

# Disaster, Disruption, Desertification: Rethinking the Architecture of Activism, Relearning from a Medieval Ecological Disaster

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The paper introduces the Błędowska Desert—a site at the edge of Europe that testifies to evidence of medieval environmental disruption, human-initiated ecological disaster & persistent desertification. It then presents a condensed historical genealogy of experimental “desert-based” arts & architecture pedagogies which feature educational models aimed at immersion within and sensitivity to desert landscapes; and proceeds to detail and critically appraise the contemporary activities & activism of The Arts of Ecology program, an ongoing interdisciplinary project in the EU that intersects disparate researchers from across the arts, humanities, and sciences within the context of a Special Habitat Conservation Area in central Poland. Through investigation of the workshops, performances, installations, and classes conducted on-site, the paper catalogs the numerous means by which contemporary educators are using the arts in Błędowska to re-trace the history of environmental degradation and re-consider the ongoing environmental conservation efforts of this anthropogenic desert. Linking these pedagogical efforts with a constellation of geological, technological & infrastructural trajectories as well as a host of political tensions, ultimately, the research is inscribed within a broader discourse on the concept of disaster.

The paper argues that the Błędowska Desert serves not as a model for a return to the fiction of a pristine, untouched wilderness, but instead offers an opportunity to collectively consider the fragile realities of ecosystems, social structures, and built environments alike. In conclusion, the paper asks how the view from the anomalous, anthropogenic desert of Błędowska—and the actions of its arts and activist community—can provide critical and creative lessons for how to adapt, with solidarity, agility, and resilience, in the face of the 21st century’s impending emergency of climate dysregulation and global desertification. Might reconsidering buildings & cities in relation to other historical environmental disasters through new modes of contemporary arts & architecture education make space for imagining new visions & possibilities for the future of built & natural environments?

*When I pronounce the word Future,  
The first syllable already belongs to the past.  
When I pronounce the word Silence,  
I destroy it.  
When I pronounce the word Nothing,  
I make something no nonbeing can hold.*

— Wisława Szymborska, *The Three Oddest Words*

## INTRODUCTION

Shortly after Russian aggression in Eastern Europe escalated into the forcible military invasion of Ukraine, the summer of 2022 finds the authors nearby on a vast expanse of sand, a sprawling geological anomaly tucked deep within the forested steppes of central Poland. A dusty surface of aeolian dunes, scrubby photogenic hillocks, and trampled paths stretch out for nearly as far as the eye can see. Along the distant horizon are stands of fir and pine trees. (Fig 1) Despite first impressions, no one is alone here. Afar, there’s a freshly paved path, dotted with surveillance cameras at regular intervals. On one side, the silhouette of a steepled church projects skyward. On the other, plumes of exhaust billow from an industrial paper factory before wafting off into the shifting breeze. Closer in on the dunes, one stands beneath the exultation of chirping skylarks, above a scurrying colony of hermit beetles, and enveloped within the chatter of a lively group, in this case, consisting of approximately three dozen people—housed in just as many tents—though the population and infrastructure seem to always be contracting or expanding in an attempt to accommodate the ebb and flow of artists, scientists, musicians or students arriving to or departing from the “federation”. (Fig 2) At the moment, a snapshot of this coalition features an environmental policy analyst from Krakow, a conceptual culinary artist from Charlotte, an industrious metal fabricator from Austin, and an observant architectural designer and visual anthropologist from Quito alongside a Georgian storyteller, a Belarusian hacktivist, an Argentinian graphic designer, and a score of other creatives—including but not limited to, aspiring and established painters, sculptors, writers, performers, choreographers, and musicians, hailing variously from France,



Figure 1. “Special Habitat Conservation Area: Błędowska Desert,” 2016. Creative Commons 3.0.

Germany, Italy, Iceland and beyond. (Fig 3) Here we are, in Pustynia Błędowska (aka the “Polish Sahara”) during Oasis 2027, an arts & science residency on desertification supported by the Fundacja onEarth & European Cultural Foundation.<sup>1</sup>

Imagined and invented, located in the middle of the Central European Forest, the Błędowska “desert” questions our conceptions of wilderness, landscape, and natural environment, but also the lasting nature of ecosystems, social structures, and built environment. While engaging and unpacking the particular dynamics of this context, this paper more generally seeks to build on contemporary theories of “spatial agency” to expand the roles of knowledge production within the architectural discipline, “exceed the exchange-driven meaning of providing a service” for the profession, and explore stories which embody alternative modes of engaging “explicit political or ideological starting point(s)” for research-driven advocacy, activism, and engagement.<sup>2</sup> In so doing, the paper adopts primarily a narrative, investigatory format to critically situate and carefully describe the research conducted and its outcomes, as well as its relevance to broader architectural discourse. The choice of a narrative tone is a deliberate and conscious decision, both acknowledging the authors’ personal and embodied experience of the Błędowska “desert” and the research methods. Research methods for this paper include on-site workshops & fieldwork, cartographic mapping, and oral history/interviews, with both artists & designers as well as members of local communities.

#### GLOBAL DESERTIFICATION: A LOCAL COUNTER EXAMPLE

On a global scale, deserts, like other biomes, are changing at an unprecedented pace in the 21st century, owing in large part to the compounding effects of anthropogenically-induced

climate change. (Fig 4) “The UN estimates,” for instance, “that 120,000sq km of land are lost to desertification,” the human-initiated process of aridification of previously arable land, “globally every year.”<sup>3</sup> However, for a not altogether unrelated reason, Europe’s largest accumulation of loose sand, Pustynia Błędowska, has—rather than expanding—been relatively stable, even experiencing a risk of shrinking or disappearing altogether for the last several years.<sup>4</sup> Paradoxically, this anomalous landscape feature is the result of continuous maintenance, and the constant, albeit often silent, struggle between sand, plants, missiles, and emissions. Following Poland’s 2004 entry into the European Union,<sup>5</sup> the country endeavored to actively conserve its sand dune habitats against the increasing sprawl of urbanization, intensification of agricultural production, and exacerbation of other extractive and CO2 emitting forms of human activity through the environmental policy instruments of firstly the LIFE+ program of the EU, and subsequently the Natura 2000, a network of designated nature conservation zones and special habitat protection areas spanning across the territories of the EU.<sup>6</sup> In the case of Błędowska, the efforts to conserve the landscape and preserve the unique biodiversity of these inland dunes were twofold. First, starting in 2011, deforestation: “Key concrete conservation actions would include,” the Polish conservation report filed with the European Commission states, “the removal of trees and scrub (mainly Scots pine *Pinus sylvestris*, common birch *Betula verrucosa*, sharp-leaf willow *Salix acutifolia*, and creeping willow *Salix arenaria*) that have overgrown much of the site.”<sup>7</sup> Second, conservation meant demilitarization: as the site, “was previously used in part as a military training ground,” by the German Afrika Korps during WWII—and subsequently by US, Canadian, and Polish paramilitary.<sup>8</sup> For nearly half a decade in the early 2010s, the ecological restoration actions onsite in Błędowska also entailed, “clearing misfired cartridges



Figure 2. Chris Paxton, “Pustynia Błędowska: Arts of Ecology Camp,” Aerochrome Film, Photograph, 2022

and unexploded ordnance (3803 items in total) from 400 ha of the project area.”<sup>9</sup> While most of the world is fighting desertification and its consequences on people, climate, and resources, Pustynia Błędowska offers a counter-example in which this sand “desert” has required constant attention and maintenance in order to preserve this fragile, yet anthropogenic, ecology.

### DESERT PEDAGOGY

The transformation of Pustynia Błędowska didn’t pique the interest of scientists alone. The “desert” is a commodity attracting regional attention and international tourism, its landscape is utilized for, among other things, wedding photographs, dune buggy rides, geo-caching, role-playing games, influencer photoshoots, and military training and reenactments. Starting in 2020, the Fundajca onEarth—an upstart Polish nonprofit dedicated to alternative ecological education bridging art, technology, and science—brought an artist residency and micro-festival to the site in order to raise awareness through the arts and to facilitate rehabilitation of the environment through collective action. In 2022, the third year they’re hosting activities in Błędowska, a whiteboard is marked up with a calendar announcing a weeklong schedule of wide-ranging educational activities—workshops, talks, and performances—loosely bound together under the theme of “arts of ecology.” According to Jo Vávra, onEarth’s co-founder, “The arts of ecology residency program has become an international community. At its core lies peer-to-peer learning, fostering deep adaptation rituals, and experimenting with horizontal, agile organizational structures. Attendees’ “survival” strategies, as well as artistic practice, are embedded in circularity, mutual aid, and respect. In order to maintain the desert dwelling participants find ways of working together, of practicing essentialism, yet full of creativity and poetry.”<sup>10</sup>

Deserts around the world are among the keepers of some of humankind’s oldest aesthetic evidence; rock art artifacts in the central Sahara desert have been dated to 12,000 years old and fragments of petroglyphs along the shore of a desiccated lake in Nevada have dated to at least 10,500 years old.<sup>11</sup> The artists and activists of Pustynia Błędowska were also concerned with time and space. Some workshops focused on building short-lived, low-impact infrastructure to enhance the encampment or maintain the organizational and emotional well-being of the collective, often with one activity feeding off of or into the efforts of the next. For example, consider one chain: Karin Groenewoud (Netherlands) led a workshop harvesting clay from deposits along the banks of nearby ponds and streams, in turn, the collected material acted as the fodder for the kiln-building efforts spearheaded by Alberto Perino (Italy) and Mateo Messori (Italy), ultimately leading to the bread baking demonstrations and tutorials of Romain Causel (Iceland) and the participatory pizza/pancake parties utilizing the yeast culture of Travis Broussard (USA). Collective movement sessions by artist Patrycja Masłowska (Poland) were complemented by carbon cycle musings from climate scientist Wolfgang Knorr (Germany). Or, consider the weaving workshop of artist duo Inès Panizzi (France) and Béatrice Zerbato (Italy), which used a combination of dune-harvested natural grasses and saplings (previously documented in a workshop by Marta Luna Valpiana [Italy]) along with synthetic tent fabrics and scrapped electronics cords (repurposed leftovers from the initial camp build-out by Steffen Sennert & others [Germany]) in order to produce carrier baskets for the campers. Elena Lazutkaite (Lithuania) planned her trip around interviewing Ukrainian refugees, while Nini Khuroshvili (Georgia) transcribed oral histories and cataloged desert myths from inhabitants of nearby towns, which fed into the documentary audio recordings of Zeno Nan (Italy) and video diaries/



Figure 3. Fundajca onEarth, “People: Arts of Ecology Camp,” Drone Footage Still, Photograph, 2021.

photojournalism of Jonas Liepmann (Germany). Audio-visual artists Bàrbara Acevedo Strange and Vanessa Bosch (Germany) teamed up to inventory the effects of indirect human activity on the landscape, while researcher Mark Cinkevich (Belarus) and designer Rebecca Schedler (Netherlands) created a DIY artillery powered, somewhat ironically, by methane emissions captured from the camp’s outhouse.

On the other hand, some workshops adopted another model—using the arts to re-trace, re-consider, or re-enact the ongoing environmental conservation efforts enacted in Pustynia Błędowska. In one workshop, Clovis Deschamps-Prince (France) encountered the successive reforestation of the sands along the perimeter of the desert by pioneer species of pine, birch, and fir adapting to the very arid soils. While in Błędowska these trees are “uprooted and cut in order to maintain a state of desertification” following the conservation plans, the artist’s workshop proposed to intervene in the process, utilizing the barks of the felled trees to distill natural dyes for transforming fabric clothing and tent canopies.<sup>12</sup> In another workshop, over the course of a week Gabriele Provenzano (Italy) gathered hundreds of bits of metal debris and shards of shrapnel from the grounds of the site, later flattening out a patch of desert sand and, in an act of epic apocalyptic knolling, laid out the collection of deadly-weapon detritus for public display.

While the workshops and projects might seem only remotely connected to established practices of architectural education. But more than the specific outcomes, the knowledge dissemination, production, and position are embedded within a long tradition which, given the climate crisis, might be increasingly relevant to contemporary design and architectural pedagogy to carefully revisit. These efforts do not constitute the first attempt to recontextualize arts and architectural pedagogy by shifting its setting out of the studio and into the desert. For example, one might recall the multidisciplinary and collectivist ethos of the Taliesin West Fellowship, a school site in the Sonoran Desert, led by Frank & Olgivana Lloyd Wright, which combined architecture and the dramatic arts. “Echoing certain aspects of the British and American Arts and Crafts movements, the German Bauhaus, and the Eastern mystic Georges Gurdjieff’s Institute for the Harmonious Development of Man, the Taliesin Fellowship was an experiment in communal work, living, and learning. Like the collectives that inspired it, the Taliesin Fellowship engaged its members in a variety of artistic pursuits... including music, drama, literature, the cinema.”<sup>13</sup> Another example from Arizona, is Arcosanti, an urban and architectural experiment founded by a former student of Frank Lloyd Wright, Paolo Soleri, built and activated by countless “Arconauts” since the 1970s. In Texas, Fieldwork Marfa is an international partnership between French, Swiss, and American universities bringing art and design students

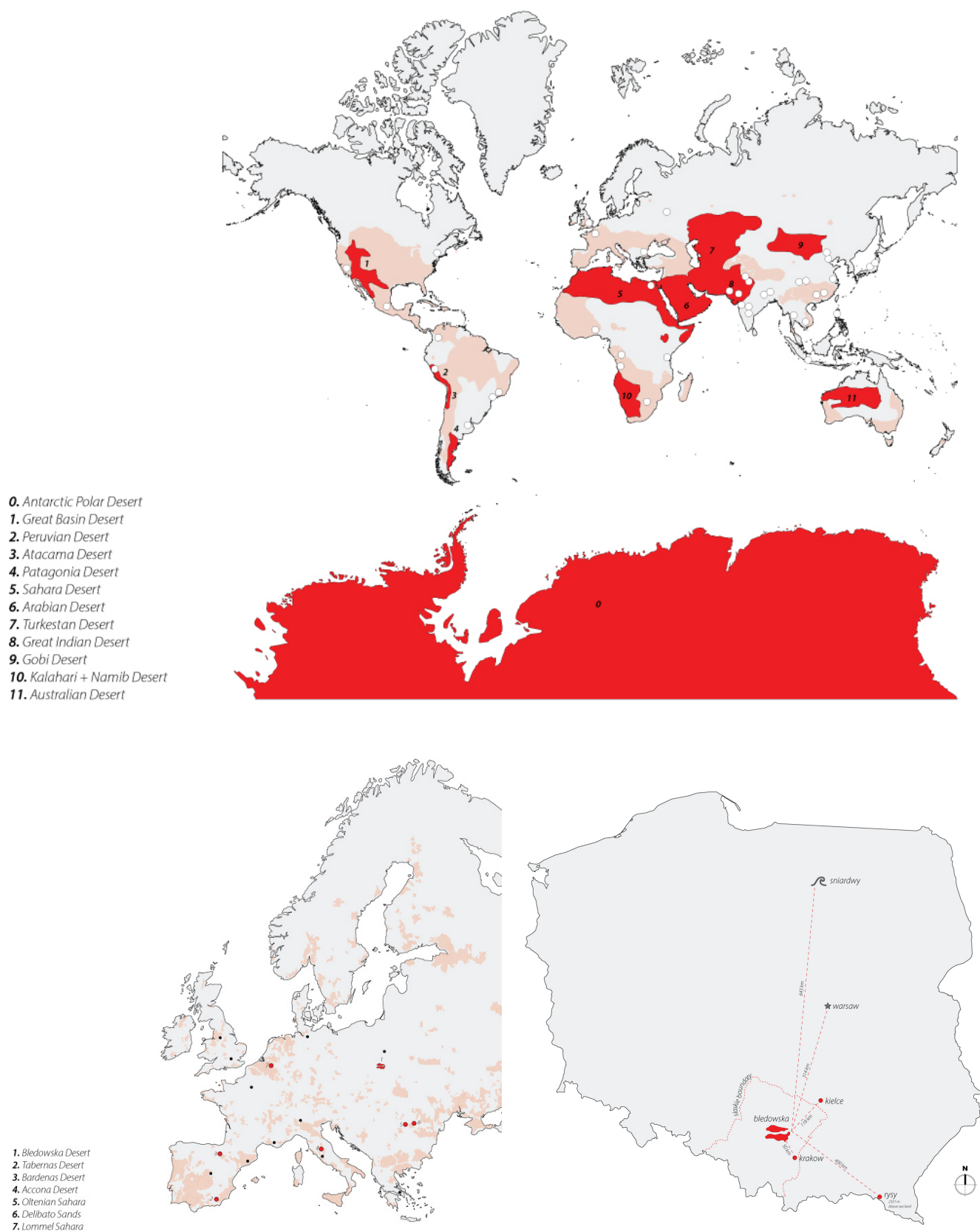


Figure 4. "Mapping Deserts, Desertification, and Urbanization: Three Scales." 2023. Courtesy of Authors.

to learn from the border region of the Marfa desert.<sup>14</sup> Finally, in California, Space Saloon has hosted both local and international students as well as architects for design-built festivals and a series of workshops in the Morongo Valley.<sup>15</sup> These preceding examples—rather than presenting a tidy, linear development of a homogenous desert pedagogy—describe a spectrum of non-chronological, multi-modal forms of architectural learning and teaching rooted in researching the diverse, liminal contextual conditions of deserts.

## DISASTER

While conceptually anchored in a legacy of desert and participatory pedagogy, in Pustynia Błędowska one thing is new: the site is home to evidence of a medieval ecological disaster. While the landscape is one of the most desertified in the region, the recent past has a different story to tell.<sup>16</sup> During the Middle Ages, the landscape was blanketed by a coniferous forest, however, the discovery of silver, lead, and zinc in central Poland led to a rapid population influx and intensification of industrial activity in the area.<sup>17</sup> The technological acceleration of the mining industry spurred the economy in nearby towns of Klucze and Olkusz, and simultaneously, led to aggressive exploitation of the natural resources of Błędowska. The forests were clear-cut in order to harvest timbers for rapidly proliferating local mine shifts, and surface waterways and subsurface reservoirs were conscripted into service of intensive agricultural operations, depleting the local hydrology. Over time as a result of these human activities, the water table was significantly lowered, diminishing the ability of the previously forested lands of Błędowska to regenerate or continue to support a robust network of plant and animal life. Cleared of coniferous trees, the perennial meadow grasses and nutrient-rich topsoil dried up, leaving the landscape in Błędowska to express a feature that was lying in wait just beneath the surface since the last Ice Age: Europe's largest accumulation of loose sand, a fine geological matrix deposited in a single flush by the slow retreat of a melting glacier moving across the area between 25,000 and 100,000 years ago.

"Horrible in itself," states author Rebecca Solnit, "disaster is sometimes a door back into paradise, the paradise at least in which we are who we hope to be, do the work we desire, and are each our sister's and brother's keeper."<sup>18</sup> As a pedagogical landscape, Pustynia Błędowska provides a lens into extreme climates—and extremely consequential human activities—of the past. Its desertification reveals that forests, streams, wetlands, and meadows are acutely susceptible to the effects of climate change, often responding faster than one can measure the effects of their actions. Participants' willing presence as a group of international designers, scholars, and artists in such a contested landscape, in close proximity to conflict zones and sites of forced displacement, demands a critical reflection on privilege. Inscribed with a constellation of historical trajectories and a host of ecological tensions, Pustynia Błędowska serves not as a model for a return to the fiction of a pristine, untouched wilderness, but instead offers an opportunity for collectively considering

the realities of the fragility of ecosystems and societal structures alike within a broken world. Might raising awareness of the activism in this desert and examining other historical disasters through new modes of contemporary arts education make space for imagining new visions and possibilities for the future, for rethinking the pluralities of nature and contingencies of human nature? Given its complicated past, perhaps the view from this anomalous, anthropogenic desert—and the actions of its arts and activist community—can hint at larger lessons for how to adapt, with solidarity, agility, and resilience, in the face of the 21st century's impending global desertification and ongoing climate emergency.<sup>19</sup>

## CONCLUSION

Pustynia Błędowska does not serve as a model for a return to the fiction of a pristine, untouched wilderness as this "desert" is in no way natural, but it is instead the result of centuries of human occupation: a fully anthropogenic landscape. In the complexities of its history and current state, it offers an opportunity to collectively consider the fragile realities of ecosystems, social structures, and built environments alike and to consider the long-term impact of short-term decisions.<sup>20</sup> Through fieldwork, observation, and participation, a close study of the Pustynia Błędowska affords lessons that may productively apply beyond the boundaries of this specific site, toward redefining design pedagogy at large within the overarching context of the urgent need to face the anthropogenic climate crisis.

The view from the anomalous, anthropogenic desert of Błędowska—and the actions of its arts and activist community—can provide critical and creative lessons for how to adapt, with solidarity, agility, and resilience, in the face of the 21st century's impending emergency of climate deregulation

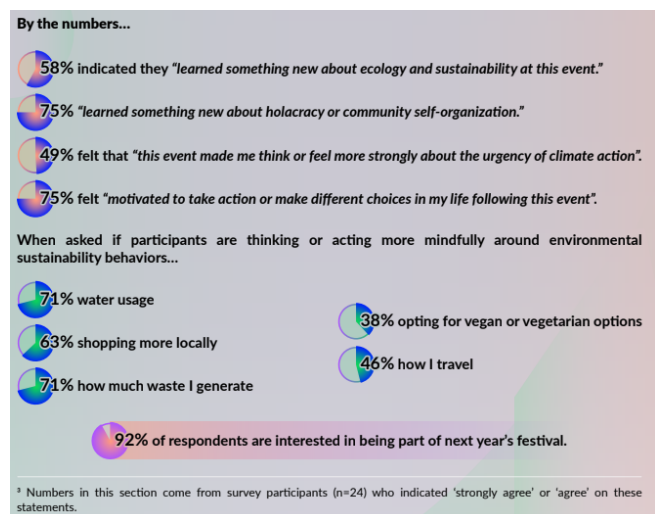


Figure 5. Fundajca onEarth, Excerpt from "Manual of Regenerative Gatherings," Impact on Participants Section, Chart, 2022.

and global desertification. The radically inclusive, peer-to-peer pedagogical approach and loosely tied program of courses relies only on participants' interests in teaching and learning - offering a counter-example to a strictly regimented, accredited curriculum. (Fig 5) It offers an alternative, and perhaps complementary, approach to traditional design pedagogy. Reconsidering buildings, sites & cities in relation to other historical environmental disasters through new modes of contemporary arts & architecture education might make space for imagining new visions & possibilities for the future of built & natural environments. In particular, Pustynia Błędowska offers a unique opportunity to look at a past climatic catastrophe in order to prepare for the future. Investigating the distribution and design of deserts, more broadly, may disrupt fixed notions about the cultural, political, and ecological dimensions of these contested—and continuously changing—landscapes, offering new avenues for the practice and pedagogy of architecture.

## ENDNOTES

1. European Cultural Foundation, *Culture of Solidarity Fund: Cultural Grant For Regional Transformation*, Round 5, 2021, <https://culturalfoundation.eu/open-calls/culture-of-solidarity-fund/>
2. Tatjana Schneider and Jeremy Till, "Beyond Discourse: Notes on Spatial Agency," *Footprint*, 3. (Spring 2009).
3. Grey Richard, "The Wall Holding Back a Desert," *BBC : Future*, September 3, 2019, <https://www.bbc.com/future/article/20190902-the-wall-holding-back-a-desert/>
4. Renata Dulias, "The Disappearance of Inland Dunes Landscape – a Case Study from Southern Poland," *Environmental & Socio-Economic Studies*, 9:2 (Berlin: Walter de Gruyter GmbH, June 1, 2021) 72-29.
5. Accession Treaty, "Treaty Concerning The Accession Of Ten New Member States To The European Union," Athens, (April 16, 2003).
6. Michał Węgrzyn and Paulina Wietrzyk, *Guide of the Sandy Grassland Habitat Protection* (Kluźce: Kluźce Poligrafii, 2014) 7-17.
7. Kazimierz Ściążko, "Active Conservation of Priority Sand Habitats Complex (6120, 2330) in the Natura 2000 site Błędowska Desert," European Commission, European Climate Infrastructure and Environment Executive Agency, LIFE 3.0 Project Public Database, 2014.
8. Sgt. A.M. LaVey, "American, Canadian Paratroopers Jump In To Poland For Exercise," US Military, May 16, 2014. [https://www.army.mil/article/125756/american\\_canadian\\_paratroopers\\_jump\\_in\\_to\\_poland\\_for\\_exercise/](https://www.army.mil/article/125756/american_canadian_paratroopers_jump_in_to_poland_for_exercise/)
9. Ściążko, Ibid.
10. Jo Vávra, "To See The World In A Grain of Sand," *Arts of The Working Class*, May 11, 2022. <https://artsoftheworkingclass.org/text/to-see-the-world-in-the-grain-of-sand>
11. Larry Benson, "Dating North America's Oldest Petroglyphs, Winnemucca Lake Subbasin, Nevada" *Journal of Archaeological Science*, 40:12 (2013).
12. Oimahmad Rahmonov and Oles Wojciech Oles, "Vegetation Succession over an Area of a Medieval Ecological Disaster: The Case of the Bledów Desert, Poland," *Erdkunde*, 2010. <https://doi.org/10.3112/erdkunde.2010.03.03>.
13. Claudia Wilsch Case, "The Architecture of Local Performance: Stages of the Taliesin Fellowship," *The Journal of American Drama and Theatre*, 32: 2 (Spring 2020).
14. Mai Trâ n & Julie Enckell Juilliard, eds., *Fieldwork Marfa Texas USA: Ten Years of Art Experiments : Beaux-Arts Nantes, HEAD - Genève* (Paris: Éditions Jannink, 2021).
15. Kat Barandy, "Space Saloon 2018 Workshop LANDING: Experimental Design in the California Desert," *designboom | architecture & design magazine*, August 23, 2018, <https://www.designboom.com/architecture/space-saloon-landing-08-23-18/>.
16. Defense Language Institute Foreign Language Center, *Countries In Perspective: Poland* (Monterey: United States Department of Defense, 2020), 8.
17. Bogdan Włodarz, "The History Of The Olkusz Mining Area Of Zinc And Lead Ores," in Buckler Mustard (Biscutella laevigata L.) *An Extraordinary Plant On Ordinary Mine Heaps Near Olkusz*, ed. Grażyna Szarek-Lukaszewska, (Krakow: Polish Academy of Sciences, 2020), 17-41.
18. Rebecca Solnit, *A Paradise Built in Hell: The Extraordinary Communities That Arise in Disaster* (New York: Penguin, 1996).
19. Jem Bendell, "Deep Adaptation: A Map For Navigating Climate Tragedy," *Institute for Leadership and Sustainability*, Occasional Papers vol 2. (Ambleside, UK: University of Cumbria, 2018).
20. Marcia Bjornerud, *Timefulness: How Thinking Like A Geologist Can Help Save the World*. (New York: Princeton Architectural Press, 2018).