

1163-01-212 **Brigitte Stenhouse*** (bstenhouse17@gmail.com). *Preparing a mathematical translation: Mary Somerville's 1831 Mechanism of the Heavens.*

Mary Somerville's 1831 work, *Mechanism of the Heavens*, was widely recognised for its importance in bringing analytical mathematics, and its applications to physical astronomy, to wider attention in early-19th-century Britain. The single volume work was ostensibly a translation of Laplace's *Traité de Mécanique Céleste*, which had been published in 5 volumes between 1799 and 1825. One of the many arguments given for the perception of a decline in British mathematics at the time was the small number of British mathematicians sufficiently literate in analysis and algebra to read and understand Laplace's work. Therefore, when producing her translation Somerville was required to act as both interpreter of the French language, and of the mathematical language and methods employed by Laplace; moreover, she incorporated numerous improvements that had been made since their original publication. I will investigate these changes made by Somerville through a consideration of the work itself, alongside contemporary reviews and correspondence with John Herschel and John William Lubbock. My investigation will illuminate the state of analysis and physical astronomy in Britain during the early 19th century, and the accessibility of mathematical texts published on the continent at that time. (Received August 27, 2020)