## READINGS

**BOOK REVIEWS** 

## DE-FIN-ING THE WIND: THE BEAUFORT SCALE, AND HOW A 19TH-CENTURY ADMIRAL TURNED SCIENCE INTO POETRY

Scott Huler, 2004, 291 pp., \$23.00, hardbound, Crown Publishers, ISBN 1-4000-4884-2

he ever-blowing wind within the atmosphere around our globe is commonly felt, and its strength is communicated day by day: as a full vector quantity, or just by its speed, or, at least, in those French sounding grades—Beaufort. Is there genuine interest in when, how, and through whom mankind eventually came to grips with the difficulty of meaningfully classifying the force of wind? Apparently a lot of such interest exists. Those following the development of geophysical sciences could in recent years witness a refreshing breeze through their

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minds generated by well-written stories about important—though not well-known—early developments centered around one person. The clock maker John Harrison in Dava Sobel's book, *Longitude*, and the pharmacist Luke Howard in Richard Hamblyn's monograph, *The Invention of Clouds*, provide such examples, which were widely recognized by a general readership as well as by

specialists. I came to wonder how Scott Huler's latest opus, centered on a proper British admiral, competes in this class of nonfiction literature: as a really *strong breeze* or only as a touch of *light air*?

The book's title reflects a combination of messages that the author has in mind: 1) his main actor is the *Beaufort scale*, which 2) appears linked to a high-ranking *person*, who 3) has somehow *transformed* science into poetry. With awakened curiosity I inspect the table of contents and find listed an introduction about how the author encountered Hurricane Fran, nine chapters with titles of growing complexity, plus two appendices and detailed notes on sources, accuracy, assistance. The quotation contained in the lengthy headline of chapter 5, "Nature, rightly questioned, never lies," and Hemingway's quote on the inner title, "Remember to get weather in your god

damned book—weather is very important," finally blow me into steady reading.

Two hundred and fifty pages later I find myself having come home again from two cleverly entwined journeys, both through longer stretches of space and time. The first chronicles two decades of the author's curriculum vitae. He tells us how he first got struck by the descriptive beauty, the conciseness, and the internal rhythm of the description for the various Beaufort grades when he browsed through the Merriam-Webster New Collegiate Dictionary during his job as a copy editor for a small technical publisher; how he tried to follow Admiral Beaufort on some of his voyages to Montevideo and the southern coast of Turkey; how he took courses in landscape drawing, tall ship sailing, and geophysical fluid dynamics in order to gain better insights into observing, describing, and understanding the moving atmosphere; how he attempted to track an anonymous weather observer at the English North Sea coast 100 years back, whom he considers to be the real originator of the optimally compressed, poetry-like descriptions such as "Bft 1-light air-direction of wind shown by smoke but not by wind vanes," or "Bft 6-strong breeze-large branches in motion; telegraph wires whistle; umbrellas used with difficulty."

At the same time, the reader becomes well informed about the development of the wind force scale, now bearing Beaufort's name, over more than two centuries; its changing relevance for formerly modern pieces of technology such as windmills and sailboats; about the progression of our knowledge concerning the nature around us from a more descriptive natural philosophy to different branches of quantitative sciences; about the life and career of renowned characters such as Francis Beaufort himself, Daniel Defoe, and Charles Darwin, as well as lesser-known figures like John Smeaton, Alexander Dalrymple, and the anonymous North Shield observer.

Once again sitting safely on his sofa, the reviewer looks again at the remarkable book in his hands. He enjoys the eye-friendly typesetting, the numerous and informative black-and-white illustrations, the seemingly irregularly cut pages—a single contrast to many a glossy publication of today. He can sense that Huler is a professional in the publishing trade, a modest perfectionist for details who obviously became more and more obsessed by the Beaufort scale or descriptive scales in general, and who would not rest before he had followed all of its old roots and many of its still-evolving descendants.

The book is densely written, well composed, and by no means boring. What is more, it is anthropocentric—humane in the literal sense. Huler incessantly stresses that science must be based on acute and complete observations and that—even today—scientists should retain a good feeling for their data. Quoting at length from the Manual of Scientific Enquiry, to which Beaufort contributed, he is fully sympathetic with the optimism of the early nineteenth century ("Nature, rightly questioned, never lies"). He enthusiastically states that it contains "the best advice any book has ever given—carry a pencil and paper because you might notice something." Of course, such a seemingly amateurish attitude is debatable nowadays, but it is refreshing in a time when dry equations and multitudes of computer simulations are sometimes considered more of a reality than the environment around us.

Meteorology is about to find its place amidst the history of sciences. Last summer, an international conference dealt with critical perspectives of observing, analyzing, and predicting weather and climate under the alliterating title "From Beaufort to Bjerknes and Beyond" (see www.meteohistory.org). Scott Huler's findings and insights are a most valuable addendum to that program, especially as his book precisely mentions all the numerous sources of which he got hold.

In my opinion, Scott Huler composed a *strong breeze* indeed, bringing the imaginative branches of his readers in motion and making their mental wires whistle. As a citizen of old Europe, I came to admire the depth to which Huler, of the new world, dug for rather ancient European sources, and I thoroughly enjoyed how he presents his material in *de-fin-ing the wind*. I can fully recommend his new book to the international readership of this atmospheric bulletin.

—Hans Volkert

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