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Washing urban water: diplomacy in environmental art in the Bronx, New York City

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Lillian Ball's art project WATERWASH creates a new ecological imaginary in the South Bronx. Building on a tradition of 'maintenance art', the work exhibits the power of soil, plants and microorganisms to clean water – in effect maintaining urban water. An overarching goal of WATERWASH is to educate local people about the metabolism of urban water, causes of river pollution, and to familiarize them with the capacity of soil and plants to respond to that problem. As part of its creation, the project provided diverse groups of people with opportunities to participate, including a group of Bronx youth who assisted in planting the wetland. Several of these apprentices will be involved in future monitoring of the effectiveness of the wetland in mitigating parking lot runoff. I use Isabelle Stengers' notion of 'diplomacy' to interrogate the efforts of the artist in negotiating and creating an occasion in which people with divergent interests can both recognize and maintain the relationships of care that sustain them. In effect, this effort extends the feminist discourse of maintenance work to include that undertaken by the 'other-than-human'.

Keywords: urban political ecology; environmental art; Isabelle Stengers; Bronx; urban ecological restoration; feminist art

Introduction

In her installation *WATERWASH ABC*, located on the edge of the Bronx River in New York City, Lillian Ball blends ecology and fantasy. The artwork bids visitors to think about the flow of water that connects rain and river, and to appreciate how plants and soil can clean urban water burdened with sediment and pollutants. *WATERWASH* also beckons pedestrians to break with the perpendicularity of South Bronx cement, to take a curving stroll on a glass path to a riverside getaway, and to imagine a new way of living in the city.

The path, a permeable pavement of recycled glass, moves down from the Bruckner Expressway sidewalk in a gentle undulation toward the Bronx River, passing through an upland planted with a variety of shrubs and grasses, backlit by the setting sun in the late part of the day. The path ends at a small observation platform edged by railing salvaged from the old Yankee Stadium. The platform overlooks a wetland dug into the land between the riverbank and the back of an enormous warehouse. A long pipe connects the wetland with a parking lot on the building's far side. Signs with large, colorful photos describe how the wetland filters dirty rainwater from the parking lot, and show images of people, fish, birds, clams, and others inhabiting or involved in the creation of this mini-retreat from the urban din (see Figure 1). The signs tell of the Bronx-based business, nonprofit groups,

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Figure 1. Signs at the viewing platform for the installed wetland and Bronx River inform visitors about how the wetland is cleaning up parking lot runoff and, therefore, protecting the river and also offering habitat to urban wildlife. The railing was salvaged from the old Yankee stadium. Photo by Lillian Ball.

teenagers, and scientists who collaborated with the artist in the work. They explain how the pipe carries water running off the warehouse's 30,000-foot parking lot after rain or snow, and feeds it into the constructed wetland, which will slow the water and allow it to gently percolate through soil and plant roots, thus cleaning it of hydrocarbons and other pollutants before it makes its way into the river.

This art project offers new ways of thinking about the Bronx River. Different approaches to urban water are posed by the signage of the installation, and by the flow of the design. *WATERWASH* brings visitors to a tiny slip of riverbank next to an expressway in an industrialized area where the river, if thought of at all, has been considered a waste channel. Much of the riverbank in this area is off-limits to public access, blocked long ago by warehouses and factories, and further removed as a desirable place by decades of pollution. The art suggests that even here we can reimagine the nature of cities and urban water, and entertain new symbioses among rain, people, plants, soil, and rivers.

Key to this reimagining is *WATERWASH*'s location in the South Bronx, a place that has long been a dumping ground in a number of ways. The area has the lowest ratio of parks to people in the city, but takes in 40% of New York City's waste, the handling of which results in over 60,000 diesel truck trips into the Bronx each day (Carter 2001). Encircled by a number of highways, the Bronx is home to Hunts Point Wholesale Markets (world's largest wholesale market), a municipal sewage sludge processing plant, a privately owned sludge drying plant, and 19 public and private waste transfer stations. The area also hosts a municipal wastewater treatment plant and a large number of manufacturing facilities, all of which result in high concentrations of truck activity and diesel emissions in the proximity of schools and residences in the South Bronx (Maciejczyk et al. 2004; Restrepo and

Zimmerman 2004). Rates for asthma in Bronx County, including for children, are eight times higher than the national average (Whu et al. 2007). In addition, the quality of Bronx River water suffers from repeated 'combined sewer overflow' events, which occur after storms when overburdened waste treatment facilities release a mix of storm water and untreated sewage into the waterway (Wang and Pant 2011).

Here, I discuss this art project as urban environmentalism; that is, as an ecopolitical project offering an aesthetic commentary on the hydrosocial cycle (Swyngedouw 2004). Geographers and other scholars have posed numerous questions about environmental art as it reflects on notions of landscape, nature, and politics. Interrogations of a range of aesthetic projects include, for example, reflections on how art can foster a dialectical understanding of the relationship between nature and culture (Gandy 1997), as well as a capacity for an 'indifferent' nature (Bartram 2005). Other scholars have focused on how artwork presents the concept of site as fluid and multiple (Cant and Morris 2006), or is involved in the creation of places of resistance, identity, and belonging (Mackenzie 2002, 2004). WATERWASH contributes to this discussion as an example of how art can broaden our ideas about our entanglements with nonhumans, especially in terms of social reproduction and maintaining urban habitat. The work and, more critically, the process of making the work calls attention to nonhuman agency (Braun and Whatmore 2010; Hinchliffe et al. 2005; Latour and Weibel 2005; Whatmore 2006) and creates opportunities for encounters with the 'other than human'. It does this specifically by exhibiting the 'caring' of nonhumans involved in the everyday maintenance of a city, as well as their need to be cared for.

My focus here is the specific practices of the artist as she pursued and negotiated social engagement and interaction in the interest of creating a hybrid urban landscape. Although geographers have written about the challenges of creating and maintaining environmental art (Morris 2011), the social processes of creating environmental art deserve more attention. Writing broadly about socially engaged performance, Jackson (2011) notes the great heterogeneity in artists' practices that involve people in their art, with some seeking to construct or create social bonds, for example, while others disrupt them. The diversity challenges any easy analysis and evaluation of socially engaged environmental art and, as Jackson convincingly argues, represents important territory for social scientists and art theorists to investigate. Focusing on the community-oriented and collaborative work performed by artists pursuing environmental remediation and community development projects similar to the one I explore here, Miles has observed:

Reclamation artists act as communicators and researchers, and as intermediaries between those who have power and those who do not, a possibility derived from the autonomy claimed for art in the modern period, which allows critical distance and independence of viewpoint whilst ... regaining a sense of engagement and interaction with diverse groups in society. (2000, 148–149)

Yet, this assessment is troubled by unanswered questions about the form that engagement takes, and whether that autonomy and critical distance can be maintained, especially as artists claim the authority to speak for others. These questions insist that we consider the making of the artwork both as artistic and social practice. As Jackson assesses: 'the social here does not exist on the perimeter of an aesthetic act, waiting to feel its effects ... The de-autonomizing of the artistic event is itself an artful gesture' (2011, 29).

As I observed her working on WATERWASH, Ball challenged political, professional, and cultural boundaries of conventional environmental discourse, even as she worked within those contours in order to create her piece. The artist became, to adapt a term from Stengers' (2005, 2010) cosmopolitical proposal, an aesthetic 'diplomat'. Her work involved orchestrating a series of human and nonhuman encounters, not a few of which

unfolded in a context of resistance. The encounters exposed people to the integrated ways that nonhuman beings and things maintain and care for humans. Perhaps just as importantly, the artist's process also created social encounters that pulled people out of their comfort zones and required that they reconsider business as usual. Here, I work to consider whether this diplomatic effort, in Stengers' words:

catalyzes a regime of thought and feeling that bestows the power on that around which there is a gathering to become a cause for thinking ... A presence that transforms each protagonist's relations with his or her own knowledge ... and allows the whole to generate what each one would have been unable to produce separately. (2005, 1002)

In documenting this art project, I corresponded with the artist for over two years during the course of planning, organizing, installing, and, finally, celebrating the effort. I visited the project as it was being put into the ground in the summer of 2011, and also attended a project celebration in October of that year. During my time at the project site, I shadowed the artist, Lillian Ball, listened in on conversations, watched people work, and also worked myself: releasing root-bound plugs from their too-tight plastic molds, massaging roots to loosen them, digging holes, packing earth around plants, and watering.

WATERWASH is a gesture to the intertwined roles that a diverse array of life forms and physical elements play in maintaining and sustaining a city. The work resonates with a feminist tradition of 'maintenance art', wherein everyday chores - cleaning, washing, sweeping – are performed as a means of drawing attention to the time and labor enacted not only in the maintenance of the family, however configured, but also in the sustenance of life and, moreover, of any social activity that brings people and place together. This ethos is, perhaps, most famously documented in New York artist Mierle Laderman Ukeles' project Touch Sanitation (1979–1980), where she spent 11 months crisscrossing the city to reach all 59 sanitation districts. She shook hands with and thanked each of the city's 8500 sanitation workers for 'keeping New York City alive'. In a similar vein, Jo Hanson's personal act of sweeping a sidewalk in San Francisco's Haight-Ashbury district during the 1970s grew into a celebrated public art practice and citywide anti-litter campaign. She compiled volumes of urban detritus, which raised both community awareness and chronicled rapidly changing demographics of the neighborhood. Hanson organized citywide street sweepings, children's anti-litter art campaigns, and in the late 1980s convinced the city's waste recycling and disposal company to develop an artist-inresidency program that continues till today. In an essay about her career for the online Women Environmental Artists Directory, she wrote:

I identified first with conceptual art's advocacy of art as experiences or phenomena that could not be bought and sold. But it was feminist art that fulfilled the aims of conceptual art in empowering artists, collaboration among artists and with communities, advancing life and social experiences/issues as appropriate subjects of art. This was my trail in discovering that my work was 'environmental art'. I have never felt related to the land artist of that period who used earth features and nature as their materials. ¹

WATERWASH, then, can very much be read against this backdrop, insofar as 'maintaining life' for people and place becomes a crucial medium of expression. Here, however, it is not the artist alone who deploys this medium. To be sure, the artist stages human encounters with urban nature as part of a mission to educate about the role of plants and soil in maintaining and sustaining clean water – in caring for the city. But, the task of enlivening an assemblage of people and things (broadly defined) in this artwork, and compelling people to think about their ecological context, proffers the 'caring' role of others – both human and nonhuman. These encounters challenge people, requiring them to think both about how they are sustained, and how they too can sustain more beneficent ways of being in a city.

In the following sections, I briefly introduce some of the elements of environmental and maintenance art that provide a context for *WATERWASH*, before going on to describe how the art work expands the focus of maintenance art to include work carried out by 'other-than-humans', or 'nonhumans', such as soil, water, and plants. I then turn to Stengers' (2005, 2010) work, which allows me to comprehend the contribution of the artist in facilitating this assemblage. I describe the process of the making of *WATERWASH* and, finally, reconsider the questions the work raises about the role of the nonhuman in urban maintenance, and the specific practices of the aesthetic diplomat working to create occasions for new ways of thinking.

Relations and maintenance in environmental art

Much has been written about the expansion of environmental art, beginning in the 1960s, from the manipulation of earth's materials and earth's processes, to work that includes land and water reclamation and the building of relationships with individuals and communities in order to educate people and also to involve them in that reclamation (Beardsley 1989; Boettger 2008; Boetzkes 2009; Brigham 1993; Carruthers 2006; Kester 2004; Lambert and Khosia 2000; Matilsky 1992; McKee 2008; Miles 2000, 2004; Prigann, Strelow, and David 2004). Two elements of this movement are especially pertinent to WATERWASH. First is the emergence of participatory and activist art that combines intervention and collaboration with countering ecological degradation. Writing about shifts in land art from the 1960s to the 1990s, Kastner and Willis (1998, ii) observe:

The great earthmovers who worked to forcibly rearrange the stuff of the natural world in an effort to mediate our sensory relationship with the landscape were succeeded by artists who sought to change our emotional and spiritual relationship with it. They, in turn spawned a third approach, that of the literally 'environmental' artist, a practice which turned back to the terrain, but this time with an activity meant to remedy damage rather than poeticize it.

Informed by these elements, some contemporary environmental artists work to highlight sources of ecological degradation and to manipulate earth and social processes to build new kinds of relationships that will specifically reverse environmental decline, and to open up possibilities for more beneficial and less destructive ecologies.

A second important element is a feminist critique wherein art becomes a means of bringing attention to elided issues, specifically the 'invisible' labor of janitors, sanitation workers, housekeepers, caregivers, and others so critical to the maintenance of everyday life. Artist performances in this work call attention to the ubiquity as well as the derided status of 'maintenance' labor, while at the same time providing opportunities for people to interact, join in, and refigure their own relationships with the work that maintains them. Thus, it is both a celebration of the care needed for the maintenance of everyday life, as well as a call to rearrange practices, priorities, and habits of mind that would diminish the importance of maintaining relationships.

In accord with the first movement, many ecological artists work to build relationships with the goal of furthering dialogue on pressing social issues. This effort is part of a broader development of 'relational', 'participatory', and 'community' art, as has been described by Bourriaud (2002), Hawkins (2011), Jackson (2011), Lacy, Roth, and Mey (2010), Kester (2004), and many others.

Alan Kaprow was a particular inspiration for many artists who have pursued participatory art with a focus on everyday practices. His work provided artists with a rationale for centering their work on intimate, daily life – subject matter previously considered mundane and unworthy of artists' attention. Kaprow taught at the California

Institute of the Arts in Los Angeles in the 1970s, and offered 'lifelike' art to a number of environmental artists practicing today including Lillian Ball, Aviva Rahmani, and Mierle Laderman Ukeles. Kaprow was a champion of the idea of an art event replacing the art object, with spectators becoming participants. In a 1960s essay on guerilla art events, or 'Happenings', he laid out several rules regarding doing art in society, including:

the line between the Happening and daily life should be kept as fluid and perhaps indistinct as possible ... Themes, materials, actions, and the associations they evoke are to be gotten from anywhere except from the arts, their derivatives, and their milieu ... A Happening can be composed by several persons to include, as well, the participation of the weather, animals, and insects. (Kaprow 2003, 63)

Suzanne Lacy is a performance artist widely recognized for her collaborative work with a range of different communities, most notably perhaps, a 10-year-long series of conversations and events grouped together as the *Oakland Projects*, part of which aimed at generating dialogue between polarized Oakland teenagers and the city's police force (*Code 33*). Writing about Kaprow, she emphasizes three key aspects of his contribution. First, she agrees, was his view of artwork as less of a 'work' than a process of meaning—making interaction. Second was Kaprow's ambiguity of definition and purpose. What is often missed in examinations of performance-based public artists, Lacy argues, is the fundamental role of ambiguity and questioning in the structure of their work because the content or topic (whether race relations or global warming) is so prominently positioned. This ambiguity is critically connected to the ongoing searching and self-reflection of the artist. Lacy, Roth, and Mey (2010, 322) also credit Kaprow with rethinking the role of the artist in society: 'Once art ... begins to merge into the everyday manifestation of society itself, artists not only cannot assume the authority of their talent, they cannot claim that what takes place is valuable just because it is art'.

Echoing this theme of ambiguity in her writing about environmental art, Boetzkes argues that she sees ambiguity in these works as a gesture to the unknowability of what is not human, a stepping back in order to create an ethical space of respecting the unknown of the nonhuman world: Earth art 'must be understood as posing the question of what escapes when the artist touches, pictures, writes about the earth', she states. Such art is 'evidencing the earth as irreducible to form ... letting the other present itself on its own terms'. She continues:

what is at stake in earth art is the disclosure of the entwinement of human social relations with the terrestrial realm. Through the enactment of an ethical responsiveness to space, the artwork brings this earthly component into view, evidencing the way in which natural phenomena are integral to defining the sites of human conflicts, politics, and social formations. Thus there is no final ending, things keep growing and changing. There is no final product. (Boetzkes 2009)

The 'evidencing' of irreducible earth is certainly a source of ambiguity in Ball's work. Her work creates a stage from which people can observe – from a distance – an ever-shifting nonhuman landscape in the middle of a city; one entangled with their own environmental politics (Karvonen and Yocom 2011). Akin to Lacy's point about ambiguity resulting from the 'ongoing self-reflection' of the artist, is a tension in WATERWASH between the role of the artist as a passionate director of the project and the ultimate lack of control that she has over the specific shape and especially future of the work. Investigating the project and its making reveals that while the environmental artist may seek to awaken people to ecological ills and to remedy specific problems, her work also reflects uncertainty regarding the specific shape of relationships involving humans and other beings. Certainly, much contemporary environmental art works within a larger ethos of the possibility of mutually beneficial ecologies of humans and other species. However, the biological or social

arrangements and outcomes of these works (indeed, their beneficence), are mostly not entirely predicted – or predictable. The artist, even while she may propel a project forward with her vision of possibilities, is at the same time repositioning herself away from a notion of single author, to one of researcher, collaborator, and facilitator. As I will discuss, even while scientists and other experts were sought out to be part of a project, there was no assumed hierarchy or primacy of any single source of knowing. In addition, since the project celebration in October 2011, it has been increasingly reliant on the upkeep and management efforts of the local business and nonprofit groups that Ball involved in the project. And the intended plant palette in the wetland differs from the ongoing succession of species that are actually thriving in the installation. The ambiguous negotiation of this coming together of different beings, forms, and expressions of knowledge of the nonhuman, and responsibilities in the project was not a straightforward task, hence my interest in Isabelle Stengers' conception of diplomacy in her cosmopolitical proposal, to which I turn in the subsequent section.

Resonant with this focus on production processes is a loose, feminist-inspired movement that has been termed 'maintenance art', and which draws specific attention to the unacknowledged (even in environmental art), everyday performances of the women and men who undertake the labor of care; the maintenance of society. As noted in the introduction, Mierle Laderman Ukeles is well known for her career-long focus on the labor of caretakers, sanitation workers, and others whose jobs involve daily maintenance. In an interview with artist Aviva Rahmani, Ukeles relates a story of how her perspective on art and society changed when she gave birth to her first child:

I had an epiphany, and I don't use that word for anything else. People would talk to me as an artist one way, but in a totally different way if I were pushing a baby carriage down the street. I was a maintenance worker, and there was no language for that. I saw this once I stepped outside of the (artist) career path. People stopped asking me questions ... (this) opened my eyes and I saw this as a door I could walk through because most of the people in the world spend most of their time trying to maintain themselves and their families. It was an entry card to join most of the people in the whole world. In my fury I sat down and wrote this manifesto in which I said ... anything that I do that I say is art, is art. I named maintenance art, necessity art ... I was trying to see every day from moment to moment. That is what I learned from Alan Kaprow.²

On 22 July 1973, Ukeles performed *Washing, Tracks, Maintenance* at the Wadsworth Atheneum, Hartford, CT. She used water and diapers to wash the stairs to the museum's main entrance and the marble floors of its Avery Court (Butler and Mark 2007). She carried out similar performances in other places, in one aggressively cleaning a sidewalk in front of a gallery so that people avoided entering the space and when they did, scrubbing immediately behind them, erasing their footsteps. About that work, she has said, 'I was pushing the idea of maintenance to its limit, to control of the territory, so that it almost became its opposite, about control'.³

Ukeles' work pulled the everyday into the spotlight and compelled people to (literally) reflect on the relationships of care that bind them with others. In 1983, she produced *The Social Mirror*, a mirror-clad garbage truck that advertised the source of its contents every time it rounded a pedestrian-packed New York City corner. Just as her role as mother sparked in her the recognition of a larger world of maintenance labor, she sought to expand the idea of the maternal beyond a specific mother—child relationship to a more general idea of care (Liss 2009). Ukeles aimed to celebrate those who carry out the labor of maintaining everyday life (and art) and to improve their working conditions as well. Her work challenged conventional dichotomies that would separate performance from private acts such as mothering, or the public arena from life-sustaining systems. Thus, care

becomes a medium of expression and relating, and people are exhorted to care for those who care for them.

Ukeles' work prepared the ground for efforts like WATERWASH that expand the discourse of maintenance and care to the other-than-human. What Lillian Ball does in WATERWASH is to create a similar kind of encounter regarding the taken-for-granted aspect of clean water in a city. WATERWASH seeks to identify and celebrate the cleaning process that might be carried out by plants and soil in wetlands if they were established around the city. While the educational signage describes the potential for a beneficial symbiosis of human and wetland in the city, her viewing platform provides an opportunity for appreciation, but from a distance, suggesting that the plants and soil are engaged in an ongoing performance of maintenance art, which itself must be maintained in careful ways. While standing on the platform, visitors can read how the 'wetland plant roots filter the first flush of parking lot gas, oil, salt, & antifreeze in runoff'.

The planning, construction, and completion of this project involved an unorthodox encounter of people and nonhumans that offers an example of a 'public-ity', as Braun and Whatmore (2010) describe an experimental occasion that amplifies the power of things to move people, and to cause them to think and feel. The work of the artist involved pulling together divergent interests, and creating opportunities for people to interact with and to think about things (rain, the Bronx River, soil, birds, plants, pavement) in new ways.

Of course, the effort of negotiating with people of varying alliances toward openended efforts involving ambiguous relationships and goals is no straightforward task. This is a task made all the more challenging when humans are not the only beings involved in the negotiations. In order to comprehend the role of the artist as a facilitator of these kinds of encounters, I look to Stengers' description of the diplomat, which she develops in her 'cosmopolitical proposal', and whose role it is to create the possibility of 'rhizomatic connections where conflict seems to prevail' (2010, 29).

Stengerian diplomacy

In her cosmopolitical proposal, Stengers is interested in how people might better respond to 'things', how, as she puts it: 'our human politics can construct its legitimate reasons in the presence of that which remains deaf to this legitimacy' (2005, 996). She argues that in order to attend to various environmental, ethical challenges in the world, people need to slow down, become open to previously overlooked agents and relationships in the world, and to reconsider one's thoughts and feelings. As a necessary step, she suggests we define 'nonhumans' according to their ability to force thought in humans. Thus, what we need to consider is not humans as thinking (and therefore exceptional) beings, but 'humans as spokespersons claiming that it is not their free opinions that matter but what causes them to think and to object, humans who affirm that their freedom lies in their refusal to break this attachment' (2010, 5). She writes: 'what makes us human is not ours: it is the relation we are able to entertain with something that is not our creation' (2010, 6). In short, once we understand our humanness as an emergent property of our relationships with objects (even technologies and concepts such as neutrinos), those relationships become fair game for political consideration. We can begin, for example, to turn the consequences of technology into a political problem (2010, 20).

Via her strategy to recognize the political importance of things through the manner in which they provoke thought, Stengers offers a new vision of the political space. This is not one protected from attachment and care, a space of 'rational' debate carried out by individuals who have laid aside their bonds and obligations, but is instead a space informed

by those connections, such that humans affirm their freedom by 'their refusal to break this attachment'. The goal is not, she makes clear, universal agreement, but is instead an active thinking and participation.

A key facilitator in this kind of space, argues Stengers, is the diplomat, who can undertake the 'art of politics'. This is in contrast to the 'expert' who joins the political discussion already secure that everything he or she has to say is considered as qualified; everyone is already interested. Stengers calls attention to the need for representation of that for which there are no experts, and which relies on diplomacy for participation. What attracts Stengers to the notion of diplomacy is that it represents a 'practical and artificial' arrangement, and is not defined by a mission to arrive at some deeper or transcendent truth. She is not looking for heartfelt reconciliation or togetherness (evidence of categorical thinking) but instead a symbiosis between heterogeneous beings with very different motivations. Diplomats are there to provide a voice for those whose practice, mode of existence, and what is often called identity, are threatened by a decision. Diplomats' role is, therefore, above all to 'remove the anesthesia produced by the reference to progress or the general interest [or some notion of ecological balance, I might add], to give a voice to those who define themselves as threatened, in a way likely to cause the experts to have second thoughts, and to force them to think about the possibility that their favorite course of action may be an act of war' (Stengers 2005, 1003). Viewed in this light, Lillian Ball and Mierle Laderman Ukeles worked as diplomats, creating encounters that unsettle institutionalized thoughts and habits about the city environment and provoke in people an awareness of the relationships of care that sustain them.

Stengers likens this work to that of an eighteenth-century chemist creating the conditions for a new reaction, providing a 'solution' that dissolves, and enables elements to interact. The process of WATERWASH might well be seen, then, as a kind of chemistry, an inter/reaction created by the artist as she solicited the involvement of people in a project that demanded their attention to the river, and insisted on new relations. Lillian Ball can be understood as representing the river and other nonhumans, by creating a special perspective on their performance, and also as facilitating an alliance by acknowledging and making room for the various dispositions that different parties bring to the event – the attachments that people already have. Her diplomacy lies in making connections between humans constrained by diverging attachments, the success marked by a contradiction (either/or) being turned into a contrast (and/and), as Stengers might describe it, such that, as we will see, either a private industrial waterfront or public access pleasure park becomes wildlife habitat and community development.

In her writing on diplomacy, however, Stengers also describes a very horizontal coming together, a 'palaver', where no one asserts authority or directs. In this sense, the emergent potential of Stenger's cosmopolitical event appears to rely on no single participant leading. Yet, Ball was very much the visionary and director of the project. She brought her concept to the site and chose a local business and local youth development nonprofit to work with. And while there was negotiation at every turn, Ball's work often involved contradicting assumptions and directing people on how to act. In this sense, her diplomacy is more like the work of a chemist, manipulating elements to provoke a reaction, rather than a background organizer of ritual. And, as chemical reactions can cause noxious fumes, so too did Ball's encounters occasionally create social friction. In other words, the work of aesthetic diplomacy, as I observed it, revolved around Ball's efforts to engage people in the creative process of the piece, which was at times both disturbing to those involved, but also enabling, creating a collaborative effort that no single person could have accomplished on their own.

Thus, this work contrasts with the connections some have sought to make between hybrid cosmopolitics (Hinchliffe et al. 2005; Whatmore 2002) and new forms of distributed environmental governance. In reference to resident-initiated and resident-directed efforts to restore and celebrate Longfellow Creek in Seattle, Karvonen and Yocum (2011, 1307) have described such projects as sharing 'a commitment to deliberative and action-oriented forms of political engagement'. These elements were not salient in the WATERWASH process. Instead Ball's diplomatic role was more concerned with pulling people into new configurations that challenged standard notions of expertise and process so that participants had to rethink assumptions and consider new ideas.

WATERWASH ABC - creating and maintaining the assemblage

Based in New York City and Southold, Long Island, sculptor Lillian Ball has produced a diversity of work, much of it involving materials like rubber, silicone, and especially glass. In 1999, she won a Guggenheim Fellowship for her work with digital animation. This was a time when she was gradually becoming more involved with wetland preservation and restoration in Eastern Long Island after buying a home there. Her increased environmental awareness and hands-on experience with soil and plants led her to come see her object-oriented art as 'superfluous'. Writing in a catalog for a 2007 exhibition, she describes a sea change in her thinking:

It gradually dawned on me that the only artwork possible for me to make must concentrate on environmental issues. It seemed I might never make art again, but images kept coming and with them the eventual realization that it is essential to be engaged with both artistic and activist practices simultaneously. (Wave Hill and Cambridge Arts Council 2010, 6)

Lillian Ball conceived of the WATERWASH concept almost fully formed during a conversation with a Long Island town planner and ecologist about ways to remedy polluted runoff flowing into Long Island Sound. She could put together her aesthetics and activism in a project that would engage community members to restore a wetland, clean up sediment-laden water flowing off roads, protect the shore, and teach more people about the threats of runoff to living bodies of water. She has written: 'I envisioned a vegetated swale with native plants, permeable pavement, and educational signage explaining the need for non-point source storm water management in private as well as public places. The transformation of a neglected space into a public outreach park could inspire community commitment to storm water issues' (Ball et al. 2011). Ball named this 'creative concept' WATERWASH, a design to slow water and to slow people, offering a chance for water, and ideas, to soak in.

Ball created the prototype *WATERWASH* installation at an eroded boat ramp on Mattituck Inlet on the north fork of Long Island, after which the administrators of the Long Island Futures Fund, which supported her prototype, encouraged her to consider a similar project along the Bronx River in New York City. The National Fish and Wildlife Foundation administers the Bronx River Watershed Initiative, a \$7 million pot of money created by the New York State Attorney General's office with settlements from polluters of the Bronx River. The funds are earmarked for green infrastructure projects.

Understanding that the long-term success of her project relies on community investment and involvement, Ball sought to ground this installation by working with a local business and a nonprofit organization, Rocking the Boat, dedicated to supporting Bronx youth (see Figure 2). The site of the second *WATERWASH* is a slip of riverfront land, belonging to a warehouse of the company ABC Carpet and Home. The installation, which Ball designed with the assistance of environmental engineering firm eDesign Dynamics,



Figure 2. Artist Lillian Ball (front row, left) poses with supporters from Rocking the Boat, a nonprofit that teaches environmental job skills to Bronx youth, and the wetland they installed as part of Waterwash ABC. Working together over the summer of 2011, the artist and teenagers planted over 8000 native plants into a wetland and upland area designed by the artist to remediate storm water runoff and help protect the Bronx River. Photo by Joaquin Cotton.

rechannels oily, sediment-laden water from the building's parking lot to the wetland, which is constructed with a graded rock-lined pool to first slow and settle the incoming water before it flows into shallower sections with wetland plants. The water then moves gradually downward, filtered by the plants and soil before entering the Bronx River. The plants and their symbiotic microbes make good use of the hydrocarbons, salts, and nutrients, turning into food what would otherwise be pollution in the river. The submerged portions of these aquatic plants provide living places for many insects, which in turn provide food for fish and birds. And after the plants die, their decomposition by bacteria and fungi also provides food for aquatic invertebrates.

Green infrastructure projects like this are designed to counter the most common source of water pollution in the region. During rainstorms, the capacity of water treatment plants is routinely exceeded, in which case the storm water (combined with sewage) is released directly into the river at combined sewer overflows (CSOs), in this case located in the tidal reaches of the Bronx River. These releases can be seen as part of a broad crisis of centralized urban infrastructure in the management of water and other flows in many cities (Gandy 2004). Sewer overflows are the biggest water quality problem in the New York metropolitan region, dumping up to 30 billion gallons of storm water mixed with raw sewage each year into Harbor and other waterways. Thus, a goal of small-scale green infrastructure such as rain gardens, green roofs, and recreated wetlands is to lower the amount of storm water flowing off streets unfiltered and directly into the river, or into pipes that carry the water to the treatment plant, which would increase chances for a release of untreated sewage into the waterway. According to a New York Times article by Mireya Navarro on 19 October 2011, the city is shifting strategies for handling storm water, recently investing almost as much in green infrastructure as in the traditional approaches of underground storage tanks and tunnels. This funding has the potential to

support a much more distributed mechanics of urban water maintenance, requiring involvement of many city residents in planting and maintaining green spaces – in a daily practice of caring for their water. This practice also might support civic environmentalism (Light 2001), what Karvonen and Yocom have described as 'place-based, participatory, and generative activities to reconfigure human-nature relations' (2011, 1307).

Aware of this kind of potential, Lillian Ball and director of Rocking the Boat Adam Green were keen to include a private, commercial enterprise in the implementation and maintenance of *WATERWASH*. She envisions the project as providing a tangible example to other businesses, as well as to residential homeowners of how local maintenance of urban water can be accomplished. *WATERWASH* thus challenges conventional thinking about public and private, a division that is a persistent danger to efforts to claim and to reframe shared natural resources and public spaces. Although there is no legal agreement about public access, the company has made an agreement with the New York State Attorney General's Office to maintain a welcoming space on its property and to care for the wetland so that it continues to effectively filter the water coming off the ABC parking lot. As the vice president of ABC carpet told Ball and Green when they approached him, 'My grandson should be able to enjoy swims in the river like I did when I was a kid here'.

The friction between different epistemological and institutional alliances in the creation of WATERWASH, along with the lack of infrastructure for an artist-led storm water remediation and environmental education project provided for a steady flow of small challenges and upsets during the installation. At one point, the vice president of ABC sought out Ball to ask if the store might use the observation platform (which, after all sits on company property) to set up a display of different types of roofing materials. As well as learning about how wetlands can be part of a healthy urban water cycle, visitors might also peruse their options for different styles of roofing for keeping that same storm water from raining on their heads. Uncomfortable with a commercial focus in the context of the ecological and educational vision, Lillian Ball had for the observation platform, she told the vice president, the topic was nonnegotiable. Yet, sympathetic to the need for a business to promote itself, she included a large logo for ABC inset into the permeable pavement near the entrance to the park, and noted often the public outreach opportunities the small park can offer the business.

Another example of negotiations occurred during Lillian Ball's consultations with the scientist from eDesign Dynamics on the types of plants to be included. Ball favored plants she had worked with in the past, including unusual native plants that she 'knew' as part of previous wetland restoration work. The scientist was unfamiliar with some of her recommendations, described her plant list as full of *prima donnas* and explained the wetland classification system for plants. At the same time, he described his own plant list as 'the usual suspects' and could not assure Ball of the survival of some of the plants he recommended because as he put it: 'who knows what's there in native Bronx soil'. There was no easy hierarchy of expertise that always provided a correct answer, but instead a persistent context of negotiation, in which expert knowledge was considered specifically in the context of its application, and answers were considered from multiple points of view.

Besides collaborating with eDesign Dynamics and ABC Carpet and Home, Lillian Ball engaged a contractor, Excav Services, with which she had worked at WATERWASH Mattituck, with experience in ecological restoration and permeable pavement products. The technology is relatively new and is made with postconsumer glass and a urethane comprised of 60% plant material, and has a range of design possibilities. The latter characteristic was critical for Lillian Ball, who wanted to be able to design curves and

letters as well as to manipulate the colors of the pavement. As she articulated to me, part of the art in this project is seduction, a drawing in of people off hot, dirty streets to a green, pleasant place by the river.

Visitors who read the signs will learn that much of the planting of some 8000 plants that were put into the wetland and the upper grassland was achieved with the assistance of the young people working with Rocking the Boat. Founded by Adam Green, Rocking the Boat seeks to provide Bronx youth with exposure to environmental work, as well as to the enjoyment of boating, both building them and using them. The group's environmental job skills apprentices have the opportunity to work closely with professional scientists and perform Bronx River restoration work. These apprentices also run the Community Rowing Program, guiding river tours, and educating the public about the history and ecology of the Bronx River. Rocking the Boat works to link the youth with a number of other environmental education and monitoring programs. When convenient, they row up and down the river to and from job sites.

At the WATERWASH site, the teens were provided with an initial demonstration from the plant scientist on how to put plants into the ground, after which they worked in small groups of two or three, spread around the site digging holes, unpackaging plant 'plugs', massaging roots to loosen root balls, and pressing soil around new plantings. Ball moved around the site, visiting different groups and directing the work. The planting weeks fell in July and August, which were hot, and watering the newly set out plants, as well as those still in pots was an everyday job. The plants sat in the shade at one end of the wetland for weeks before planting, and many of them were very root-bound. The interns frequently had to rip the molded plastic planters away from tenacious root balls (which were often larger then the above-ground portion of the seedlings), sending bits of mud and sand flying. They worked to open up the base of the plant, tearing and sometimes cutting roots, so that it would start to take in water and nutrients once it was set in the sandy ground. They furthered its chances by pressing vigorously around the base of each newly installed plant, which included pickerelweed, arrow arum, and lizard tail. The young people thus handled different kinds of plants and became intimate with the sandy soil medium in which these plants thrive; learning from Ball about plant preferences for wetter lands or dry, and what kinds of insects or birds they might interact with. As Ball pointed out: the plants' flowers provide pollen for bees and other insects. Muskrats and ducks chew pickerelweed leaves, the cabbage white butterfly feeds on blazing star (one of many flowering native perennials installed), and mockingbirds can obtain ongoing nutrition from staghorn sumac berries throughout the winter. The interns also gained a vantage point on the human collaboration, watching adults discuss and implement a plan, working together to change a riverbank from a stretch of sandy beach to a fully planted wetland. One young man remarked to me at the project's formal opening in October 2012: 'In the beginning I never thought it would look like this. It's really nice. I'm definitely going to come back here'.

The work interns took time to train, and Lillian Ball spent substantial time supervising, as well as on the phone with Rocking the Boat administrators, trying to figure out how to organize and motivate the group. The artist turned down other offers for volunteers (one from a financial corporation based in Manhattan that could likely have provided enough people to do the work in a week) in preference for this small group of local, untrained youngsters because she wanted to provide them with the experience of working outside and in their own neighborhoods. After an initial rough start, Ball related to me that within a few weeks she had a core group of dedicated and experienced interns, who worked hard for most of the summer to establish the wetland. At the end of planting season, the environmental engineer from eDesign Dynamics remarked that he felt the engagement of

Rocking the Boat youth may have been critical to plant survival – providing continuity and focus, and especially water, over a long hot July and August. Many ecological restoration efforts fail at exactly this step when plants put in quickly by contract (or adult volunteer) labor die from neglect in the following critical weeks as the plants work to establish themselves in a new environment, but lack in daily care and attention.

Thoughts on diplomacy and maintenance

Reflecting on the trajectory of her public environmental art, Lillian Ball focuses on the importance of tenacity and a positive approach as key to her diplomacy:

The 'School of Hard Knocks' often gives artists a particular tenacity and way of working outside the box that can make these projects uniquely possible. My first serious artwork in a public context was *Maze*, 1979, at Artpark in Buffalo, NY. Subsequently, I was involved with collaborative activist practices (such as Guerrilla Girls and Women's Action Coalition) that were community based in the New York art world. In Southold, with the environmental challenges faced by small coastal towns, it seemed more positive to conceptualize alternatives to traditional development than to protest its failures. The Bronx River infrastructure project, WATERWASH ABC, translates that experience back into an urban art context. (Wave Hill and Cambridge Arts Council 2010, 6)

These specific practices of Ball's diplomacy reveal the importance of her vision and energy to the completion of *WATERWASH*. While we see her efforts to create collaboration and synthesis, calling local youth and businessmen to a common cause, there is also a strong sense of making space for what has been overlooked. We see Ball pushing back against the use of the site as a commercial space (even though it is private property), insisting that the work be done by local youth rather than more efficient bussed-in outsiders, and reassessing scientific expertise in the context of application such that personal experience and site-specific issues as well as scientific protocol inform decisions about plants. Ball's diplomacy is informed by a strong interest to represent river water and wetlands in a discourse about the future. She reimagines a city in which humans and other species work together to care for, and are cared for by, water. Her wetland creates a performance space for the everyday maintenance work of water-purifying plants, soil and microorganisms, which are in turn, celebrated and cared for. The case illustrates Stengers' description of diplomacy as an active, if not always comforting effort, orchestrating diverging interests and creating challenging situations as well as opportunities to interact and react differently.

Maintenance is a core part of this aesthetic: maintenance and care of the city and the urban hydrological cycle, the maintenance work of plants, and finally, the maintenance of environmental activism. It is the continuities in this story that help us understand WATERWASH not as an isolated experiment but as a kind of punctuated activism, connected by memory and imagination. These continuities provide key insight into the social material, if you will, that Ball worked with in her diplomatic efforts.

As noted in the introduction, a history of state neglect, targeted environmental injustice (such as the siting of power, waste handling, and chemical plants), and activist response in the South Bronx provides an important backstory to *WATERWASH*. This is Majora Carter⁵ territory; and her work is preceded by a number of other environmental justice efforts such as the Young Lords, a Puerto Rican group advocating in the early 1970s for adequate sanitation, and health care services in the South Bronx (Gandy 2002). In her book, *Noxious New York*, Sze (2007) describes how activist groups in the South Bronx have shifted their focus from fighting individual polluting facilities to actively engaging in community planning and community-based health initiatives. There are currently a number of environmental restoration efforts being pursued by the New York Parks Department in

collaboration with South Bronx community groups such as The Point Community Development Corporation, Sustainable South Bronx, Youth Ministries for Peace and Justice, the Bronx River Art Center and Gallery, Rocking the Boat, and the South Bronx Clean Air Coalition.

These efforts reveal how WATERWASH builds on precedent, informed by historical and concurrent efforts to construct a more ecologically minded and just city. Ball's art aims to be practical, offering a basic ecological model of relationships that can be useable in many towns and cities, but also one responsive to particular places and events. Ball does not claim WATERWASH to be a definitive answer to problems of urban storm water or to the unfair burden of New York City waste that the Bronx bears. What she does offer is that the reclaiming of urban storm water in thousands of small ways is itself a radical political gesture. The maintenance and care of urban storm water by diverse assemblages of local people and other species, even if the water is captured and entertained for a short period of time, carries tremendous generative potential: washing water, watering gardens, creating shade and color, interacting with other species as well as other people, creating art, learning about soil and plants, understanding how maintenance work is shared across the species boundary, and gaining a moment of pleasure. These may be relatively fleeting but they are also the stuff of life.

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Notes

- Women Environmental Artists Directory. Accessed April 20, 2012. http://weadartists.org/ jo-hanson-2.
- Rahmani, Aviva. 2007. Interview with M.L. Ukeles. 'Virtual Concerts'. Accessed April 17, 2012. http://www.ghostnets.com/talkshoe_shows_word.html.
- Akaret, Julie. 1984–1986. Not Just Garbage: The Maintenance Art of Mierle Ukeles, 1/2 hour video for TV. Accessed April 17, 2102. http://www.youtube.com/watch?feature=player_em bedded&v=aJ9GWIFZz1g.
- 4. Many urban soils include fill materials such as bricks or other construction debris, topsoil, coal ash, municipal solid waste, and dredged material from waterways. These additions alter soil hydrology and chemical properties, and thus, how well plants thrive.
- 5. Majora Carter, founder of Sustainable South Bronx and long-time resident of the borough, has won a Guggenheim and a number of other prizes for her environmental justice advocacy in the South Bronx. Appropriately, she describes a moment of awakening for her environmental consciousness, when her dog insisted on pulling her off the sidewalk and across an empty lot to a forgotten edge of the Bronx River, which she had previously been only dimly aware of and had never considered an important piece of the area's revitalization. "Greening the Ghetto", Majora Carter on TED, http://video.google.com/videoplay?docid=2883494385256707942 (accessed April 18, 2012).

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References

- Ball, L., T. Collins, R. Goto, and B. Damon. 2011. "Environmental Art as Eco-Cultural Restoration." In *Human Dimensions of Ecological Restoration Integrating Science, Nature, and Culture*, edited by D. Eagan, E. Hjerpe, and J. Abrams, 299–312. Washington, DC: Island Press.
- Bartram, R. 2005. "Nature, Art and Indifference." Cultural Geographies 12: 1-17.
- Beardsley, J. 1989. Earthworks and Beyond. New York: Abbeville Press.
- Boettger, S. 2008. "Excavating Land Art by Women in the 1970s: Discoveries and Oversights." *Sculpture* 27 (3): 29–35.
- Boetzkes, A. 2009. "Contemporary Art Facing the Earth's Irreducibility." Reconstruction Studies in Contemporary Culture 7 (2). Accessed July 25, 2012. http://reconstruction.eserver.org/072/ contents072.shtml
- Bourriaud, N. 2002. Relational Aesthetics. Paris: Les Presses du Reel.
- Braun, B., and S. J. Whatmore, eds. 2010. Political Matter Technoscience, Democracy and Political Life. Minneapolis: University of Minnesota Press.
- Brigham, J. 1993. "Reclamation Artists: A Report from Boston." Leonardo 26 (5): 379-385.
- Butler, C., and L. G. Mark. 2007. WACK! Art and the Feminist Revolution. Los Angeles, CA: Museum of Contemporary Art Los Angeles and Cambridge, MA: The MIT Press.
- Cant, S. G., and N. J. Morris. 2006. "Geographies of Art and the Environment." Social and Cultural Geography 7: 857–861.
- Carruthers, B. 2006. "Mapping the Terrain of Contemporary Ecoart Practice And Collaboration. A Report for Art In Ecology A Think Tank on Arts and Sustainability Vancouver, British Columbia." April 27 2006. Accessed December 20, 2011. http://www.unesco.ca/en/activity/sciences/documents/BethCarruthersArtinEcologyResearchReportEnglish.pdf
- Carter, M. 2001. "Balancing Development and the Environment in the South Bronx." Gotham Gazette, March 19, 2001. Accessed December 13, 2011. http://www.gothamgazette.com/commentary/77.carter.shtml
- Deleuze, G., and F. Guattari. 1983. A Thousand Plateaus: Capitalism and Schizophrenia. Minneapolis: University of Minnesota Press.
- Emmett, R. 2011. "Community Gardens, Ghetto Pastoral, and Environmental Justice." Interdisciplinary Studies Literature and Environment 18 (1): 67–86.
- Gandy, M. 1997. "The Making of a Regulatory Crisis: Restructuring New York City's Water Supply." *Transactions of the Institute of British Geographers* 22: 338–358.
- Gandy, M. 2002. "Between Borinquen and the Barrio: Environmental Justice and New York City's Puerto Rican Community 1969-1972." *Antipode* 34 (4): 730–761.
- Gandy, M. 2004. "Rethinking Urban Metabolism: Water, Space and the Modern City." *City* 8 (3): 363–379.
- Hawkins, H. 2011. "Dialogues and Doings: Sketching the Relationships Between Geography and Art." *Geography Compass* 5: 464–478.
- Hinchliffe, S., M. B. Kearnes, M. Degen, and S. Whatmore. 2005. "Urban Wild Things: A Cosmopolitical Experiment." *Environment and Planning D: Society and Space* 23 (5): 643–658.
- Jackson, S. 2011. Social Works: Performing Art Supporting Publics. New York: Routledge.
- Kaprow, A. 2003. *Essays on the Blurring of Art and Life*. Berkeley: University of California Press. Karvonen, A., and K. Yocom. 2011. "The Civics of Urban Nature: Enacting Hybrid Landscapes." *Environment and Planning A* 43: 1305–1322.
- Kastner, J., and B. Wallis. 1998. Land and Environmental Art. London: Phaidon Press.
- Kester, G. H. 2004. Conversation Pieces Community+Communication in Modern Art. Berkeley: University of California Press.
- Lacy, S., M. Roth, and K. Mey. 2010. Leaving Art: Writings on Performance, Politics, and Publics, 1974–2007. Durham, NC: Duke University Press.
- Lambert, A. M., and M. R. Khosia. 2000. "Environmental Art and Restoration." *Ecological Restoration* 18 (2): 109–114.

- Latour, B., and P. Weibel, eds. 2005. *Making Things Public: Atmospheres of Democracy*. Cambridge, MA: MIT Press.
- Light, A. 2001. "The Urban Blind Spot in Environmental Ethics." *Environmental Politics* 1 (10): 7–35.
- Liss, A.. Minneapolis 2009. Feminist Art and the Maternal. Minneapolis: University of Minnesota Press.
- Maciejczyk, P. B., J. H. Offenberg, J. Clemente, M. Blaustein, G. D. Thurston, and L. C. Chen. 2004. "Ambient Pollutant Concentrations Measured by a Mobile Laboratory in South Bronx, NY." *Atmospheric Environment* 38: 5283–5294.
- Mackenzie, A. F. D. 2002. "Re-Claiming Place: The Millennium Forest, Borgie, North Sutherland, Scotland." Environment and Planning D: Society and Space 20: 535–560.
- Mackenzie, A. F. D. 2004. "Place and the Art of Belonging." Cultural Geographies 11: 115–137.
 Matilsky, B. 1992. Fragile Ecologies: Contemporary Artists' Interpretations and Solutions. New York: Rizzoli International Publications.
- McKee, Y. 2008. "Haunted Housing: Eco-vanguardism, Eviction, and the Biopolitics of Sustainability in New Orleans." Grey Room 30: 84–113.
- Miles, M. 2000. *The Uses of Decoration: Essays in the Architectural Everyday*. Chichester: Wiley. Miles, M. 2004. *Urban Avant-Gardes: Art, Architecture and Change*. London: Routledge.
- Morris, N. J. 2011. "The Orchard: Cultivating a Sustainable Public Artwork in the Gorbals, Glasgow." Cultural Geographies 18: 413–420.
- Prigann, H., H. Strelow, and V. David. 2004. *Ecological Aesthetics Art in Environmental Design: Theory and Practice*. Basel: Birkhäuser.
- Restrepo, C., and R. Zimmerman. 2004. South Bronx Environmental Health and Policy Study, US Environmental Protection Agency administered study produced by the Institute for Civil Infrastructure Systems and the Robert F. Wagner Graduate School of Public Service. Accessed December 11, 2011. http://www.icisnyu.org/admin/files/ICISPhaseIIandIIIreport.pdf
- Stengers, I. 2005. "The Cosmopolitical Proposal." In Making Things Public, edited by Bruno Latour, and Peter Weibel, 994–1003. Cambridge, MA: MIT Press.
- Stengers, I. 2010. "Introducing Nonhumans in Political Theory." In *Political Matter*, edited by Bruce Braun, and Sarah J. Whatmore, 1–33. Minneapolis: University of Minnesota Press.
- Swyngedouw, E. 2004. Social Power and the Urbanization of Water: Flows of Power. Oxford: Oxford University Press.
- Sze, J. 2007. Noxious New York: The Racial Politics of Urban Health and Environmental Justice. Cambridge, MA: MIT Press.
- Wang, J., and H. Pant. 2011. "Land Use Impact on Bioavailable Phosphorus in the Bronx River, New York." *Journal of Environmental Protection* 2: 342–358.
- Wave Hill and Cambridge Arts Council. 2010. "Exhibition catalog for: Remediate/Re-Vision Public Artists Engaging the Environment." Accessed July 25, 2012. http://www.wavehill.org/arts/documents/WH%20RR%20cat%20FINAL.pdf
- Whatmore, S. 2006. "Materialist Returns: Practising Cultural Geography in and for a More-Than-Human World." *Cultural Geographies* 13: 600–609.
- Whatmore, S. J. 2002. Hybrid Geographies. Natures, Cultures and Spaces. London: Sage.
- Whu, R., G. Cirilo, J. Wong, M. L. Finkel, H. A. Mendez, and R. J. Leggiadro. 2007. "Risk Factors for Pediatric Asthma in the South Bronx." *Journal of Asthma* 44: 855–859.

ABSTRACT TRANSLATIONS

Lavando agua urbana: diplomacia en arte ambiental en el Bronx, ciudad de Nueva York

El proyecto artístico de Lillian Ball, WATERWASH, crea un nuevo imaginario ecológico en el Bronx del Sur. Partiendo de una tradición de un "arte de mantenimiento", el trabajo exhibe el poder del suelo, las plantas y los microorganismos para limpiar el agua – en efecto manteniendo el agua urbana. Un objetivo general de WATERWASH es educar a la gente local sobre el metabolismo del agua urbana, las causas de la contaminación del río, y familiarizarla con la capacidad del suelo y las plantas para responder a ese problema. Como parte de su proceso de creación, el proyecto brindó oportunidades de participar a

diversos grupos de personas, incluyendo un grupo de jóvenes del Bronx que ayudaron con la plantación del humedal. Varios de estos aprendices estarán involucrados en el monitoreo futuro de la efectividad del humedal en mitigar el escurrimiento de los estacionamientos. Utilizo la noción de "diplomacia" de Isabelle Stengers para interrogar los esfuerzos de la artista en trabajos de arte como éstos: negociando y creando una ocasión en la que las personas con intereses divergentes puedan tanto reconocer como mantener las relaciones de cuidado que las sostienen. De hecho, este esfuerzo extiende el discurso feminista del trabajo del mantenimiento hasta incluir lo abordado por lo "no-humano".

Palabras claves: ecología política urbana; arte ambiental; Isabelle Stengers; Bronx; Nueva York; restauración ecológica urbana; arte feminist

洗涤都市之水: 纽约市布朗克斯区环境艺术的策略

莉莉安包尔 (Lillian Ball) 的艺术计划"净水"在纽约南布朗克斯中创造了崭新的生态想 象。该计划以"维修艺术"之传统为基础,展现出土壤、植物和微生物的净水力量,且实质上提供了都市用水。"净水计划"的主要目标在于教育当地民众有关都市水源的新陈代谢与河川污染源的知识,并使大众熟知土壤和植物的能力以回应此一问题。该创作的部分之一便是提供机会给各类团体共同参与,包括一群来自布朗克斯的年轻人协助栽种湿地,其中部分的学徒在未来亦将参与监测湿地减少停车场径流的成效。我运用伊莎贝拉史坦格 (Isabelle Stengers) 的"交际策略" (diplomacy)概念,探究艺术家在创作工作中所做的努力: 例如在利益分歧的人群中进行协商,并创造他们共同认可并愿意维系支持彼此的照护关系的场合。这些努力实则扩展了女性主义有关微修工作的论述,使其纳入"人类之外"的工作。

关键词:都市政治生态、环境艺术、伊莎贝拉史坦格、布朗克斯、纽约市、都市生态复育、女性主义艺术