# Martín Andrés Paddack Design Work



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# Profile: Martín Andrés Paddack

Martín Andrés Paddack, M.Arch, MSSD, BFA, Associate AIA, LEED Green Associate, was most recently a Lecturer at the College of Engineering & Architecture at Howard University, Founder of DesignMAP and Co-Founding Partner of DAYMAP design practices. He received a Master of Architecture with a Concentration in Urban Practice and a Master of Science in Sustainable Design from The Catholic University of America School of Architecture and Planning., He earned his undergraduate degree in Painting with a Minor in English from The University of Hartford/HartfordArtSchool. Martín has dedicated himself to sustainable design and teaching at various levels for many years. He is a professional architectural designer and artist with a wide-ranging exhibition history at various national and international venues incorporating color theory, light, built environments, installations, spatial thinking and reasoning.

Martín's work in architecture and design are driven by his interests in the Social Impacts of Design, Sustainable Design and Environmental Justice. Within these areas, he uses color and light as catalysts for conversations in phenomenology, discursive design, the responsibibility of design and place-based atmospherics. He is also very interested in Fabrication and Woodworking. What emerges from his work is a series of built works that are informed by what he refers to in his architecture and paintings as "Color Field Realism," the dissolve that exists in tension between the real world and an oneiric, pure light. In all of his design work, he reaches for the still-point in which ordinary objects and symbols move from the immediate to the otherworldly, from the quotidian to the contemplative and from the physical to the spiritual.

Martín has worked with Hickok Cole Architects in Washington, D.C., Schick-Goldstein Architects in Washington, D.C., Kerns Group Architects in Falls Church, VA and is currently writing a monograph on The Impact of Color in Architecture. His paintings can be found in the Permanent Collections of The Museum of Modern Art in Cuenca - Ecuador, the Muncipality of Cuenca - Ecuador, The City of Washington, D.C., The Hilton Corporation, Starwood Hotels, and over 200 Private Collections around the world.

### The Watershed: A Net Zero, Modular Microhome Atmospheric Water Generation for Water-Scarce Climates







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### THE WATERSHED HOUSE: A PROTOTYPE MICROHOME AND SMALL BUSINESS SPACE DEDICATED TO VULNERABLE COMMUNITIES WITH A LACK OF ACCESS TO CLEAN WATER.

The Watershed House is a low-cost prototype design for an adaptable, modular microhome that is self-sustaining and designed specifically to serve vulnerable communities. The design incorporates a number of sustainable strategies including rainwater, humidity, dew and fog harvesting, as well as solar power generation. Most notably, the house employs a biomimetic design based on the Namib beetle, which uses the structure's envelope to create a "drinking skin" that can harvest over 100 gallons of drinking water per month through atmospheric water generation.

Of further importance is each microhome, which is designed for two adults and two children with sleeping, kitchen and bathroom facilities, is also equipped with a workspace with outdoor access. The house is further designed for families who can work remotely, or communities who subsist in the informal economy, with small businesses such as food stalls, handicrafts and textile work, among others. Providing a workspace for residents of these homes is therefore of primary importance.

The goal of the Watershed House is to create meaningful, healthy, well-designed spaces that are not only sustainable, but are family-oriented and provide an equitable platform for communities who need it.

### PLASTIC MONUMENT: THE CULTURAL CONTAINER PROJECT



... is a temporary, repurposed and recycled plastic and wood, adaptable structure which seeks to raise awareness to the consequences of disposable culture - While the ubiquitous images of environmental degradation are shocking when seen, landfills are not typically placed in touristed areas, relegating the imagery to the temporal, rather than establishing waste as an accreting permanent reality.

The goal is to establish an image of permanence in the public's consciousness by creating an analogthatisequally shocking, and inspire action over reaction - The fire at the cathedral of Notre Dame in Paris in 2019 served as a catalyst for the project-

The burning of the roof created a massive container that could easily fill with the plastic waste produced in a single day - According to National Geographic's *Plastic or Planet*, "by 2050 there will be 12 billion metric tons of plastic in landfills - an amount 35,000 times as heavy as the Empire State Building"



### PLASTIC MONUMENT: THE CULTURAL CONTAINER PROJECT

Users will be encouraged to fill the cultural containers with plastic waste to the point of overflow, marring the landscape and recognizing the extant conditions of global waste as commensurate with destroying our cultural treasures



### INTERIOR VIEWS - VARIATION B





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### PLASTIC MONUMENT: THE CULTURAL CONTAINER PROJECT

### MATERIALS PALLETTE:



Hemp 3D Print Filament: (used to create all cultural container bins and monuments) a closed loop material made from PLA and hemp that prints at low temperature with no odor- the material can be painted with VOC free plant based dye

3Form Chroma: (used in National Mall flooring and container pedestals of project) a thick optical grade resin panel with high clarity and light transmission - product has high receycled content and company is committed to Zero Waste initiative

Packnatur Tube Netting: (screen *material)* a material made from beechwood cellulose and 100% plant based biopolymers with all natural dyes - used in sustainable food packaging

Trex Trascend Composite Decking: (used on ramps and landings) a highly duarble material made from 95% recycled wood and plastic film

**Reclaimed PVC Pipe:** (structural frame) in an effort to keep PVC out of landfills, only reclaimed pipe will be used to create the frame of the pavilion

### CONFIGURATIONS:





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### PLASTIC MONUMENT: THE CULTURAL CONTAINER PROJECT

### PLAN (CONFIGURATION A): 1/4'' = 1-0'



- CULTURAL CONTAINERS:
- 1: London Cluster Waste Bin
- 2: Parthenon, Athens Waste Bin
- 3: Hagia Sofia, Istanbul Waste Bin
- 4: St Basil's, Moscow Waste Bin
- 5: Dome of the Rock, Jerusalem Waste Bin
- 6: Taj Mahal, Agra Waste Bin
- 7: Sydney Opera House Waste Bin
- 8: Notre Dame, Paris Waste Bin
- 9: Lalibela Cathedral, Ethiopia Waste Bin
- 10: Cathedral of Brasilia Waste Bin
- 11: Colosseum, Rome Waste Bin
- 12: New York Cluster Waste Bin
- 13: US Capitol, Washington, DC Waste Bin
- 14: Lincoln Memorial Waste Bin

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### PLASTIC MONUMENT: THE CULTURAL CONTAINER PROJECT







### CONTAINER DETAIL

### SITE AND MODULAR CONFIGURATION (A)

### PLASTIC MONUMENT: THE CULTURAL CONTAINER PROJECT



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SIDE ELEVATION CONFIGURATION A: 1/4'' = 1-0'



### ENTRY ELEVATION CONFIGURATION A: 1/4'' = 1-0'

## FORCE - RESISTANCE PROJECT: DAYMAP: Martín Andrés Paddack + Dahlia Nduom

Martín Andrés Paddack + Dahlia Nduom The Force - Resistance project seeks to create dialogues and color atmospherics by aligning and juxtaposing physical objects which represent positions on various social concerns from immigration and race to gentrification and gender.



The conversations and contemplations will occur via a series of static and moving structures, which will move about fixed points of rest. The fixed vs. flexible spaces will be marked by a series of sliding color panels of varying sizes and shapes which visitors will generate the power to move through kinetic energy, (specifically bicycle generated power). The shifting positions of objects will create an ever-evolving exhibit space from which visitors/participants can observe and dialogue from different vantages and types of seating. Upcycled, reclaimed, and high content recycled materials will be used to create the space; and water, color and light will be used as connecting tissues.

The goal of the project is to use architecture and art to create an elevated discourse in an increasingly contentious and polarizing climate.

### Intent:

- 1. *Participatory Design:* (Flex vs. Fixed... Kinetic pieces vs. installed)
- 2. *Environmental/Sustainable Aspects:* (materials will be reclaimed, upcycled and have recycled content. Energy creation will occur via physical activity/kinetic energy. Water conservation will focus on harvesting and runoff control)
- 3. *Dialogue:* Select a current social issue and begin a conversation, or contemplate privately... each theme has it's own channel of water that the panels shift and slide through, (see module diagram to the right).
- 4. Architectural Concept: Create a dynamic space comprised of tectonic elements aligned to linear and radial orders. Two spaces will be created and connected: one of movement, (strands of social engagement), and a more private area of contemplation, (stillness).
- 5. *Artistic Concept:* Create varying atmospheres of color and light with shifting and overlapping panels, (concept diagram at far right).
- 6. *A Moveable Feast:* The space will be able to be disassembled and reassembled in different locations.



### FORCE - RESISTANCE PROJECT: DAYMAP: Martín Andrés Paddack + Dahlia Nduom







# Capitol Hill Loft Addition: DesignMAP: Martín Andrés Paddack



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# Capitol Hill Loft Addition: DesignMAP: Martín Andrés Paddack



### (concept sketches)

# Baltimore Light Park: Martín Andrés Paddack



**Summary:** The Baltimore Light Park is a proposed elevated park that reconnects 3 neighborhoods divided by decades of infrastructure projects and gentrification. The project seeks to reconnect the city and create a vital area of art, identity & community.



**Parti & Concept:** Inspired by James Turrell's *Aten Reign* and Gustave Caillebotte's *Floor Scrapers*, the park's paths delaminate and create varied vistas of atmospheric color while reconnecting neighborhood edges. Raised planes and ramps reconnect to the natural growth and river below . Color panel "sails" are hung off of monolithic masts, which harken to Baltimore's rich maritime tradition.



**Site:** A The Jones Falls River has been buried over the years by the expressway and rail yards. The elevated park seeks to reconnect the neighborhoods of Bolton Hill, Mount Vernon and Northeast Baltimore. The park's multiple levels will also connect the urban fabric with both old and new natural features.

# Baltimore Light Park: Martín Andrés Paddack



# Congressional Cemetery Chapel: Martín Andrés Paddack





### Chapel Renderings



### Structural Frame



# Congressional Cemetery Chapel: Martín Andrés Paddack





### Concept Sketches and Models









## Thesis Work Sample: Martín Andrés Paddack







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### The Cuenca Museum of Color and Color Park



## Furniture Design: Martín Andrés Paddack





### Furniture Design: Martín Andrés Paddack



# The Driftwood Coffee Table

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The table was designed and constructed from reclaimed black walnut and paduak, with driftwood found on the beach.

Driftwood passes through a "floating" center support and acts as cross-bracing for the table. Additional butterfly joints and splines were cut as joinery.



# Fine Arts Work Sample - Paintings: Martín Andrés Paddack





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