



Venus Seen on the Sun: *The First Observation of a Transit of Venus by Jeremiah Horrocks*

Tr. by Wilbur Applebaum

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With each new transit of Venus season the inspiring story of Jeremiah Horrocks and his prediction and observation of the 1639 transit has been retold. Horrocks' own treatise on the transit, *Venus in sole visa*, was published in 1662 by Hevelius. In 1859, an English translation by A. B. Whatton appeared.

Over the following 150 years, this remained the only English version, although scholars occasionally complained that Whatton took too much poetic licence. Sometimes his translation is misleading, because of his lack of astronomical background. Sometimes, it perpetuates mistakes by Hevelius.

Now, just in time for the 2012 transit, a new authoritative translation has been published: *Venus Seen on the Sun: The First Observation of a Transit of Venus by Jeremiah Horrocks*. This is the work of noted Horrocks expert Wilbur Applebaum, Professor Emeritus at the Illinois Institute of Technology. Reading it is like seeing an old friend with completely fresh eyes. Despite the absence of poetic licence, Horrocks' treatise in this version has lost none of its poetic charm.

Applebaum has produced a readable translation whilst eschewing the excessive 'free style' of Whatton. As a result, some of the puzzling inconsistencies of the latter have gone. Even on the simple matter of observing site, there are interesting differences between the two translations. In the Whatton version, Horrocks says 'When the time of the observation approached, I retired to my apartment', even though 'my' didn't figure in the original Latin. The new ver-

sion says instead '...I retired to a suitable chamber', thus leaving open the possibility he might have been permitted to use a room other than his own (e.g. at Carr House, Bretherton).

Notably missing from the new translation is the famous diagram, 'Venus on the Sun's Disk', that was provided by Whatton. That diagram, composed by Hevelius – not Horrocks – was misleading. It showed Venus in positions on the Sun's disk (bottom left quadrant) corresponding to the naked-eye view. But in reproducing a graduated circle similar to that upon which Horrocks projected the solar image, Hevelius gave the impression that this was what Horrocks saw on his screen.

With the (probable) Galilean telescope of Horrocks, however, Venus would be seen in the top left quadrant of the screen. Further confusion arose from the Hevelius/Whatton text: 'I found that the shadow of Venus ... had entered the Sun's disc about 62°30'...from the top

towards the right'. Applebaum correctly gives the critical last phrase as 'from the vertex towards the left'. The confusion is reflected in the paintings of the Horrocks observation by Crowe and Lavender. Both show Venus projected in the upper right quadrant.

The new translation has a 14-page introduction and voluminous annotations, explaining Horrocks' calculations, allusions, and occasionally archaic terminology.

Applebaum has performed a great service by preparing this new translation. It is a pity that the price seems to be aimed at academic libraries. Even so, for transit enthusiasts, this book will be essential reading.

David Sellers

David Sellers is the author of The Transit of Venus: the Quest to Find the True Distance of the Sun (Magavelda Press, 2001)

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