THE COOPER UNION FOR THE ADVANCEMENT OF SCIENCE AND ART

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The Benjamin Menschel Fellowship Program to support creative inquiry was endowed by a grant given to The Cooper Union by the Horace W. Goldsmith Foundation in 1994 to support work in the fields of art, architecture, design, and engineering. This generous grant was intended to provide funding to exceptional students who propose scholarly, independent projects that will in some way provide a culmination to their educational endeavors at The Cooper Union. It is the hope of the Goldsmith Foundation that students designated as Menschel Fellows will be encouraged by their awards to complete bodies of artwork, develop scientific protocols, or otherwise further their intellectual investigations in a manner that will provide inspiration and illumination to the community as a whole.
Our project took us to Puerto Rico to discover changing attitudes about food consumption and its connection to the land. After Hurricane Maria in September 2017, Puerto Rico started importing 95% of its food. We wanted to meet with people working to address this problem—people creating sustainable, localized food models. We met farmers, we interviewed professors of agronomy, and we threw ourselves into the hard work of growing and protecting the land.

One of the reasons for Puerto Rico’s difficulty becoming food-self-sufficient is the island’s history as a U.S. territory. For nearly a century, Puerto Rico’s main import partner has been the United States, accounting for almost half of its imports. In 1950, Operation Bootstrap, a series of development projects that granted private capital more access to the labor and economy of the island, pushed Puerto Rico from a primarily agrarian export economy to an industrial economy. Because of tax incentives and low labor costs for businesses, the country turned from producing tobacco, sugar, and leather, to being a manufacturing hub, and eventually to producing pharmaceuticals.

Presently, the systems that measure economic success devalue, even overlook, small farmers. We wanted to meet with farmers to find out more about their role in feeding the country. Before we set out,
Jessica Martinez’s mom, Carmen, who grew up in Puerto Rico, told us about the first rains in May. It was a tradition for everyone in her community to go out and soak their hair and absorb the beauty of the rain that she remembers coming, without fail, every 1st of May. Later on, in Puerto Rico, we met Franco, a farmer, who told us those rains are not so predictable anymore. He deeply impressed upon us what these climate changes meant for him and his farm. He told us that just a few years ago, the rains were consistent. He said the rain now does not come until late May, extending the dry season for almost a month. These erratic weather patterns leave him with no plans for how to make his crops thrive.

Toward the end of our trip, which took us all over the island, we met with other farmers who took us into their homes and taught us about agroecological practices. We woke up before the sun, we learned to listen and to smell, to sow and to weed, to harvest green beans, to make pancakes out of breadfruit, to milk a goat. We learned how potato plants smell and how to notice differences between leaves. We ate mangoes from a tree planted long before we existed, by people thinking about the future. Seeds have a political history as well. They took us to the Plaza at Lares, where the revolution against Spain in 1868 started but failed, and where an insurrection against the U.S. was planned as well. In this plaza, we looked at the tamarind tree planted in 1932 by Pedro Albizu Campos, from a seed brought from Simon Bolivar’s tree, this vision solidifying the unity across the Caribbean and the South and Central American states that we already felt.

Our main goal was creating a documentary film that tells of the regenerative possibilities farming can have and has had for Puerto Rico. By creating a cohesive narrative through film, we gave those we interviewed an opportunity to speak to their own experiences. Our documentary was based on our six weeks of exposure to these agrarian methods, as well as revisiting them afterwards at home in New York City. One message persisted: by taking care of the land, the land, in turn, takes care of you, and the land is extremely resourceful. We also created a sculpture, with the aim of physically synthesizing the variety of farming methods we saw, using repurposed materials common to the farmers. Our sculpture serves as a representation of three particular structures we saw: first, an industrial steel greenhouse; second, a shaded area for seedlings; and, third, bamboo structures. The first symbolizes the arrival and eventual departure of outside corporations, the second protects the future with what is available, and the third was created by students at the University of Puerto Rico at Utuado, who are learning low-input techniques in a threatened system. By creating a hybridized structure from these materials, we tell a story of imports and exports, power struggles, and the people who manage to grow within them.
In the mornings, my grandmother and I would prepare a simple breakfast—fish and rice, vegetables maybe, accompanied with a vinegar. I’d start the stove as she prepared the ingredients, turning the valve on the propane tank and igniting the fire with some matches. Just above where we cooked was a window that faced the neighborhood, left open for cool air to come in. Often, in the distance, we’d hear a man’s voice announce, “Taho! Taho! Taho!!!” As he neared our home, my grandmother would wave from the window, and I’d step outside with bowls in hand.
The process of fermentation is an act of transformation, a sort of alchemy of disparate ingredients that, through their decomposition, produces something other—something new. Our predecessors looked at this transformation as something divine, something attached to the otherworldly, so that it could only be understood as a kind of miracle: to bury the dead and be subsequently confronted with the alive. As time progressed, methods of fermentation became domestic ritual—a practice that enabled one to provide and to nourish when climate and geography yielded nothing. As such, the biological processes involved in fermentation, whether understood as a meal or for ritual, can be seen as the hinge between that which transforms and the environmental conditions that enable the transformation.

So in the midst of monsoon season, with heat and humidity at its peak, I journeyed through the neighborhoods, marketplaces, and valleys along Laguna de Bay, the largest lake in the Philippines, on the northern island of Luzon. I navigated memories of childhood meals in forgotten streets and places familiar but never understood. I was able to meet cooks, bakers, and several vendors at their places of work to observe the ways in which the process of fermentation may be informed by the tools used and the spaces that contain it. The converted home of a kakanin (glutinous rice cake) vendor, housing open pit fires; the backyard gardens of families fermenting their own suka (vinegar); local bakers and cooks who provided meals on the street to any who were hungry. I observed (and often partook in) the preparation of ferments—as well as meals—in an attempt to understand food relative to the mediums in which it was both prepared and served.

This project is an attempt to capture the relationship between a process, an artifact, and a geography. To reenact in some way the alchemy that our forebears understood as a ritualistic interaction among the body that enacts, the body that is acted upon, and the context in which the transformation takes place. I hope to come closer to comprehending the confluence of histories and narratives that make up a cultural landscape, and to do so through something as intimate as the preparation of a meal.
Archives are living and are constantly in transition. How do modes of archiving, identifying, developing and framing plant seeds affect the future of these seeds? In Saint Petersburg, Russia, I worked at the Vavilov Institute, a federal genetic research institute. This institute was founded by Nikolai Vavilov, a botanist and geneticist, who started this collection during the Siege of Leningrad, a time when Russia was experiencing famine. It now holds the world’s largest collection of seeds. They are used for interbreeding and cultivating new plants, vegetables, and fruit, as well as other forms of experimentation. In my interactions with scientists, archivists, and assistants at the Institute, something that emerged was the limits of the physical architecture of the space. Since new seeds are constantly being produced and moved through various sites within and around the institution, storage is becoming harder to manage. Finding space for new seeds in the near future was a concern, and expanding the archive was one proposition under consideration.

Classification and censorship also became prominent themes in these conversations, as it has for activists, artists, curators, writers, scientists, researchers, and archivists in various communities. Included in the larger community of the Vavilov Institute are residents of the nearby Kanonersky Island and participants in its Environmental Biennale (including Ilya Dologov, Ekaterina Mikhatova, and the ASI group consisting of Stanislav Shuripa and Anna Titova); Timur Musaev-Kagan and his Gallery, Kunst Vitrina; and underground communities in Saint Petersburg—especially Κλημ Κηλ, a club in an abandoned factory in the old car manufacturing district in Saint Petersburg. The relationship between these groups and the government, as well as many basic freedoms, are still at stake for many people that I met. This was
especially true for the residents of Kanonersky Ostrov, a marginal island half an hour away from the center of Saint Petersburg. Most of its residents are people who have lived on this island for generations. A large highway was built recently, the Western High-Speed Diameter, that spans all of Saint Petersburg and cuts through Kanonersky Island. After it was built in 2008, all of the birds native to the island fled due to the droning sound produced by new vehicular traffic. The traffic also prevents people on the island from keeping their windows open because the sound it produces is hard to live with. In addition, there are occasionally pieces of metal that fall from a bridge that forms part of the highway. One of the activists on the island showed me her collection of objects that she continues to find on a pathway that is directly under the bridge. The highway is a hazard because it poses a threat to young students headed to the nearby school, as well as anyone else walking on the pathways under the bridge. In addition, the government continues to work on plans for various parts of the island in terms of urban planning. There are currently a number of proposals online, including one for a church. In a video shown to me by one of the residents, there was a three-dimensional rendering of a church falling from the sky onto this land. This church would be built to attract tourists, as well as to provide a space of worship for the community. Another proposal was to create a separate housing area on one end of the island, move all of the residents there, and demolish their current homes, so that they can use the majority of the land for non-residential purposes. The activists and residents have expressed disapproval of all of these plans and are constantly fighting back against them. They have also proposed their own plans that would benefit their community and the environment.

I met with Ilya Dolgov, a contemporary artist who works mainly with plants and other living organisms. He lives and works on Kronstadt, an island two hours away from Saint Petersburg. We discussed the history of Russia through the lens of archiving, and the way archives are embedded into Russia’s culture and politics. He spoke about the time after World War II when people were trying to retrieve their family photographs that they had before the war, and a lot of these photographs were archived and kept classified by the government, so families were not able to retrieve them. He related this to the inaccessibility of federal institutions and their archives, including the one at the Vavilov Research Institute. He introduced me to the work of the ASI group. They self-publish archives and news articles as a way to subvert federal censorship and interject their own experiences, in order to critique the dominant conservative perspective.

In my work for this exhibition, I am exploring points of intersection between archives, classification, and censorship, as they exist for the communities that I was able to engage with, as well as for this specific archive in its imminent transition. It is an attempt to connect narratives, moments, and recollections that are still being experienced and constantly changing and to highlight the encounter between opaque institutions and an engaged public. The work also opens up through structures I’ve conceptualized, including a nesting structure consisting of a thing within a thing within a thing. One nesting structure might include, in this order, geography, architecture, archival structures, identification, and the living.
Situated within a mountainous region, only 41,285 square kilometers in size, Switzerland might bring to mind a postcard of the Alps, chocolate, or cheese, as well as architectural clichés of vernacular wooden chalets and concrete boxes. Moving beyond such clichés, this research explores the trajectory of Swiss tradition in the context of its architecture. Interviews with locally practicing architects in different regions of the country provided insight into the historical, political, and cultural impact of neighboring countries on the creation of high-standard, pristine buildings in Switzerland. We are moved by both the purity and complexity of Swiss contemporary architecture, so we travelled across the country to trace its formal, material, and cultural relationship with the vernacular. The project was inspired by the work of the philosopher Martin Heidegger, and his landmark 1951 essay “Building, Dwelling, Thinking” also supplies our title.
transformation, to Valerio Olgiati’s ambitious proposal of non-referential architecture, to Rudolf Steiner’s spiritual exploration, to name just a few.

Swiss architecture exhibits a purity in geometry, with a richness of spatial and construction detail. The spirit of craftsmanship transcends decades, from the vernacular treatment of wood to the contemporary advancement of concrete construction. Our image-focused project aims to celebrate the consistency and coexistence of the past and present, while heightening the subtle differences of each unique voice in Swiss architecture.

BUILDING
The making of buildings, as well as their literal built space, cultivates within the landscape a dynamic relationship between logical order and a poetic element.

“...dwelling in the sense of the stay of mortals on the earth”
– Martin Heidegger

DWELLING
We define the vernacular as buildings that were made using primitive materials in service of their use as a shelter to protect the dweller or to demarcate a boundary. They provide an objective space to contemplate, to think, and to feel ourselves.

THINKING
Our exhibition aims to produce a similar state of mind, by elevating the audience’s awareness of architecture and encouraging them to reflect on their attitude toward the surrounding built environment of our contemporary culture. It offers a conceptual “dwelling” for the audience to understand the space they are in and the type of space they desire to be in.

Swiss architecture appears timeless. Historically Switzerland has been home to many renowned architects and, as a result, has a rich collection of buildings. Today, it provides a fertile ground for young architects to experiment and participate in architectural discourse, through its strong tradition of open competition. An inseparable relationship between architecture, philosophy, and the attitudes of the inhabitants is manifested in different architects’ design approaches and methodologies. The varied definition of the “Swiss spirit” ranges from Peter Zumthor’s minimalist sensibility, materials, and atmosphere, to Aurelio Galfetti’s persistent belief in preservation and transformation, to Valerio Olgiati’s ambitious proposal of non-referential architecture, to Rudolf Steiner’s spiritual exploration, to name just a few.

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