

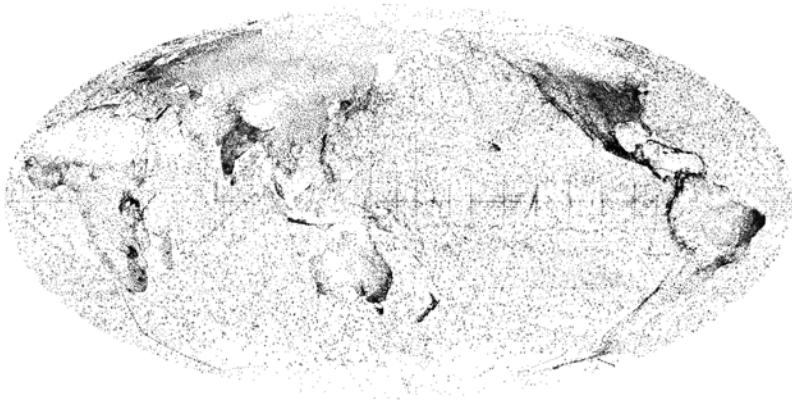
Our City as Ahupua‘a

For Justice-Advancing Futures

Sean Connelly

Everyone in Hawai‘i should be debating the meaning of urbanism—the way of living within cities. Not just about the image of being in a city with tall buildings, urbanism is about how different cities become connected and embedded into the world around them. For instance, anyone using a cell phone becomes linked to sea-floor mining through city processes. Yet despite such technological advances, the urban social conditions of today are very similar to those of one hundred years ago, with intense public health challenges affecting people and the built environment then and now.

While even the idea of a city in Hawai‘i often arouses despair, we can harness it to recover ahupua‘a (the Hawaiian land system) as the basis for an Indigenous built environment. Recovering ahupua‘a is the most practical and careful response to address today’s pressing public health challenges, including pandemic, social justice, and climate change. As a technology of waiwai (value), ahupua‘a recovery can help guide the people of Hawai‘i in restoring our built environment in a way that heals history, and secures justice-advancing futures.



Climate sensors around the planet show the extent of urbanism. Sean Connelly, 2014.

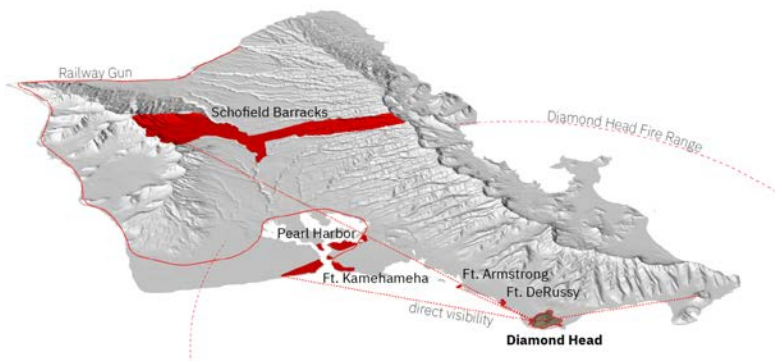
Urbanism for Peace, 100 Years Ago

Proposed only a few years after WWI and the 1918 pandemic, the first glass and steel skyscraper was drawn in 1921 by architect Ludwig Mies van der Rohe and became the quintessential image of cities worldwide. Many people had recently lost their families and loved ones to the war and pandemic of that time. A new architecture of clarity and lightness, the skyscraper reflected a fundamental need for the human experience of urbanism to be optimistic. Many scholars dedicated their careers to discovering how cities and architecture could ideally embody a universal space of peace and public health.

O'ahu, a Giant Military Base

Twentieth-century urbanism has strayed from its historic aspirations toward peace, leaving our built environment far from healthy. Urbanism's biggest producer, the US Department of Defense, is also the world's largest employer and heaviest consumer of fossil fuels. Since 1898, the US military has also used Hawai'i's built environment to advance American urbanism globally, commercially, and technologically.

Encompassing the volcanic island of O'ahu, Honolulu is not just a capital city, but a utopian fort, where the US Indo-Pacific Command controls military operations for 52 percent of Earth's surface. Surveys of American urbanism overlook O'ahu's urban typology as a giant military base because Hawai'i's occupation and relationship to the US military remains shrouded in images of tourist beauty, and the profession of architecture in Hawai'i is complicit in military construction projects.



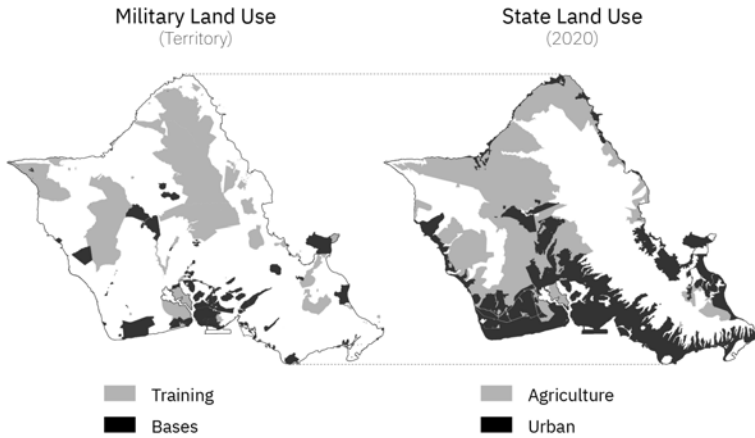
Original land defense of O'ahu. Sean Connolly, 2019.

The reconstruction of O'ahu into a military base really began in 1906, when the US Army Corps of Engineers (USACE) broke ground on the most advanced coastal fortification system of its time, stretching from Waikiki to Pu'uloa (Pearl Harbor). Even the Ko'olau and Wai'anae Mountains were conceived as part of the fortification system as natural defense walls. When Le'ahi was turned into Diamond Head Military Reservation (Fort Ruger), this tuff cone became the largest, most sophisticated star fort on Earth, with cannons that could shoot seventeen miles over the Ko'olau Mountains, and an observation tower with visibility over 25 percent of O'ahu's land mass. Diamond Head featured the first green roof in Hawai'i (Fort Harlow), and the poured concrete bunkers around the crater took curved and voluminous forms decades before architects made such material aesthetically palatable for civic and residential markets. Diamond Head is a hidden cornerstone of twentieth-century American urbanism.

The USACE then filled in the Waikiki fish ponds to build Fort DeRussy in 1909. In the 1940s, it dredged Ke'ehi Lagoon's fertile reef for seaplane runways—never fully utilized—and built the Red Hill Underground Fuel Tank storage, which has leaked fuel above the aquifer today. In 1966, USACE dredged the Anahulu River at Waialua Bay to create Hale'iwa Harbor, causing the adjacent fishpond to fill with sediment. These and many more military projects and operational training exercises have negatively affected the built environment of O'ahu. And similar projects continue today. The USACE Ala Wai Flood Risk Management Project proposes seven three-story detention basins in Makiki, Mānoa, and Pālolo streams, and four-to-seven feet walls around the Ala Wai Canal.



Underground Red Hill Fuel Tanks versus Aloha Tower. Sean Connelly, 2019.



The interlocking relationship of US military and American urbanism on O'ahu. Sean Connelly, 2019.

The long history of US military imposition through infrastructure projects has damaged Hawai'i's environment, culture, and food security. A cumulative historic mapping of the US military on O'ahu reveals how urbanism has served the military, not the people. If we compare the military's functional land use plan (housing, training, communications) established before statehood with the State land use districts (urban, agriculture, conservation) set subsequently through zoning, we can see that lands surrounding military training areas were zoned as agriculture or conservation, while areas close to military bases were zoned as urban. Especially on O'ahu, this programmatic adjacency has been ignored, even though the life expectancy for communities in agriculture land use districts is ten years lower than in state urban zones (Holmes).

The Ahupua'a

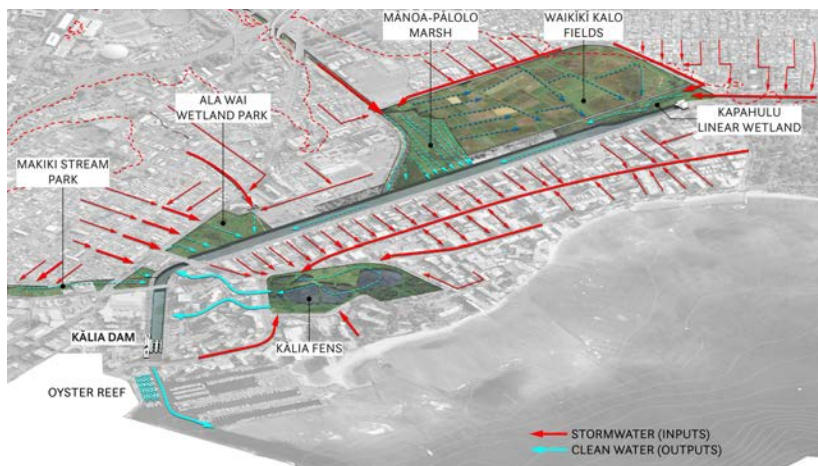
Since the 1920s, urbanism scholars have stressed the importance of the *valley plan of civilization*, or mountain-to-ocean section, as the vocational space of peace. But colonialism has obstructed our understanding of how our oceanic ancestors, whether 400 or 40,000 years ago, successfully extended urbanism across many valleys. The obsolete idea that ancient Pacific Island societies did not have "cities" erased a profound history of Indigenous technological advancements in maritime navigation and transportation that are foundational to cities today. Native examples of the *valley plan* embedded in Hawaiian land use methods such as ahupua'a are ignored as viable city forms by architectural history.

An ahupua'a can be several things. A land division, usually extending from the uplands to the sea. It is also a way of life. Poetically, ahupua'a is architecture—producing some of the most amazing living buildings imaginable. A GIS statistical analysis of all Hawai'i ahupua'a concludes that the average ahupua'a encompasses a surface area of around nine square miles, and will take on as many formations as the landscape resources offer, whether hydrological, geological, political, or genealogical. When Ma'ilikūhāhi became chief of O'ahu, he clarified the moku system, then in disarray, and launched a civic legacy of peace. Today more than ever, ahupua'a are viable forms of urbanism that must be recovered.

Ahupua'a Recovery: The Next 100 Years

Ahupua'a recovery can be described as the ecology of regaining possession of land, water, and other resources that have been lost, stolen, erased, corrupted, or destroyed. Such recovery provides a framework for an architectural approach toward achieving a culture of health and climate resilience as the basis for citymaking. Neither a nostalgic pursuit nor a utopian effort, ahupua'a recovery is a spatial, intellectual, and responsive approach to creating the built environment. An ecological revolution.

For infrastructure to work in Hawai'i, it must be culturally rooted, addressing the traumatic histories of social injustice that Hawaiians and locals have faced due to the giant military base approach to imposing American urbanism. Healing this history goes hand in hand with responding to the pandemic and climate change in ways that will redirect Hawai'i's economy to work for its people, and not just for visitors or the US military.



Hypothetical proposal to recover the functional hydrology of Waikiki. Sean Connelly, 2018.

Climate change offers an opportunity to recover ahupua'a through practical infrastructures designed to secure an affordable yet resource-abundant quality of island life. By the age of six, every student should know that before US military occupation and widespread tourism, Hawai'i flowed clean, its wealth streaming through abundant forests, kalo, and fishponds that nourished its people. Our young generations believe they can recover ahupua'a. The remaking of Ala Wai Golf Course into the Waikiki Kalo Field when the Ala Wai Canal turns 100 in 2021 is one example of shifting infrastructural upgrades to address pandemic and climate change. Transitioning the Ala Wai Golf Course, Honolulu's largest open urban space, into a system of commercially viable food production would incentivize retrofits to the streams' upland channels to clean the water. Seeing a vast and abundant kalo field in Honolulu again would be incredible.

Just reframing our approach to how Honolulu's built environment is maintained—the difference between being informed stewards clearing leaves from a stream rather than building detention basins to capture debris—could bring our framework of urbanism closer to the ahupua'a. Amid COVID and climate change, an ahupua'a approach to public health integrates ecosystem restoration (climate change), food security, and social justice. Recovering ahupua'a can help begin to repair the damages inflicted by American urbanism.

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