

Kircher's monumental study of light and shade encompasses reflections on the sun, stars and planets, comets, eclipses, optics, mirrors, and sundials.

Kircher, Athanasius. *Ars magna lucis et vmbrae in decem libros digesta*. Romae: Sumptibus Hermanni Scheus; Ex typographia Ludouici Grignani, 1646. 12 3/16 inches (310 mm), [40], 568, 567–935, [15] pp, xxxiv [i.e. 38] leaves of plates (woodcuts, copper engravings), 1 folded.

Athanasius Kircher (1602–80) was one of the most remarkable universal scholars of his time. He has become emblematic not so much for his achievements as his enticing packaging and irresistible subject matter. Other encyclopedic savants—Cassiano dal Pozzo or Nicolas Fabri de Peiresc—left all or most of their scholarly and scientific achievements in manuscript. Kircher, by contrast, was a relentless publisher, often in large format, with abundant illustration.

The title-page of *Ars magna lucis et umbrae* is one of Kircher's most elaborate, with citations in Greek and Hebrew, and opening with an unusually long self-description that is closer to a C.V. than was customary, even in the verbose 17th century. The book, too, might almost be called verbose, consisting (as it does) of almost a thousand pages on the *chiaroscuro* of light and shade. Much of what Kircher records in his *Great Art* concerns subjects that might have attracted the attention of (say) Galileo. He writes about the sun, stars and planets, comets, eclipses, optics, color, distortion, sundials and mirrors. Kircher illustrates his observations of Saturn and Jupiter in 1643, finding them (as Galileo had found the pock-marked moon in *Sidereus Nuncius*) not to be the perfect immutable spheres promoted by Aristotle.

What is distinctively Kirchnerian is the evocation of the sense of mystery in creation—the fantastic, paranormal, and occult twist given to optical phenomena. Kirchner, for instance, made his own experiments in the harbor of Syracuse in an attempt to verify the ancient legend of Archimedes having set the Roman fleet afire with a special mirror. Just as his encyclopedia of music, *Musurgia Universalis* (available on rarebookroom.org as “kirmus”) gave as much consideration to mysterious echoes and the croaking of the frog as to baroque church music, so Kircher, while ostensibly writing of

the *Great Art of Light and Shade*, was just as interested in its wilder shores—in phosphorus and fireflies, optical illusions, magic mirrors, improbable sundials, and the magic lantern, of which he is often thought to be the inventor. All of these fascinating byways (and dead-ends) are mapped out by Kircher as thoroughly as the highroad of conventional science.