

A Summer At The Aquarium:
Pacific Visions And My Adventures In Eco-Modernism

Designmatters Fellowship Documentation— Summer 2014
by Benjamin Weiss



This is an account of my experience working at the Aquarium of the Pacific as a Designmatters Fellow in Summer 2014.

The Players



DESIGNMATTERS is the social impact design department at Art Center, College of Design in Pasadena. Each year, up to six Art Center students are awarded Designmatters Fellowships. These funded, high-level fellowships embed students in host organizations for one full 14-week academic term to work on strategic design projects and explore the mission, model and meaning of the host organization's work.



The **AQUARIUM OF THE PACIFIC** in Long Beach has the mission to instill a sense of wonder, respect, and stewardship for the Pacific Ocean, its inhabitants, and ecosystems. It's vision is to create an aquarium dedicated to conserving and building Natural Capital (Nature and Nature's services) by building Social Capital (the interactions between and among peoples). With more than 1.5 million annual visitors, the Aquarium of the Pacific is the fourth most-attended aquarium in the US. The Aquarium of the Pacific is a community gathering place where diverse cultures and the arts are celebrated and a place where important topics facing our planet and our ocean are explored by scientists, policy-makers and stakeholders in the search for sustainable solutions.

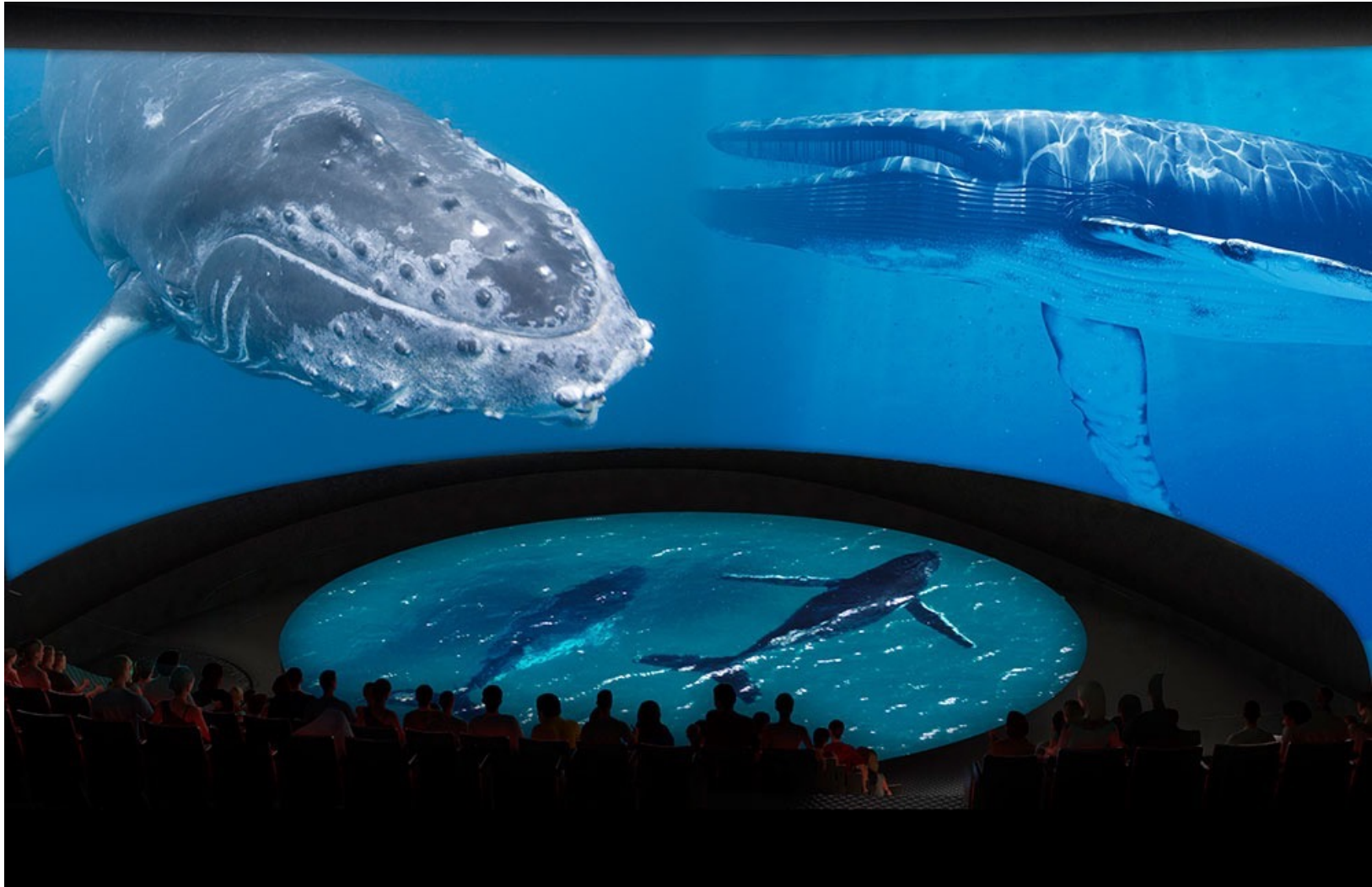


BENJAMIN WEISS graduated with a BFA from the Art Center Film Department in August 2014. He is the first film student ever to undergo the *Designmatters Concentration in Art & Design for Social Change*. Benjamin was born and raised in Zurich, Switzerland. His award winning and internationally recognized short films have a strong affinity to stories evolving around social change and a deep curiosity for the human condition in the 21st Century. He currently lives in Los Angeles, CA.

Background



During summer term 2014 I had the pleasure and privilege to work as a fellow at the Aquarium of the Pacific in Long Beach. My assignment was to help with the initial conceptualization and creative storytelling of ***Pacific Visions***, a new large-scale architectural addition to the Aquarium, which is currently being developed.



As a filmmaker, I was supposed to outline a visually stunning and emotionally gripping story for the centerpiece of ***Pacific Visions***: a movie theatre with an immense 180-degree concave IMAX-type screen.

The Greatest Story Never Told

Pacific Visions is structured as a three part experience, with a pre-show area, the actual theater and a changing exhibition gallery. It will deal with a multitude of different environmental and ocean related topics and will feature a strong interactive component.

The first opening show experience, which is planned for late 2016 and which I got to work on, has a clear objective: To inspire audiences to start thinking about solutions for the pending threat of climate change and the changing relationship of humanity with planet earth.

Dr. Jerry Schubel, President and CEO of the Aquarium has synthesized the ideas that build the cornerstone of ***Pacific Visions*** into a 80-page internal document with the bold title ***The Greatest Story Never Told***.

It is a very compelling treatise that starts with the Big Bang and ends in the 21st Century. It tells of our planet's creation 4,5 billion years ago and goes all the way through the dawn of man, to the advent of agriculture up until the anthropocene — the age of man — where humanity has become the principal geological driving force on the planet and faces the many wicked problems we are currently learning to deal with — it ends by raising a series of questions about how we should design our future.

I was given the task to think about ways of how we could condense these 80 pages into a 5 min cinematic experience.

Eco Modernism (a very short overview)

The ideas out of ***The Greatest Story Never Told*** belong to a particular school of thought, which has been defined as Eco-Modernism.

Eco-Modernism is a political, cultural and environmental movement that believes that the wicked challenges of climate change, population, agriculture, water scarcity and global poverty can be solved through the power of human ingenuity and technical innovation. Eco-modernists have harshly criticized the way of how traditional environmentalism tries to deal with these problems.

Its main arguments are:

- Humanity is likely to use a lot more energy in the future. Technologies for so called renewable energies like wind and solar are currently not developed enough to significantly mitigate climate change. Nuclear energy and hydraulic fracturing are necessary methods to move away from coal and reduce CO2 emissions.
- Bio-technology is not an enemy. Genetically engineered crops are necessary to grow pest resilient crops that can feed all people. The world's population cannot be fed on organic food alone.
- The classical narrative of environmentalism is one of “woe is me and shame on you” and describes planet earth as fragile. Eco-modernists see planet earth as resilient. They believe that humanity has the capability to solve the environmental mess it put itself and the planet into.

The challenge for ***Pacific Visions*** is to introduce the general public to these controversial ideas — and in doing so, to create a platform for discussion, where audiences are empowered to make their own decisions.

I was studying these eco-modernist thought leaders:

- Stewart Brand, The Long Now Foundation
- Jesse Ausubel, Program for the Human Environment at Rockefeller University
- Ted Nordhaus & Michael Shellenberger, The Breakthrough Institute
- Peter Kareiva, The Nature Conservancy

Perspectives on Conservation

Partly for research purposes and partly to exercise my filmmaking muscle, I started to conduct a series of video interviews. Jerry Schubel and I came up with a loose concept for a web series titled ***Perspectives on Conservation***, a show in the style of *60*

Minutes, made for the web. It would feature a range of different perspectives on environmental conservation both from eco-modernists and from traditional environmentalists.

I conducted an interview with Peter Kareiva of the Nature Conservancy in Long Beach and had the pleasure to drive up to the Bay Area to interview Ocean Explorer and environmentalist Sylvia Earle at DOER in Alameda and eco-modernist Michael Shellenberger of the Breakthrough Institute at his home in Berkeley.

The image to the left shows the company car with which I drove to the Bay Area together with the Aquarium's in-house filmmaker Andrew Cohen.

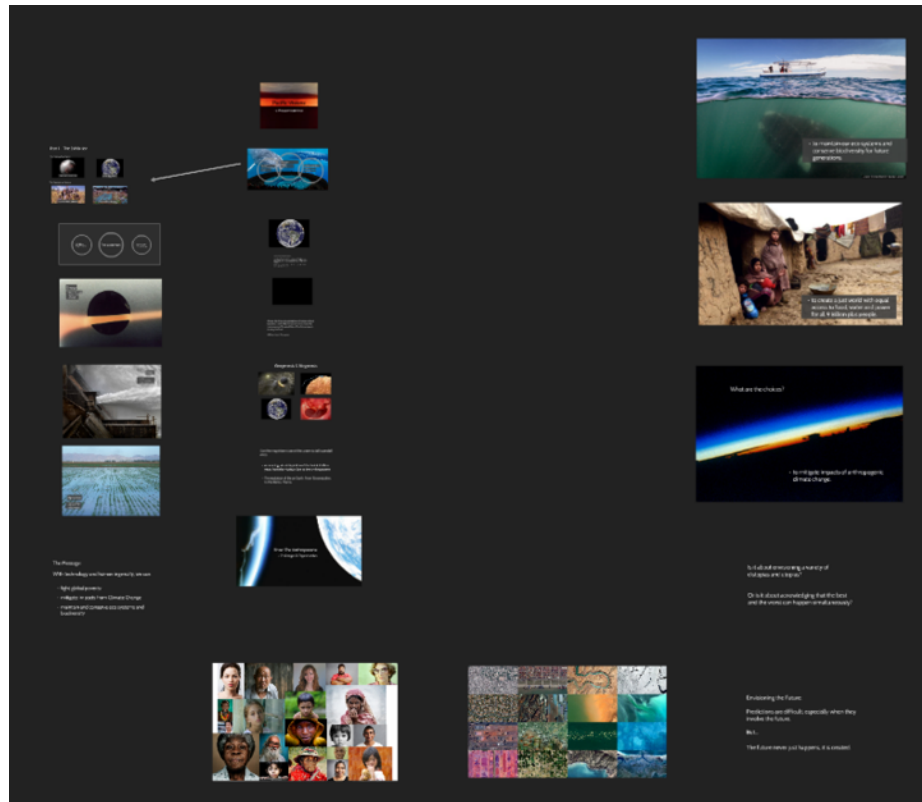




Shellenberger & Earle; video stills from ***Perspectives on Conservation***

Pacific Visions

The work on ***Perspectives*** was fruitful so far as that it helped me deepen my understanding of the general subject matter.



Since at this stage of the ideation process it was too early to make a film, I decided to use *Prezi* as a tool for presenting my ideas.

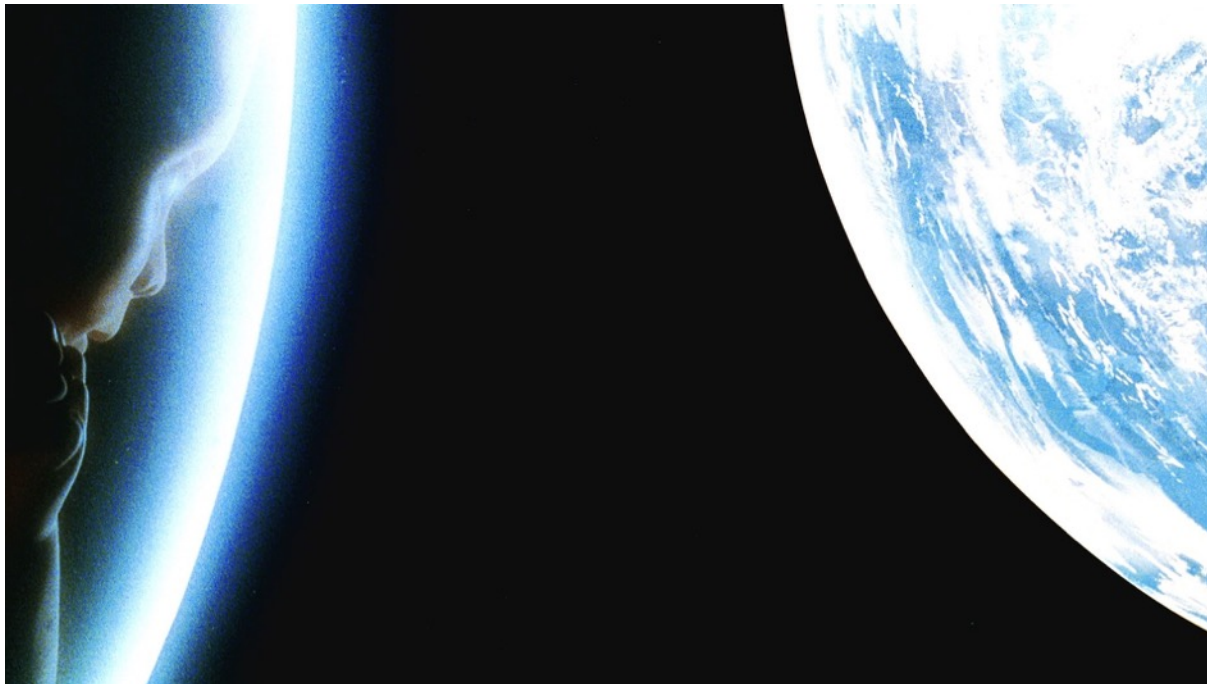
Over the course of the second half of my fellowship, I did two presentations for the Aquarium's leadership and a delegate of Cortina Productions, the design firm in charge of producing the exhibition.

Please have a look at the midterm Prezi [here](#).

The big idea of my first presentation was to try and add a somewhat spiritual component to the very scientific and research driven content that makes up the bulk of the information.

I proposed to use the magnificent size of the ***Pacific Visions*** screen to tell a parallel story:

- A stunning, visual depiction of the last 4,5 billion years on Earth: from the Hadean Eon to the Anthropocene.
- The evolution of life on Earth. From Stromatolites to the Genus Homo.



"We are the climactic generation of human cultural evolution, and in the microcosm of our lives the macrocosm of the evolution of the human race is playing itself out."
William Irwin Thompson

"The notion that we emerged from fire and rock and amoebas is no less wondrous than the notion that we were created by an intelligent designer. Why do we assume that it is only the latter and not the former that can inspire us? And while there need be no single story, some story about the mystery and majesty of life must be told."
T.Nordhaus & M.Shellenberg

Source: 2001 — A Space Odyssey; Stanley Kubrick, 1968.

My argument was that there is an obvious visual analogy that should be taken advantage of: The forceful colliding of planets in space and the fertilization of an egg within a living organism. I further argued that the juxtaposition of a human being with the blue planet can provoke a deeper sense of empathy for life on earth.



While my proposal of the visual analogy as a centerpiece for the theatrical storytelling was dismissed for being unscientific and a little too esoteric, my reasoning was successful in so far that it promoted the idea of having ***Pacific Visions*** be cosmic in scale and visionary in character.



For my next presentation, which can be found [here](#), I emphasized the importance of giving visual reference to our planet's atmosphere. The above illustration, made by my friend Amaro Koeberle, is an attempt to visualize the planet's atmosphere by using the aspect ratio of the ***Pacific Visions*** theater screen.

Even though as a society we are very much aware of the altering effect that the output of excessive amounts of carbon dioxide has on our atmosphere, it is hard to actually make it comprehensible: CO₂ has neither color nor odor and the atmosphere is physically unreachable — unless for astronauts (and Richard Branson).

Conclusion

My Designmatters Fellowship at the Aquarium was a thought provoking and truly educational experience.

I got to research some of the most pressing matters of our time, while being able to meet and talk to several thought leaders of conservation in the 21st Century. I was able to formulate and synthesize my ideas into a presentation and got very good feedback for both my ideas and presentation style.

I was happy to see that many of my ideas found direct implementation into a similar presentation by Cortina Productions, which I was invited to on October 1st, 2014.

As regards the filmmaking process of ***Perspectives on Conservation***, there was a meeting in September, in which I presented a very rough cut of the Earle and Shellenberger interviews. The project has not been further pursued as of right now.

However, there is a new film project in the works: I will be meeting again soon with the Aquarium in order to start developing a documentary on Ocean Exploration. I like to see the Fellowship as an overall success, because it seems to have brought me ongoing work, beyond my student activities.

My sincere ***Thank You*** goes out to Jerry Schubel, and his wonderful secretaries Linda Brown and Adina Metz, as well as Andrew Cohen and everybody else at the Aquarium of the Pacific; further thanks goes to to Elisa Ruffino, Jennifer May, Mariana Amatullo and Stephen Butler at Designmatters for their ongoing support and Jean Rasenberger, Maggie Hendrie and Nik Hafermaas at Art Center for their counsel and advice.

Benjamin Weiss, November 2014