NOTE

A REATTRIBUTION OF THE TYCHONIC ANNOTATIONS IN COPIES OF COPERNICUS’S “DE REVOLUTIONIBUS”

In the State Library at the Clementinum in Prague, there is a well annotated copy of the second edition of De revolutionibus, which since the seventeenth century has been associated with Tycho Brahe, and which was printed in facsimile in 1971 under the title Nicolai Copernici De revolutionibus orbium coelestium libri sex (editio Basileensis) cum commentariis manu scriptis Tychonis Brahe.

In 1973 Gingerich discovered at the Vatican Library a first edition of Copernicus’s book well annotated in the same hand and containing at the back a fascinating series of planetary drawings that seemed to be related to Tycho’s early cosmological speculations. These diagrams, dated in January and February of 1578, seemed anomalously early in the light of Tycho’s 1588 statements that he had worked out the Tychonic system in 1583, but this discrepancy could be partly reconciled by the fact that the Vatican drawings did not show the crucial intersection of Mars’s “sphere” with the Sun’s (nor in fact was this possible with the proportions used).

In 1974 Westman located a third copy bearing the same handwriting, a first edition at the University of Liège, and subsequently Gingerich found yet another copy, a second edition formerly in the Royal Astronomical Society Library and now in private hands in London. Although the notes in all four copies are closely related, most of the individual annotations differ from volume to volume. The Liège exemplar is particularly important because it contains in an earlier hand a rather precise copy of Erasmus Reinhold’s annotations, and these have been partially copied into the Prague and Vatican books.

The astonishing circumstance of four separate copies glossed in the same hand and Westman’s persistent doubts about the handwriting caused us to re-examine the attribution to Tycho Brahe; by the beginning of 1978 we realized that these annotations could not possibly have been written by the Danish astronomer himself. Nevertheless, there seemed to be a variety of connections with Tycho, including citations to the planetary stacking theory of Offusius mentioned in the Progymnasmatum (1603, p. 472) and to the prosthaphaeresis method that Tycho supposedly co-invented with Paul Wittich.

After an extensive investigation of candidates from the second half of the sixteenth century, our search zeroed in on Wittich (c. 1550–87), an itinerant mathematician from Wroclaw who was highly regarded by his contemporaries, but who now remains virtually unknown because he died before publishing anything. A variety of clues pointed to Wittich: the same handwriting is found in the copy of Apianus’s Astronomicum Caesareum presented by Tycho to Wittich in 1580 at the close of Wittich’s brief stay on Hveen; the list of geographical longitudes in the Vatican copy has “Vratislaviae” (Wroclaw, formerly Breslau) near the beginning of the list (and does not include Hveen or Copenhagen); and most significantly, in a De revolutionibus in Edinburgh that contains notes copied from the Liège exemplar, the words “a M. Witt inventus...
sit” replace “a me inventus sit”. The matter was definitively settled when we received an attested copy of the five pages of Wittich’s handwriting in Tycho’s record book for the Comet of 1580. The reattribution of the annotations to Paul Wittich then cleared up the mystery as to why Duncan Liddel (1561–1613) of Aberdeen and John Craig (c. 1550–1620) of Edinburgh had such extensive sets of these notes in their own copies of De revolutionibus: both met Tycho only fleetingly if at all, but both knew Wittich.

It is our intention to publish a detailed discussion of the four Wittich copies in a future issue of Centaurus. We shall there analyze why the erroneous attribution was originally made in Prague; we shall bring together biographical material on Wittich including previously unpublished information; we shall look at Brahe’s attitudes to Wittich; and we shall argue that Wittich deserves essentially the sole credit for the invention of the first two prosthaphaeresis formulas that presaged the logarithms. And finally we shall conjecture as to why Wittich annotated so many copies of Copernicus’s book.

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REFERENCES
2. First reported at the History of Science Society meeting at Norwalk, Connecticut, October 1974.
3. Reinhold’s annotated De revolutionibus is in the Crawford Collection, Royal Observatory, Edinburgh.
4. This Apianus is in the Regenstein Library, University of Chicago.
5. John Craig’s 1566 De revolutionibus is in the University Library, Edinburgh.
6. An appended note from Jacob Monau, 23 October 1600, confirms the identification of the hand.