I’ve come to think of pollution as the chief product of our civilization, as important or more so than the monuments on which it settles. It’s the material that scientists turn to as the evidence of the Anthropocene, a new geological era measured by the permanent mark of man-made airborne pollution on the stone crust of the earth. The mark of buildings on that crust is quite ephemeral by comparison to pollution. That distinction is even more telling in light of the recent Paris climate talks. The best our leaders have been able to do is to propose a cliché borrowed from the field of historic preservation: to restore the atmosphere back to what it looked like in the past.

This is quite a leap. Preservationists know how to restore buildings, cities, and landscapes, but restoring the atmosphere is entirely new territory. All sorts of questions immediately come up. Ontological questions: How can one conceive of the atmosphere as an object worthy of restoration? Since it is made of natural gases and man-made particles, is it more appropriate to call it a natural or a cultural object? Where does this object begin and end? Does it extend continuously from inside our lungs to where airplanes fly? Or does it present itself to us more like a discontinuous series of environments or fragments we can tangibly grasp? Legal questions: Can this object be owned and therefore regulated? Who could own such an object? What rights and responsibilities would that owner have toward the object? Historiographical questions: How far are we to take this atmospheric restoration? The year 2001, 1989, 1492? Cultural questions: What is the cultural significance of each of these dates? Political questions: Who benefits and who bears the cost for this restoration? Technological questions: What restoration technology is appropriate? What if the technological restoration of the atmosphere turns out to damage it further? Could we find a reversible treatment? There are of course many more.

My own work in the field, and this essay, are attempts to open up a new set of questions about our relationship to the atmosphere and the central role that pollution plays in our thinking about the atmosphere as our heritage.

This conceptualization of the atmosphere as an object of preservation poses a great civilizational challenge. Since the nineteenth century, the objects that preservationists have cared for have grown in size, from movable artworks to interior rooms, buildings, neighborhoods, landscapes, and even vistas. With each enlargement of the object’s scale, we had to devise new institutions capable of carrying out the necessary work—intellectually, politically, culturally, and, of course, technically. Individual collectors could preserve an artwork or even a building, but to preserve a historic neighborhood requires a municipal government, and to preserve areas as large as Yellowstone requires a state robust enough to invent and sustain the National...
Park Service. Now we’re talking about the entire atmosphere of the planet as one object that needs to be tended to.

We don’t currently have an institution in place capable of addressing this task for the atmosphere. We need to build it from the bottom up, starting with the intellectual foundations. To do this, we will need to rethink the discipline of preservation and reimagine what is relevant knowledge for the task before us. The challenge is that most preservation organizations are narrowly focused on improving how to care for the objects that were defined in the nineteenth century. No one is thinking about objects like the atmosphere, which are being defined in our time.

Even at the purely conceptual level, to think of the atmosphere as an “object” worthy of preservation is an intellectual challenge for which we need to call on the greatest minds, irrespective of their discipline of origin. It’s important not to talk only among designers, preservationists, and other cultural producers. Beyond a certain level, there are no real boundaries between disciplines. But, regretfully, our institutions are set up to reinforce the idea that knowledge belongs in distinct compartments, or departments, each with its own building. Even in universities there are few opportunities for the great minds of different disciplines to even have a meal together.

In universities, as everywhere else, technology is where the money is. So it is no surprise that world leaders are approaching the preservation of the atmosphere myopically, as if it was strictly a technological problem, to be solved with more new technology, from the smart city to the fuel-efficient car—never mind the lessons of Volkswagen. In so doing, they are imagining the atmosphere as a technical object—a resource to be manipulated and exploited. They seem to have completely written out culture from the solution. This makes no sense to me. Since we are talking about smoke in the end, think of smoking. No technology could make people quit smoking, not nicotine patches, not nicotine gums. It took a cultural revolution, followed by courageous policy to prohibit smoking in buildings, for the majority of people to quit smoking.

A technological upheaval alone won’t be enough to preserve the atmosphere. We’ll also need a cultural revolution. Not Mao’s kind, which was all about destroying heritage, but rather one that grasps culture as intrinsically intergenerational—a shared heritage. To think of the atmosphere as a cultural object means, by definition, to conceive of it as something that belongs to multiple generations. That is the basis of intergenerational equity—leaving the world so that our children may enjoy it as we did, which is not the same as leaving it the way we first found it, which would be impossible, since change is the nature of existence. Since we are talking about the atmosphere, we must also envision an object that belongs to multiple cultures at once, without any single culture laying exclusive claim to it. To move from a strictly technological view of the atmosphere to one that includes a cultural and intercultural understanding of it is very difficult but worth the effort.

The anthropologist Mary Douglas famously found that we typically think of pollution as that which has no place in our culture. Our work should be to bring pollution back in to the cultural sphere. Between atmosphere and architecture, we might find a material continuity, pollution. It is through this material continuity that I think we can begin to conceptually extend our traditional idea of the monument to the atmosphere. There is a role for aesthetic work in thinking about climate—reorienting our understanding of the atmosphere toward culture, because it helps to see something in order to understand it.
But there’s also much necessary intellectual and scientific work to be done. It is difficult work, because there are few opportunities for collaboration between the visual arts, the humanities, science, and technology. But where there is a will there is a way. In my view, the places best suited to support these encounters are research institutions, not just universities but also museums and the like.

One field that holds much potential in this regard is “experimental preservation”—a theoretically informed practice that tests hypotheses of what preservation can be and do. It is in the nature of this testing to push on the limits of the discipline, to draw relevant knowledge from other disciplines while contributing preservation knowledge back to them. On the surface, experimental preservation can appear to be undermining the very foundations of preservation, but upon closer scrutiny this undermining reveals itself to be a renewal. To push outward is also a way to reaffirm the center, to nourish the unique knowledge that preservation produces and its particular modes of engagement with the world. It is also to remain open to the possibility that preservation knowledge might surface where we least expect it: in biotech, in first societies, in aerospace, in philosophy, in fashion, and so on.

I’m particularly interested in the contributions of contemporary artists to preservation. Ai Weiwei is buying ancient Chinese wooden temples and showing them as his art in an effort to use the power of the art market to prevent their destruction. Olafur Eliasson recently moved an iceberg older than the pyramids to Paris, where it melted in front of world leaders gathered for the climate talks—an expression of the challenge before preservation. There are also fascinating experimental preservation works being produced at the intersection of art, preservation, and history. David Gissen has created some


Bottom: Tomás Saraceno's Aerocene, a solar-powered hot-air balloon, White Sands Missile Range, New Mexico. The launch and the symposium “Space Without Rockets” were initiated by Tomás Saraceno with the curators Rob La Frenais and Kerry Doyle for the exhibition “Territory and the Imagination” at the Rubin Center for the Visual Arts. Courtesy of the artist; Pinksummer contemporary art, Genoa; Tanya Bonakdar Gallery, New York; Andersen’s Contemporary, Copenhagen; Esther Schipper Berlin. Photograph by Studio Tomás Saraceno © 2015.
incredible visual reconstructions of the atmosphere of Pittsburgh, the Smoky City. Mark Wasiuta, Marcos Sánchez, and Adam Bandler have reconstructed the particulate matter floating in the Los Angeles atmosphere circa 1955 and 1965. We live in a peculiar situation today when certain art practices outside of traditional preservation are at the forefront of a new preservation. It is not the first time in history that art leads the way for emerging disciplines. Think of meteorology in the nineteenth century. For some, John Constable was a great British landscape painter; for others, his paintings are pioneering works of meteorology, made by a scientist who contributed as much to the understanding of the weather as any of his contemporaries.

In our own time, preservation is undergoing a fundamental transformation, emerging as a renewed discipline, with new purposes and means, through experimental practices that are broadening the established boundaries of knowledge. As preservationists, it behooves us to seriously engage those practices, and to recognize their contributions to our common efforts. The way these “outsiders” do preservation may seem unorthodox. But then again, all our conventional treatments of cultural objects, from consolidating stone walls with ethyl silicate to legally designating buildings as landmarks, were at one point in time quite unorthodox things to do. Experimental preservation is radical in the strict sense that it returns to the roots of preservation as an unorthodox treatment of cultural objects. One can pursue orthodox treatments when working on objects that are widely recognized as having cultural value—but in the case of the atmosphere, its status as a cultural object is a question rather than a given.

The unspecialized public tends to assume that cultural objects are out there, and that preservationists come later and treat them. But this is not always the case. For instance, historic districts did not exist before preservationists created them through unorthodox legal treatments. Likewise, National Parks did not exist as such before preservationists invented them, drew artificial lines across vast landscapes, and started forcing ranchers out at gunpoint and employing rangers to keep poachers out. In other words, preservation treatments are constitutive of cultural objects. Preservation in many ways comes before, or at least accompanies the formation of cultural objects.

The question then is what sort of preservation treatments, however unorthodox, can accompany the formation of the atmosphere as a cultural object. My own project, *The Ethics of Dust*, is one such treatment. I paint liquid conservation latex on monuments, which removes pollution—and in so doing, creates an imprint of it as a record. Each cast might seem at first to be about an individual monument. And they are. But taken together the series of casts begins to suggest a material continuity through pollution between all these individual monuments. The pollution itself was once airborne. It belongs to the sky as much as to the monuments. Each cast is a piece of the atmosphere deposited on a particular building. Each piece is also an invitation to do the conceptual work to put them all back together, to reconstitute the atmosphere as a cultural object.

It might seem unorthodox to work from small fragments, strewn about the world, to reconstitute the atmosphere. And it is. But this is precisely how many of the greatest monuments of the world exist. Think of the Parthenon, for example. Where is it? Only a small portion of it is on top of the Acropolis. Much of it is down the hill in a museum. Very important parts of it are in the British Museum. There are original pieces in the Vatican Museum, in the Louvre Museum, in the National Museum of Denmark, in Vienna’s
The Ethics of Dust: Trajan's Column, Jorge Otero-Pailos, 2015; commissioned by the Victoria and Albert Museum. Photograph courtesy of Peter Kelleher and the Victoria and Albert Museum.
Kunsthistorisches Museum, in the Munich Glyptothek, in the Würzburg University Museum, in the University of Heidelberg, and many other places. The Parthenon, from a material standpoint, is a series of fragments strewn about the world. Despite this discontinuous material reality, we think of the Parthenon as something that has unity. But what holds together this cultural object? I would argue that what holds it together is an idea: Western democracy. We cannot imagine Western democracy without its historical anchor in the Parthenon, the symbol of Periclean Greece, at least since the early nineteenth century, when the American and the French revolutions revived democracy as a viable political system.

Just as we can never see the Parthenon all at once, we cannot see the atmosphere in one glance. Even the famous 1972 “Blue Marble” photograph from Apollo 17 shows only half of it, and only an instant of it. Conceived as a cultural object, the atmosphere is not just a space, a sphere, or a moment—1972 or whatever other date politicians might want to restore it to. The atmosphere also has temporal depth; it has a history that can only be borne out, not to mention experienced, in its materiality. It is in this way that the atmosphere is a cultural object, shared across generations, each of which has the right to enjoy and the duty to preserve.