At the request of Emperor Ferdinand III to the intelligentsia in his empire to find solutions toward the advance of a universal language, Kircher publishes his *Polygraphia nova et universalis.*

Kircher, Athanasius. *Polygraphia nova et universalis ex combinatoria arte detecta*. Romae: Ex typographia Varesij, 1663. 9 7/8 inches (350 mm), 148, 23, [1] pp.; 3 folded leaves.

The great Jesuit encyclopedist and polymath Athanasius Kircher (1602–80) published numerous books on language, with a pronounced inclination for the exotic, the neglected, the unusual, and the impractical. For him, the Tower of Babel, on which he published a book, *Turris Babel*, in 1679, was a touchstone: restoring the subsequent Confusion of Tongues became a lifelong obsession. Kircher's pioneering investigation of Coptic, the *Prodromus Coptus* (1636), was but a foretaste of the *Lingua Aegyptica Restituta* (1643) or "Egyptian Language Restored." Half-dozen later books, culminating in Kircher's three-volume *Oedipus Aegypticus* (1652–54), attempted to elucidate a still earlier Egyptian, as represented in the hieroglyphs that he found all around him, carved into the obelisks of Rome. Kircher's cat-bird's seat in the Roman center of the great Jesuit web of missionary endeavor also placed him in a splendid position to write of the Chinese language and monuments in *China Illustrata* (1667).

 As head of the polyglot Holy Roman Empire, the Emperor Ferdinand III was similarly stimulated by the internecine linguistic tragedy symbolized by Babel. After the Thirty Year's War, Ferdinand advanced the notion of a universal language, and invited the intelligentsia of his empire to devise appropriate solutions. This was a task that was tailor-made for the intrepid Kircher, who had already devoted his *Oedipus Aegypticus* to Ferdinand, introducing the work with a "Polyglot Caesarian Triumph" of 47 laudatory poems to the Emperor in as many different languages, including such freaks as Egyptian hieroglyphics. Alas, like many a closet philologist or unworldly theorist, Kircher lacked certain practical skills. In fact, no international language—not even the most promising, Esperanto—has ever gained a significant following, with the inevitable result that, in our era of diminished expectations, there are no longer any "universal" languages, merely

"auxiliary" ones.

Had Kircher tried out his language on his housekeeper or his laundress, he might have come to realize its limitations. *Polygraphia Nova et Universalis* (1663) consists of three sections and an "apologetic" appendix. The first section gives the grammar and vocabulary of the newly invented language. Books two and three are devoted to cryptography. The essential feature of Kircher's language is a notational system that may be variously interpreted: each Kirchnerian term denotes a single meaning that may be expressed in many words, depending on the native language of the end-user. Kircher provides 32 numbered lists, comprising 1048 terms in all. The first *Dictionarium Pentaglossum* on **Spreads 12–26** lists words and names in Latin, Italian, French, Spanish, and German, giving to each a number (Roman at first, subdivided by Arabic). The second *Dictionarium* (**Spreads 27–43**) lists the 32 Roman-numeral divisions, allowing the reader to translate Kircher's Universal Language back into the five vernaculars.

Grammar is also coded. After the Roman and Arabic numerals, the signs N, G, or D, indicate that the word is to be taken as being (respectively) in the Nominative, Genitive, or Dative case. **Spread 11** gives full details of such declensions, as well as conjugation of verbs. Kircher's *Polygraphia* is pasigraphy: it is not for speaking—to laundresses, or to anyone else. The sections on codes are not for speaking either, but for letter-writing, to select rulers, patrons, and to fellow members of the Republic of Letters, offering a 40-page *Epistolographia Pentaglossa* of phrases **(Spreads 51–70)**, resembling the codes later used in commercial telegrams of the 19th century. Kircher even manufactured a "linguistic device," an *Artificum Linguarum* variously referred to as a Polygraphic Organ, a Glottotactic Ark (*Arca Glottotactica*)—one is illustrated at **Spread 49**—or a Stenographic Ark, an *Arca Stenographica*—see **Spread 74**. These were some kind of wooden box, with rods or slats—a sort of linguistic slide-rule, or primitive, non-rotary version of the German Enigma ciphering machines of World War II. Here Kircher returned allusively, yet again, to favorite and familiar *topoi*, the Stenographic Ark recalling his lifelong interest in the design and organization of Noah's Ark that culminated in the *Arce Noë* (Amsterdam, 1675) and in the Organ, the key instrument of his *Musurgia Universalis* (1650).