

Western Carolina University, College of Business, Center for Entrepreneurship and Innovation book review by Dr. Robert Lahm

Title: "Wondrous Contrivances: Technology at the Threshold"

Author: Merritt Ierley

Length: 306 pages

Publisher: Clarkson Potter / Publishers

Price: \$22.00 (hardcover)

Reading time: 7 hours

Reading rating: 5 (1 = very difficult; 10 = very easy)

Overall rating: 4 (1 = average; 4 = outstanding)

Merritt Ierley's book, "Wondrous Contrivances: Technology at the Threshold," lends present day entrepreneurs and innovators a smorgasbord of wonderful insights.

In any given generation, we tend to be enthralled with the present, somehow thinking that most of what we use in our daily lives, is conceptually or in fact, truly "modern." But often, it is not! Ierley, a social historian, makes this point perfectly clear in his work, demonstrating the results of what must have been tireless research. His presentation is organized under three major headings: Transportation, Communications, and Entertainment.

Under transportation, Ierley reminds us of the beginning of air travel in America. Orville and Wilbur Wright's famous ascent at Kitty Hawk in 1903 may first come to mind when we think of a seminal event, ushering in this era. Nevertheless, it was the flight of the Atlantic, travelling a distance of 800 air miles at speeds of up to 60 miles per hour (reaching an altitude as high as 10,000 feet) which provided "a compelling demonstration that humankind could travel long-distance through the air, and at speeds faster than on the ground." The Atlantic was a balloon. It carried a party of four from St. Louis to central New York State in July, 1859.

Railroads "annihilated time and space," and indeed led to a need for time zones themselves, so as to schedule and route trains that may be approaching one another (but when – your time or mine?) and avoid collisions or other calamity. Ierley also brings forward moments that readers may find humorous. For instance, an excerpt from the owner's manual of a 1904 Cadillac admonishes, "Don't try to run without oil, water and gasoline."

Did you think your Fax machine was a relatively new device? News gathering and publishing changed with the invention of telegraphy. Text and other vital information could be sent by "wire," but what about photographs? Well, in 1907, a demonstration proved that it could be done, by transmitting a photograph from the London Mirror to Paris. By the 1920's, the business of journalism had undergone a revolutionary change by allowing the transmittal of pictures. By the way, this was all preceded by earlier ideas; in 1843, Alexander Bain, a Scottish clockmaker,

obtained a British patent for a device that “could scan a flat surface with a stylus mounted on a pendulum,” and another (more sophisticated) scanning device was demonstrated at the 1851 World’s Fair in London.

As soon as a desire for transmitting still images surfaced, knowing of other devices of these times such as the telephone (and telegraph) that had begun to arise, people also imagined a device that could send moving images. Does the word “television” now have a richer context for you?

Before George Eastman’s blockbuster product, the “Kodak” camera that started a craze, “kodaking,” thereby generating so many orders in the first six months (5,000) that the Eastman company could not keep up with production, there was the other now forgotten product, known as the Detective. No more than 50 of these were made, and it was characterized as a commercial disaster.

While the past is not necessarily a predictor of the future, it can be helpful to know where we have been previously, especially before any attempt is made to chart the course ahead. Lessons for entrepreneurs are plentiful in Lerley’s book: vision, persistence, risk-taking, social acceptance and adoption, all of these are the “stuff” of entrepreneurship. With so many challenges in any given time, I can’t help but look forward to what “wondrous contrivances” may be next.

Robert Lahm is an Associate Professor of Entrepreneurship in the Center for Entrepreneurship and Innovation, College of Business, at Western Carolina University. He is the founder of several businesses and Web sites. His research and public speaking interests include creativity and innovation, careers, start-ups, and small business marketing. For previously reviewed books, visit the Web site at www.wcu.edu/cob.