

the
**Henry
Ford**

MAGAZINE
MARCH-MAY 2017

®

Gain perspective.
Get inspired.
Make history.

THE MATH ISSUE

PAGE 48

**What if a museum of history
added a mathematical exhibit
to the experience equation?**

WRITING CODE THAT
CREATES MUSIC
HOW MATH SLIPS INTO
THE MAINSTREAM
MODERN-DAY MAKEOVER
OF A MATH BOOK

Contents

DEPARTMENTS FEATURES

- Our Mission **4**
Behind the Scenes **5**
Letter from the President **6**
A Number or Two **8**
Ask + Answer **9**
Off the Shelf **10**
Social Snippets **12**
A Look Back **80**
- 18**
MATH GONE VIRAL
Why numbers, shapes, equations, graphs, probabilities and Pythagorean problems are having a pop culture moment

- INNOVATION
NATION 13**
- 28**
**MATH, MUSIC +
THE MATRIX**
Live coders are in tune with the mathematical makeup of song

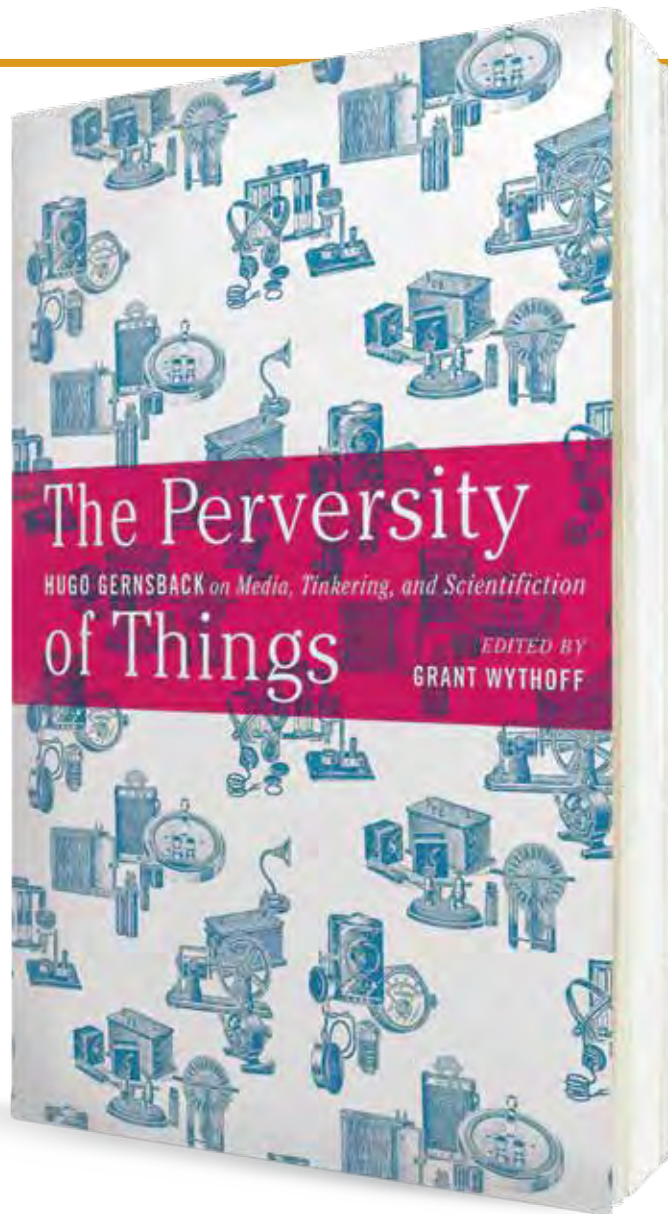
- INSIDE
THE
HENRY
FORD**
- Henry Ford Museum of American Innovation **48**
Greenfield Village **50**
Ford Rouge Factory Tour **52**
Acquisitions + Collections **54**
2017 Events **56**
Connect 3 **60**
- 38**
**MATH BOOK
REIMAGINED**
Iconic text loved by mathematicians for more than a century gets a designer reboot

STAY, EXPLORE + SAVOR 61

ON THE COVER

With an eye to the peephole of the Conic Sections interactive, a world of surfaces and curves formed by tightly stretched strings comes into startling view. Charles and Ray Eames' groundbreaking *Mathematica* exhibition opens in Henry Ford Museum of American Innovation this fall.

PHOTO BY BILL BOWEN



The Perversity of Things: Hugo Gernsback on Media, Tinkering, and Scientifiction

KRISTEN GALLERNEAUX, THE HENRY FORD'S CURATOR OF COMMUNICATIONS AND INFORMATION TECHNOLOGY, REVIEWS EDITOR AND LITERARY SCHOLAR GRANT WYTHOFF'S CAREFUL COMPILATION OF ESSAYS, FICTION AND TEXTS FROM HUGO GERNSBACK, THE INVENTOR AND WRITER KNOWN FOR LAUNCHING SCIENCE FICTION AS A GENRE.

Hugo Gernsback became “the father of science fiction” when he published *Amazing Stories* in 1926 — the first pulp magazine dedicated to the genre. Here, editor Grant Wythoff proves that the pathways to imaginative speculation formed decades earlier in Gernsback’s hobbyist magazines *Modern Electrics*, *The Electrical Experimenter* and *Radio News*.

Essays from 1905–1932 that originally appeared in these publications are thematically arranged into areas such as tinkering, radio, television, sound and fiction. Wythoff’s annotations provide each text with modern context; this book is as useful to media historians as it is to makers.

In a 1916 article, Gernsback described “the perversity of things” — the frustrating resistance of inanimate things during an unproductive day at the workbench. But these “misbehaviors” are usually the result of impatience, lack of proper tools or knowledge. Gernsback’s brand of self-empowerment through technology believed in helping people to understand the science and behaviors of their devices and materials.

As Wythoff notes: “Wireless [radio] was magical to Gernsback’s readers not because they didn’t understand how the trick worked but because they did. That elemental, raw materials could produce such effects was absolutely fantastic and provided an endless source of fascination.”

“This book is as useful to media historians as it is to makers.”

— **Kristen Gallerneaux, The Henry Ford’s curator of communications and information technology**