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Unraveling the Voynich Codex

 Springer

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For Shirley R. Janick and Sharon L. Tucker

The cover illustration of three sets of images each of New World plants, animals, and Mexican volcanos provide evidence that the Voynich Codex is a post-Columbian Mexican manuscript.

	jaguarundi	La Malinche volcano
prickly pear cactus + agave	ocelot	Pico de Orizaba cauldron
sunflower	armadillo	Popocatèpetl volcano

Foreword

The *Voynich Codex* is a mysterious, bizarre hand-written manuscript discovered by the book dealer Wilfrid Voynich in 1912. Its unique symbols and text have defied translation attempts by world-eminent cryptologists. The *Codex* is encyclopedic in scope and includes approximately 359 images of plants or plant parts, making it primarily an illustrated herbal, a book that combines traditional plant lore and medicinal properties. But it is much more than that. The *Voynich Codex* also depicts more than 500 nymphs, mostly nude, cavorting in pools with weird plumbing. There are strange magic circles, including ones with zodiac, astronomical, and cosmological depictions. The codex includes a large foldout section with kabbalah-like images that may be interpreted as a map. Many of its pages appear to be medical recipes, poetry, or incantations. The *Voynich Codex* has captured the imaginations of many, but all have failed to make sense of it.

This volume summarizes the collaborative attempts of a botanist and emeritus herbarium director at Delaware State University, Arthur O. Tucker, and a horticulturist at Purdue University, Jules Janick, to unravel the *Codex* from a new perspective. We believe that previous attempts to get to grips with the *Voynich Codex* have taken a wrong approach because they have erred on its origins in time and place, relying upon interpretations rather than the hard evidence. Furthermore, no one previously has been able to make sense of its many parts. No one has been successful in deciphering the codex, which holds its secrets. Although we have not fully succeeded, progress has been made.

The collaboration led to an invited seminar by Tucker at Purdue University in 2014 and a coauthored presentation by Janick at the annual meeting of the American Society for Horticultural Science in 2015. A coauthored joint paper expanding plant identifications appeared in 2016. Finally, a symposium entitled *Mysteries of the Voynich Codex: A Meso-American Herbal*, organized by Janick and Tucker, was held in Atlanta in 2016. The symposium abstract caught the attention of Kenneth Teng, a Springer editor, and this volume is the result of those encounters.

The origins of our collaboration are revealing. We first met in 1990. Later in 2007, Janick invited Tucker to speak at a horticultural congress in Indianapolis concerning herbs, for which Tucker is a recognized expert. Tucker became interested in

the *Voynich Codex* in June 2012, when he located a reference to it that coincided with a long interest in Latin American herbs and sixteenth century codices from New Spain. He was amazed at the large number of New World species in the *Voynich Codex* and incorrect identifications by nonbotanists. He sought out collaboration with Rexford H. Talbert, another herb expert and information technologist, formerly at NASA. This resulted in a manuscript entitled *A Preliminary Analysis of the Botany, Zoology, and Mineralogy of the Voynich Manuscript*, based on the identification of 37 plants, seven animals, and the mineral boleite, all indigenous to the New World. The manuscript was submitted in December 2012 to *HerbalGram*, a refereed journal of the American Botanical Council, and was published in 2013. It confirmed a 1944 paper by botanist Hugh O'Neill, which noted that the *Voynich Codex* contained New World plants and must have been written post-Columbus. Furthermore, the Voynichese symbols were decoded into an alphabet based on names attached to some of the plants in the Pharmaceutical section, providing the Rosetta Stone of the elusive codex.

The paper was generally treated with hostility by many members of the Voynich internet community, but received congratulations from academics. It proved a revelation to Janick, who had had minor contact with the *Voynich Codex*, first from a graduate student, Angela Catalina Ghionea, who was seeking advice for her doctoral thesis on magic and science, and later by Professor Lincoln Taiz, who submitted a manuscript on Voynich to Janick, who served as science editor for *Chronica Horticulturae*. Tucker's *HerbalGram* paper was immediately grasped by Janick as a breakthrough and a collaboration was formed that later included Fernando Moreira, a Canadian linguist, and Elizabeth A. Flaherty, a wildlife zoologist at Purdue University. The present book is based on this collaboration.

Janick worked on iconographic analysis of the *Voynich Codex*, and a key finding was achieved when a single foldout page (folio 86v), made up of six sheets, was identified as inspired by kabbalah. It was brought to the attention of Thomas Ryba, a philosophy professor at Purdue University and a theologian at Purdue's St. Thomas Aquinas Catholic Center, who confirmed the kabbalah similarity and suggested that it might be a map. Tucker made the inspired leap that the map was associated with the Celestial City of Jerusalem (Angelopolis), in the present-day state of Puebla, Mexico. The city was founded in 1530 by Toribio de Benavente (known as Motolinía), one of the famous Twelve Apostles, Franciscan missionaries who arrived in Mexico in 1524 upon the recommendation of Hernán Cortés after the Aztec conquest. This information put the *Codex* into context in time and space. It gave a potential earliest date to the *Codex* (1530) and suggested that it must have been written before 1571, the date the Inquisition was formally introduced into New Spain, when it would have been dangerous to put any kabbalah images in a manuscript. This also confirmed that there was a Franciscan connection to the *Voynich Codex*, as follows:

1. The Franciscan order had created El Colegio de Santa Cruz de Tlatelolco (in present-day Mexico City; also called Colegio de Santa Cruz) for the sons of

Nahua (Aztec) nobility, and we believe that the author of the *Voynich Codex* must have been associated with that institution.

2. The Franciscans had been supporters of the kabbalah in Spain and could explain this allusion in the codex.
3. Motolinía was a Franciscan friar.
4. Finally, Bernardino de Sahagún, the great chronicler of Aztec culture, was a Franciscan and at one time a professor and dean at the Colegio de Santa Cruz.

With this discovery, a general hypothesis could be created. The author/artist of the *Voynich Codex* must have been associated with the Colegio de Santa Cruz and brought up with Spanish, Western, and Aztec sensibilities (both transcultural and syncretic). As a result, we re-examined the codex through the lens of this hypothesis. Parts of the *Codex* began to confirm and reinforce our assumptions. For example, the decipherment of the Voynichese symbols (or alphabet) allowed the decipherment of a variant of the name of the city Huejotzingo, written on a drawing of the convent-fortress in circle 2 of folio 86v. The zodiac clearly showed an amalgamation of Aztec and Western sensibility, with the replacement of many of the traditional signs with animals native to the New World. The nymphs could be explained as part of the bathing ceremonies of the Aztecs. The many medicinal plants and bathing facilities for concubines were clearly compatible with the gardens at the palace of Nezahualcoyotl as well. Furthermore, folio 86v distinctly showed three volcanoes, which were major landmarks of central Mexico. The presence of the star cluster universally recognized as the Pleiades fitted our hypothesis, as this star cluster was a vital part of Aztec cosmology, and its 52-year cycle was an essential component of Aztec culture and theology associated with the New Fire ceremony.

We found our hypothesis to be reinforced by events that had occurred at the Colegio de Santa Cruz. Many students and staff, such as Bernardino de Sahagún, had become renowned, including Martinus (or Martin) de la Cruz, a Nahua staff physician, and Juannes Badianus (or Juan Badiano), a Nahua teacher of Latin, who collaborated on an illustrated Aztec herbal (now known as the *Codex Cruz-Badianus*), written in Latin in 1552. Others included the indigenous writer Pedro de San Buenaventura, the historian Juan Bautista de Pomar, great grandson of Nezahualcoyotl, and Gaspar de Torres, master of students at Colegio de Santa Cruz from 1568 to 1572, highly educated as a physician and lawyer, a supporter of Indian rights, and governor of Cuba in 1580. In addition, Torres' name and the ligated initials of Juan Gerson, an indigenous artist (*tlacuilo*), were embedded in the first botanical image (folio 1v) of the codex, which suggested that Torres might have been its author and Gerson its illustrator.

Aside from the hard evidence of plant, animal, and mineral identifications, we are fully aware that many of our individual assertions are speculative, but we believe that they are plausible. We continually find associations that provide evidence for the hypothesis of an origin in sixteenth century New Spain. We both admit to academic deficiencies in linguistics and astronomy. Scholars in these fields are needed to complete the picture and we are frustrated at our inability to persuade them to join

our quest. We hope that this book will encourage a community of scholars to complete the task of translating the *Codex*, which, in the final analysis, holds the key. We are convinced that this would be crucial to a fuller understanding of post-colonial Aztec history because this codex comes to us unfiltered by Spanish or Inquisitorial censors. Although we have found evidence to support our hypothesis, we remain open-minded scientists, and look forward to data to prove, disprove, or expand our understanding of the *Voynich Codex*.

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