

Irradiated Traditions: Navajo People Wearing the Yellow Dust of Uranium Toxicity

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This project involves a multidisciplinary team including a fiber artist/textile surface designer, an apparel designer, a Navajo matriarch and traditional weaver (Jane Benale), and a multimedia artist (Malcolm Benally). The fiber artist/textile surface designer makes fabric typically out of repurposed material, silk, and wool utilizing a process called nuno felting; the apparel designer uses various surface design techniques such as hand weaving and digital textile printing. They both share a similar quest: pay homage to the traditional dress of indigenous people, and use design to reflect the dynamic interplay of opposing elements: air and earth, water and fire, new and old and life and death. In the execution of this wearable art, the very embodiment of their inspiration comes from the death of one garment to give life to another.

This design was originally developed for ‘Hope and Trauma in a Poisoned Land,’ an Arizona exhibition where invited artists explored the impact of uranium mining on Navajo lands and people. The art exhibition featured Navajo stories and perspectives about how uranium radiation and unknown exposure has impacted their health, their land, their water, their animals, and the natural materials and objects that they use in their everyday lives.

The two designers incorporated the work of a skillful and revered Navajo weaver, Jane Lilly Benale, who has herself experienced the personal trauma of uranium toxicity in her family and on her land. The weaver created an interpretive piece, weaving a prayer for the stories to be told. The weaving tells the story about how the very fabric of Navajo family and tribal lives were permanently changed because of uranium toxicity. She believes a weaving for the Earth was necessary. The second designer then created nuno felt fabric that harmonized with Jane’s rug. The first designer then created a contemporary outfit, infused by all of the fabrics and design elements, relying on traditional Navajo garment style. Certain parts of the felted fabric and Navajo rug gave inspiration to the apparel designer to create an additional digital textile print that was hand-woven into fabric for the pattern pieces. Malcolm contributed his creative and interpretive perspective on how to depict Navajo culture and the impact of uranium toxicity in this wearable artwork.

To make the piece, the second designer first dyed wool in colors that represented important elements in Navajo life. Wool was used as a medium because of the significance of sheep in Navajo daily life and ceremonies. After the original rug was created by the Navajo weaver, it was then digitized into an image and modified in Photoshop and then printed on silk organza fabric. From the 2-yard silk organza image, nuno felt fabric pieces were made. Those felted pieces were stylized into a skirt and cape, inspired by both contemporary and traditional Navajo

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garment style. Two sets of textile patterns were developed, inspired by the original rug color, for the top pattern. For the blouse, one textile pattern included ½” width stripes for weft strips and the other included a textile pattern with ½” width stripes for the warp strips. These were then placed on Adobe Photoshop and then printed on 100% cotton chambray. Each 1/2” strip was then hand-cut and woven together to simulate the original weaving pattern that you often see in a Navajo traditional garment. An additional organza piece was developed with more green-yellow irradiated color to showcase the uranium pollution.

Symbolic explanation of this design project and woven rug:

During the Cold War through 1986, mainly men worked in the uranium mines and came home with their clothing tarnished by yellow toxic dust from the mines. Not knowing about the dangers, the uranium dust stayed in their homes. Now, Navajo women who kept the home safe, must *wear* the memory of how their lives were changed. This piece represents the ways that uranium contamination has affected the lives of women and the earth. The clothing indicates the modern representation of contemporary yet traditional Navajo clothing. The irradiated green transparent outer shawl represents the invisible shroud of irradiated uranium, the toxicity spilling onto the body and the land.

The weaving starts with the brown earth and underground water that gives life to the turquoise blue water. The thin red lines are like the red ochre rock; these are both the bloodlines of strata in earth’s history as well as bloodlines from the lives lived. Sustenance from the land tells the Navajo people: “*Tó éí Iiná áádóó Dibé bee Iiná: Water is Life and Sheep is Life.*” The green, represents the color of growth and comes from the green pastures; it includes healing medicinal plants, juniper, and piñon trees. Yet green now also represents radioactivity. The sheep calmly gives of its life and the blood flows back onto the land. The sheep trails and dirt roads lead back to the water that they drink, which is now contaminated. The Navajo weaver said: *this is a weaving for the Earth and the Land, about how our lives are tempered by our bloodlines that become a part of the land.*” Then there is the blue sky, clouds, and the rain. As Navajo create their fifth generation, their four bloodlines (via the sheep) must pasture and drink the water from the uranium-contaminated ground. This is the blood land. Again, the water is no longer safe to drink. The sky is still blue, but Navajo ideals for water make it darker. Through the Navajo legacy of uranium, yellow is the color of today, an offer of corn pollen for renewal. Yellow becomes gold from the coming of daylight. Yet from toxic dust, like something new, Navajo say we learn: “In beauty is done.” Hozho Nahasdlii.

