

## *An Explanation of Why I Can't Contribute to This Narrative*

JOHN GREGG

It has been one of the great, unexpected pleasures of the *Western Flyer* restoration process that I get to work with notable scientists and authors. When one of them graciously asked if I would write an explanation as to why I'm involved in this project, I said yes before I thought about it. I was caught up in the excitement of hanging out with this group, before the truth fought forward and reminded me why I wanted to decline this assignment. I can't write. I have an incomplete education and am the very personification of the problem E. O. Wilson described in his 1998 book *Consilience*. Being schooled in things technical and precise, I lack almost completely a sufficient exposure to the humanities, social discourse, and artist-y things. I am, in fact, a perfect exemplar of the problem of separation of art and science. My co-contributors, on the other hand, are examples that exceptions are, and should be, made. They are not only skilled scientists and scholars, but also philosophical thinkers and lyrical writers.

Our societal house has long been too divided between art and science. Artistic creativity has not been rewarded in the scientific milieu, and precision and validation are rarely valued in art. It has been said (not by me—I was doing math) that Mona Lisa's smile came not from divine intervention per Giorgio Vasari, but as the result of da Vinci's exacting and painstaking anatomical research—so he was an early exception, blending scientific curiosity with artistic brilliance. But, alas, there are few da Vincis. In seeking a career, we are asked to separate into two camps, like a schoolyard game of Red Rover. In choosing the technical path, we are made to abandon the personal and egocentric view of things in favor of an ordered set of impersonal and dogmatic constructs. The artists, conversely, are told to abandon the group view and interpret the world through their own eyes and sensibilities. For the artist, the ordered

JOHN GREGG is President, *Western Flyer Foundation*, Los Angeles, California.

process is anathema, and group approval and peer review the road to ruin.

Science has sought to suppress spurious creativity in its formulation. It rewards repetition and exactness, while art specifically frowns on anything that appears derivative.

And yet, Piero Scaruffi noticed that all major scientific revolutions have coincided with a climate of creativity. This fact was also graphed by Ed Ricketts on butcher paper hung on the walls of his lab. He (without Google or Wikipedia) mapped all major events in human history throughout the world and noticed that similar patterns emerge in countries far removed from one another. Periods of great advances in both art and science were followed by long periods of quiescence—that was true in Japan and in Europe. This is what Stephen Jay Gould and Niles Eldredge called “punctuated equilibrium” in 1972. This is contrasted against phyletic gradualism—the idea that evolution occurs as a slow and steady transformation.

One of these rapid steps forward seems to have occurred on the *Western Flyer* in 1940. For Steinbeck and Ricketts—an artist and a scientist—the dichotomy of art and science could be bridged by immersive observation. That is what Ricketts and Steinbeck did on their 6-week voyage. They observed. Deeply. The science that followed gave truths about nature. The art generated a series of notable books and essays.

By listening to ribald stories from the crew about life in Monterey (and from living “down on his soles” in the 1930s on the “Row”), Steinbeck—a notorious “lint picker” of facts—penned *Cannery Row* and *Sweet Thursday*. Many nights during the voyage, Steinbeck huddled close to the *Flyer*'s shortwave radio and listened to the unfolding drama of the Nazi invasion of Norway and the brave resistance that became the material for *The Moon Is Down*. Their self-described Homeric journey also included a story gathered in La Paz, which became *The Pearl*, as well as greater familiarity with Mexican history and culture—which may have inspired Steinbeck to write the film scripts for *Viva Zapata*, and *The Forgotten Village*.

The late-night talks that Ricketts and Steinbeck had after watching schooling fish further refined their views regarding the individual versus the “group-man,” as set forth in Steinbeck's 1932 reflections, “The Argument of Phalanx.”

This is all very derivative and in line with my training. But in order to describe my involvement with the *Flyer*, as requested by this volume's

guest editor, I must become subjective instead of objective/factual. At age 10, I grabbed a book from a bookmobile by mistake, and was forever changed by it.

The Library Service Act of 1956, and subsequent efforts by Jacqueline Kennedy, brought the miracle of bookmobiles to poor rural communities such as mine in Brunswick, Georgia. Upon the bookmobile's eagerly anticipated arrival to our street, we had only a few minutes to turn in our old books and grab an armful of new titles to read before the bookmobile's return in two weeks. I would gravitate toward anything adventurous, such as Jack London's *White Fang* or Jules Verne's *20,000 Leagues Under the Sea*. Anything about a pirate, an abandoned racehorse, or an aggrieved whale would feed my pre-teen hunger for adventure.

During one of those mad bookmobile scrambles, I grabbed *The Log from the Sea of Cortez*, since it sounded adventurous. And it was. The dust jacket showed a drawing of a fishing boat in big green waves under a yellow sky. Originally published in 1941 with the ponderous title (and contents) *Sea of Cortez: A Leisurely Journal of Travel and Research*, the book was cut in two and re-issued in its more tractable version in 1951. During that intervening decade, 80 million people perished in the Second World War, 22 billion sardines were killed in Monterey Bay, and Edward Flanders Ricketts died at a railroad crossing on Cannery Row.

It was the 1951 edition that I grabbed in 1969, and with which I have been intrigued ever since. I realized then that a person could, with their friends, go to a remote place, and do real science while having breathless adventure. My 10-year-old self, in my mind, traveled with this band of characters on what Joseph Campbell, who was heavily influenced by Ricketts, would later describe as a "hero's journey." In 2015 it was definitely my subjective, 55-year-old self that purchased the boat that took Steinbeck and Ricketts to the Sea of Cortez, the *Western Flyer*. The boat and its history mean more to me every day.

Steinbeck wrote about the duality of the mind when discussing man's relationship with boats. The brain, with a perfect balance of the artistic and the utilitarian, shaped the boat into a "lasting thing of useful beauty." He said, "Of all man's tools, the boat is personification of man's soul." And, "There is an ancient ancestral memory at work which has shaped that man's mind into a boat shape. The boat, in turn has received the man's soul." The boat will identify with those aboard and respond with human-like moods and intelligence.

In the intervening years between Steinbeck and Ricketts' voyage and

now, the *Western Flyer* has displayed an awareness that defies calling her an inanimate object. She refused to sink many times, and when she did, it didn't take. She rewarded loving captains with a hold full of fish or crab. When she got a bad captain, maybe one who had previously sunk his charges, or who had a penchant for abusing both vessel and crew, well, that bad captain may have found himself dragged off the deck by a fouled crabpot line and taken to the bottom. Perhaps the boat responded a little slowly to the man overboard. Maybe the crew reacted a bit more deliberately than hastily when recovering the gear from the ocean depths with the lifeless captain in tow. These moments, though forgotten by men, seem to be remembered by the boat. It is palpable when you board the *Western Flyer*, to feel the presence of the captains and crews and scientists and fishes that were there before. And with this awareness, it doesn't seem like a question of "if" the *Western Flyer* should be returned to her former usefulness, but rather the question is how best to move her to her new mission while respecting her history and form.

Steinbeck and Ricketts were not sentimental men. They bristled at old traditions and focused their creativity and logic on looking ahead. It is with this awareness that I, as the boat's owner, and we as an organization—the Western Flyer Foundation—are tasked with preserving the historical significance of the boat while also fitting the *Western Flyer* for her new mission.

The vessel was built at the end of the sail era, and her hull lines retained the sleekness and efficiency necessary for sail-powered vessels. The elegant wineglass hull of the *Flyer* makes her slippery in the water and highly efficient for the battery-powered electric motors that will replace the original diesel engine. The original Atlas engine weighed over 9 tons, and was the size of a Volkswagen van, yet produced a scant 160 horsepower. Such power was, however, adequate to propel the *Flyer*, laden with 70 tons of fish, at a speed of 11 knots—an attestation to her excellent hull design. The new electric motor, by contrast, will be the size of a microwave oven, and will provide 450 horsepower, enough to reach similar speeds with much more torque.

The electric propulsion system will allow the *Flyer* to glide quietly across the water. She will be able to approach wildlife with minimal disturbance, allowing a substantial increase in lethality in harpooning marine mammals (just seeing if you're still reading). The lack of diesel fumes, along with stability provided by a pair of Seakeeper gyroscopes, will provide a clean, stable environment for people prone to seasickness,

and will make for a much more pleasant voyage for all. The electric propulsion system will also facilitate a dynamic positioning system, which will hold the vessel in one location while a remotely operated vessel (ROV) is deployed. The fully functional ROV will transmit high-definition video to on-board screens. Such video can also be transmitted in real time to any internet-connected monitor in the world. We will also be able to collect marine specimens, deploy data loggers, and recover derelict fishing gear with the ROV.

We anticipate that the *Flyer* will spend 26 weeks each year in its home port of Monterey. The city has offered us permanent berthing at what is now a Coast Guard pier. The rest of the year the *Flyer* will venture north, as far as Sitka, Alaska, and on alternating years, south, to the Sea of Cortez. Along the way we intend to call on small ports that are seldom visited by research or educational vessels. With its shallow draft, the *Flyer* can visit ports inaccessible to larger craft.

Each venue will be visited by an advance team that will work with local scientists, teachers, and artists, who will receive training on project-based learning. Symposia will be held each year in Monterey to “train the trainers,” preparing them for our visits. This process will identify a marine issue of local concern at each stop, such as eelgrass depletion or agricultural runoff, and a long-term study will be initiated and performed using the *Flyer* and local partners. These long-term studies may be transect surveys, or water quality studies, or whatever kind of long-term data collection is needed to be meaningful for local communities.

A seafloor data logger will also be placed near each stop, with a total of nearly 60 loggers to collect continuous readings on pH, salinity, dissolved oxygen, and other parameters for 2 years with each setting.

The advance team will also supply ROV kits for clubs in high schools to assemble. When the *Western Flyer* arrives, the ROV cameras will provide video footage for a short student-made documentary about a local marine concern. We want the *Flyer*'s visits to remote ports, such as Prince Rupert or Tillamook, to be much-anticipated events.

The new explorers on board will be challenged not just by technical things, but subjective impressions will be teased out by writing, painting, photography, and documentary production, thereby engaging both hemispheres of the mind. This is where I feel I'm out of my depth. But by working together with others—the Steinbeck/Ricketts model—we will be more complete, and the creativity of others will help create a holistic vision aboard the *Western Flyer*. Often I seem blind to what Kant said was “our ability to know things through our senses but cannot directly see.” The *Western Flyer* project will embrace both the seen and

the sensed.

If science is stripped of emotion and creative manipulation, it cannot advance. The same rules apply to art. A large chunk of Carrara marble was just a flawed boulder until shaped into *David* by Michelangelo's precise knowledge of anatomy and use of visual tricks of foreshortening.

This duality of thought is the basic underpinning of our mission. The relationship of the artist Steinbeck and the scientist Ricketts aboard the *Western Flyer* is a perfect metaphor of our larger goal. The symbiosis, were I able to enunciate it clearly, is an elusive and fragile thing that must only be referred to in whispers, but if successfully employed will yield important lessons to those we reach. The "consilience" or merging of thought from people with diverse backgrounds will be the crop we seek to harvest.

I really appreciate being asked to share the source of my involvement in this project. Perhaps the next cohort of technical people will be more fully evolved. I feel like I stumbled upon a new phalanx, not modeled on da Vinci or Darwin, who were good at everything, rather a group of people each with a particular talent. Hopefully our combined efforts will result in a new system, with the *Flyer* as the centerpiece, of exposing people to the art of science. ❖

## BIBLIOGRAPHY

- London, Jack. 2015 [1906]. *White Fang*. Antheneum Books/Scribner Classics, Simon & Schuster, New York.
- Steinbeck, John. 1942. *The Moon Is Down*. Viking Press, New York.
- Steinbeck, John. 1945. *Cannery Row*. Viking Press, New York.
- Steinbeck, John. 1947. *The Pearl*. Viking Press, New York.
- Steinbeck, John. 1951. *The Log from the Sea of Cortez*. Penguin Books, New York.
- Steinbeck, John. 1954. *Sweet Thursday*. Viking Press, New York.
- Steinbeck, John, and Edward F. Ricketts. 1941. *Sea of Cortez: A Leisurely Journal of Travel and Research*. Viking Press, New York.
- Verne, Jules. 1873 [1870]. *20,000 Leagues Under the Sea*. James R. Osgood & Company, Boston.
- Wilson, E. O. 1998. *Consilience: The Unity of Knowledge*. Knopf, New York.