

Glosses on Dirt

Aeolian. I worked for six months as the lab manager for a contract archaeology firm that was excavating ancestral Pueblo sites at the White Mesa uranium mill south of Blanding, Utah. One week, when the field crew was short-handed, I helped screen for artifacts in a field of aeolian soil. Aeolian has something to do with wind: I thought of the aeolian harp, its strings moved by the winds, but I heard no music in the Utah dirt. Usually, I was confident about my words, and I bent them this way, or that way, but when it came to words that archaeologists used, I wasn't always certain of their meaning. Sometimes they had too many meanings. Other times, not enough. (A museum curator once told me that when cataloging artifacts, it is not acceptable to make aesthetic judgments. In a collections management database, description means description. Describe a projectile point, its type—for instance, corner-notched—and the stone from which it was knapped, but if it's pretty, don't call it pretty.) Aeolian was one of those words. It sent me on a little expedition to the dictionary. I was screening for artifacts in a field of aeolian—which is to say, wind-blown—soil. Aeolus was the Greek god of the winds. You see my problem.

Artifacts. At my job, I spent hours washing artifacts. Mostly I washed potsherds, fragments of the broken bowls, seed jars, and other vessels of the Pueblo Indians who lived in southeastern Utah a thousand or more years ago. In the lab, which was not a real lab but rather a rented garage with no sink, I'd fill a bucket with water from the garden hose and scrub the sherds with a toothbrush. I washed stone scrapers, hammer stones, manos, and the fragments of shaped, smoothed sandstone that the archaeologists called bulk indeterminate ground stone. I washed a quartz crystal. I dry-brushed the artifacts I couldn't immerse: awls made from animal bone, fragments of turkey eggshell, and rosy sherds whose color, applied after firing, was known as fugitive red. Washing artifacts was simple, physical work, and I liked it. Each artifact told a story of the past, but it didn't tell it to me. We occupied adjacent spaces, the artifacts and I, in companionable silence, like seatmates on a train in a country where I did not speak the language. Washing them was a way of greeting them, acknowledging their entry from their world into mine. Where I work now, at an archaeological research and education center, a visitor asks if washing removes valuable residue from the artifacts. Yes, I reply, but not everything warrants that level of analysis.

Flotation. The archaeologists went off early each morning to the excavation site on White Mesa. At the end of the day they brought back brown paper bags of artifacts and samples, labeled with the precise location where they were found. The collections included numerous one-liter bags of dirt, scooped from the twenty archaeological sites they were excavating—an area that soon would be destroyed in the construction of a new "cell," a holding pit for uranium mill waste. That construction project was the reason for the archaeology, which bore the straightforward name of the White Mesa Mill Cell 4B Data Recovery Project. In the lab, the soil samples were processed by a college student, a theater major, the daughter of the archaeologists who owned the firm. She did this work in the driveway of the garage, using a garden hose, buckets of water, kitchen strainers, and other homely implements and wearing her bathing suit because thirty years earlier her mother had processed floats similarly attired. When her hair was up, you could read the tattoo in delicate script on the back of her neck: So much beauty in dirt. What came out of the muddy water was left to drip-dry in pouches of diaphanous white mesh, like little ghosts suspended from a clothesline that stretched across the back of the garage. This material would later be examined for microartifacts—small particles of animal bone, plant material, delicate ornaments such as shell beads—that would have passed through the 1/4-inch screens in the field. "It's not what you find, it's what you find out," archaeologist David Hurst Thomas has said. If we look at dirt closely enough, we are no longer looking at dirt. We are looking at lives.

Loess. Wind blows dust, and dust settles into loess, a word of German origin that means a silty sediment. Aeolian loess soils were deposited after the last ice age across much of southeastern Utah and southwestern Colorado. In a region known for its canyons, loess is rock's unglamorous cousin. It can't compare with the fine bones of sandstone, the arches and the natural bridges. Loess sat unappreciated—hunter-gatherers didn't find a diversity of plants suitable for foraging there—until, the archaeologists say, people began farming corn and beans and realized the deep soils held moisture in the high desert. The first time I walked through Utah's aeolian loess I was in my twenties, and the place gave off something like pheromones, that jolt you get in the presence of an attractive stranger when you admit, to your joy or shame: I want this.

Yet it was hard to love the loess at the mill. The wind blew steadily from the southwest, stirring up dirt devils at the excavation and the adjacent construction site where another kind of crew was busy obliterating what the archaeologists were done excavating. The wind drove grit the texture of cornmeal and the color of cinnamon into our ears and nostrils. Inside the portable toilet, a fine powder of loess covered every surface, including the after-the-breakup wheel someone had left there for the amusement of the field crew. You could spin the dial, then choose an action to take: revenge, wallowing, and so forth. Any fingerprints left on the wheel would soon be covered up by another layer of dust. In their work clothes, you couldn't tell the girls from the guys. But on their field specimen bags, the girls were the ones who wrote "Pretty!"

Midden. A lovely word for a trash mound, with comforting echoes, middle and den. I learned to tell a midden by the presence of gray soil—gray from ash swept from old hearths. Other than middens, I'm nearly illiterate when it comes to reading dirt, even though I've watched archaeologists read it many times. They see things in the earth of early spring when it is wet with snowmelt that would be impossible to see in the same earth baked dry by summer heat. One archaeologist may spot something that another archaeologist may miss. One may, I suppose, call the soil in a unit loamy silt, while another calls it silty loam. But no one can fail to identify a midden. Even I can recognize that telltale ashy soil. This is one of the consolations of archaeology: the salvaging of discards, the opportunity to sift through the past and find something of value.

Munsell color system. Used by archaeologists, soil scientists, and others who are intimate with dirt. The Munsell system uses letters and numbers to represent color in terms of hue, value, and chroma perceptible to the human eye. The warm-spice-colored earth I fell in love with: 2.5YR 5/3. The bare soil that strikes my eye as drab when I am sad: 2.5YR 5/3.

Pithouse. The artist Rachel Whiteread casts negative spaces. Shallow Breath is the space beneath a bed. House was a concrete cast, in 1993, of an entire Victorian house in London before its scheduled demolition the following year. For me, archaeology was like that: a revelation of spaces. At the site on White Mesa, the places where soil changed color guided the archaeologists in their excavation of postholes, storage bins, hearths, and other features that combined to delineate the shape of seventh-century Basketmaker pithouses. At the excavation, the sight of a pithouse, or more accurately the volume of one, with its clearly defined area for cooking and its equipment for grinding corn, affected me greatly. Here was a home, snug and earthbound, with a place for everything and everything in its place, in situ as the archaeologists say. But if the pithouse I saw had been found with its grinding stones left carelessly askew, that would also have affected me greatly. You see, I was keeping my essentials in my car, in auto, so to speak, and everything else in two storage units, one just up the road in Blanding, the other in Bellingham, Washington. In my forties, I was the one who was aeolian, blown by winds called Poor Decisions and No Longer Young.

Pottery. The archaeologists moved dirt with scoops they'd made out of cut-up one-gallon plastic jugs. Metal clipboard boxes kept dirt off their forms in the field. It all began with baked clay: dirt made into containers for things you want to keep dirt out of. We live on the path the Neolithic revolution put us on, the transition from hunting and gathering to agriculture and a settled, sedentary way of life. We store food. We save for the future. By we, I don't mean me. By Neolithic standards, I was inadequate. I had no home of my own. I was living in a borrowed place, an old pottery studio that was equipped with a toilet and a utility sink but no kitchen or shower. In the morning, before joining the van pool up to the site, I'd go to the K&C store and buy a pack of Hostess Donettes. I'd eat half for breakfast and save the other half for lunch. I'd swallow my antidepressant. During that time, I was unhappy. My feelings are not what matter, about the work, or the artifacts. Description means description.

Screening. My screen looked like a rough-hewn wood-framed window screen slung waist high from chains attached to a collapsible metal tripod, balanced on uneven ground, splay-legged over a mound of screened dirt. I'd heave a five-gallon bucket of dirt onto the screen, take hold of the frame, and commence a vigorous shaking, back and forth, then side to side, turning my head to the side as dirt poured through the screen and rose airborne in clouds of choking dust. I liked the screening, just as I liked the washing. While I did this work, I thought less and less about the meanings of words, and more about the meanings of dirt. Sometimes the dirt fell away from the artifacts during the first shake. It was easy then to pick out the sherds and lithics and drop them into my paper field specimen bag. What was left in the screen, the rock-hard clods of dirt, had to go through the wire mesh as well. That meant anything from lightly tapping at the clods to whacking them with a trowel or, more often, a sawn-off section of broom handle. You could get a rhythm going. This is another thing I learned from working with archaeologists: there is the dirt you treat with tenderness, and there is the dirt you can hit.

Stratigraphy. A stratigraphy diagram shows levels of deposition and levels of occupation, layer by layer, down to ancient periods of human habitation. Stratigraphy is reassuring. Things that were on the surface are no longer on the surface. Things that used to trouble me now trouble me hardly at all.

Temper. In the lab, I washed potsherds to remove the dirt, and when the sherds were dry I counted them, weighed them, and put them into archival-quality polyethylene bags. Eventually, it would be someone else's job to open the bags and analyze the sherds. If you are a pottery analyst, one of the things you look at is temper: the materials mixed in with the clay, which show at the broken edges of a sherd. Temper can be gritty, like sand or crushed rock. Temper can be crushed sherds. It is temper that strengthens clay and helps hold it together. It makes the vessel possible. Once, when I was washing artifacts, a grayware sherd, badly tempered or badly fired or both, softened into mud in my hands. My own temperament includes, by now, a good amount of Utah dirt. There were times it nearly made me fall apart. Now it holds me together.

Erica Olsen lives in southwest Colorado. She is the author of *Recapture & Other Stories* (Torrey House Press), a collection of short fiction about the once and future West. "Glosses on Dirt" (in different form) will be included in an anthology, *Dirt: A Love Story*, to be published in fall 2015 by University Press of New England.