Introduction

As a supreme cultural achievement, writing has fascinated and transformed societies from its very beginnings in the mid-fourth millennium BC down to the present day. Three of the four indisputable hearths of early writing systems—Mesopotamia, Egypt, and China—have been well studied and a sizable body of literature, academic and general, is available on each. Younger than the other centers of civilization, Mesoamerica has been the least studied and continues to evoke mystery. Indeed, its very status as a birthplace of writing has only been fully recognized in the last fifty years, following the breakthrough in the decipherment of Maya glyphs in the 1970s. Even now, comparative studies of writing and handbooks on writing systems devote scant attention to Mesoamerica. The Maya script has finally begun to attract the interest of comparativists, and literature on the subject has been growing incessantly—unlike the Aztec script, on which not a single book has been published. It is this gap that the present volume intends to fill, unlocking the mysteries of Aztec writing for a wide readership for the first time.

The Aztec writing system is actually one of several that developed in Mesoamerica in Prehispanic times. Zapotec writing was already flourishing in the 1st millennium BC, but the small number of known inscriptions has unfortunately made decipherment all but impossible to date. The same may hold true for the Isthmian script of the 1st millennium AD, although would-be codebreakers have more, and longer, texts to work with. And yet a full-fledged writing system with a more than adequate corpus has been hiding in plain sight for some 500 years—the Nahuatl-language hieroglyphic script that came into bloom in the Aztec Empire and continued to evolve even after the cultural upheaval and societal horrors of the Spanish conquest and its aftermath, only to lose its vibrancy in the waning years of the 16th century.

This book itself began with colorful images and signs, as a series of presentations and workshops in Europe and the United States from 2001 onwards. The research behind it has a somewhat longer history. It began when my father, forgetting that his ten-year-old son was actually interested in Romans, not Aztecs, brought home a comic narrating Bernal Díaz del Castillo's vivid account of the Conquest of Mexico (the Aztec capital, also known as Mexico Tenochtitlan). From this grew a love for all things Aztec. Practice in decipherment followed, when as a schoolboy, now sixteen, I was allowed into the basement of Sydney's Mitchell Library to retrieve the nine ponderous volumes of Viscount Kingsborough's *Antiquities of Mexico* that I had requested to see, but the librarian was in no condition to carry. Discovering in it a beautiful hand-painted reproduction of the Codex Mendoza, I spent my spare hours thereafter comparing hieroglyphs with their Spanish glosses and trying to figure out how the writing system worked.

Later, I was fortunate to track down the Anderson and Dibble edition of Book 10 (the only volume available to me) of the Codex Florentinus, which had been compiled in the late 16th century under the editorship of Franciscan friar Bernardino de Sahagún. Since the published text was bilingual (Nahuatl with an English translation), I went to work comparing the structure of the Nahuatl words with their English equivalents, and in so doing gained my first experience with the Nahuatl language. Soon after, in 1968, I plucked up my courage and wrote to the leading specialist in Mexico, Ángel María Garibay, for advice on my Nahuatl analysis, not realizing that he had died just a few months earlier. His student, Alfredo López Austin, today Mexico's foremost expert on Mesoamerica, very kindly replied, taking the time to gently correct my Nahuatl, offer me encouragement, and guide me towards the best tools for further study of the language.

Some three years later, as a freshman at Brandeis University in Massachusetts, I was given a printout of a microfilm copy of the Codex Vergara by John Glass, who had compiled a catalogue of so-called pictorial manuscripts for the multivolume *Handbook of Middle American Indians*. It was this codex, and John Glass's kindness, that led eventually to the making of this book—the culmination of half a century of careful, forensic study. The decisive stimulus in writing the volume came from my former Yale doctoral advisor, mentor, and dearest of friends, Michael D. Coe, who recommended me to Thames & Hudson and was a constant source of encouragement right up to his untimely death in 2019.

One would think, given the spectacular forms and colors of Aztec hieroglyphs (dubbed "glyphs" for short), that scholars would have been attracted to them like bees to honey, but the extraordinary fact is that no handbook of writing has devoted

more than a page or so to the subject and most neglect even to mention the existence of the Aztec script, let alone its characteristics. This is the first book ever written on the writing system of the Aztec Empire, and indeed of Nahuatl writing as a whole. Its objective is as much to dispel misconceptions about the nature of Aztec writing as to reveal the patterns, characteristics, and genius of the system. The oversimplifications that were inevitable in explanations for colonial-period learners have also led today in some quarters to the assumption that, in its basic make-up, Aztec writing could hardly match, let alone exceed, in complexity and sophistication the finely honed system fashioned centuries earlier by the Maya; and indeed, to a lack of recognition that the hieroglyphs enshrined in Aztec and other Nahuatl manuscripts are actually elements of true writing. However, I hope it will become clear that the Nahuatl system has a number of surprises in store for students of writing. On the one hand, its multimodal and multifunctional approach to writing, freely incorporating aspects of iconography (such as iconicity, size, proportion, orientation, and color) in writing in a manner similar to the techniques of modern advertising; and on the other, its unparalleled flexibility in the way it derives phonetic sign values (that is, sounds) from word signs.

The attitude towards Aztec accomplishments has been all too frequently marred by a perception that the playful and unrestrained nature of this Central Mexican script reflects a kind of iconography (often inaccurately referred to as "pictography") with but a veneer of incipient writing, a mere forerunner of the sophisticated Maya system. It didn't help that Aztec hieroglyphs were commonly glossed, or transcribed, by indigenous and Spanish scribes for the enlightenment of the hieroglyphically illiterate. Like the supporting wheels of a child's first bicycle, these glosses sometimes conveyed a false sense of security to the unwary and a false impression of the balance in the mechanics of the system. Many a glossator (a glossing scribe) misheard or mistook here and there a reading or explanation offered by the indigenous hieroglyphist (the original scribe), immortalizing errors and inaccuracies that eventually found their way into the analyses of modern scholars who, as a result of disciplinary divisions, frequently lack sufficient knowledge of the Nahuatl language and of other, comparable writing systems to be able to catch such instances and then correct the interpretation. Working on the iconography of Central Mexican manuscripts, it is all too easy to misunderstand, and underestimate the significance of, hieroglyphs, and to mistranslate the names and terms they represent.

Let us consider the name of a prominent 14th-century king, Achitometl. This name has been translated somewhat incongruously as "Water Chia Maguey" simply because the name glyph contains elements depicting water, chia seeds, and a maguey plant (a type of agave). Deep examination of Nahuatl and comparative writing systems, however, shows that the first two elements, and a further one depicting a water source or spring, are actually phonetic. They represent sounds, not semantics, and are read **a**, **chi**, and **to(n)₂**, spelling out the word *achìtōn*, "a little bit." Only the plant is semantic—the logogram, or word sign, ME(TL) stands for the Nahuatl word *metl*, "maguey." The whole sequence yields a name meaning "A Little Bit of Maguey" (see Chapters 2 and 3 for further information on the principles involved). The mistake had been to assume that the recognizable elements in a compound sign are necessarily units of meaning simply because they are iconic—that is, because they look like objects and living things. This is the same mistake that was made by the 5th-century scholar Horapollo when he attempted to decode Egyptian hieroglyphs. It was not until the early 19th century that the true principles of the script were discovered, when Champollion applied his intimate knowledge of the latest stage of the Egyptian language, Coptic, of associated languages, and of the history and culture of Egypt to the task of decipherment.

Most specialists on Mesoamerican iconography have tended to be art historians with only a superficial knowledge of Nahuatl, while specialists on writing systems are usually epigraphers, philologists, and linguists. Each discipline has its own focus and traditional perspectives, and art history has indeed contributed much to the understanding of Aztec art, iconography, and codices. However, its non-linguistic disposition has resulted in a long-term and severe underestimation of the relevance and value of the writing system to an appreciation of the Aztec graphic communication system as a whole, in which iconography, writing, and notation are equal but distinct sub-systems. This volume will remedy the imbalance by dissecting and describing the writing system in lavish detail, presenting a holistic overview of this fascinating vehicle for the intellectual blossoming of Nahuatl civilization and the Aztec state.

The approach to reading Aztec glyphs that I am presenting here illuminates the uniqueness of Aztec writing. Some specialists on Maya writing have suggested that phonetic signs in the Nahuatl system are just like their Maya counterparts—that is, that they merely represent one consonant followed by one vowel (e.g. **ma**, **me**, **mi**, **mo**). Yet this disregards the fact, known for almost two centuries now,

that there are many instances of pure phoneticism involving Nahuatl signs beginning with a consonant and a vowel but also ending with a consonant (e.g. **cac**, **can**, **cax**, or **pal**, **pil**, **pol**). There are even, as I will demonstrate, a number of two-syllable sequences (e.g. **acol**, **cochin**, **ocuil**, **quinatz**, **teca**) that are reminiscent of the disyllabograms of 8th-century Japan. To deny all this is to do injustice to the system by forcing it into a reductive Maya template on the assumption that all Mesoamerican systems, unlike the diverse systems of Mesopotamia and environs, adhered to a single set of principles.

One of the remarkable things about Nahuatl writing is that it is a name-oriented system, with a strong focus on the representation of names of people and places, titles, professions, and the like. Sadly, we do not have the usual corpus of texts with full sentences that we are accustomed to in the Maya area and in other regions of the world, since libraries and archives were burned in the course of the Spanish conquest. Nonetheless, there are a number of names in glyphic form that take the form of sentences, giving us some idea of the potential of Nahuatl writing for recording texts, and indeed there are some isolated instances of actual sentences in early manuscripts, notably the Codex Xolotl. It is important to keep in mind that the capabilities of a system and its actual use are two very different issues. I will examine an array of glyphs for the names of the foremost rulers and places in the history and politics of Aztec-period Central Mexico, allowing you to see how the principles of the writing system work in practice.

I will also investigate whether the 4th-century writing system of the great Classic-period city of Teotihuacan can be identified as the ancestor of the Aztec system of the Postclassic. In the city's elite architectural complexes of Techinantitla and La Ventilla two series of simple and compound glyphs exhibit characteristics that we find again in the Aztec system a millennium later. Probable phoneticism in the compounds strongly suggests that the language of the glyphs was an early form of the same language that was spoken by the Aztecs, Nahuatl. Finally, I will explore the writing system's terminal period of development, the mid- to late 16th century, when the heirs to the last generation of Aztec scribes went about refining and adapting Nahuatl writing to the challenges of Spanish colonial rule.

All this will show that Aztec glyphs do not represent, as has previously been suggested, mere "writing without words." This claim mistakenly equates iconography and notation with writing and divorces writing from its essential relationship to language. Moreover, it belittles the nature of writing as a millennia-old and worldwide phenomenon that has added precision to graphic communication since its inception.

Indeed, the very idea of writing without words is self-contradictory. The Nahuatl verb *tlàcuiloa* means "write," "paint," and "draw," yet these multiple meanings do not imply or prove that the Nahua saw no distinction between writing, iconography, and art. They merely underscore the fact that writing in the Aztec world was outlined and painted with a brush. The contextual use of the verb established the intended meaning, in the same way that Ancient Egyptian *seš*, "write, inscribe, paint, draw," was unambiguous in a given context, as was Ancient Greek *gráphein*, "write, scratch, brand, draw, depict," and is Modern Chinese *xiě*, "write, depict, paint, draw." An Aztec scribe was well aware that paintings, which did not represent words (although they could obviously be described with them in various ways), were not the same thing as *machiyōtl*, or signs, which were linked to precise readings—specific words and names in the Nahuatl language. It is worth noting that the Mexican Spanish word *machote*—"form letter, rough draft, blank form, template, prototype"—is a direct descendant of this script-related term from Aztec times.

In this book, the analysis of the Aztec writing system and of the structure of its hieroglyphs is my own, unless otherwise noted. It should be stressed, however, that the individual components of many signs have long been recognized, given an oft transparent relationship between an iconic glyph and its gloss, but the underlying glyphic structure and the principles behind it have rarely been accurately described. You will find references to current literature on the individual manuscripts, the glyphs of which are discussed in this volume, in the bibliography. I would like to express my gratitude to all my colleagues who have so kindly discussed various aspects of this subject matter with me over the years and helped me in various ways, including Juan José Batalla, Agnieszka Brylak, David Carballo, María Castañeda de la Paz, Michael Coe, Lori Diel, Davide Domenici, Michael Dürr, Sven Gronemeyer, Byron Hamann, Claudine Hartau, Christophe Helmke, Jin Yang, Benjamin Johnson, Patrick Lesbre, Alfredo López Austin, Angela MacDonald, Julia Madajczak, Katarzyna Mikulska, Mary Miller, Barbara Mundy, Jesper Nielsen, Jerome Offner, Justyna Olko, Ramona Schaubitzer, John Sullivan, Katarzyna Szoblik, Micaela Verlato, Alexander Vovin, Catherine Whittaker, and David Wright Carr, and last, but by no means least, I would like to thank my editors at Thames & Hudson, Ben Hayes, Jen Moore, and Colin Ridler, and designer Aman Phull, for their endless patience and skillful guidance during the preparation of this volume.