

Design against Extinction at New York University

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Abstract

This article reviews the eco-social design work of students at the Gallatin School of Individualized Studies at New York University over the last decade. Environmental justice movements and the effects of global warming pose significant challenges to the architecture of dwellings, landscapes, and urban design communities. In response, students have placed socially and ecologically sensitive projects at the center of their design education. The justifiable moral outrage of our students has prompted us and them to rethink the methods by which we teach and imagine social environmentalism from the perspective of equity, inclusion, and the biosphere.

Keywords

design against extinction, design activism, green design, landscape architecture, New York City, design pedagogy

DOI

<https://doi.org/10.47982/spool.2023.1.08>

1 School of the Earth

Fortunately, we do not teach at a design school. We do not have to navigate the rigid dynamics of defining ourselves as either architects, landscape architects, product creators, urbanists, or philosophers or historians thereof. We enjoy the liberty of teaching, designing, and writing about whatever we find interesting, thanks to the freethinking spirit and support of our institution. (Pause for envious readers). As a result, we do what any responsible person would do, namely to address the mounting environmental and social problems of our world. These problems seem even more urgent thanks to us being at a university which only reluctantly tries to tackle our environmental challenges and sluggishly addresses societal inequalities. We believe New York University could do much better. So, we are upset about the lack of greening of our university. Also, the unfortunate systemic, yet shifting diversity, equity, and inclusion issues at NYU across the global network (consisting of three portal campuses and twelve international sites). In response, we have individually and as a group pursued research, exhibitions, and publications attempting to turn NYU's green-speak into a reality. In pursuing these endeavors, we have been fueled by the moral outrage of our students whose social and environmental concerns are adamant. Their force, fury, and funtivities have resulted in a set of eco-social design interventions that will be the topic of this article.

Our undergraduate students have limited and/or no experience whatsoever in environmental justice, design, urban planning, or architecture. As students in a liberal arts school, they may not even have a passion for these topics; instead, they are taking our courses more out of curiosity than a curricular necessity. This allows us to imagine ourselves as the instructors in the legendary first-year introduction courses at the Bauhaus School where students enrolled without preconditions. And our syllabuses would be, just like those of that celebrated school: equally interdisciplinary and open-minded. What unites us with our students is a shared fixation on socially driven environmental concerns. In terms of curricular organization, we ask the students to design for the intimate, private, social, public, cryos, atmos, and biosphere. Diversity, biodiversity, climatic change, species extinction, and socio-ecological degradation take place within these multiple spheres, and we follow suit in our courses starting with the very personal (race, ethnicity, gender, faith, and income class) and ending with the global. This article proceeds correspondingly.

2 Socially Greening the Intimate & Public Spheres

How does that water bottle or teacup feel in your hands and on your lips? What is the shape of an ideal water flask? Even the most simple design question has complicated answers, as there is no straightforward response to the "form follows function" formula. Things get even more complicated with the added caveat that cups and lids also should function well in the ways they are produced and disposed of. Studying what it takes to create an environmentally and human-friendly design of even the simplest object, like the personal water container, amazes our students who tend to reach the conclusion that disposable paper cups and plastic lids should be a thing of the past. As a last resort, we could use old bottles to create something magical, as a sociable reminder that even in hideous things there may be a buried magnificence. The students called (successfully!) on our school's leadership to stop purchasing wasteful paper cups, plastic lids, and bottles.

3 Climate Fashion for the Social Sphere

Why is it that bowtie Bauhausers back in the day celebrated costume design and experimental outfits while current design schools seem to shun fashion as unworthy endeavors? As students and visitors of design schools, we have enjoyed spectacular Beaux-Arts balls and extravagant masquerade parties. However, we have yet to see a design school in which students are asked to think seriously about fashion. In reading about the Bauhaus, we have imagined ourselves participating in their incredible costume parties and theatrical productions, and we decided to have a go for it ourselves. We wanted sustainable clothing to look good. Anyone hanging around climate and extinction rebels, as we do, would know that they tend not to put fashion at the forefront – thus missing out on the opportunity of using fashion to communicate their message. We begin by challenging our students to take part in a t-shirt contest, which entails cutting and sewing an ordinary used t-shirt into something extravagant. By using the same clothing as a point of departure, we leveled the field so that students can compare and contrast the results better. Using a sewing machine, needle and thread, or scissors can be a new experience for many, in effect training them to become more self-reliant. The old t-shirt at the bottom of a drawer at home may, as a result, re-emerge as something new and special. Likewise, the rising water levels due to climate change require us all to rethink life jackets, most of which are charmingly bulky and unfashionable. The “global warming life jacket challenge” has resulted in a series of innovative outfits by our students, often reflecting the very ugliness of pollution. Fashion does not have to be beautiful, as pollution is not. Another favorite among our clothing designs has been an assignment where students transform emergency blankets given to refugees into a welcoming outfit. Finally, the general assignment of turning waste into haute couture has been, perhaps, the most popular one among our students.



FIGURE 1 Lifejacket for Aruba, an Island country drowning due to climate change.

4 Rebuilding the Public Sphere

Neither NYU nor New York City is impressive in terms of environmental policies, despite – or perhaps because of – the broad-minded cultures they contain. Pollution, waste, poverty, and conspicuous consumption are just a few keywords describing where we work and live. So we asked our students to imagine an entirely new and better city and educational institution, including reimagining roads, transportation, and so forth. One particularly innovative result has been the plan for a new “School of the Earth” at NYU. They envisioned it to be free and open to the public. It would have a new building, a green educational program, no annoying administration (of course), plus energy architecture, urban farming, public outreach, and much more. The ideas were all combined by the students into a film, a booklet, a webpage, and a student exhibition which included a six feet high model of the imagined building.



FIGURE 2 Model of 'The School of the Earth' being made.

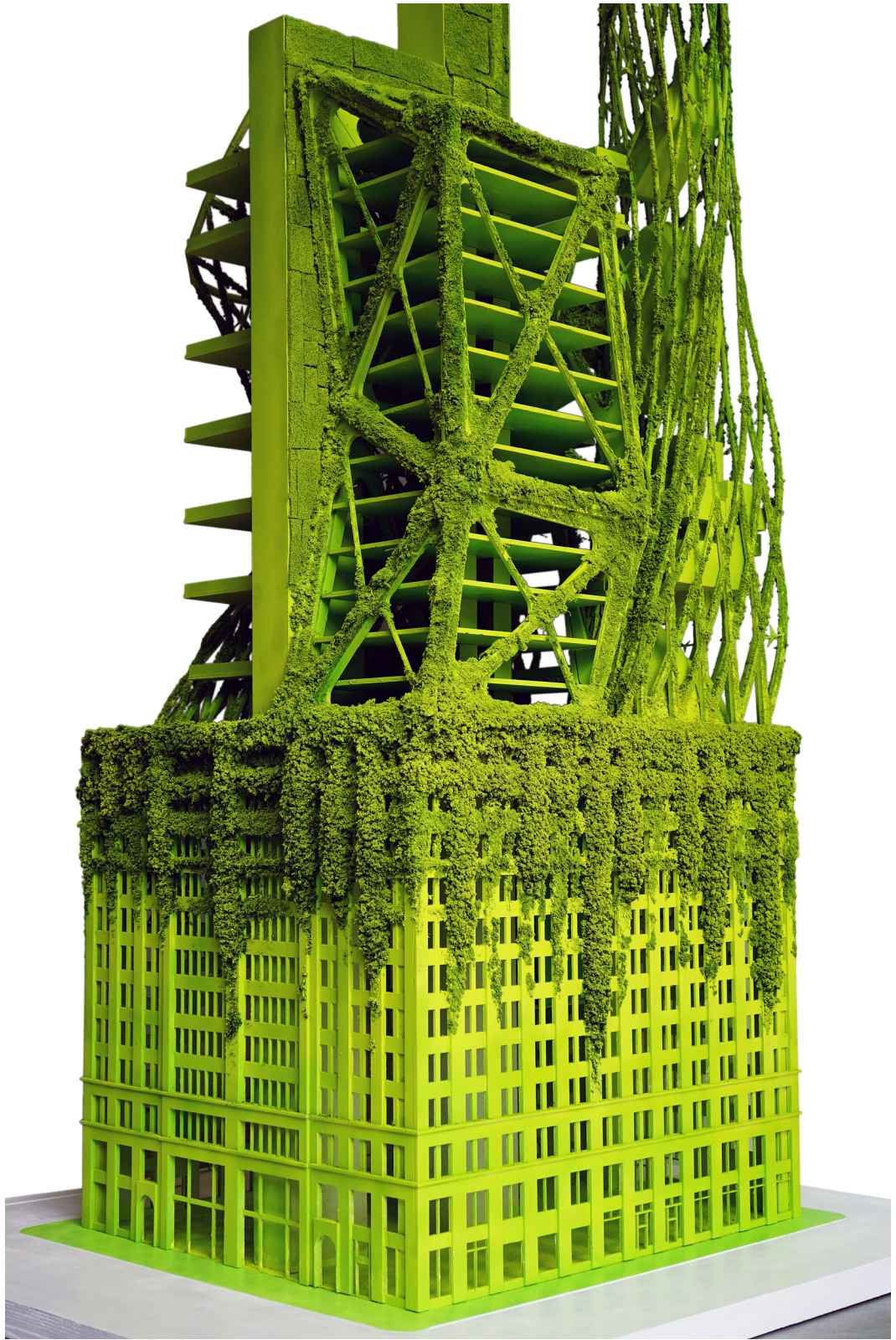


FIGURE 3 Close-up of the School of the Earth Model.

5 In Defense of the Cryosphere and Atmosphere

To involve students in the environmental problems of the icy cryosphere and the invisible atmosphere is a challenge. Building ice sculptures would not do the trick unless they melt in a meaningful way. Ice is a material that is less stable and controllable in the classroom, making it unattractive for educational purposes. But we tried, and the result came in the format of a film in which we used large ice cubes to write a message of support for the Paris Climate Agreement. That ice would melt next to the traditional Washington Square Christmas tree was, to us, a message in itself, and we put it on display by writing “Climate Deal Now!” by pushing large ice cubes along the square slowly enough to mark the ground with meltwater. Not a particularly impressive design, but nevertheless fun and engaging for students seeking to make an impact.



FIGURE 4 “Climate deal now!” Writing with melting ice in NYC in December.

Together with our colleagues and staff, with our colleague Louise Harpman at the helm, we made another similar intervention in defense of the atmosphere. By using close to fifty human-held mirrors in a heliostat formation, we were able to direct a strong beam of sunlight directly into the office of our university’s president. The purpose was to “shine the light” on the ways NYU needs to commit to using renewable energy instead of polluting fossil fuels and also divest its endowment from fossil fuel companies. It became an annoying moment of enlightenment for our leadership who were blinded with energy from the sun. To us, it was a fairly innocent attempt to engage them (and our students) on the importance of not relying on atmospheric greenhouse gases when producing energy.

6 Creating a Microcosm for a Better Biosphere

Times Square is a place for dreams. Endless streams of imaginary stories from Broadway's many theaters have produced films, books, design, and fashion for the world. The power of these stories has spread far and fast, and the further away from New York, the more powerful they seem to get. Whatever takes place in the imagined worlds of Broadway shows is not happening at Times Square itself, which is nothing but a despicable place of roaring human exploitation, unbearable pollution, and high-gear capitalism empowered by hard-core Disneyfication. So we decided to make an intervention in favor of the biosphere. Once upon a time, there was no Times Square, only the Wickquasgeck Trail carved out by the Metoac band of the Lenape Native Americans. The land itself was lush with plants, rich swamps, insects, bird and animal life. Hunting was excellent, which is evident in them naming the land *manaháhtaan*, which can be translated as a "place for gathering the (wood to make) bows." They respected and cared for the land until they were forced to leave, based on a fraudulent deal in which they sold the island for beads and trinkets (for the equivalent of \$24 in current value). This celebrated 'greatest deal ever' in record books began a process of expulsion ending with the Metoac now living in the tiny impoverished Shinnecock Indian Nation next to the flamboyantly wealthy village of Southampton in Long Island. Our dream was to somehow resurrect the power of the lost land by creating a garden or a green space at Times Square. If the place enabled Disney to spew out their sexist patriarchal story about *The Lion King*, why could we not use the place to mobilize a more environmentally friendly vision for the world? With our students, we dove into the pages of Eric Sanderson's amazing book [Mannahatta: A Natural History of New York City](#) (2009) to find out precisely what Times Square looked like back in the day when the Metoac lived with the land. Then we assigned them with the task of imagining a new lush green redesigned square that would empower the weak and be a friendly hub for all species.

No strings attached, we told them, just dream up something better than the polluting narcotic nightmare which is there now. Dreams matter. And they need to be nurtured in order for them to be able to frame our future. Yet if never realized they will only serve as a fool's escapism. We, therefore, decided to turn Times Square into a green space for real. If Nike could promote yet another selection of polluting plastic shoes at the Square, why couldn't we be allowed to promote our vision for a greener world? Legally speaking, the Square is actually a public space, and the Times Square Alliance generously thus gave us all the necessary permits. For free. As it turns out, we were not the only ones harboring a dream for a greener New York City. Our undergraduate students had no experience whatsoever in designing urban spaces, and even less so in building them. And as they had no idea of what they were doing, thus pursued the task with confidence and enthusiasm. This was to be their project, their dream, not ours. First they imagined dropping an "Earth Bomb" at the Square that when blowing up would splatter seeds and greenery everywhere. We loved that, though the ever-present police at the Square may have been less amused. We kept the round bomb shape but relabeled it to be an 'Orb.' With that came the idea of the Orb to be a microcosm for a better microcosm, like those crystal balls once used by the medieval spiritualists and magicians. The electric company Con Ed uses a triangle-shaped plastic barrier to fence off their work, and these tend to dominate New York City streets. Picking them up when done may not be cost-efficient for the company, so they are often left behind.

We collected some of these barriers to construct our Orb (and would later return them to where we found them). We then decorated the Orb and its surroundings with attractive greenery. The Earth Bomb idea had not entirely left us, however, as the truck carrying the Orb to the site crashed into one of the commercial screens that hovers over Times Square. It was a moment of rebellious joy among our students and of real fear for us as responsible professors for having to pay for the damage. Fortunately, New York University's legal team was able to skew the million-dollar bill in the direction of the rental car insurance company. When walking into our Orb, visitors would walk into a forest of grass balls grown in used stockings inspired, partly, by the work of the artist Ernesto Neto.



FIGURE 5 Inside Times Square Electronic Garden with Suspended Grassy Balls for Motion and Sound Interaction

We had great fun creating these; filling the stockings with earth and grass seeds, and watching them grow into lush green hanging lawns. The idea behind them was a group of mostly female NYU master students in engineering. When massaging the balls, they would make squeaky sounds of pleasure, which grass expressed (they imagined) in the sounds of gurgling water. The engineering behind it was extraordinary in the merging of the natural and artificial of what became an 'electronic' garden. A symphony of water sounds from dripping to splashing was what visitors heard when squeezing, touching, or rubbing down our forest of hanging grass balls. They became species with needs and desires for us to please and respect. The hidden speakers and live sensors among the plants were supposed to connect to our URL. At least that is what we tried to convey



In the Times Electronic Square Garden project, we tried to initiate a conversation about climate change, energy use, and green urban spaces. The idea was to re-nature Times Square so that the public can contemplate and envision new natural environments within our cities. We invited people to explore soothing living vegetative surfaces and recognize the stark contrast of their hyper-electrified surroundings. The students designed and built an open central sphere for visitors to circulate through so that they could encounter a microcosm of what a healthy biosphere would be like. And around the Orb, we set up a greenscape of serpentine living benches for rest, gathering, and contemplation. The whole project, start-to-finish, was erected and removed in a 24-hour period. For this short period, we had managed to place within Times Square's consumer culture a dream of a sumptuous environmental future.



FIGURE 6 Times Square Electronic Garden.

8 Conclusion

We achieved nothing. As a species, we are moving towards extinction at a record speed with climate change, the planet's sixth mass extinction, an immense loss of natural habitat, a colossal amount of pollution, social upheavals, and various unending conflicts. Yet we tried. Together with our students, we sought to imagine better alternatives and also how to achieve those dreams by the means of design. These have been bewildering ambiguous paths, however, and intentionally so. Instead of offering silver bullets and one-size-fits-all solutions, the design projects sought to tease and tickle our students and audiences, thereby forcing us all to see our future differently. Design against extinction is an educational platform trying to change the world towards something better.

Credits and acknowledgments

We would like to acknowledge about hundred and fifty students who have taken our design courses, contributed to realizing the projects, and inspired us to rethink the ways in which we teach green design. We are equally grateful to our former Dean Susanne Wofford who generously supported these classes and projects financially.

Lifejacket Fashion

Instructors: Peder Anker, Mitchell Joachim, Design with Climate Change Students. Lifejacket for Aruba by Harry Hooper. Model: Rogue James. Photo: NYU Photo Bureau

Climate deal now! (writing with ice)

Producers: Peder Anker, Stephen Duncombe, Louise Harpman, Mitchell Joachim, Keith Miller. Director: Keith Miller. Camera & Editor: Maria Juranic. Still photos: Em Watson. NYU Gallatin students: Emily Bellor, Carter Bird, Taylor Brock, Sophie Epstein, Dylan Fauss, Jonathan Friedman, Carly Krakow, Sara Ludwick, Jake Madoff, Rachel Stern, Maxwell Thoeny, Em Watson.

Times Square Electronic Garden

Producers: Mitchell Joachim, Louise Harpman, Peder Anker. Film Media: Keith Miller. NYU Tish students: Namira Abdulgani, Kylin Chen, Ella Dagan, Jordan Frand, Michelle Hessel, Renata Kuba, Gal Nissim, Isabel Paez, Tigran Paravyan, Lutfiadi Rahmanto, Leslie Ruckman, Abhishek Singh, Edson Soares, Katie Temrowski, Jed Watson, Yan Zhao, Yang Zhao. NYU Gallatin students: Theo Mandin-Lee, Jordan Marks, Max Mezzomo, Valerie Mu, Shel Orock, Alex Selz, Henry Wang. NYU Staff: Karim Ahmed, Jenny Kijowski, Nicholas P Likos, Lillian J Warner, Matthew Tarpley, Shandor Hassan, Shai Pelled.

School of the Earth

Instructors: Peder Anker, Mitchell Joachim. Model overseer: Karim Ahmed. NYU Gallatin students: Ryan Porter Andrewsen, Aliza Joy Blond, Brian Cash Callaghan, Danielle Margo Domskey, Juan Diego Galvez, Sophia Hampton, Michelle Lee Johnson, Laura Sejin Jung, Devansh Majithia, Annie S Pluimer, Cecilia Reid, Anna L Robertson, Arielle A Ross, Olivia Catherine Saber, Alejandro Santana, Sabrina A Santos, Joshua Jackson Shapiro, Cate Stitt Stern, Hanna Danielle Stern, Rachel N Stern, Celine Sutter, Leland R Sutton, Zoya Hannah Teirstein, and Jenna Hallie Zimmerman.

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