

# Writing

A Knowledge Class with Joe's Group

Writing: A big reason why we've come so far as a species. If we'd never invented writing we wouldn't be able to remember most of the big ideas we come up with. We use writing for lots of stuff: books, movie scripts, the news, speeches, even shopping lists, and text messages. So writing is, of course, a huge and complicated subject. Maybe too huge for such a short article. Let's take a look at how we got from scratching into clay with sticks to writing upside down in outer space.

The first writing wasn't writing at all. People who lived in ancient civilizations used objects like sticks and rocks to draw pictures in wet clay, which would then dry and leave an imprint that lasted for a long time. During those days there weren't calculators or computers, so people had to keep track of things by writing them down. For example, merchants would use these clay tablets to keep track of how much they'd sold by using tally marks next to little drawings of their wares. These little drawings are called *pictographs*.

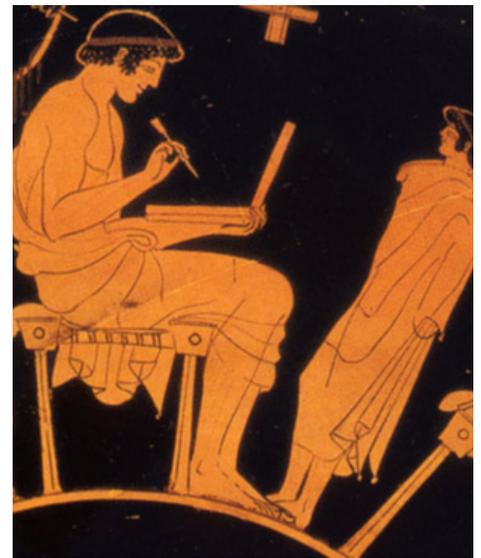
Sometime around 400 BC, the Greeks invented an alphabet, which replaced pictographs with symbols that represented certain sounds; like how the letter "A" makes an "ah" sound. Writing is an extension of speaking, in many ways. Pretty much everything we say can be written. Any random sound we make can be reproduced in print, with varying levels of accuracy. Even if it's a sound we can't write -- maybe because it's very loud, or deep, or high, or whatever the case may be. We can write things like "The sound was very loud and deep." So being able to describe things very accurately with words was a big deal for mankind.

Time passed and writing became more sophisticated. We got both lowercase and uppercase letters in the alphabet, punctuation, and an ever-expanding book of words. Writing tools became more sophisticated as well. Around 600 CE the Greeks began using a stylus to write on wax-covered tablets. These tablets folded in half like a greeting card to protect the fragile imprinted wax. These tablets were used until (and well after) the invention of ink as a writing tool.

"India Ink" is a type of ink that was actually invented in China. It's unclear exactly when it first came into use, but some historians put its earliest use sometime around 3,000 BC. The ink is a mixture of hide glue, carbon black, lamp black, and bone black pigment.



Pictographs Recording the Allocation of Beer, Public domain



Douris Man with wax tablet, public domain.



(Above) Bert prefers to use a Bic pen.



"Royal quill pen" by quinet is licensed under CC BY 2.0.

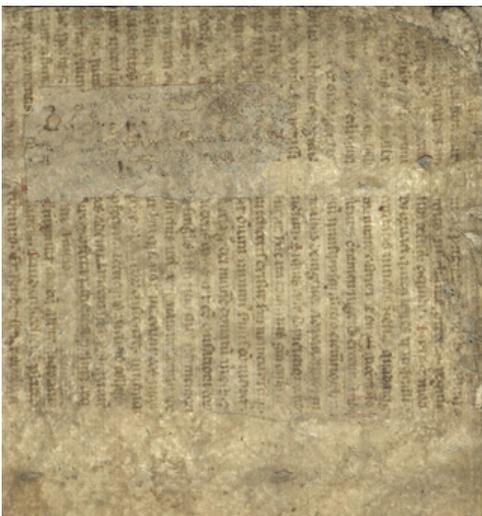
These materials are mixed together and ground up with a mortar and pestle to create the inky paste. The invention of ink allowed people to write relatively easily on bones, stones, bamboo, and wooden tablets. The convenience of writing with ink on top of a surface rather than carving into it meant people could write more quickly and easily. This meant more ideas were finding their way into the world. Good deal!



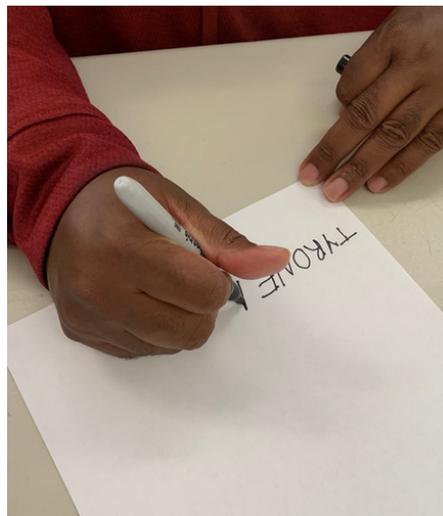
"fountain-pen-nib-14" by Mike Rodriguez is licensed under CC BY-NC-SA 2.0

Quill pens came into use around the year 700 CE, and remained the main writing tool for the next one thousand years. Made from the five outer flight feathers of living geese, the quills were cured to make them dry and strong, then shaped with a small knife to make them suitable for writing. The quill had to be frequently dipped into an inkwell to keep the ink flowing. Quill pens worked great on papyrus and vellum, but these materials were costly to produce. Paper mills began to pop up during the 15th century to meet the need for stuff to write on, and though the paper they produced was durable and inexpensive, it was hard on quill tips and wore them down quickly. The age of the quill pen was over.

The metal pen started out imitating quill pens. The steel point pen nib allows ink to flow the way it does from a quill, while being much more durable. This was the beginning of the modern era for the pen. As time went on we came up with fountain pens (which work similarly to a quill, except the ink is stored in the pen's shaft - eliminating the need for an inkwell), the felt pen (Sharpies, markers), and the champ: the ballpoint pen. The ballpoint is by far the most popular style of pen these days. They're cheap to produce, reliable, lightweight, and versatile. From the humble Bic to the pressurized Fisher Space Pen (left) that the astronauts use, the ballpoint very well might be the pinnacle of human pen innovation.



"Italy V68 18 1532 tall, front cover" by Yale Law Library is licensed under CC BY 2.0



Tyrone uses a Sharpie marker.



Phoebe tries out a modern fountain pen.