isc Press

The New Earthwork

Edited by Twylene Mover and Glenn Har

Art

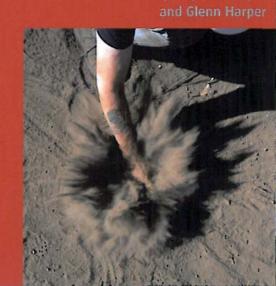
Action

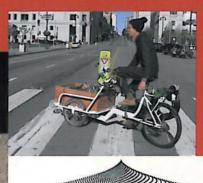
Agency

## The New Earthwork

## **Art Action Agency**

Edited by Twylene Moyer and Glenn Harper













sc Press



FoRM Associates, Northala Fields (aerial view), 2003–09. Clean demolition spoil, plantings, and water, approximately 2000 x 1500 x 105 ft.

anti-pollution agents, has determined that construction materials containing TiO<sub>2</sub> (including concrete, plaster, paving, and paint) help to destroy pollutants released by car exhaust and heating emissions. The process works through photocatalysis: sunlight touching a sculpture, a building façade, or a road triggers a chemical reaction that breaks down airborne pollutants, converting harmful nitrogen oxides into inert nitrates that drain off with rainfall and feed nearby plants.

A percent-for-art commission for a multi-story carpark, *Catalyst*, as Matthew Dalziel says, "point[s] the way to how cities with notoriously bad air quality...could, in the short term, mitigate some of the worst effects of air-borne pollutants." Since their introduction, photocatalytic concrete and other smog-eating materials have become increasingly widespread, as companies around the world develop products for use in public space. In the U.S., Sasaki Associates, a leading planning, landscape architecture, and urban design firm, issued a report in December 2006, advising Los Angeles (one of America's most polluted cities) to adopt TiO<sub>2</sub> concrete and other materials for its outdoor spaces.

When innovative materials won't suit a project, artists can give themselves an environmental edge by repurposing old ones. In 2007, Atlanta-based sculptor Dwayne Bass and green builder/developer Dave Radimann realized that public art could make a significant contribution to the recycling of construction waste. At Commonwealth Braselton, an industrial building in Braselton, Georgia, Bass constructed three tower-like works exclusively from materials found at the job site—a "very cost effective and environmentally beneficial" arrangement. Unused materials do not need to be removed from the site and dumped, nor do they need to be sorted and hauled away for recycling. Green builders and developers have another incentive to seek out artists: the U.S. Green Building Institute awarded Commonwealth Braselton a LEED (Leadership in Energy and Environmental Design) point for the sculpture. This kind of collaborative synergy could inspire more builders to seek LEED recycling and innovation in design credits, while providing artists with expanded sources for non-traditional materials and additional venues for their work.

In the U.K., FoRM Associates, a cutting-edge, interdisciplinary design firm led by artist Peter Fink and architect Igor Marko, has made creative waste disposal a key factor in its approach to livable urban environments. At *Northala Fields* (2003–09), a multi-use community park in outer London, FoRM provided open space and recreational facilities at no cost to taxpayers. The Borough of Ealing, which commissioned the project, acquired the neglected land in 1997 but

lacked sufficient funds for its redevelopment. Fink and Marko, in collaboration with ecologist Peter Neal, won an open competition in 2000 with a dynamic proposal that exceeded the borough's "Land Art aspirations." Their concept combined elements of "social participation, biodiversity, [and] cultivation" and, most crucially, incorporated 1.5 million cubic meters of inert construction refuse, which provided \$10.5 million—enough to fund the entire project.

The process was complex: construction companies brought detritus from major building projects around the Southeast, including displaced material from Heathrow's Terminal 5 and rubble from the Wembley Stadium reconstruction, paying to dump at Northala Fields just as they would at a regular landfill. Using this material saved space elsewhere and shortened hauling time, saving resources and "contribut[ing] to shrinking the ecological footprint of London," Fink says. If Northala Fields had not claimed this construction spoil, 13,000 trips of several hundred miles to outlying dump sites would have been necessary, not to mention the amount of energy required to passively process such quantities of material.

Northala Fields' four grass-covered mounds, sited along the A40 highway, range from 60 to 100 feet high. A spiraling pathway climbs the tallest form, leading to an observation platform that provides views of London. Other features of the 18.5-hectare park include playgrounds, fishing ponds, bicycling and walking paths, and a boating pond. The new landscape also creates mixed woodland and meadow habitats supporting a variety of species (birds posed a special problem because of the site's proximity to an airfield). A new drainage system captures ground and surface water, feeding into recreational and ecological catchments that include an educational wetlands area. The use of recycled materials extends to every possible element of the park, from crushed concrete (gabion retaining walls and paths) to timber (seating and trash bins), plastic (path edging and fishing platforms), and reclaimed granite cobbles.

Though local politics briefly threatened the process when the borough government changed hands, residents advocated for their park and ultimately prevailed. FoRM stressed community involvement from the project's outset,

FoRM Associates, Equating Ecologies, 2008. View of proposal for a project in Quito, Ecuador.



cut & fill





FoRM Associates, in collaboration with AID Architects, *Izolyatsia Landscape Park Masterplan*, to be completed 2011. View of project in Donetsk, Ukraine.

recognizing that a genuinely sustainable park (or any other public endeavor) can only be developed through a commitment that outlasts political cycles—support for innovation must involve residents, the people who will use and enjoy these resources. With equally innovative proposals to reclaim an abandoned airport in Ecuador (*Equating Ecologies*) and transform a former coal and steel center in the Ukraine (Izolyatsia Landscape Park, scheduled for completion in 2011), FoRM proves that the desire for a greener, forward-looking public realm is almost universal—and attainable. Their success demonstrates the potential opportunities out there for artists who open themselves to collaboration and embrace inventive ways of approaching problems.

## Off the Grid: Self-Powering Sculpture

by Elizabeth Lynch

Artists have long been at the forefront of sustainable energy technologies, using the sun and the wind, for instance, to power kinetic and light elements. Such self-fueled works not only fund themselves (a clear benefit in the eyes of cash-strapped commissioning organizations), they also provide important community services, educating the public about alternative energy sources and demonstrating environmental commitment. While this conservation-minded practice is commendable in itself, at least a few artists have begun to investigate its inherent potential: If you're using sustainable energy to power your sculpture, why not take the next step and use your sculpture to help power the community?

In Cambridge, Ontario, *Solar Collector* (2008), by Matt Gorbet, Rob Gorbet, and Susan L.K. Gorbet, responds to "the intersection between manmade artifacts and nature." Every evening at dusk, an interactive network of aluminum shafts—powered by solar energy and designed to mirror the sun's motion—lights up in a series of patterns created by individuals across the world through the Internet. The 12 shafts—arranged in an arc, each one supporting a series of LED lights and solar panels—are pitched at successively sharper angles. Their composition allows them to mark the summer and winter solstices. *Solar Collector* is installed near the "first LEED Gold-rated public facility in Ontario, for the Emergency Medical Services." The commissioning brief encouraged alternative energy, and the artists' interactive, on-line component enables the work to spread educational information about solar power. Matt Gorbet describes the

Matt Gorbet, Rob Gorbet, and Susan L.K. Gorbet, Solar Collector, 2008. Aluminum, glass prisms, solar panels, LEDs, software, and electronics, approximately 65 x 35 x 20 ft.

