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THE BOOK NOBODY CAN READ

A BOOK NOBODY COULD READ

In 1912 a rare-book dealer named Wilfrid Voynich was picking through a crate of old volumes at a Jesuit college outside Rome when he opened a small book he could not read. Its pages were crowded with plants no BOTANIST could identify and a flowing script unlike any alphabet he knew. Tucked inside was a seventeenth-century letter claiming that the Holy Roman Emperor Rudolf the Second had once paid six hundred DUCATS for it. Voynich assumed he held a CIPHER: ordinary writing disguised by swapping every letter for an invented symbol.

SPELL Spell: BOTANIST

BOTANIST

SPELL Spell: DUCATS

DUCATS

KNOWN What is the term for ordinary writing disguised by swapping every letter for an invented symbol?

CIPHER

OPEN Voynich opened a page of script that matched no alphabet he knew. What would you try first with writing you could not read?

Open response - use practitioner judgment

SKIN, INK, AND SECTIONS

The object itself is unusually cooperative. It is written on VELLUM, CALFSKIN scraped and stretched and dried into a writing surface, and RADIOCARBON dating, which measures the decay of carbon left in once-living material, placed that skin between 1404 and 1438. Analysis of the inks turned up nothing out of period. Roughly 240 pages survive, and scholars sort them by their ILLUSTRATIONS into stretches called HERBAL, ASTRONOMICAL, BALNEOLOGICAL, PHARMACEUTICAL, and RECIPES: plants, then star charts, then women standing in green pools, then jars and roots, then dense text with almost no pictures.

SPELL Spell: CALFSKIN

CALFSKIN

SPELL Spell: ILLUSTRATIONS

ILLUSTRATIONS

KNOWN What is calfskin called once it has been scraped, stretched and dried into a writing surface?

VELLUM

KNOWN Dating that measures how much carbon has decayed in once-living material is what kind of dating?

RADIOCARBON

SEMI_OPEN Scholars sort the pages into five sections by their pictures. Name two of those sections.

NEEDS 2 OF HERBAL / ASTRONOMICAL / BALNEOLOGICAL / PHARMACEUTICAL / RECIPES

OPEN Nobody knows what the women standing in green pools are doing. What do you think is happening in that picture?

Open response - use practitioner judgment

MATH The vellum dates to somewhere between 1404 and 1438. How many years wide is that window?

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A TEXT THAT ACTS LIKE LANGUAGE

The writing behaves like a language, which is what makes it maddening. A couple dozen recurring GLYPHS, the individual written characters, do nearly all the work, combining into word-like units separated by spaces, and those units follow the frequency pattern that real languages show. But the text's ENTROPY, a measure of how unpredictable the next character is, runs lower than in European languages, and identical words sometimes repeat two or three times in a row. William FRIEDMAN, the American cryptologist whose team broke Japanese wartime ciphers, spent years on it and never produced a sentence.

SPELL Spell: GLYPHS

GLYPHS

SPELL Spell: FRIEDMAN

FRIEDMAN

KNOWN A measure of how unpredictable the next character in a piece of writing is - what is that measure called?

ENTROPY

OPEN Friedman broke wartime ciphers and still never got a sentence out of this book. How long would you keep at something before setting it down?

Open response - use practitioner judgment

NOTHING TO READ

One explanation is that there is nothing to read. Gordon Rugg showed that a CARDAN GRILLE, a card with holes cut in it and laid over a table of SYLLABLES to pick out combinations, can generate text with many of the book's odd habits, which would make it an elaborate HOAX built to be sold. Others still argue for a CIPHER, or for a lost natural LANGUAGE written in an invented alphabet, or for one person's private SHORTHAND. None of the four has produced a reading anyone else can reproduce.

SPELL Spell: CARDAN

CARDAN

SPELL Spell: SYLLABLES

SYLLABLES

KNOWN What is the card with holes cut in it called, the one laid over a table of syllables to pick out combinations?

GRILLE

SEMI_OPEN Name two of the four explanations people have offered for the book's writing.

NEEDS 2 OF HOAX / CIPHER / LANGUAGE / SHORTHAND

OPEN One explanation is that there was never anything to read. Which of the four explanations would you most want to be true?

Open response - use practitioner judgment

OPEN TO ANYONE

You can look at it yourself tonight. The book lives at YALE, catalogued in the Beinecke Rare Book and Manuscript Library, and every page has been photographed at high resolution and posted free online, alongside a TRANSCRIPTION standard that converts each glyph into a typed letter so the text can be searched and counted. Amateurs and ACADEMICS announce solutions almost every year, and none has held up. The oldest book nobody has read is sitting on a public server, waiting for someone to try.

SPELL Spell: TRANSCRIPTION

TRANSCRIPTION

SPELL Spell: ACADEMICS

ACADEMICS

KNOWN Which university keeps the manuscript in its Beinecke Rare Book and Manuscript Library?

YALE

OPEN The whole book sits on a public server for anyone to open. What would you want to spend your time on first?

Open response - use practitioner judgment