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978-0-521-00884-6 - On Tycho's Island: Tycho Brahe, Science, and Culture
in the Sixteenth Century: Abridged Paperback Edition
John Robert Christianson
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ON TYCHO'S ISLAND

TYCHO BRAHE (1546–1601), the premier patron-practitioner of science in sixteenth-century Europe, established a new role of scientist as administrator, active reformer, and natural philosopher. This book explores his wide range of activities, which encompass much more than his reputed role of astronomer. Christianson broadens this singular perspective by portraying him as Platonic philosopher, Paracelsian chemist, Ovidian poet, and devoted family man. From his private island in Denmark, Tycho Brahe used patronage, printing, friendship, and marriage to incorporate men and women skilled in science, technology, and the fine arts into his program of cosmic reform. This pioneering study includes capsule biographies of two dozen individuals, including Johannes Kepler, Willebrord Snel, Willem Blaeu, several artists, two bishops, a rabbi, and various technical specialists, all of whom helped shape the culture of the Scientific Revolution. Under Tycho's leadership, their teamwork achieved breakthroughs in astronomy, scientific method, and research organization that were essential to the birth of modern science.

JOHN ROBERT CHRISTIANSON is a Research Professor of History at Luther College, where he taught history from 1967 to 1997 and served as Chairman of the History Department during 1967–82. In 1995, he was dubbed Knight of the Royal Norwegian Order of Merit by King Harald V. He was also awarded the Bronze Medal of the League of Finnish-American Societies in 1985 and received the Alf Mjøen Prize in 1989. Christianson is a former Fellow of the American Council of Learned Societies and has held postdoctoral grants from the American Philosophical Society, Danish Bicentennial Foundation of 1976, Danish National Bank, George C. Marshall Fund in Denmark, and the U.S. National Endowment of the Humanities, among others. Christianson has written, edited, and/or translated nine books and more than a hundred articles on Scandinavian and Scandinavian-American topics, including twenty publications on Tycho Brahe in such journals as *Scientific American*, *Isis*, *Centaurus*, *Sixteenth Century Journal*, *Fund og Forskning i Det Kongelige Biblioteks Samlinger*, and *Personallistoriske Tidsskrift*.

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“PORTRAIT OF TYCHO BRAHE OTTESEN THE DANE AT THE AGE OF FIFTY, when after a long period of exile from his native land through divine providence he regained the liberty he had sought after.” He is dressed in the black attire of a courtier, with a white lace collar and cuffs, gold jewelry including a signet with the Brahe arms on his index finger, and King Frederick II’s Order of the Elephant on two golden chains. The prosthesis is evident on the bridge of his nose. The emblem at top left shows a cone (which Tycho called a “pyramid”) on a pedestal, protected from the surrounding wind, water, and lightning by a canopy suspended from a hand emerging from the sun. The legend on the cone reads: “Standing on firm ground, I am protected though the wind, fire, and waves do rage.” Honnens de Lichtenberg (1989, 362–3) interpreted this emblem as symbolizing that the changing fortunes of the world could not overthrow Tycho because the four elements of air, fire, water, and earth combined to give him strength as he rose to immortality under the protection of Apollo–Jupiter–Jehovah. (Courtesy Skokloster Castle)

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TYCHO BRAHE, SCIENCE,
AND CULTURE IN THE
SIXTEENTH CENTURY

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JOHN ROBERT CHRISTIANSON

Research Professor of History, Luther College



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To
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APOLLO AND THE MUSES

How Apollo, the leader of the Muses, overcame the god Pan in a music competition:

“[Apollo’s] golden head was wreathed with laurel of Parnasus, and his mantle, dipped in Tyrian dye, swept the ground. His lyre, inlaid with gems and Indian ivory, he held in his left hand, while his right hand held the plectrum. His very pose was that of an artist. Then with trained thumb he plucked the strings and, charmed by those sweet strains, Tmolus ordered Pan to lower his reeds before the lyre.”

Ovid, *Metamorphoses*, translated by Frank Justus Miller

The goddess, Pallas Athena, visited the home of the Muses on Mount Helicon to see the spot where the hoof of Pegasus, the winged horse, had struck the ground, causing Hippocrene, the sacred spring, to flow. She was greeted by Urania, the Muse of Astronomy. Athena told why she had come, and Urania replied,

“Whatever cause has brought thee to see our home, O goddess, thou art most welcome to our hearts. But the tale is true, and Pegasus did indeed produce our spring.’ And she led Pallas aside to the sacred waters. She long admired the spring made by the stroke of the horse’s hoof; then looked round on the ancient woods, the grottoes, and the grass, spangled with countless flowers. She declared the daughters of Mnemosyne to be happy alike in their favourite pursuits and in their home. And thus one of the sisters answered her: ‘O thou, [Athena], who wouldst so fitly join our band, had not thy merits raised thee to far greater tasks, thou sayest truth and dost justly praise our arts and our home. We have indeed a happy lot – were we but safe in it.’”

The other daughters of Mnemosyne and Zeus, sisters of Urania, Muse of Astronomy, were these: Calliope, Muse of Epic and Heroic Poetry; Clio, Muse of History; Erato, Muse of Love Poetry; Euterpe, Muse of Lyrics and Music; Melpomene, Muse of Tragedy; Polyhymnia, Muse of Sacred Hymns; Terpsichore, Muse of Dance; and Thalia, Muse of Comedy.

Ovid, *Metamorphoses*, translated by Frank Justus Miller

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THIS BOOK BEGAN IN A SHOEBOX. In the course of my research, whenever I ran across the name of a coworker of Tycho Brahe, I made a notecard and put it in the shoebox. Then I tried to find out who they all were and what they did. As years passed, the shoebox filled up, its contents became a data base, and I decided it was time to write a book about Tycho Brahe and his associates. So here we are.

Some scholar, deep into the lore of the late sixteenth century, may ask why I did not include this or that figure, a Petrus Severinus, Duncan Liddel, Bartolomæus Scultetus, or any number of others. The answer is that I had spent more than twenty-five years compiling names, trying to track down each one of them and make sense of the cultural, intellectual, and material networks that connected them, and the task could easily have gone on for another quarter-century, but the time had come to publish what I had found. I encourage others to carry on the work and can only advise, by way of incitement: Seek and you will find!

I owe profound thanks to those who have supported my research on Tycho Brahe and Tycho's island. At the beginning of my academic career, a Danish government grant (42.Dan.5/3.b) in 1962, together with two United States Office of Education Title VI Foreign Language Fellowships in 1962–3 and 1963–4, allowed me to research and write my dissertation on Tycho Brahe. A research associateship and travel grant from the University of South Dakota in 1966 let me continue my Tychonic research and writing, as did summer stipends from the National Endowment for the Humanities in 1968 and 1980. A summer grant from the Penrose Fund (no. 5865) of the American Philosophical Society in 1971 allowed me to focus specifically on Tycho Brahe and the patronage of science. In 1973–4, my work on Tycho Brahe was supported by a fellowship of the American Council of Learned Societies and a grant from the George C. Marshall

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Fund in Denmark. In 1989, the National Bank of Denmark fostered my research by arranging the use of an apartment at Nyhavn 18 in Copenhagen. Luther College has generously encouraged my Tychonic research through sabbatical leaves in 1973–4, 1980, and 1988–9, a Paideia Endowment Sabbatical Support grant in 1988–9, and smaller grants from various research funds.

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