The Humble Weed Takes Storytelling to a Higher Agenda

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Tumbleweed Rodeo is a multi-sensory, multi-species approach to understanding temporality, migration, and the arbitrary nature of borders by tracing the vectors of tumbleweeds' movement from where they're from—the Caucus Region—to where they've ended up: America. Despite its ubiquity in and synonymity with the American Southwest, the plant has mostly evaded critical inquiry; while much literature exists in the fields of agriculture, botany, and environmental science, there is little in cultural anthropology and none in architecture, save one essay on the plant's formal properties. It's precisely because of this—the lack of scholarly work and recognizable expertise—that makes the tumbleweed an exceptional resource for helping students and faculty to shape their education, work across multiple sites to train their imagination, and ask questions outside their frame.

Over the last three years, architecture students from across the Great Plains have engaged collaborators in America and Caucasia to tag, track, draw, and build with tumbleweeds because they defy humanmade borders and ask new questions of indigeneity and invasiveness. This paper covers three examples of architectural studios that work with the plant: the first comprises two month-long participatory performances in Lubbock, Texas, and Chicago, Illinois, respectively; the second centers on reimagining architectural tools to produce new forms of human and non-human extra-thick mappings between New Mexico and Tbilisi, Georgia; and the third documents the planning efforts of students in Colorado who will execute five design-build events in a borderland region with an overlay of different cultures.

WHY TUMBLEWEED?

In the American Southwest, there is nothing as iconic and insidious as the humble tumbleweed. It symbolizes America's reverence for resilient individualism, yet its true provenance from Caucasia—a region between the Black Sea and the Caspian Sea—remains largely unknown. Tumbleweed Rodeo is an ongoing architectural studio that excavates and exhibits the plant's complicated legacies to identify how it helped construct a particular kind of American subjectivity in the Southwest. Through impromptu, Dadaesque performances and dinners, design-build

projects, GPS-informed landscape drawings, and material explorations, students reveal the social dimension of an ecological catastrophe that, when considered from a different perspective, isn't all that bad. The plant intersects everything from President Thomas Jefferson's efforts to create a nation of yeoman farmers to President Herbert Hoover's control over wheat prices in World War I and Georgia's steppe biome degradation during the Russo-Georgian War. By tracing tumbleweeds' movement from their place of origin to their host country, the slow commercialization of the American Southwest's landscape comes into high relief. The plant symbolizes America's reverence for resilient individualism and is a proxy for idealized renditions of the American frontier. It positions the question of invasive species (what came first, and what's truly invasive?) not as disasters but as displays of the majesty of nature and progress. Through their work on tumbleweeds, students collaborate with artists, farmers, and ranchers to represent the plant's true impact on American identity and ecology and ask questions such as: What are the overlooked actors and places that are estranged from the nations and ideologies they help produce and maintain? What would happen if architecture canonized them? What architectural systems have enabled the invasion of different colonial species? This paper presents the plant's historical and contemporary context and offers examples of its inculcation into architectural education.

CONTEXT

The second iteration of the Russian-American Commercial Treaty was ratified in 1832 under the auspices of President Andrew Jackson.¹ Signed against the backdrop of the Monroe Doctrine—President James Monroe's 1823 suppression of colonization to protect the United State's sphere of influence from European forces—the agreement provided general bilateral trading rights between the US and the Russian Empire until it was repealed nine years later because of Russia's discriminatory immigration policies.² During this tumult, the tumbleweed, also known as Russian thistle (salsola tragus), was smuggled into the US by Russian sailors hiding them in their clothes, sacks of flaxseed, and other agricultural exports.³ As tensions between the two states grew over questions of citizenship, territory, and militarism, America's second invasion took hold. The colonial plant species began displacing its native counterparts, irrevocably altering the American Southwest.



Figure 1. Tumbleweed Rodeo Drawing Performance at CO-OPt Research + Projects in Lubbock, Texas, 2020. Photo by CO-OPt.

By the late 1800s, European settlers had removed millions of acres of native flora and enacted agricultural practices incompatible with the colonized landscapes.⁴ The disturbed ground, persistent winds, and evolution of the railway allowed the ruderal weed to rapidly migrate across the U.S. and, unexpectedly, become an integral part of the US's developing identity. Traveling theatrical productions, such as Soldier Buffalo Bill Cody's Wild West Show, created nostalgic and isolationist renditions of the American West using tumbleweed, live buffalo, cowboys, and mestizo and indigenous peoples, making the plant synonymous with the American frontier.5 Once again, the plant raises questions of identity, agency, and ownership through its role in contemporary art and consumerism. In 2018, actor Val Kilmer became embroiled in legal disputes when he was accused of plagiarizing artist Terry Bale Allen's bronze tumbleweed creations.⁶ Kilmer dismissed Allen's suit as harassment, claiming the sculptures lacked the "requisite originality for copyright protection." To complicate matters further, a burgeoning market for tumbleweeds has cropped up on eBay, Etsy, Instagram, and Facebook in recent years, with retail prices up to \$2988.8 The forced migration of tumbleweeds from the American Southwest to suburban homes worldwide offers consumers a packaged, simulated version of the American West and its "curative powers."9

The life cycle of a tumbleweed begins with seed germination from late winter to early spring. In its nascent stages, the plant is an edible reprieve in its arid adopted territories. As a summer annual—a plant that lives and dies in one growing season—a tumbleweed plant can grow rapidly into a verdant green bush that reaches towering heights of up to six feet. ¹⁰ By early fall, it transitions into senescence, then desiccates and disconnects from the ground, transforming into a formidable wind-propelled seed-sowing machine capable of producing around 250,000 progenies. Each tumbleweed can travel several miles before disintegrating. Its cyclic dispersion and aggressive propagation strategies have earned it the moniker "Russian invader." ¹¹ The latter was particularly troubling during the Cold War at the U.S.

Department of Energy's Hanford plutonium manufacturing complex in Washington state: the country's most contaminated nuclear waste site. ¹² With taproots that reach down as far as 20 feet into the ground, tumbleweeds are extraordinary hyperaccumulators that can absorb harmful radionuclides such as strontium and cesium. ¹³ They were the first plant to grow back after aboveground atomic testing ceased and quickly became one of the most uncontainable biological vectors, contaminating other areas. ¹⁴

TEACHING WITH TUMBLEWEED

Since 2020, students from three different North American State universities have worked with tumbleweeds to excavate these histories and realities, then instrumentalize their architectural education to bring them into high relief. They accomplish this in two ways: by imagining new possibilities for the tools of architectural visualization—drawings, models, maps—that are capable of capturing the speed and politics of rapid transformation and by designing and executing public events that invite people to reconstitute the plant and dirt into different architectural compositions. During these performances, participants relay anecdotes, facts, and oral histories about the materials and their relationship with America and Caucasia's revised legacies of subjugation and productivity.

In the spring of 2020, third-year undergraduate architecture students from Texas Tech University marshaled permissions to create two artist-in-residence houses for the Charles Adams Studio Project in downtown Lubbock, Texas. The studio's ambition was to build for free using two region-specific materials—clay-rich soil and tumbleweeds—and, in the process, bring in other voices and work towards democratizing the practice of architecture. Although the COVID-19 global pandemic hampered their construction efforts, students garnered enough attention around the project to hold two month-long events that realized the plant's potential as a formidable conversational tool. They enlisted the help of artist and rancher Jack Craft, who, along with



Figure 2. Image caption. Image credit.

their instructor, the project author, transported 800 cubic feet of tumbleweed from the Llano Estacado across the Stakes Plains and Great Plains; first to CO-OPt Research + Projects, a DIY art space in Lubbock, Texas, and then to space p11, a subterranean gallery for experimental art and architecture in the Chicago Pedway. Students made and installed six custom canvases in both places and attached electric leaf blowers to simulate rodeo pens containing unyielding tumbleweed tornadoes. The gallery floors were lined with West Texas dirt and water, providing an authentic backdrop for the tumbleweeds' wind-blown journey across the spaces. 15 The plants' muddy movements marked the canvases, capturing the relationship between drawing buildup and material breakdown, and viewers, who were primarily locals, volunteered to enter the maelstrom—dancing, roping, and wrangling with the tumbleweeds and each other. While in the exhibition, they shared oral histories of the American West and recounted anecdotes about their direct and indirect experiences with tumbleweed, such as relatives using them as makeshift mattresses during the Great Depression. Intermittently, students would prompt conversations that ranged from colonial strategies in the Americas to contemporary water issues and geopolitical futures. After the shows, they asked the guests for their consent to use their stories, published them as a series of zines, and distributed them for free using internal grant funding.

At the University of New Mexico, recent drawing experiments involved affixing live GPS trackers to tumbleweeds to trace their vectors of movement, which always appear contrary to the Jeffersonian grid—the 18th-century rectangular land survey

system used in the early US Republic to displace indigenous peoples.¹⁶ Alongside artist and farmer Eric Simpson, students helped create an inhabitable landscape drawing that offered the public a new way to experience their environment. They took a 750-foot-long segment of a tracked tumbleweed's route on Simpson's farm in Shallowater, Texas, and he planted 10-foot-tall native plants along both sides.¹⁷ Within the line, activities such as dinners and tours occurred. Once migratory birds consumed the drawing, a new version traveled to an alternative site, such as Tbilisi, Georgia, for the 2022 Tbilisi Architecture Biennial. American tumbleweeds, equipped with tags and cases built by students, were released at two different locations. The first was a 70-hectare former Soviet military garrison in Tbilisi with unclear ownership, and the second is the Tserovani Refugee Camp—a product of the 2008 Georgian-Russian war, which displaced hundreds of thousands of people.¹⁸ The event coincided with the announcement of Vladimir Putin's draft, which resulted in an enormous Russian emigration.¹⁹ In this context, the project mirrored geopolitical dynamics and historical currents. At the former military base, the American tumbleweeds encountered their Russian counterparts; what was once estranged is now reunited.

The current iteration of Tumbleweed Rodeo is a cross-institutional studio between the University of New Mexico and the University of Colorado Denver that asks students to orchestrate a large design-build project, where each step becomes a participatory construction performance. The course's agenda is to expose the lesser-known histories of San Luis Valley—a borderland region that's faced multiple waves of conflict and ethnic succession. By working with something as seemingly banal and familiar as tumbleweeds, the studio tests ways to build a public conversation that isn't exploitative. The studio will hire professional storytellers who have a personal connection to the people and histories they're engaging, such as the Latinx History Project, to initiate and sustain conversations while consenting participants mound, lay on, cover, and burn the tumbleweed-adobe structure.

The tumbleweed's transformation from an alien species to an iconic emblem of its adopted country offers insights into the evolution of American exceptionalism and expansionism. The plant's paradoxical nature—being both intrusive and essential—asks new questions of indigeneity and invasiveness, bolstering contemporary discourses on reconstructions of American identity. Pedagogical experiments such as Tumbleweed Rodeo underscore the pivotal role non-human actors, like this misunderstood plant species, can have in shaping our cultural narratives. By working with tumbleweeds, the instructor's role becomes one of a co-conspirator, helping students expand their scope of influence by supporting their commitments to galleries, international architecture biennials, manufacturing companies, and conferences. Students learn the craft and scope of research and creative practice in the classroom.



Figure 3. University of New Mexico and University of Colorado Denver Design-Build Studio Plan, 2022. Drawing by Sarah Aziz.

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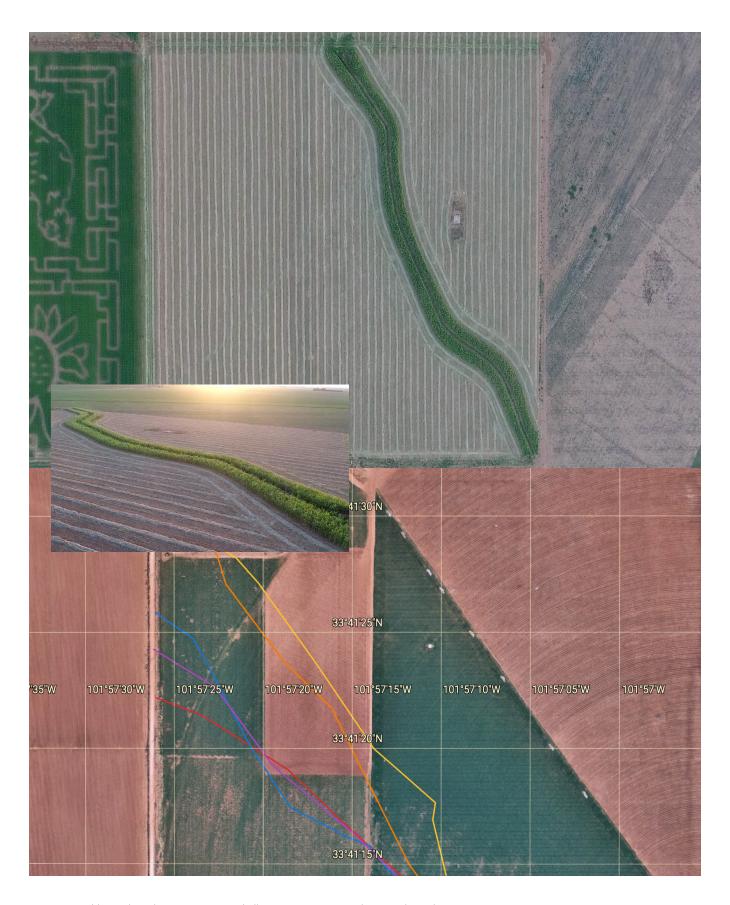


Figure 4. Tumbleweed Landscape Drawing in Shallowater, Texas, 2021. Photos and Map by Eric Simpson.