

ByDESIGN

An Online Journal of Exceptional Achievement

ByDESIGN Goes to CUBA!

From a
People's
Revolution to
a Country's
Evolution

Cesar Chavez
Solar Calendar
Monument
Design

A New CASA
Mural for
Our Time

OUR TEAM

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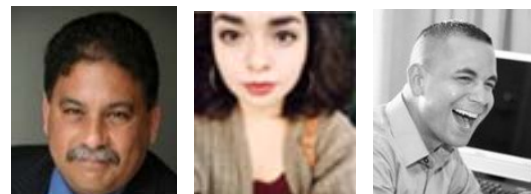
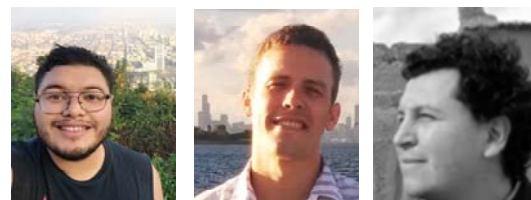
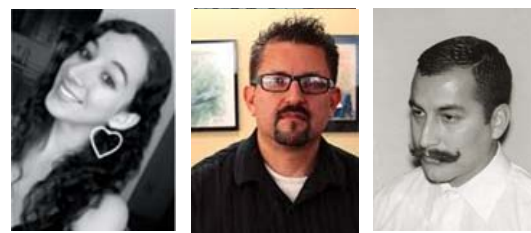
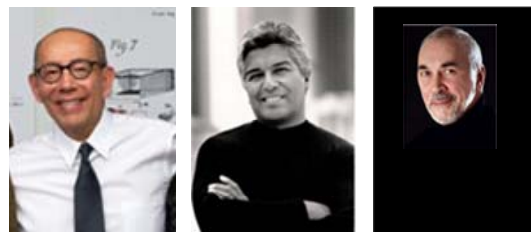
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ByDESIGN is published by: CASAalumni

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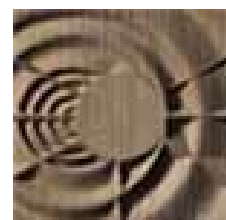
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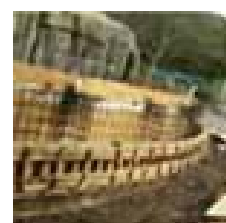
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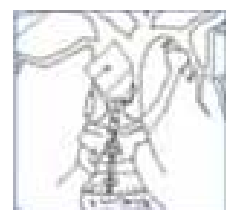
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ANNOUNCEMENTS

“ByDESIGN Presents” to Hold 7th Annual CASA Alumni Scholarship Gala at UC Berkeley

We are pleased to announce that the UC Berkeley CASA Alumni Scholarship program has joined with the Center for Architecture Design, San Francisco Chapter (AIASF) and Latinos in Architecture (LIA) to create a 501(c)3 mechanism for tax deductible contributions.

Objectives of CASA Alumni

- Increase diversity at CED, including People of Color, Women, and LGBT students
- Provide financial support so students can succeed
- Provide mentorship to students
- Promote community service
- Assist student acceptance into leading graduate schools
- Assist students find employment

We invite our friends and colleges to consider participating in this scholarship by making a tax-deductible contribution - any amount is appreciated. Send your check or money order made out to:

Center for Architecture & Design
Attn: CASA Alumni Scholarship
130 Sutter Street, Suite 600
San Francisco, CA 94104

Thank you in advance!

7th Annual Awards Event
April 28, 2017, 6:00 – 8:00 pm
1st Floor Gallery
College of Environmental Design
University of California, Berkeley

CASAalumni



ON THE COVER:

A classic colonial embassy (one of 90 diplomatic offices in the country) exemplifying one of numerous architectural gems in Old Havana, Cuba, shot by ByDESIGN's publisher Roy Hernandez. The photo was taken on December 19, 2016 at dusk, juxtaposing the elegantly restored 17th century palace with young Cuban kids playing soccer in the plaza in front of it.

MEMO from the Editor

“An Opposite and Equal Reaction”

Roy Rogelio Hernández



"For every action, there is an equal and opposite re-action." - Newton's third law of motion. It predicts that physical objects will behave in predetermined ways.

The third century BC notion of Yin and Yang ("dark-bright") in Chinese philosophy designates how opposite or contrary forces (or social dynamics) may actually be complementary, interconnected and interdependent in the natural world.

The philosophy dictates one extreme may give rise to the other as they interrelate with one another.

The same principles seemingly apply to society, politics and economics.

In this issue we cover our odyssey to Cuba, "1959," a trip inspired by stories of 1955, told to me from my grandmother in Mexico City. BD visited Cuba to obtain a firsthand view on the amazing Cuban people, their art, history and architecture. We uncovered a country where an acutely repressive capitalist society - casino and brothel for the US (Yang), gave rise to a Marxist-socialist society (Yin). The country went from one extreme to the other.

A similar parallel might be drawn on how the 'action' of Barack Obama gave rise to the 'reaction' of the person now occupying the White House (with the help of a few friends). Nationally syndicated, Chicano cartoonist, Lalo Alcaraz, offers us a cartoon illustrating how this Newtonian/Yin-Yang phenomenon has manifested itself on the political stage in our country.

Perspective

“Because of the horrible direction the US has turned this past year, I will make this promise. I will do my best to try to keep you sane and somewhat amused in 2017 through cartoons and other online chingaderas.”

LALO

Lalo Alcaraz: Artist, Cartoonist, Writer
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https://www.facebook.com/lacucaracha

Lalo Alcaraz : POCHO
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a quarterly e-zine

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On the Boards we are proud to showcase the extraordinary student work of Albert Orozco.

Successful construction entrepreneur Miguel Galarza continues his tale of woe on the design and construction of the San Francisco Zoo Tiger Exhibit.

The *Community* section offers the story of the Cesar Chavez Solar Calendar Memorial, a proposal for the City of Berkeley Marina Park, by Prof. Ron Rael, Albert Orozco, and Chris Detjen.

Itzel Torres contributes a piece on the New CASA Mural to be rendered in the College of Environmental Design, at UC Berkeley. The mural is designed to replace the original painted in 1977, which was painted over in the 1990s, as the political winds shifted at Cal to a more conservative decade. The mural features contemporary visual metaphors reflecting how the pendulum has now swung back.

And the Graphics Corner caps off this edition with a collection of classic Cuban cars, vestiges of a bygone era when cars served a dual purpose as industrial art on wheels and transportation systems. As the Cuban revolution transitions from Yin to Yang, it is only a matter of time when these works of American Art will be gentrified by Kia's, VW's, Toyotas and, yes, BMWs and Benzos.



Elegantly restored 17th century palace in Old Havana, Cuba, December 19, 2016.
© Roy R. Hernandez



Cafe, Sculptural Garden, and Shop in the African American Museum and Library in Oakland, CA

Albert Orozco



Studio:

Graduate Option Studio 202 : The Difficult Whole

Semester:

Spring 2016, University of California, Berkeley,

Instructor: Susan Ubbelohde

Project Description:

During the semester we were asked to add a cafe, sculptural garden, shop, and other public amenities to an existing museum called "The African American Museum and Library" in Oakland, California.

Learning about African American history during various site visits to the museum, an overarching problem is that African American communities have always been marginalized from "the progressive society."

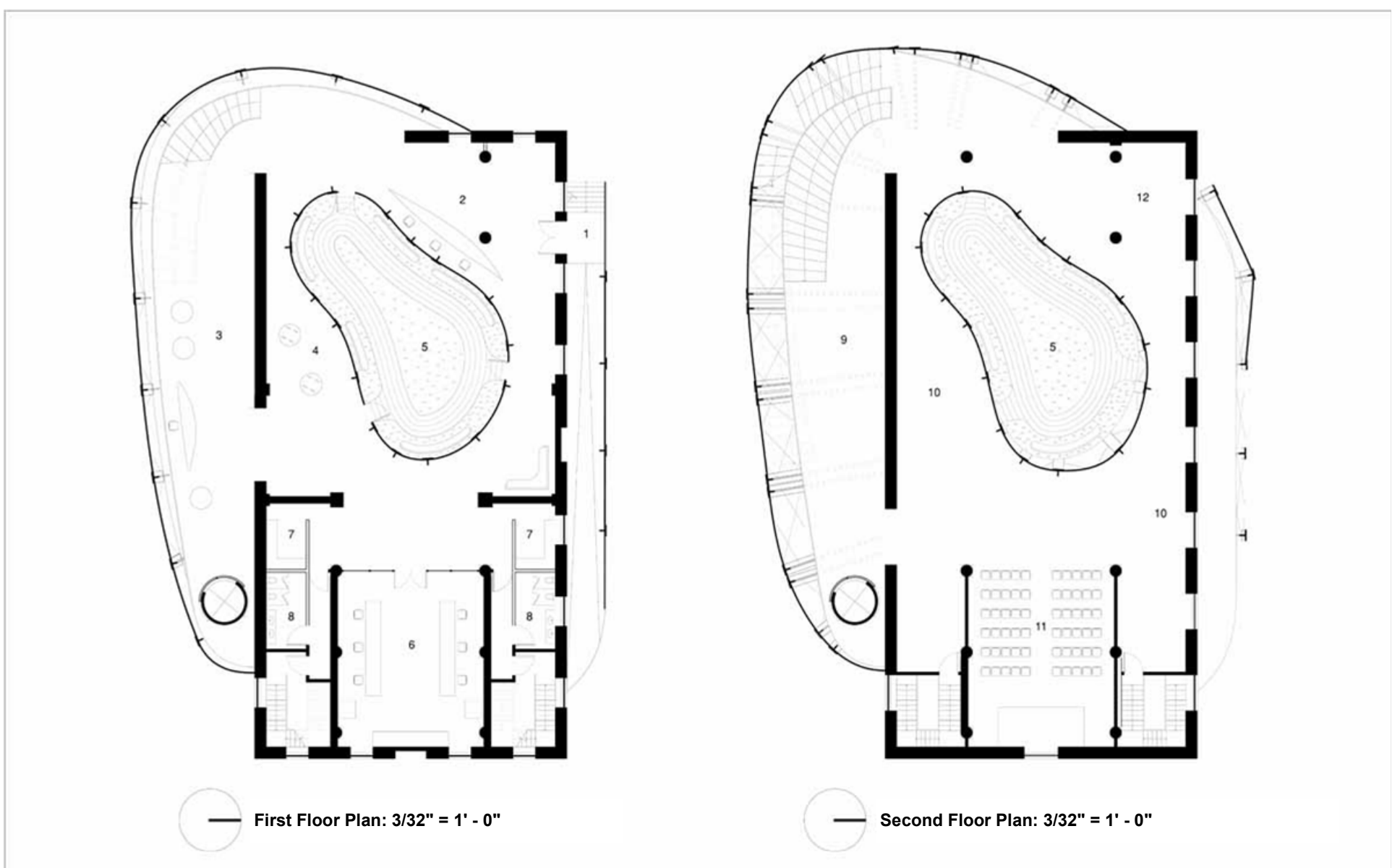
I found it satirical to find African American art and historical archival shoved into a Carnegie Library in the style of Neoclassical architecture. These neoclassical facades don't represent the actuality of the rich content displayed within the museum.

“ I found it satirical to find African American art and historical archival shoved into a Carnegie Library in the style of Neoclassical architecture. These neoclassical facades don't represent the actuality of the rich content displayed within the museum. ”

"Addition into the Light" is a museum addition that uses a light-weight structure to hide the facade of the current museum and re-purposes its front as an African American Museum and Library.

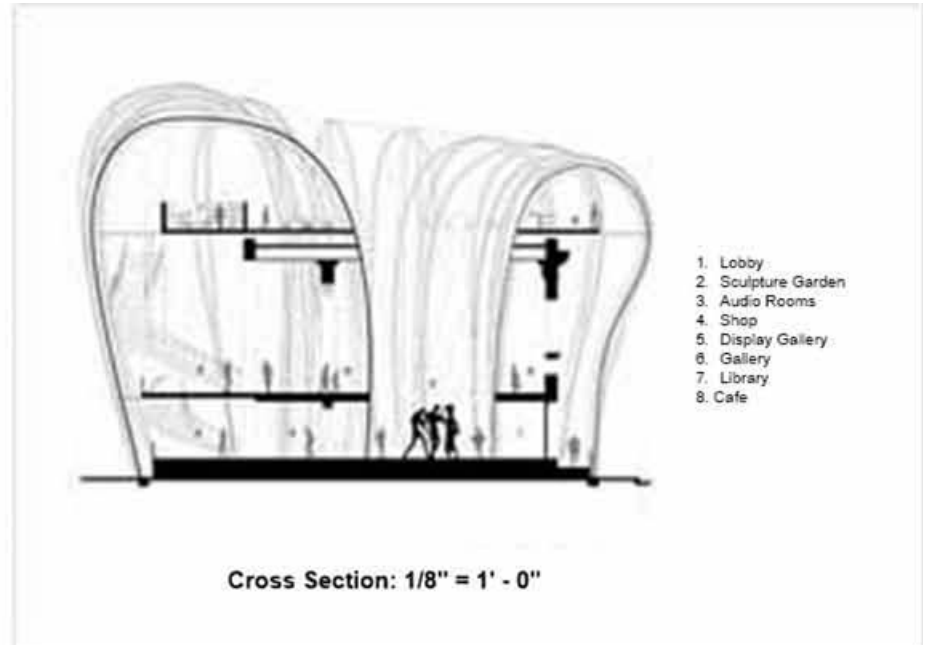
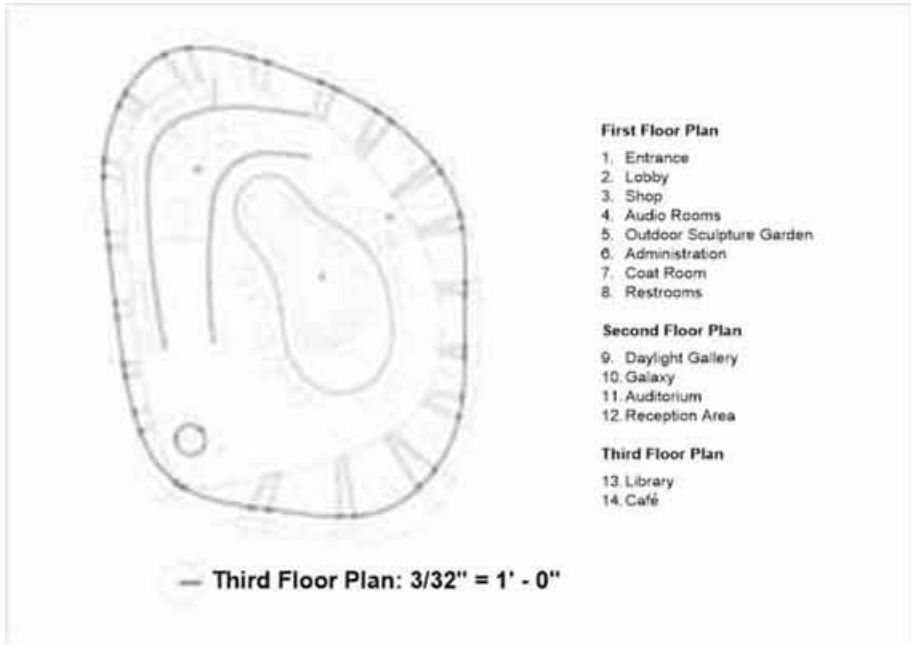
This light weight shell is made out of ETFE and wood ribs that carve into the interior of the building, diminishing the structure as you progress from ground to roof level.

This addition brings to light the artifacts and archives embedded inside the museum and provides additional community spaces for the city.



Cafe, Sculptural Garden, and Shop in the African American Museum and Library in Oakland, CA

Continued



ELEVATION

LOBBY (Top)
SECOND FLOOR (Middle)
UP TO THE THIRD FLOOR (Bottom)



CAFÉ



LIBRARY

About Albert Orozco: Mr. Orozco is a student in the Master's of Architecture program at the College of Environmental Design, at the University of California Berkeley. His outstanding student work has appeared in previous issues of ByDESIGN and he has been the recipient of CASA Alumni Scholarships.

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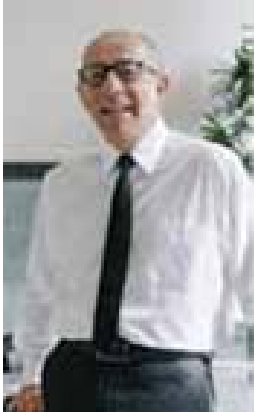
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From a People's Revolution to a Country's Evolution

Roy Rogelio Hernández, Publisher, Photography Lauren E. Hernández



The middle-aged woman rises hours before sunrise. She's made enough food to feed a small army, but it isn't her family of 12 or dozens of grandchildren. This morning she'll travel an hour to the Bosque de Chapultepec (one of the largest urban forests in the Western Hemisphere). She has made this trek many times, driven by a fervent conviction for social and political justice fostered as a young girl in the Mexican Revolution in 1914.

Today, in 1955, she is feeding a small army of Cuban revolutionaries training in Mexico City's Chapultepec Park, to oust dictator Fulgencio Batista. The group of 81 is led by Fidel and Raul Castro, and Argentinian doctor Ernesto 'Che' Guevara. The woman was Esperanza Valle Ortega, my grandmother.

A Number of Sins

Much has been written on Fidel Castro's revolution, one that expelled many of the wealthiest businesspersons and corporations from Cuba. Many have long held animosities towards the Castro regime. Paradoxically, some of the same communication and hospitality corporations that were evicted from the island now clamor to get back in. For those unfamiliar with the Cuban Revolution, providing context is important, as President Kennedy did in 1963.

"I believe that there is no country in the world including any and all the countries under colonial domination, where economic colonization, humiliation and exploitation were worse than in Cuba, in part owing to my country's policies during the Batista regime. I approved the proclamation which Fidel Castro made in the Sierra Maestra, when he justifiably called for justice and especially yearned to rid Cuba of corruption.

I will even go further: to some extent it is as though Batista was the incarnation of a number of sins on the part of the United States.

Now we shall have to pay for those sins. In the matter of the Batista regime, I am in agreement with the first Cuban revolutionaries. That is perfectly clear."

President John F. Kennedy
Source: Jean Daniel Interview, *The New Republic* 12.14.63

ByDESIGN's purpose for visiting Cuba was to garner a firsthand view of the Cuban people, architecture, art, and history. We interviewed dozens of people from diverse walks of life including the young and old.



Che and Fidel Castro.

Prior to the trip, I saw an HBO documentary titled **"Patria o Muerte: Cuba, Fatherland or Death."** The film makes a dire observation, "Cuban society is "somber, depressive and dark." The filmmaker's romanticized vision of desperation and poverty of living in Cuba today is not what we observed.

Welcome to 1959

Years ago, while on a business trip to Calgary, a furniture commercial came on TV promoting a contest. The prize? An all-expense paid one week vacation to, wait for it: Cuba! I never thought of Cuba as a vacation destination one could win as a prize. We think of Cuba in the context of the blockade; the rest of the world does not.

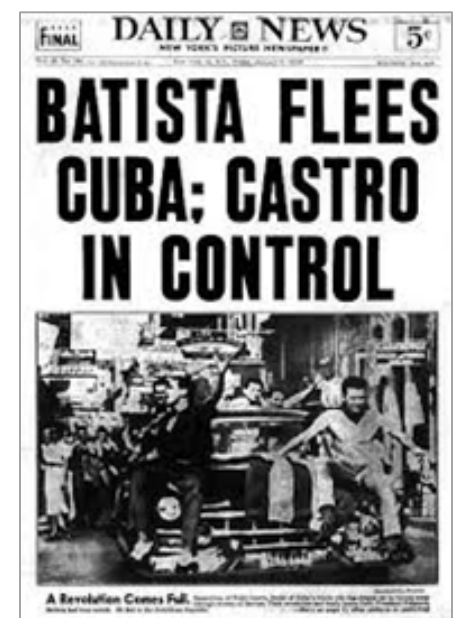
Landing at the Havana airport resembles a typical Latin American tropical resort. The airport is modern, airy and clean – overflowing with international travelers. But when you get on the highway to Havana, you know this is going to be a different experience: welcome to 1959.

We met numerous tourist from the US, Asia and Europe in Havana. While the great majority fly in, thousands disembark from cruise ships, which can hold two-to-three thousand passengers. (One ship can generate \$400,000 in cash revenues per day, which equates to a \$6.2M per year cash infusion into the micro-economy.) The cruise ship schedule will increase from two to four per week soon, to the excitement of businesses, vendors - and Cuban government who is using these revenues to renovate many public buildings and infrastructure.

Tourism has become a significant economic engine for all of Cuba. One American corporation that has already capitalized on this substantial opportunity is Airbnb.



Advertisement for 1959 in LIFE magazine



Headline in New York's Daily News

From a People's Revolution to a Country's Evolution

An Airbnb search dramatically illustrates how many private homes and hotels (many luxury suites) are available throughout Havana/Cuba. As we found out, "casas particulares" (private homes) offer very reasonable, low rates. An article in Architect News by Amelia Taylor-Hochberg on April 2, 2015 quoted Nathan Blecharczyk, Airbnb co-founder:

"Think about the big hotel chains coming in, with mass development. The idea here is to support growth in travel that isn't disruptive, that actually celebrates and preserves Cuba as a distinct destination." - bloomberg.com"

Old Havana, a World Heritage Site

Cuba represents a rich mix of multiple cultures and architecture stretching back to August 25, 1514, when Conquistador Diego Velázquez de Cuéllar founded San Cristóbal de la Habana.

Old Havana is so architecturally significant that the 503-year-old city center is a UNESCO World Heritage Site. For those who appreciate architecture, it is a visual feast; a spectacular blend of baroque, Moorish, neoclassical, and Art Nouveau architecture. The built environment reflects the history of the island and its inhabitants: Spanish, African, Mestizo, Chinese, Arabs, Jews, French, Belgians, Americans, and Russians.

Cubanos and tourists stroll the neo-classical plazas and picturesque alleys hosting small shops, street vendors, restaurants/pubs showcasing live bands playing infectious Cuban music. It is common to see people dancing in the open air pubs and sidewalks.

But it is not just Old Havana that is architecturally striking, it's the whole City. Some residential neighborhoods have homes and buildings inspired by Art Deco or the Modernist Movement that you might see in the US.

We saw neighborhoods that looked like we were in Los Angeles, full of California Bungalows! Americans have also left their mark on the island.

We visited the poorest neighborhoods far from central Havana, and they reflect a traditional, colorful architecture set in clean neighborhoods. With rare exception, Cuba is free of the litter and squalor so often seen in the urban favelas in Latino/Caribbean countries.

Many of Cuba's historic buildings and larger housing stock have suffered considerable deterioration due to the 50-year Embargo. Economic obstacles and low Cuban incomes have long impaired ongoing maintenance.

However, unlike the HBO documentary depiction, Cuba is experiencing exciting restoration efforts by the people and government. According to persons interviewed by BD, a law passed in 2012 allowing homeowners to buy/sell their homes for the first time, has spurred significant residential renovation and historical restoration, even in low income residential neighborhoods. Prior to that, houses were passed down through family members. Cubans typically lived in the same house their entire life.

Race, a Truly Inclusive Society

Coming from the US one cannot help notice a unique characteristic of Cuban society: the population is made up of Spanish, African, Mulato and Anglo residents - and it is highly integrated. Observing crowds on the sidewalks, bus stops, plazas, or the Malecón (promenade), the interracial fusion of Cuban society is vividly obvious. No matter what shade Cubans are, they live in the same type of built environment and use the same outdoor amenities. The urban landscape, business and restaurants are barrier free when it comes to the Cuban people. However, economics may be the thing that causes a new level of non-racial based socio-economic stratification.



Top Left: El Capitolio, or National Capitol Building. Unlike the US White House, no fence or Secret service required to protect it.
Left Bottom: Renovated apartment building.
Left: Mixed use commercial and residential building
Above: Poor neighborhood commercial street. (Note: not one piece of litter on the street.)

Photos © 2016 Lauren E Hernandez

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An example of the Cuban mindset occurred at the Ernest Hemingway house where we met a group of African Americans from Los Angeles. They had attended an international jazz festival. Hearing how amazing the festival had been I commented: "I ain't mad at cha," to which some of the folks laughed amusingly, not expecting a rap colloquialism from a Latino. Our guide asked: "What did you say to make them laugh?" They were amused that I used Black rap slang, I said. He said: "I don't understand? Do Black people and Latinos have different slang? Yes, I responded, to which he replied. "That must mean that you live segregated." Yes. His final reply was: "In Cuba, people from different provinces have different slang, but everyone in a province, regardless of their color, all speak the same."

Healthcare Costs, What's That?

The Cuban health care system is known to be exemplary. The government routinely offers scores of doctors to countries that are devastated by natural disasters. i.e., Hurricane Catrina and 2010 earthquake in Haiti.

One morning while walking down a major thoroughfare we spotted a group of high-school students dressed in crisp uniforms. We asked what they were studying? "Nursing." We asked how old they were? "Fourteen, fifteen and sixteen." After turning 17, they noted, they could begin attending medical school - for free!

Unlike the US, there are no economic incentives to become a doctor in Cuba, they earn approximately \$29.00 US/month, compared to a construction worker who earns \$10.00 US/month.



Above: Home of legendary writer Ernest Hemingway

Health care is nationalized and is free to all, even tourists. Every neighborhood has its own modern hospital; some have specialized hospitals as well. There are hospitals for foreigners too, where staff speak the language of the patient so they are most comfortable. Cubanos have absolutely no medical worries or expenses!

Education, What's Student Debt?

In 1900 Cuba had a literacy rate of 42%, one of the lowest among developing countries. Before 1959, 22% of Cubans over the age of 15 were illiterate and 60% of the country were semi-illiterate because many rural Cubans had a third-grade education or less.

After the Cuban Revolution, the new government placed education as a top priority. By 2000, 97% of Cubans ages 15-24 were literate, All education is free in Cuba, as are meals and uniforms. Over half of Cuban teachers have MA degrees. Cuban students can attend any of 42 universities for free, including the impressive University of Havana. Founded on January 5, 1728, the university is the oldest in Cuba, and one of the first to be founded in the Americas. The architecturally stunning University has 15 faculties (colleges). Student debt is an unknown in Cuba.

Dimly Lit Streets and Crime, No Problem

Cubans are proud of their low crime rates; they repeatedly told us there is "no crime" in Cuba, except for the pick-pockets on crowded city buses. I asked a bank security guard how often bank robberies occur in Cuba? In his lifetime he could only recall one robbery, and the thieves were caught within hours. He added: "On an island there is nowhere to run."



Above: Clothes drier in a Cuban apartment.
Below: Friendly Cuban man says hello to a couple of firefighters.

Above: University of Havana.
Below: Home of Che Guevara, now a museum.

Above: Cubanos getting a late night snack and hanging out.
Below: Cuban woman in traditional garb, selling cigars in Old Havana

Above: Outdoor tourist 'mercado' where tourist curios are sold.
Below: Local barbershop/jewelry store, and a 20 cent/US haircut.

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Above: Major thoroughfare near Fidel Castro's home, where numerous ambassadors also live. Many homes are beautiful mansions; resembling boulevards in Beverly Hills.



Above: One of many luxury hotels near Havana.
Below: A marketing piece in front of the Havana Flea Market, the chair reflects the gigantic scale of the flea market, unlike anything we've ever seen.



Above: Hemingway Marina, where some of the most luxurious yachts in the world are moored. Some are so large, they can park a full size sedan and have plenty of room for other amenities.

Cubanos are comfortable being on the streets. It is not uncommon to see young girls walk down poorly lit streets by themselves late at night, something that would not be prudent in American cities. Urban streets bustle with people of all ages, primarily because Cuban houses are small and most lack air conditioning. Outdoor space plays a key function in Cuba's social fabric. Proper urban planning, landscape architecture and lighting could provide substantial benefit to the people.



Changes in Cuba now allow private businesses and the selling of family homes, which has resulted in a country of emerging entrepreneurs. We witnessed significant ongoing investment in housing renovations and small businesses everywhere. Whether it's a pizza shop in a third floor apartment, with pizza delivered on a rope to customers on the street - or a businesses in entry stairwells.

Improvements to urban spaces and infrastructure will come from capital generated by the 4,000,000 tourists that now visit Cuba per year. One woman interviewed noted her only concern about crime is that American tourists may bring it because "The US is such a violent society."

CUCs Versus CUPs? Dual Economies

One of the most curious economic characteristics of Cuba is its dual currencies: the CUC (Cuban Convertible Peso) the new "tourist" currency, and the CUP (the Cuban Peso), the official currency that locals use. The CUP is worth 1/24 of the CUC.

The average official salary is \$25 a month, but recent studies by the Miami Herald show that 54 percent of Cubans actually earn \$50 to \$200 monthly. While this sounds very low to Americans, low salaries are offset by free healthcare, education and subsidized living expenses

The Airbnb house owner we stayed with pays \$1.00 US/year for electricity! International film festival tickets were 12 cents/US; in the US they would have cost \$12.00 - 100 times more. A cab ride in a shared local taxi is 10 Cuban Pesos (40 cents US), a commercial cab for tourists could be \$20.00 US, almost as much as a doctor makes in a month!

No one starves in Cuba and there is no homelessness. We visited a free homeless center where people are clothed and fed, including the mentally ill. It resembled a junior college with athletic facilities!



Hasta la victoria siempre!

Country in Transition

Cuba's transition may prove to be double edge sword. I'm reminded of what I saw in China in 1980, a country unchanged since 1949; a year later it was blanketed with construction cranes resulting in overdevelopment. Cuba's most marketable asset is its colonial architecture and culture, the revenue engine is tourism and hotels. This is where developers, architects and planners come in. The following appeared in Architect News, February 1, 2016 titled "Selling Cuba (Gehry's already there)" noting:

"The Guardian's Oliver Wainwright writes that Havana's real estate micro-capitalism "won't be micro for much longer. American architects and developers are already queuing up to be first in line, ready to pounce on investment opportunities when the embargo drops. Frank Gehry sailed into Havana in December, aboard a streamlined yacht he designed for himself, here to "offer his expertise to Cuba" according to a government statement. - theguardian.com"

As we left Cuba, the vibrant architectural gem and cultural treasure, a question lingered in our minds: How will Cuba navigate its evolution? Will it undergo explosive development and create a stratified society of haves and have nots, betraying the fundamental precept of the Cuban Revolution? Or will Cuba improve its economic position while protecting the unique character of San Cristóbal de la Habana?

When we asked Cubanos about looming uncertainties we heard a common Cuban saying: **"We are happy with whatever we have."**

The Great Escape! (Part 2)

Miguel Galarza



When the head of a City Department chooses to call you to action, you have several choices to make. You can display a level of self-doubt that leaves the client wondering if they've overestimated your abilities. You could simply fold your tent, thereby proclaim your lack of confidence in yourself and your company's abilities.

Or you could choose to step up to the plate, and recognize the chance you been given to change how you and your company will be perceived moving forward. That fateful day on December 26th 2007, we chose to step up to the metaphoric plate, and prepare for the unknown fastball pitches that would be the task of renovating the San Francisco Zoo Tiger Exhibit.

We knew that these fastballs would be coming at us high and tight, as the project architect had only hand sketches of a conceptual Tiger Exhibit. Hence our goal was to keep fouling off pitches. Those fastball pitches being, unforeseen conditions, RFI's, chances in scope, material availability and cost. Yes, keep fouling them off until we could get our pitch and hit it out of the park, as a successful project.

“ That fateful day on December 26th 2007, we chose to step up to the metaphoric plate, and prepare for the unknown fastball pitches that would be the task of renovating the San Francisco Zoo Tiger Exhibit. ”

From the conceptual drawings, we knew the following:

- The existing concrete wall need to be raised a minimum of (4) four feet in some areas.
- The exhibit would need viewing areas for ADA compliance
- Laminated Glass and Stainless Steel Supports Members would be key design features.
- The City of San Francisco desired a world class exhibit upon its completion.

From the conceptual drawing, the following were big question marks

- What architectural features would the public side of the concrete wall have?
- What would be the extend of the concrete reinforcing steel needed to support said architectural features?
- What was the lead time for the laminated Glass the Stainless-Steel support members?
- What underground utilities existed, and would the ADA grades and drainage work?

Figure 1: Plan of New Tiger Exhibit

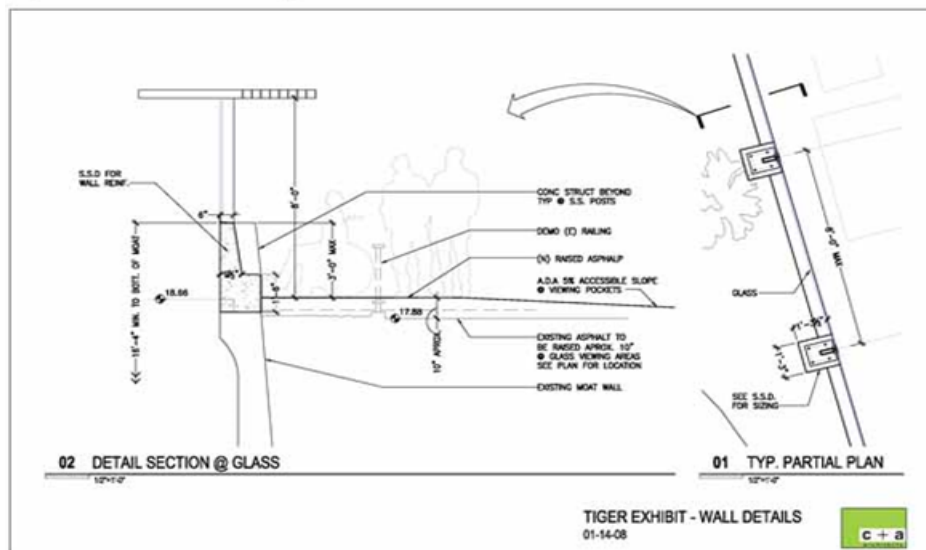


Figure 2: Fast Track / Critical Path Project Schedule

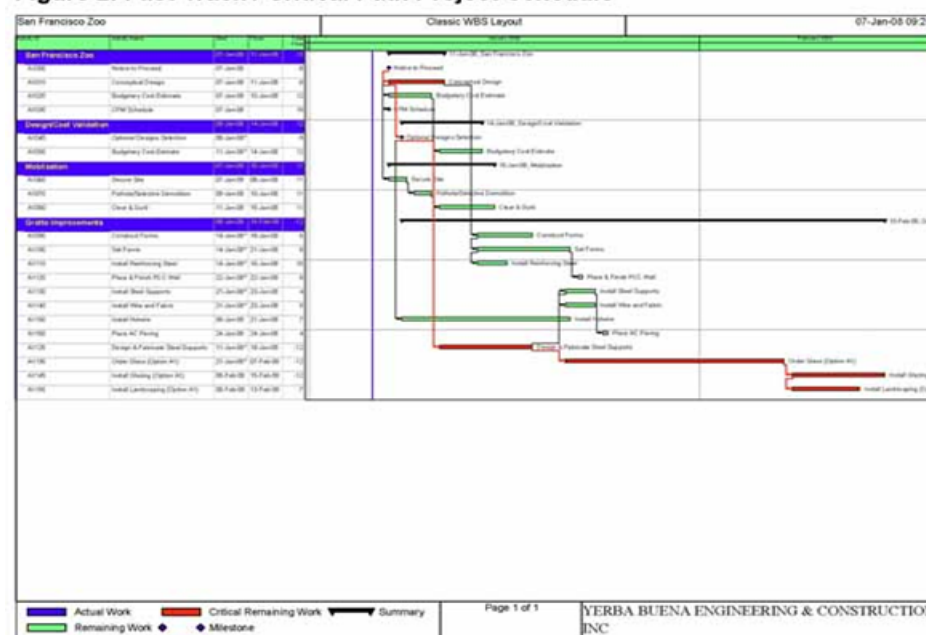


Figure 3: Form Work



Figure 4: Inside Wall of the Tiger Grotto



Figure 5: Workman Working Hard

The Great Escape! (Part 2) Continued

With a commitment of 30 days to complete the project, and reopen the exhibit to the public, it was clear that several tasks had to begin before the final design was complete. Of critical importance were the following:

- Could 8'x4'x1" thick laminated glass be manufactured in 3 weeks, and if so which vendor/subcontractor could we commit to the delivery and installation of this glass on time.
- We're the exotic designed stainless steel member needed to support the laminated glass in stock and available for custom fabrication into a glazing support and shade structure?

As critical path schedule material items were being decided on by the design team, the construction team moved to creating a safe work site zone. Safety is paramount in ensuring a successful project, let alone a project needing to be completed in 30 days. The project would require working adjacent to an eleven foot drop into the tiger moat, the first task was the create an adjacent working platform.

This was achieved by install 4000 SF of tubular scaffolding inside the tiger exhibit, in so that we created a work platform level with the grade above the exhibit. With a safe working platform in place the construction team began to form the inside wall of the tiger grotto wild approx. 2000 SFCA (fig-2) as elevation had yet to be confirmed.

Additional we were confident that two rows of reinforcing steel would be required, hence the team install twenty-four hundred dowels #5 dowels six inches into the existing concrete wall to fast-track construction of the cast in place wall.

As the stainless-steel support members and laminated glazing material were being confirmed and ordered, the design team turn to the architectural design element of the walls visible to the public, quickly hand sketches materialized into working drawings and in the field construction. (fig-3). Critical attention was paid to the steel support embed, at every eight foot on-center these embed would provide support to the steel members that secured the laminated glass to the concrete structure. (Fig-4) with less than ¼' play, these casting in place embeds were secured at four point, to ensure they remained plumb, aligned, and square in the concrete wall. Lastly working alongside the concrete supplier, the design and construction team, developed a concrete mix design that within 4 days achieved 4000 psi strength, that was a good thing for three days after the pour and removing the forms, the steel supports arrived for installation, closely followed by the laminated glazing. (Fig 5 & 6).

With the key elements were in place, one would like it was time to pat each other on the back. A project on a fast track, is like a marathon it not only how you start the race, run the race, but also how you finish the race. In the next and final installment of The Great Escape, we'll share how the project was brought to it successful conclusion.



Figure 6: Formed Enclosure
Figure 7: Embeds

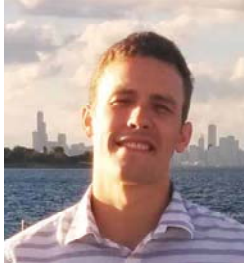
Figure 8: Stripping Forms
Figure 9: Stripped Forms

Figure 10: Formed Enclosure
Figure 11: Installing Glass

About the Author: Miguel Galarza, is the Founder and President of Yerba Buena Engineering & Construction, Inc, (YBEC) San Francisco, CA. Established in 2002, YBEC is a growing SBA 8(a) certified and HUBZone. Miguel Galarza is a 22-year veteran in the construction industry who has managed more than \$100 million in projects for the Army Corps of Engineers, Navy, Marine Corps, Air Force, National Park Service, and other federal government agencies.

Cesar Chavez Solar Calendar Memorial

Chris Detjen, Albert Orozco, Prof. Ron Rael



Legacy of Cesar Chavez

Cesar Chavez's historic contributions to the struggles of economic and environmental justice are rooted in his personal history on this land.



As a teenager, Chavez worked the fields of Delano, California. Those experiences directly informed his decision to launch the Delano Grape Boycott of 1965, one of the earliest and most historically significant labor actions of his life. Twenty years later, Chavez returned to Delano to speak out against environmental degradation caused by the abuse of toxic pesticides among growers.



Chavez's lesser-known interests of the human relationship to the natural environment has been central to the design of the Cesar Chavez Solar Calendar Memorial.

Chris Detjen
Albert Orozco
Prof. Ron Rael

City of Berkeley Names Parcel of Land

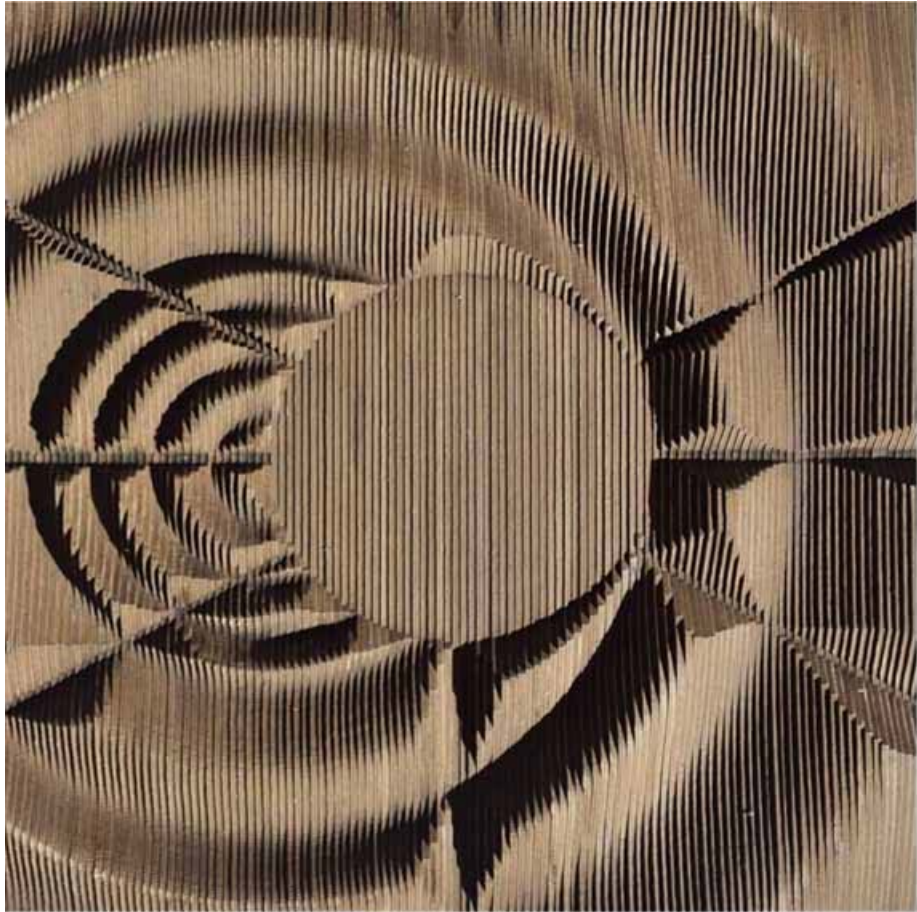
In 1996 the City of Berkeley renamed this parcel of land, located in the Berkeley Marina, in Cesar Chavez's name. A council of community members led by Santiago Casals has been working since then in an effort to develop a memorial to Cesar Chavez.



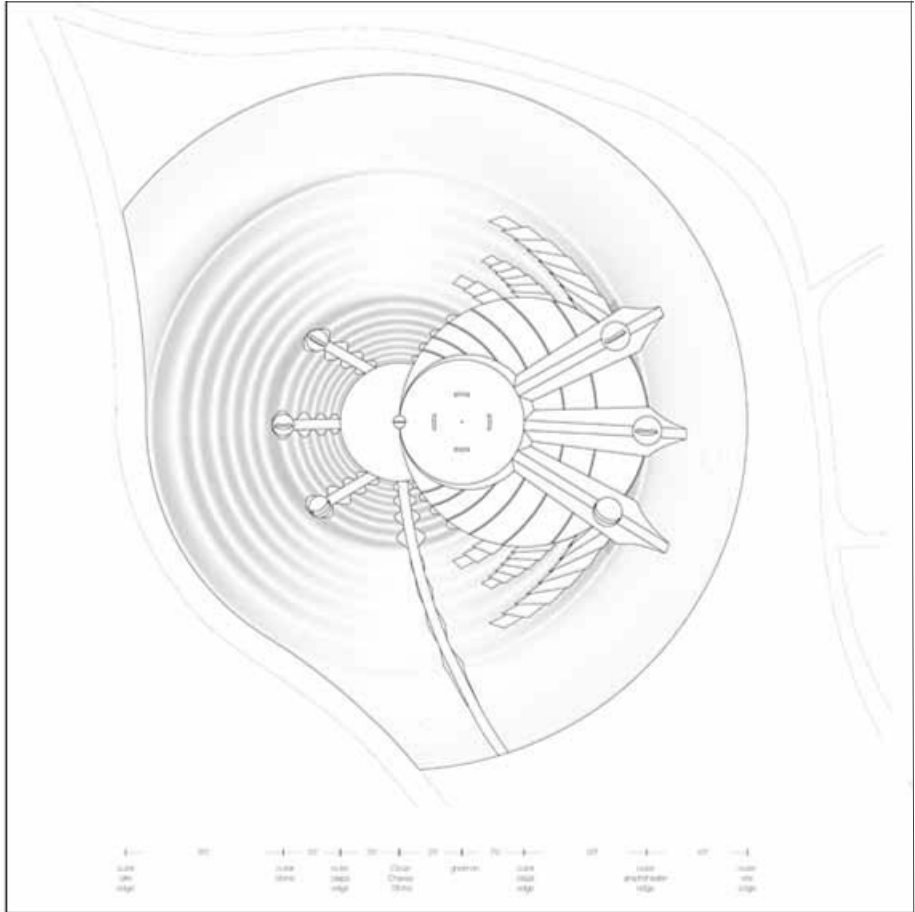
A modest memorial was constructed near the northwest corner of the park.

During the 2015-16 school year, at the request of this council and with the guidance of Associate Professor Ron Rael, we began working on a schematic design for a new memorial that aimed to address Chavez's legacy of environmental activism by generating compelling images that could be used to raise funds for further redevelopment at the site.

Early Study Model



Site Plan



Cesar Chaves Park
Location: located on the north side of the Berkeley Marina

Cesar Chaves Park Maps
City of Berkeley Website
http://www.ci.berkeley.ca.us/Parks_Rec_Waterfront/Marina/Marina_Facility_Map.aspx

Cesar Chavez Solar Calendar Memorial

Continued

The Cesar Chavez Solar Calendar memorializes Cesar Chavez, a community leader who lived for a mere sixty-six years but whose contributions to economic, social, and environmental justice will be felt for many generations. We used concepts of the sun by indigenous people from the past and our current understanding of light to infer a vision of cultural unity and nonviolent struggle in an architectural landscape.

Our architectural landscape frames the sunrise and sunset of the equinox and solstices; four important seasonal times for farmworkers. The space is ritualized by these times and by Cesar Chavez's date of birth which closely coincides with the spring equinox.

The undulating landscape attempts to place the individual in a contemplative environment with a variety of shadow contrast where a 360-degree view of the bay area is the most prevalent feature of the site.

Lastly, the project is centered on the Cesar Chavez stone, the heart of the project that is marked by the shadow of the adjacent sundial at sunrise at March 31st. The passage of time in a human life is a difficult thing for anyone to comprehend. The Cesar Chavez Solar Calendar Memorial attempts to remind visitors that time is linked directly to the movements of the sun, to light and shadows, and to the earth; all important features that contributed to the legacy of Cesar Chavez.

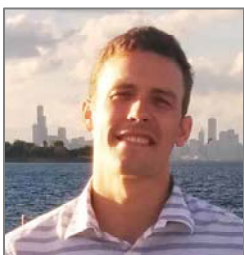


Above: Rendering showing some details in the design: The Cesar Chavez Stone, the sun dial, the four virtues, and the tiling on the floor flowing the part of the landscape design.

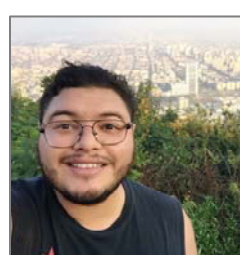
Bottom: Rendering showing a sunrise at March 31st, Cesar Chavez Birthday.

Above: Image showing the sunrise at the spring equinox.

Bottom: A view of the entire project at sunset .



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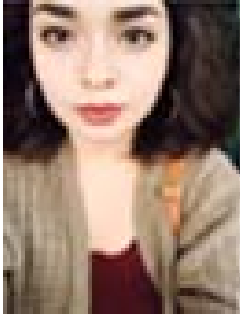


Prof. Ron Rael: Rael is the Eva Li Memorial Chair in Architecture and Chair of the Graduate Committee in the Department of Architecture at UC Berkeley. He directs the printFARM Laboratory (print Facility for Architecture, Research and Materials), holds a joint appointment in the Department of Architecture, in the College of Environmental

Design, and the Department of Art Practice, and is both a Bakar and Hellman Fellow. He is the author of numerous books. His latest, *Borderwall as Architecture: A Manifesto for the U.S.-Mexico Boundary* (University of California Press 2017), advocates for a reconsideration of the barrier dividing the U.S. and Mexico through design proposals that are hyperboles of actual scenarios that have occurred as a consequence of the wall.
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A New CASA Mural for Our Time

Itzel Torres



It started with the piercing brown face painted on the fifth floor wall in Wurster Hall. This face represented a feeling of recognition, safety, and inclusion. It was a reflection of the Latinx culture and subconsciously without knowing at the time it would turn into one of our greatest motivators.

This face was part of the original mural that was painted by the first CASA class in the 1970's. The mural was a representation of the issues that were occurring at the time with the Latinx community. It served as a representation of the magic of our communities. This mural was covered up in the years to come and the brown face was the only symbol left. I got to hear the story of how the mural got painted, and how it brought together the CASA members as they took space to narrate their stories.

This ignited a conversation with the CASA board, and we started talking about how we felt there was a lack of representation within the College of Environmental Design for communities like ours. We started discussing how the mural being covered symbolized the invisibility we felt. The Diversity Platform Committee sent out an application to submit a proposal to mount projects that allowed inclusivity and diversity in the College; this seemed like the perfect opportunity to get our mural back.

After consulting with the CASA board I submitted the proposal, and we got grant funding to create a new mural.

“ Our mural tells the narrative of our community through space, time and structure. We tried to incorporate iconic monuments, landscapes, and a story that is tied together with the prospect of growth. One of the main components that makes the narrative of the mural impactful is the student who we portray in the mural to be the seed that allows the tree of resilience to grow. This tree is linked to the student, and together they create an entity that allows barriers to be broken, and explains the sacredness of our identities. ”

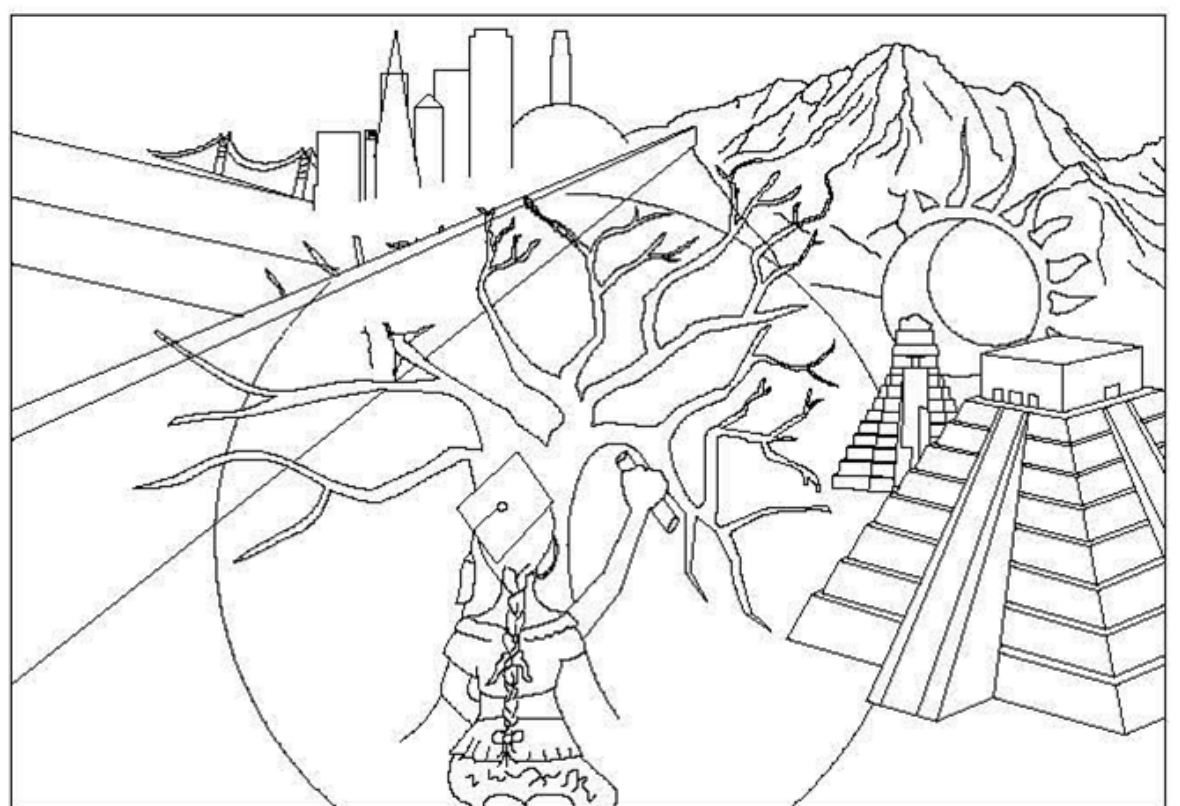
About the Author: Itzel Torres is a student at the College of Environment Design, UC Berkeley. She will receive B.A. Architecture | Sustainable Design in 2018. She is the Co-chair of CASA (Chicanx Architectural Student Association), Torres has been a previous contributor to ByDESIGN and has been the recipient of a CASA Alumni Scholarship. itzeltorres94@berkeley.edu

We soon started mounting town halls to get the community involved and also get input on how they wanted to be represented. Our conversation revolved around portraying the resilience and growth of our community. With this we carried out the next meeting with the CASA board and CASA members. A few students sent in collages and we soon took all of this input and started creating sketches what would become our mural.

Soon those sketches were compiled and I sketched out one of our last renditions. Ana Rosa Robledo and I have been working on the digital copy with the CASA Board's input. We have tried to make this project as inclusive as we could.

Our mural tells the narrative of our community through space, time and structure. We tried to incorporate iconic monuments, landscapes, and a story that is tied together with the prospect of growth. One of the main components that makes the narrative of the mural impactful is the student who we portray in the mural to be the seed that allows the tree of resilience to grow. This tree is linked to the student, and together they create an entity that allows barriers to be broken, and explains the sacredness of our identities. The mural is set to be an interactive piece of art, so future generations will get to incorporate a piece of their identity within it. We plan to leave room for panels so this can be carried out.

There are a few details that still need to be decided, but we plan to complete the project by the end of April. It will be displayed next to Wurster's first floor gallery. We hope to carry out all the love, resilience and growth that is part of our culture.



Sketch of the new CASA Mural to be painted on the first floor at the College of Environmental Design, UC Berkeley

“Carros, Chebis y Almendrones” de Cuba

ByDESIGN is made up of a talented team of volunteers in a variety of professions and industries. A subset of that team is made of ‘la familia’ Hernández: Lauren (lead writer), Michael (lead photographer) and Roy Hernandez (Publisher). For the “ByDESIGN Goes to Cuba” issue, we were joined by a fourth family member, Roy, an armature photographer.

Cuba is an enchanting Caribbean island with a historically rich history and architecture reaching back to 1510. However, one of Cuba’s most iconic trademarks are cars on the island that were last imported in 1959 before the blockade. These include:

“**Carros**”: a pochismo (a Spanish-ized version of an English word) for private cars;

“**Almendrones**”: taxis that go down a fixed route for a fixed price, usually 10 Cuban pesos (approximately 50 cents), which is the same whether you ride from one end of town to the other or just a few blocks; or,

“**Chebis**”: another pochismo from the word “Chevys” used for taxis.

Regardless of their purpose, these vestiges of a bygone automotive era reflect industrial art on wheels.

The ingenuity and creativity of owners who have maintained cars more than 55 years old without replacement parts, is nothing less than amazing. According to many cab drivers we spoke to, foreigners routinely offer to buy these classic rides for top US dollars or in exchange for new BMWs.



ByDESIGN photographers:
Lauren, Michael and Roy B. Hernández
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