

De-silvering the Mirror

William L. Fox

It is a little-known and poignant fact that some of the silver and chemicals to produce the films that made Hollywood the global center of the movie industry were extracted from the Owens Valley and environs. As if it weren't enough that Los Angeles drained water from the Eastern Sierra to expand into the San Fernando Valley, its major industry and part of the reason for the city's growth were also being supported through mining in the same region, an ecological double jeopardy. Los Angeles artist Lauren Bon and her Metabolic Studio are using this set of entwined histories to make visible the effects of the historic resource extraction on both the Owens Valley and the city to the south.

The snow-fed waters that flow down the Eastern Sierra and into the Owens Valley once watered its substantial agriculture before terminating in Owens Lake. After William Mulholland opened the Los Angeles Aqueduct in 1913 to capture and transport those waters to the Los Angeles metropolitan area, the valley's agriculture became unsustainable and the 108-square-mile lake began to dry up. By 1924 Owens Lake no longer held water year-round. In 2006 Los Angeles was forced by a dust-mitigation lawsuit to begin re-watering sixty miles of the river, with the result that approximately twenty-seven square miles of the lakebed are now flooded, a ghost of the lake that was.

The town of Cerro Gordo, which is located high in the Inyo Mountains directly east of and looking down on the lake, produced prodigious amounts of silver from 1866 through the 1950s. Much of the ore was smelted on the lake shore at Swansea and Keeler, then transported by barge across the water for transshipping on wagons to L.A. On the northwestern shore of Owens Lake and embedded in an abandoned plate glass factory is an elaborate *camera obscura* that surveys these sites from the top of the mountains down to the new mitigation ponds. And it is from this repurposed industrial ruin that Lauren Bon conducts part of her complex social practice that seeks to change the relationships that people have to the water flowing along the 223-mile-long aqueduct and in its twelve-foot-diameter pipeline.

Bon, who lives in Los Angeles, heads up an eclectic group of projects housed in a large cement-block warehouse alongside the L.A. River on the edge of downtown. The rubric connecting her various teams, the Metabolic Studio, springs from the Greek term for change. "Metabolic" is a word that today is commonly held to mean the "process that maintains life," the cycle of nutrients turning into energy and matter and back again. The Studio works to transform "resources into energy, actions, and objects that nurture life," which for Bon in her artmaking implies architecture, performance, advocacy, landscape design, filmmaking, and more—all of which she accomplishes through an unusual articulation of artist and philanthropist. In 2010 Bon was leading several teams that focused on three major projects: housing rights for homeless veterans; large-scale panoramic pinhole photography (an epic device in a twenty-foot-long shipping container known as the *Liminal Camera*); and *AgH2O*, which was making a film about the water and silver spirited away from the Owens Valley to Los Angeles. The team for the latter project sought to use silver and water from around the Owens Lake to make and process the actual film stock that was going to be shot. Among scenes featured in the film was one in which the Metabolic Studio builds "The Silver Screen" at Cerro Gordo, and another featuring Dorothy from *The Wizard of Oz* delivering soil to the town of Lone Pine to create an "Emerald City."

If all of this metaphorical linking of the Owens Valley and Los Angeles seems a complex tangle of effort and intention, then you have correctly envisioned the fertility of Bon's imagination, the dense layering of metaphors she deploys in her practice, and the gentle mayhem of the Metabolic Studio's headquarters in L.A. You might also understand, then, how *AgH2O* actually created a physical green spot in Lone Pine, the "IOU Garden," the name of which is Bon's acknowledgement that L.A. owes the Owens Valley its very existence. And you would completely get why Bon bought an old water truck to transport water back from L.A. to Lone Pine as a fictive gesture of repayment—and how all this accelerated the local food movement in the valley, which in turn spawned the recycling of manure from pack trains in the Sierra to improve the impoverished soils of the valley.

It is within this rich matrix that the *Liminal Camera* crew and the *AgH2O* came together in a project that is a fully realized trope for Bon's vision. Bon said recently that she started out wanting to make a film, but came to realize in late 2012 that she wanted to make film. That is, she wanted to make not a story on film, but a story of making film itself. What started out as a metaphorical and political gesture—using local materials to make a film about the relationship between a site of production to that of consumption—has become a deeper inquiry fielded by the Optics Division of the Metabolic Studio, a team that includes the work of the *Liminal Camera*.

The Pittsburgh Plate Glass factory, which stands on the alluvial flats above Owens Lake, includes a large sheet-metal-covered fabrication facility and three large silos that have been unused since the 1960s, when the company stopped producing transparent

sheets from the soda, lime, silica, and other chemicals found in the saline lakebed. In the northernmost silo the Optics Division has drilled a hole facing the lake. Unlike a pinhole camera, which requires no lens to project an image through its small aperture, in order to throw a large and focused image across the forty-six-foot-diameter silo, a lens was used to create a *camera obscura*. The team inserted one the size of a fist that projects a spherical image of the lake and mountains around nearly the entire inside of the large tubular structure. The resulting upside-down image is so encompassing that it requires you to re-conceive your relationship with the view, to slow down and consider its constituent elements, and then to reconstitute them visually and ecologically.

Outside and off to one side sits an olive drab Vietnam-era U.S. Army portable developing unit, as well as several large washing trays holding local chemicals harvested by the team to process the exposed film—film that will soon be made of celluloid derived from the crushed bones of local cattle and coated with silver that the team is mining from Cerro Gordo. Obtaining the silver required rebuilding the mine that was slowly being subsumed by the surrounding peaks, an act of historical preservation and small-scale business redevelopment that is typical of Bon's expanded field of social practice. Now the Optics Division can take a picture of the place from which the picture is being made out of the materials of the place, literally and physically and absolutely.

In another and even tighter turning of the trope, the Optics Division has recently begun floating the locally processed panoramic prints in large trays of water, which slowly dissolve the image by lifting the chemicals off the paper. As the water evaporates and chemicals effloresce on the paper, it dries out to form a miniature dry lake bed. And now this very tight knot of artmaking has been fully consummated as a metaphorical act of visual metabolism. By re-creating at a personal, intimate, individualized level the several industrial processes required to make film, Bon and her team are restoring our knowledge of what filmmaking does to the land, of what Los Angeles and Hollywood have done to the Owens Valley.

The Owens Lake prints by the Optics Division are a prime example of the geoaesthetics being exercised by artists in the Anthropocene, which provides a larger context for Bon's work. Artists have increasingly come to rely upon the geologic as a metaphorical bedrock from which to construct a critique of what we have done to the natural environment. Geoaesthetics is the realm where geography, geology, philosophy, and art meet, an attempt to find solid ground upon which to stand, some piece of history that is prehuman and the foundation for the geography that shapes human societies. To mix geology and metaphor is something our species has been doing since we started to carve symbols on rocks, a fundamental desire to derive cause and effect.

Geoaesthetics has become more commonplace in contemporary artmaking during a time when artists, as well as scientists, have accepted the coining of the term Anthropocene, a word that describes the new geologic epoch in which we are now living, indeed, that we have created. In 2000 Paul Crutzen, a stratospheric chemist who had been awarded a Nobel Prize in 1995 for his part in discovering the mechanism for atmospheric ozone depletion, declared that we were no longer living in the Holocene, or "recent era," but that since the 1790s we had been inhabiting the Anthropocene, the "human epoch." This was not an arbitrary distinction, but one founded upon his analysis of the carbon found in ice cores, a worldwide chemical strata that has been laid down by the burning of fossil fuel since the Industrial Revolution. Crutzen and his colleagues describe three stages within the Anthropocene. The first lasted from the 1790s until the early 1950s, a period during which human use of fossil fuel, hence its effects, grew slowly. The second stage, labeled the Great Acceleration, occurred as post-war consumerism created an explosion of fossil fuel consumption that led to obvious global change, including increasing temperatures and the acidification of the oceans.

The third stage, which dawned during the 1990s, is when humans not only realized they had severely perturbed the entire Earth system, but that we could consciously direct how we affected the system. Given that we can decide how we alter the metabolism of the world and thus everything living in it, a moral imperative is obvious. Geoaesthetics is a way for artists to exercise their work in meeting that responsibility.

The art history coterminous to the three stages can be summarily described as moving from representation of the Earth and its systems, to picturing the human footprint, and then conducting direct interventions in Earth systems. Earthworks, eco-art, environmental art, and most social practices are all, in one degree or another, examples of the latter. Bon's work with the Metabolic Studio is a prime example, its very name indicating how aware she is of the Anthropocene and her potential role in the art of the epoch. She creates collaborative works that are direct manifestations of conditions in the world and that seek to change those conditions. It's a complicated business, but so are the self-reflexive systems of the world that keep the environment stable enough for us to inhabit the planet.

Lauren Bon and the Metabolic Studio knit together the worlds of art and science and politics, worlds that sometimes appear separate endeavors when in fact they aren't. It's just that it takes an artist and a multiplicity of projects to forcibly remind us. The system that is the Metabolic Studio is a model for the twenty-first-century *atelier*, an artist's workshop run not to realize paintings and sculptures commissioned by patrons, but one devoted to a philanthropy of spirit as well as funds: a desire to help one another through conscious

action. And that is the largest context within which an artist can hope to act.

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