and Pathology*, eds. James M. Bradburne, James Clifton, MAK Frankfurt and Schirn Kunsthalle Frankfurt; Munich, New York: Prestel.
- p. 73 Frank Moore. *Release* (1999). Oil on canvas on wood panel. 22.6 x 95"
In *Bodies of resistance*. Julia Bryan-Wilson, Barbara Hunt, Visual AIDS, Real Art Ways, and NSA Gallery. 2000. New York: Visual AIDS.
- p. 80 Adriana Varejão. *São Paulo jerked-beef ruin* (2000). Oil on wood & polyurethane. 14 x 168 x 69.5 cm
In *Adriana Varejão*. Adriana Varejão, Louise Neri, Paulo Herkenhoff and Banco do Brasil. Centro Cultural. 2001. [Brazil]: Takano Editora Gráfica.
- p. 81 Valeska Soares. *Untitled (from Intimates)* (1994). Wooden ex-voto, fabric and vaseline. 72 x 12 x 30"
In *Histórias ... : Valeska Soares*. Valeska Soares, Adriano Pedrosa and Galeria Camargo Vilaça. 1996. São Paulo: Galeria Camargo Vilaça.
- p. 82 Félix González-Torres. *Untitled (Blood)* (1992). Plastic beads and metal rod. *Untitled (Lover Boys)* (1991). Cellophane-wrapped blue-and-white candies, endless supply, ideal weight 355 lbs. *Untitled (Public Opinion)* (1991). Cellophane-wrapped black licorice candies, endless supply, ideal weight 700 lbs.

In *Félix González-Torres*. Nancy Spector, Félix González-Torres, Solomon R. Guggenheim Museum, Centro Galego de Arte Contemporánea, and Animation-Recherche-Confrontation. 2007. New York: Guggenheim Museum.

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