

Keeping Time Hawaiian-Style

According to the site for the 2013 International Kinetic Art Exhibition and Symposium (*intlkineticartevent.org*), “Kinetic artists seek to propel the mind to wonder and to encourage viewers to appreciate the joy in motion and learn about other ways it can benefit society.”

That is a spot-on characterization of Clayton Boyer, kinetic artist (and retired 30-year chiropractor) based in Hawaii who crafts wooden clocks—he refers to them as “mechanisms”—and makes the design plans available to all comers with a predilection for things in motion—from like-minded hobbyists to NASA employees.

Kinetic art—art that is movement-centric—evolved from the Dadaist and Constructivist movements of the early 20th century. Today, kineticists (OK—not a real word) reason that kinetics is in harmony with 21st century engineering feats such as the wind turbine, an energy source that, when converted, produces precious electricity and power.

But Clayton lays no claim to re-invention. “For the kind of mechanisms that I make, most of the gear-form ‘expertise’ has already been worked out by previous, ‘old-time’ clock-makers,” he allows. “Clocks of the 17th, 18th and 19th centuries had an importance equivalent to what computers have today. During those periods (big-brain thinkers) were dedicated to creating better and more accurate clocks; accuracy was key.”

But for Clayton and his fellow enthusiasts, the meat is in the movement—not the accuracy. It’s all about the sheer wonder and awe of motion for its own sake. “Being released from this strong tie with accuracy, as clock hobbyists we can now enjoy clock making as kinetic art, art that has accuracy as only a secondary consideration. Of course I’ve studied the various types of tooth forms, pressure angles, pitch diameters, etc. But once you’ve seen a fully functional, 300-year-old wooden clock whose teeth are triangular in shape and hacked from a wooden disc with a hand saw, it puts things into perspective. Pretty much most of that theory is allowed to flow right out the window. ‘Efficacy is the measure of truth,’” quoth Clayton, citing Serge Kahili King, a mystic of sorts and adherent of “huna”—the Polynesian philosophy of effective living, and “aloha”—the uniquely Hawaiian attitude of love and peace. In other words, says Clayton, “If it works—it’s the truth. And these mechanisms are truly forgiving.”

Clayton, a child of the 1950s and self-professed “gear head” since the age of 10, says his fascination and fervor for clock making grew out of a dream deferred; it happens that a “DIY” magazine of the time featured an article on how to build a wooden clock. “I didn’t have the money, time or tools



Boyer calls this mechanism Nautilus.

to build that clock, but I held onto that wonderful idea for the next 40 years,” he says. “I have always loved repairing old clocks, and did that as a hobby for many years. Once I retired from my practice, I returned to the idea of making my own wooden clocks. I ordered a wooden clock plan, and as soon as it arrived I dove right in. In a couple of days I had created my first wooden clock! (But then) I stood back to admire my work and thought to myself, ‘Blind monkeys could design a better looking clock than that.’”

He’s been at it ever since.

“I have always loved the idea of being able to make things move, whether with springs, weights or motors,” Clayton relates. “Wooden gears give a flexibility of design that is within reach of most home hobbyists.” And lest there be any question, “I love gears,” he says. “I love calculating ratios and seeing how new and different combinations interface with the project at hand. I think that everyone with an interest in this hobby shares a love of gears.

“My original purpose in making my designs available to other woodworkers was to spread the joy that I have found in creating these wonderful mechanisms. Some wooden movements that are 300 years old are still in working order today. With some care and maintenance, these clocks should outlast us and our children. Hopefully, our clocks will be passed down through the family as heirlooms.

“To come out into your shop the next morning and hear a chunk of wood that you put into motion yesterday still singing her beautiful song is truly a thrill. And even after building well over 50 of these mechanisms, I still feel that thrill with each new creation.” (To view Clayton’s “mechanisms” and for more information, please go to www.claytonboyer.net.) 