The Art of the Alphabet

By Laura Martin
This document accompanies an Art To Go lesson. Art to Go shares genuine art objects from the Cleveland Museum of Art’s distinctive education collection to schools, libraries, community centers, adult facilities, and other sites around northeastern Ohio, inspiring and teaching children and adults of all ages.

With supervision and wearing gloves, participants are able to handle actual art objects while engaging in exciting exploration and lively discussion about diverse cultures, time periods, materials, and techniques represented in the works of art comprising varied media including ceramics, textiles, prints, carved wood and stone, and cast metal.

From ancient cultures in Egypt, Greece, or Rome, to the technology of medieval armor, China, or Japan, to the traditions of Native American peoples, customs of early American settlers, and the elements of art, Art to Go offers different suitcase topics that can be adapted for most age groups. Museum staff and trained volunteers specifically select art objects from the suitcases to create individualized presentations.

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The Art of the Alphabet

These mighty ones created writing in the beginning...
The heir speaks with his forefathers,
When they have passed from the heart:
A wonder of their excelling fingers,
So that friends can communicate when the sea is... between them,
And one man can hear another without seeing... him.

Portion of caption at top of the east wall of Temple of Horus at Edfu, accompanying an image depicting King Ptolemy X offering a palette and inkwell to Toth, Sesha, and seven falcon-headed gods who personify the written word and are described as having “caused memory to begin because they wrote.”

The beginning of writing

Writing is what makes it possible to transmit knowledge over distance and time, to preserve stories and traditions, and to share information with people all over the globe.

Writing began with a drawing. Writing is therefore intertwined with art and with image. It is part of humanity’s inheritance of the work of the hand and the joining of image with text. Writing is one of humankind’s most spectacular inventions.

The advantages of writing for keeping accounts, recording sacred texts, promulgating laws, and establishing authority were immediately apparent to its inventors, as it is to us today. However, we sometimes forget how closely writing—from its beginnings—has been linked with art. The earliest forms of writing emerged directly from drawings, and artists have always combined writing with images or three-dimensional forms to create works with aesthetic as well as informational appeal.

Writing is always derived ultimately from oral language, although it cannot ever reproduce all the information carried by the voice. Nevertheless, writing has its own advantages when compared to speech: permanence, portability, standardization, and prestige. One of its greatest features is that once a writing system has been established, it can be transferred to languages for which it was not designed. This process has occurred over and over throughout human history and explains how the alphabet you are reading at this moment is now used around the globe for languages completely unlike English.

And of the various types of writing systems that humans have designed, the most flexible and transferrable—and the most easily learned—is one in which each symbol in the system represents a significant sound in a language rather than a whole word or idea. This type of writing system is an alphabet and in this Art to Go suitcase we explore both how our alphabet developed and how artists have exploited it over the centuries.
The development of pictographs

The earliest people drew and, indeed, all human societies draw. Most of these drawings are not permanent, but ancient cave paintings of animals and hunters still show us the origins of pictographic writing: writing that uses pictures to relate a story or keep a record. It’s easy to understand how writing could have developed out of drawings like these—and why it developed among settled populations of agriculturalists who were part of complex societies with different kinds of work and different classes of people.

Just imagine for a moment that you are in ancient Mesopotamia and are in charge of making payments to farmers for sale of their animals to the palace. If you make a quick drawing of an ox head or a goat horn, and then record a set of little hatch marks for a number—the way we still sometimes do today when we are counting—you can easily keep track of those animals. And if you give the farmer a little token on which the number of oxen or goats is also recorded, you and he will both have a record of what is owed and what has been paid for how many animals.

Over time, the drawings on the tokens easily come to stand for the words for “ox” and “goat.” When that happens, you are on your way to developing a writing system!

The development of the alphabet

Humans developed writing in only four places on earth: in Sumer in Mesopotamia around five thousand years ago, in Egypt at about the same time (and scholars debate whether some contact with literate traders from Sumer might have spurred the development), in China about 1200 BC (also possibly through diffusion from the Near East), and completely independently in Mesoamerica about twenty-six hundred years ago. At first, none of these writing systems were alphabets; instead they all involved some degree of picture writing.
The English writing system we use today is an alphabet that developed from earlier forms of writing whose history extends back several thousand years to the Ancient Near East and Egypt. It is the product of many cultures: Sumerian, Assyrian, Egyptian, Phoenician, Greek, and Roman. It slowly developed into an alphabet during the time of ancient Greece, around 750 BC. If we look closely, we can recognize a relationship between that Greek writing system and the way we write today.

The writing surface
All art is produced on some sort of surface, called a support. Humans have written on all kinds of materials, including stone and ancient glass, clay and animal skin, paper and fabric. Examples of all these materials can be examined today. The development of the alphabet and of writing surfaces provides insights into the progress of the democratization of information. Early writing systems were highly complex, involving many signs and a lengthy process of learning. In addition, the supports on which writing was done were costly to produce. So the number of people who could read and write was small. Literacy was confined only to wealthy and privileged members of society. But technological innovation has steadily led to the expansion of literacy, the reduction in cost, and increase in written materials. This exact process continues today in the case of digital media, and the alphabet is a key element in it.

The dispersion of writing technology
Writing involves a number of different technological components. Some examples of important innovations in writing technology include the production of paper, the invention of movable type, and various types of mechanical reproduction. The dispersion of writing is also related to social organization. As schools become more numerous or economic systems increase the demands for record-keeping, literacy spreads and information becomes more accessible.

During the fourteenth century in Europe, for example, several factors produced a flood of new documents. In 1300, for example, the Vatican produced about thirty-five documents a year. By 1400, the number had increased one hundred-fold,
to more than thirty-five hundred new documents annually. Some of the factors that propelled this change include the expansion of universities, the increase in global commerce, the reintro-duction of classic texts by Muslim translation centers, and the development of local paper manufacturing in Spain and Italy.

Similarly today, as the technology of digital formats increases the portability and accessibility of information, we are seeing another explosion in the power of the alphabet and of writing. And throughout this process, across time and space, artists have participated in the creative uses of writing and have designed novel ways to combine text and image. When we study the evolution of writing, we also study the evolution of art and society in relation to it.

From pictographs to ideograms to logograms

The first stage of development toward the alphabet occurred when the marks that an early Mesopotamian accountant used to count the number of oxen in a farmer’s tribute payment became standardized. That is, various accountants and farmers began to use the same kind of mark to refer to an ox. In addition, the individual shapes came to refer to the idea of an ox and not just an individual animal itself. In other words, the mark stopped being just a pictograph—a “picture-sign”—and became an ideogram—a “concept-sign.” The mark might begin to mean something more like “food” or “a place where oxen are” or “strength,” rather than something like “this is an ox.”

Here is an example of an early Sumerian pictograph for “ox.” (You may already be able to see in it the origin of our letter A.)

This process from pictograph to ideogram makes it possible to use the sign to refer to other attributes of the animal. Here’s an example using a familiar English word: suppose an early beekeeper created a mark to stand for a bee. And then suppose that over time that sign also came to mean “buzzing” or “busy” or “to travel,” or all three in different contexts. Instead of just being a noun—the name of the thing—it can be used to name an action or a quality as well.
Now let’s suppose that, again over time, an association develops between the marks for bee and the actual sound of the word it stands for. Now we have a **logogram**—a sign that stands for a specific word. It’s a short step to associate the sign with the sound of the word: the picture of a bee can now be understood as the sound B. We still use pictures to refer to words in this way when we read a rebus. In a rebus, we still have a drawing but we are expected to “read” the drawing as a specific word—a word that sounds like the name of the thing in the drawing. Here’s an example.*

By this stage, a mark that began as a picture is now completely disassociated from the original thing it referred to and becomes solely associated with a particular sound in the language. If you think about the number of words that include the sound associated with the sound of “bee”—not the word or meaning, just the sound—you can see how useful this kind of mark would be: *believe, behave, behind, belittle, become, befriend, besiege.*

A mark that can be used in this way is a **phonogram**—a “sound-sign.” Once a writing system has phonograms, we are on our way to a modern writing system. Typically, as writing

* CMA objects (details): 1922.404, 1914.604, 1923.112
systems develop, ideograms, logograms, and phonograms may all coexist. We can see the same situation in the modern style of writing used today on Twitter: \texttt{b4}, meaning “before,” is a kind of phonogram, while a combination like \texttt{>:)} is a type of ideogram that represents an emotional response. And its pictorial version—\text{😊}—is a pictograph.

**The development of writing in Sumer**

By about 3000 BC, the Mesopotamians were using a system of standardized ideograms, logograms, and phonograms. And like most early writing systems, the support on and process by which the marks were made had implications for other aspects of the system, like reading order. For their ordinary writing, the Mesopotamians wrote on clay, an abundant and inexpensive local material. They used the sharpened end of a river reed—called a *stylus*—to press lines into soft clay. As the clay dried, the writing would be preserved.

Because the stylus made a wedge-shaped mark, this kind of writing is known as *cuneiform* (from the Latin word *cuneus*, meaning “wedge”). If you are right-handed, as most people are, it’s better to make your marks going from left to right so you don’t smudge the earlier ones with your hand. So cuneiform was written—and read—from left to right, just the way we write and read English today.

A writing system that uses individual signs to represent ideas or words needs a lot of signs, and that makes it cumbersome to use and hard to learn. Sumerian cuneiform probably had over one thousand distinct signs and took a person many years to learn. It was a very sophisticated writing system and was used to record many different kinds of texts, from accounting records to important stories, such as the heroic tale of Gilgamesh.
Telling stories in cuneiform

An important story like the Gilgamesh epic had been told aloud long before anyone began to write it down, but its familiarity and significance made it a good subject for recording in a more permanent way. Not everyone knew how to read or write, but everyone could recognize the advantages of a written record for certain situations, such as signing your name or marking something you own. And the marks that referred to elements of important cultural information like stories might be recognized even by someone who was not otherwise literate, just like a child today might recognize M-shaped arches at a McDonald’s without otherwise being able to read.

The importance of a story like the one about Gilgamesh’s journey to learn what it means to be human meant that an individual might want to use an element of it as a personal mark. This kind of practice is very human! When someone wears a cross or has a tattoo of a Star Wars figure or puts on a Cleveland Browns jacket, that person is using an image from a larger cultural tale to say something about his or her own personal identity. One of the ways ancient Sumerians did the same thing was to create a small cylinder stone. This clay seal had a significant personal mark carved into it. When you rolled the seal across something that could take an imprint—like another damp piece of clay—you could mark that object with your own personal sign.

Cylinder Seal with Hero Figure, 2750–2334 BC. Mesopotamia, Sumer, Early Dynastic II/III. White stone; 2.6 x 1.5 cm. Educational Purchase Fund 1915.140
This forty-seven-hundred-year-old stone cylinder seal has carved figures of heroes, perhaps those from the Gilgamesh story. (To find a figure, look for a head with two small dots as eyes.) Its personal value is suggested by the fact that it was buried with its owner, who was probably a scribe. In life, he probably wore it on a thong around his neck. It was thus a piece of jewelry personal to him, while also serving to imprint his identity onto other objects or documents. It had therefore both a practical and a decorative function. From the beginning, then, writing has been both a functional tool and a site for aesthetic expression. And from the beginning, writing has provided a link between narrative and image.

**Uses of cuneiform**

Cuneiform was used to write down the words of ritual and religion. In fact, the earliest named author in history was En-hedu-anna (about 2285–2250 BC), a daughter of the Akkadian king Sargon I in the city of Ur and a high priestess of the mother goddess Inanna. Her temple hymns, poetic prayers in honor of the goddess written in cuneiform, include the first recorded use of first-person references in literary texts. Writing and art and ideas of the sacred have always been intertwined. Writing itself, because of its miraculous ability to capture words and hold them permanently, has sometimes even been considered a sacred act itself. So it is no surprise that early writing was devoted to the words of ritual and religion.

Cuneiform was also used to record legal documents, such as the Code of Hammurabi—an extensive statement of 282 laws governing such social transactions as contracts and wages, divorce and inheritance, and what to do when property is damaged by accident or on purpose. The laws were enacted by the sixth Babylonian king Hammurabi (ruled about 1792–1750 BC) and were carved onto stone stele and clay tablets. This code was a model for the laws of punishment, such as “an eye for an eye,” that are laid out in the Old Testament. Like the poetry of En-hedu-anna, it is written in Akkadian, which had borrowed the Sumerian cuneiform script and used it to write an unrelated language.
From sign to sound

Scripts that connect signs to sounds are much more flexible than those that are connected to specific ideas or words, and they can be more easily borrowed for use in languages where they did not develop. Besides the Akkadians, the Assyrians and the Hittites also used cuneiform. These languages are all part of the Semitic language family.

Rulers throughout history have used public art to impress their subjects with their exploits. One of the masterpieces of the Cleveland Museum of Art is an Assyrian wall panel that
illustrates the use of writing—and of writing in combination with imagery—in just this way. It is a wall panel from the palace of the Assyrian king Ashurnasirpal II (reigned 883–859 BC) in the ancient capital of Nimrud. He decorated his palace with large panels of carved reliefs that combined protective spirit images with accounts of all his military exploits and famous conquests.

The last great Assyrian king, Ashurbanipal (685–about 627 BC) could read both Sumerian and Akkadian in cuneiform and was a great collector of ancient texts. His collection of many thousands of clay tablets formed history’s first systematically organized library in Nineveh. Nineveh was destroyed by fire in 612 BC, and the fire baked the tablets hard, thus preserving them for archaeologists to find in the mid-nineteenth century. It is from Ashurbanipal’s library that we have ancient Sumerian, Akkadian, and Assyrian texts to use to help us decipher these ancient languages and their writing systems.
The cuneiform syllabary

In all varieties of cuneiform, the various characters actually represented syllables—a consonant together with a vowel—and not single sounds. Therefore, we call their system a syllabary, not an alphabet. Over time, each character became associated with more than one meaning. So, for instance, the character KA, which stood for the word ka (mouth), could also be used to write the words zu (tooth), gu (voice), and dug (speak). The sound ka could also mean “gate.”

There is an obvious connection between the meanings of “mouth” and “gate” and in languages around the world (for example, Japanese kanji) we find these concepts associated in early writing systems. A reader could usually tell from the context of the sentence which meaning was meant. However, a scribe could also give the reader a hint by adding a little ideogram that meant “wood” in front of the ka sign. It warned the reader that this ka is the one that refers to a thing made out of wood, that is, a gate. You can imagine how, over time and use, the signs might became more and more abstract as they became more and more simplified for ease of writing.
This lovely clay tablet was used to record a contract in the fifteenth year of the reign of Nabonidus, the last king of the Neo-Babylonian Empire. He ruled from 556–539 BC so this tablet is dated to about 541 BC. He was succeeded by Cyrus the Great after the Persians defeated the Babylonians. The deeply imprinted text clearly shows the way the wedge-shaped stylus could be used to write onto the wet clay, producing a sequence of legible marks.

The development of Egyptian hieroglyphs
At about the same time that the Mesopotamians were inventing writing, the Egyptians were doing it too. It isn’t known for sure whether the Egyptians borrowed the idea of writing from the Sumerians or came up with it themselves, but by 3200 BC they already had a complete system in place. We know Egyptian writing today as hieroglyphs, and it was a system that used tiny pictures to represent objects, ideas, and sounds. Its development followed the same sequence as in the Sumerian case: from pictographs to ideograms to logograms. But there were a few important differences in how the Egyptian experiments turned out.

An alphabet, not a syllabary
One of the most important ones is the fact that the Egyptian signs represented individual sounds and not syllables. By using signs that stood for only one consonant sound, the ancient Egyptians had almost invented an alphabet—a writing system in which each sign stands for a sound, not a syllable—but they never stopped using ideograms and logograms in their writing. They also used some signs that represented combinations of consonants. If in English we wrote t and h as Ŧ, whenever they occur together (as they often do), that would be an example of a two-consonant sign.
Using papyrus as a support

Another feature of Egyptian writing is that sometime around 3000 BC, they invented a fiber-based writing surface, papyrus, which they created from the stems of a river reed. After a stem was cleaned and split lengthwise, it would be cut it into lengths about sixteen inches long. Then a row of reed stems would be placed next to each other and covered with a layer of stems going the other direction. In the samples of modern papyrus, it is easy to see how the front and back show the two directions of the stems.
Pounding the stems with a mallet releases a glue-like coating inside the stems that would bind the two layers together into a single sheet. This very strong sheet would be flattened and dried under weights. Then it could be smoothed and polished by being rubbed with a round smooth stone or perhaps a piece of sea shell. In a dry climate like that of Egypt, papyrus could last for centuries. Papyrus was still used in Europe for important documents until the eleventh century. Because of the way the fibers run, it was easy to make long sheets and roll them into a scroll.

In the CMA permanent collection is an Egyptian scroll book on papyrus that is nearly four thousand years old. You can see the beautiful hieroglyphic writing is combined with small drawings of figures. Together the text and the images trace the journey of the soul of the book’s owner, Hori, through the underworld after death.
Shawabty of Djehutyirdisu, 360–342 BC. Egypt, Late Period, Dynasty 30, reign of Nectanebo II. Pale green faience with hieroglyphic writing; 21 x 5.5 cm. Bequest of James Parmelee 1940.616
Reading direction

You will recall that cuneiform was written and read from left to right. Another special feature of Egyptian hieroglyphs is that they could be written in either direction and some texts were in lines and others in columns. So how could you tell which way to read? Just look for a sign that shows an animal or human figure and the direction in which the eyes are facing: that is the starting direction; you read toward the faces. This is how the writing works in the Book of Hori where the reading order is in only one direction, from left to right. But with the hint given by the animal figures, Egyptian writing could go in either direction on the same object.

This little Egyptian figure is a shawabty. Shawabties are very common because they were guardian figures buried with the bodies of important people in order to serve them after death. Therefore, there might be household servant shawabties, or scribe shawabties, or, as in this case, shawabties to work in the fields. In this figure’s right hand, he holds a pick and in his left, a hoe. A woven seedbag is carried over his left shoulder with the long strap in his hand. You can see a repaired crack near the ankles.

This particular shawabty belonged to Djehtuyirdisu, one of the most important men of his time. He was the finance officer under Nectanebo II (reigned 360–342 BC), the last native ruler of ancient Egypt. He was also a high-ranking priest of the Egyptian deity Thoth, associated with magic, writing, science, and the settling of disputes. (There is an image of Thoth shown, as he often is, with an ibis head toward the right-hand side of the Book of Hori.)

The writing on this figure presents a series of titles and a genealogical reference for Djehtuyirdisu: he was the fourth son of his mother Nebe-thutiti. Often such inscriptions were quite standardized and include many formal titles of the owner and routine descriptions of the work the shawabty will perform. The text here is given in the shape of a T. Can you tell which way to read it? (Hint: Find a bird head on the back and read toward its face.) The text begins on the left side of the back and continues around the figure. It concludes by running vertically down the front.
The first real alphabets: multicultural influences

The first real alphabetic writing systems are the products of extensive cultural exchange and cross-fertilization. They seem to have developed among Semitic-speaking slaves of the Egyptians. These systems existed at least by 1500 BC when those Canaanite slaves began using hieroglyphs to write in their own languages. The most famous group of Canaanites was the Phoenicians, whose language was spoken all along the coast of the Mediterranean Sea. The Phoenicians traveled, interacted, and traded with cultures all around the Mediterranean, bringing with them their writing system.

The Semitic language family also included Aramaic, the language of large sections of the Jewish Talmud (sacred texts of rabbinic commentary) and many books of the Christian Bible. Over time, modern Semitic languages like Hebrew and Arabic arose as well. All these languages developed their own writing systems based in part on the Egyptian and Sumerian scripts.

By about 750 BC the ancient Greeks had adopted the Phoenician alphabet. That alphabet in ancient Greece is where most modern European alphabets originate. So we can say that our own writing system—what you are reading right now—has a history that we can trace straight back to that first farmer—and amateur artist—who recorded the number of oxen in his herd. In a way, every time we write (or type using these same characters), we enjoy the fruits of a multicultural heritage in which many cultures contributed to one of our most important intellectual achievements.

Here is a table showing the way some of the signs in these early systems are related to each other.

<table>
<thead>
<tr>
<th>Sign</th>
<th>Early Greek</th>
<th>Sound</th>
</tr>
</thead>
<tbody>
<tr>
<td>beyt</td>
<td>b</td>
<td></td>
</tr>
<tr>
<td>keph</td>
<td>k</td>
<td></td>
</tr>
<tr>
<td>mem</td>
<td>m</td>
<td></td>
</tr>
<tr>
<td>hfau</td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>ayin</td>
<td>o</td>
<td></td>
</tr>
</tbody>
</table>

* represented a different sound
The contributions of the Ancient Greeks

Alphabet history advanced greatly once the ancient Greeks got their hands wrapped around a pointed instrument and began to record speeches, philosophical arguments, poetry, and history. Some characters in the Phoenician alphabet represented sounds that didn’t occur in Greek. So the Greeks cleverly repurposed them to represent vowels instead. You can see an example in the table above, where the word meaning “eye”—ayin—became the vowel sound o. The symbol for aleph, the word meaning “ox,” became the vowel sound—and our modern letter—a.

<table>
<thead>
<tr>
<th>Egyptian ox</th>
<th>Phoenician aleph</th>
<th>Greek alpha</th>
<th>Roman/Cyrillic A</th>
</tr>
</thead>
<tbody>
<tr>
<td>![image]</td>
<td>![image]</td>
<td>![image]</td>
<td>![image]</td>
</tr>
</tbody>
</table>

What they couldn’t settle on right away was reading direction. First, the ancient Greeks did what the Phoenicians did: they wrote from right to left. Later, during the eighth and seventh centuries BC they experimented with switching directions at the end of each line. Finally, by the sixth century BC, they began to standardize the system by writing from left to right—just the way English is written today.
The next object shows Greek writing from the fourteenth century, by which time the sequence of letters and reading order were completely standardized. It comes from Byzantium where many kinds of religious texts were being produced. They were all handwritten, mostly in Greek, and the pages were bound into books that we would recognize today.

We can see the free-flowing style of handwritten Greek that Byzantine scribes perfected in the thirteenth and fourteenth centuries. This leaf, a single-sheet page, is of handmade paper—you can see the tiny lines created by the wires in the mold from which it was pulled. The page comes from a gospel book that records the writings of the evangelists. It is written in two columns, using a cursive style in which many of the letters are connected to each other, making it easier to write quickly.
Look closely and you will see some of the most easily recognized Greek letters: the letter chi, Χ, used to record the name of Christ; the letter theta, Θ, which looks the same in both its capital and lower-case forms; and the upper- and lower-case lambda (Λ and λ), that like many Greek letters is still used as a symbol in a variety of scientific, mathematical, and other contexts. The upper-case lambda, the chevron, is the symbol used today to identify NATO military vehicles; it was also the shield symbol of the warriors of Sparta.
The contributions of the Romans

The early Romans adopted the alphabet of the Etruscans, who were still writing from right to left, but by the fourth century BC they had come under the influence of the Western Greeks. As a result, they began writing from left to right and took over the Greek alphabet intact. There were a few differences between the classical Greek alphabet and this Western Greek version, and the Romans changed the order of certain symbols. But in general it is not hard to identify the letters we use today in the writing system used in Rome twenty-four hundred years ago. In this table you can see the evolution of letters from Phoenician to Roman alphabets.

<table>
<thead>
<tr>
<th>Modern Roman</th>
<th>A B G D E F Z H</th>
<th>I K L M N</th>
<th>O P</th>
<th>Q R S T</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Latin</td>
<td>A B C D E F Z H</td>
<td>I K L M N</td>
<td>O Π</td>
<td>Ω Ρ Σ Τ</td>
</tr>
<tr>
<td>Greek</td>
<td>Δ Ζ Ζ Ζ Ζ Ζ Ζ</td>
<td>Ζ Ζ Ζ Ζ</td>
<td>Ω Π</td>
<td>Φ Ρ Σ Τ</td>
</tr>
<tr>
<td>Phoenician</td>
<td>א ב ג ד ה ז ח</td>
<td>י ק ל מ נ</td>
<td>ע פ נ</td>
<td>מ נ ק ל</td>
</tr>
</tbody>
</table>

http://en.wikipedia.org/wiki/Greek_alphabet
http://en.wikipedia.org/wiki/Archaic_Greek_alphabets
Summary of the early evolution of the alphabet

Today our familiar English alphabet is a direct descendant of these ancient people’s experiments and standardizations. It is also a direct result of the persistent interest in the way text and image can be combined for aesthetic purposes. Artists of the past, as well as modern ones, have often used the graphic qualities of writing to enhance the composition of a page. They have experimented with the relationship between visual elements and words, sometimes finding new ways to highlight or contradict the meanings carried by each one. To an outsider, a script can appear to be purely decorative and may be adopted for aesthetic purposes even by those who cannot read it. In the history of Western writing systems, many cultures have influenced each other by copying (or even parodying) the look of foreign writing and by adopting the tools or techniques of foreign scribes.
Writing as an art form: calligraphy

Among the various cultures using writing systems originally derived from Sumerian scripts were the Arabs. Arabic scribes turned writing—calligraphy, “the beautiful writing”—into their premier art form. As tenth-century Arabic philosopher and writer Abu Hayyan al-Tawhidi (about 930–1023) wrote, “Handwriting is jewelry fashioned by the hand from the pure gold of the intellect. It is the brocade woven by the quill with the thread of discernment.”
Writing and religion

Just as Jewish and Christian scholars used writing to record and preserve their sacred texts, so did Islamic scholars. The Arabic language and script existed before Islam. However, the expansion of the religion across a large geographic area from Spain to Asia between the seventh and fifteenth centuries facilitated the spread of the language and the writing system. The artistic use of handwriting was the primary means of preserving the Qu’ran, the sacred text of Islam. As the most revered form of Islamic art, and because of Islam’s prohibitions on figural images in religious contexts, writing predominates as a decorative device in Islamic culture, used on textiles and in architecture, as well as on parchment and paper.

Other languages that adopted Arabic script—and there are many such groups across the Near East and Asia—also placed a high value on the aesthetic qualities of the written page. For example, Persian writing is based on the Arabic alphabet with a few additional letters. Persian literature existed before Islam, and the ancient pre-Islamic religion of the Persians, Zoroastrianism, praised beautiful, clear writing. But the spread of Islamic culture introduced a new writing system to Iran. Persian was the first language to break the Arabic monopoly on writing and many famous works were composed and written in Persian script, including the poetry of Rumi and the Rubiyat of Omar Khayam.
Another written epic

One of the most famous Persian literary works is the *Shahnama* of Firdausi, a long epic poem about Persian history from the creation of the world to the Islamic conquest in the seventh century. The poet Firdausi (or Ferdowsi) began composing it in 977 and completed it thirteen years later. Like Gilgamesh and its influence on Sumerian and later cultures, the *Shahnama* has had tremendous influence on Iranian cultural identity and on many other ethnic groups as well, including Armenians, Pashtuns, Kurds, and Afghans. It has been copied numerous times and praised by Western writers such as Goethe.
This leaf cut from a sixteenth-century copy of the *Shahnama* shows a painted miniature of a mounted hunter during a lion hunt. Persian is always written cursively; that is, the letters are always connected to each other in a flowing line. The eye-catching form of Persian calligraphy seen on this leaf is known as *shekasteh nastaliq*. It is curvier and less geometric than other styles of calligraphy, and the letters are more stretched out. This style was developed over five hundred years ago and is still one of the most popular Persian calligraphic styles. A newly written Qu’ran in this style by master calligrapher Alireza Babaei was unveiled in July 2012 in Tehran.

Notice how the brightly painted image is placed among a series of four lined columns of text. There is a specially highlighted section of the text in larger script set apart in a lined block. The entire page is contained within a painted frame, making the miniature a “picture within a picture.” Both the poem and the style of writing continue to be important touchstones in Iranian culture. As Firdausi wrote in his final couplets:

I’ve reached the end of this great history
And all the land will talk of me:
I shall not die, these seeds I’ve sown will save
My name and reputation from the grave,
And men of sense and wisdom will proclaim
When I have gone, my praises and my fame.
New supports for writing

Much of the writing in all the languages of the early period in the history of writing is preserved in texts carved on stones or cut into ceramics. But over the centuries, other supports were developed.

**Parchment** was invented by the Greeks, perhaps in the third century BC, as a replacement for papyrus, which had become expensive and difficult to get. Parchment is prepared from animal skin—usually sheepskin, calfskin, or goatskin—that is carefully cleaned, stretched, and rubbed smooth. The finest quality parchment is also known as vellum.

**Paper** was invented by the Chinese around AD 150. The Arabs learned the secrets of papermaking from the Chinese in the mid-eighth century (around the time of Battle of Talas River in 751), and transmitted it across the Muslim world. Paper manufacturing finally arrived in Europe, in Muslim Spain, in the mid-1100s, and in Italy by 1276. The production of Italian paper in Fabriano is documented by 1300.

The first paper mills in Germany were established in the fourteenth century, where artists transferred woodcut printmaking techniques from fabric to paper, setting the stage for Old Master and popular prints. The progress of paper technology in Europe is therefore matched by the expansion of access to artistic products as well as to the democratization of literacy.

However, like all technological innovations, each one of these new types of writing surfaces was more quickly adopted by some people than by others. As seen earlier, the Vatican continued to use papyrus for its official documents until the mid-eleventh century. Parchment was the primary choice for both artists and officials until the fifteenth century. Eventually fine rag paper was widely adopted, but technological innovations in both materials and processing has affected the type, quality of paper, and cost of paper right up until the twentieth century. In this suitcase, there are examples of both parchment and paper in documents that are close in date.
Manuscript illumination

In Western Europe and throughout the region around Turkey—the area once known as Byzantium—the traditions of combining handwritten text with image in the production of sacred manuscripts also achieved the highest aesthetic recognition. Practiced primarily in monasteries until about the twelfth century, the techniques of rich illuminations using valuable pigments and delicate drawing produced increasingly desirable, collectible, and expensive books. These objects were mostly various types of religious texts such as gospel books, psalters, and books of hours, and their size indicated whether they were intended to be used in private or communal devotions. Known today for their highly decorative and complexly rendered initial letters as well as for often elaborate marginal decorations, manuscripts are the most common items to survive from the medieval period. Many such books were deconstructed in later centuries so that the most decorated pages with their colorful and detailed paintings could be sold separately.

By the fourteenth century the demand for such manuscripts, including those on secular topics in science and philosophy, was so great that non-monastic commercial scriptoria—manuscript production centers—were at work in Italy, France, and the Netherlands. Generally still written on parchment, books would be commissioned by a patron buyer and would
vary in price based on the amount and complexity of the non-text (image) material as well as the rarity or expense of the raw materials, such as pigments. And the influence of the Romans could still be seen in manuscripts even after Latin was no longer the language in which they were written.

This leaf is a calendar page cut from a French book of hours. The year is 1480, and even at this late date wealthy people often preferred to pay for a book on expensive parchment. If you look closely, you can see the distinctive veining and cell structure that is the mark of parchment.

This page sets out the days of the month, in this case October. Saints’ days are identified by the names written next to a date—usually the saint’s birth date, or the date of their martyrdom. Using a book of hours, a devout person could know which prayers were appropriate to offer on any particular day. The most important of the saints and their dates are given in red.
**Information in a book of hours**

You can see Roman numerals in the *far left column* of this page; they label various feast days in the Catholic ritual calendar. In the *second column*, the day of the week is indicated in a system using dominical letters: the first seven letters of the alphabet are used to indicate the days of the week, starting with *Sunday* (a). So, on this page, the feast of Saint Francis on October 4 fell on a Wednesday, marked by a *d*. The *third column* has either a letter *n* or the abbreviation *id*. These marks tell us that at this time the old Roman division of the month into *nones* and *ides* was still being used in France in 1480.

Since this book was intended for a French patron, the saints listed for the first few days of October are mostly of French origin and are especially venerated in France. Information about locally venerated saints listed in books of hours can often be used to identify the locality in which a particular book was written. The saint who is celebrated on the first of October is unidentified but the other saints listed on the front page include:

- **Saint Léger (a.k.a. Leodegar):** a seventh-century martyr from near Poitiers, France, on October 2
- **Saint François (a.k.a. Saint Francis of Assisi):** founder of the Franciscan order, on October 4
- **Saint Foy (pronounced *fwa*; known in English as Saint Faith),** third-century virgin martyr from Aquitaine on October 6
- **Saint Denis:** third-century Bishop of Paris, martyred by beheading sometime after AD 250; the patron saint of Paris (note that his date is in red), he is often depicted carrying his severed head since the legend is that he walked ten kilometers carrying it while preaching all the while, on October 9
- **Saint Nicaise (a.k.a. Nicasius),** a disciple of Saint Denis, martyred two days after him, on October 11

The illuminated decoration includes a large initial letter on the upper left and a floral band that includes strawberries on the right side. The strawberry is a symbol of the Benedictine order, suggesting that this book of hours was used by a Benedictine monk or a patron of a local Benedictine house.
The printing press

Not long before the creation of this book of hours, Johannes Gutenberg invented movable type and the printing press in Germany around 1440 (unless you accept the claim that Laurens Coster invented it in the Netherlands about twenty years earlier!). The Chinese had invented a movable type system around 1000 using wooden characters, but the huge effort involved in carving the thousands of characters required for Chinese script limited the adoption and diffusion of the technique for text. Nevertheless, wood-block printing was being used in Europe in the second half of the fifteenth century to create the images that sometimes accompanied text printed with movable type. The so-called Old Master prints were often made from woodcuts.

Alphabetic scripts, with their small set of characters, are well suited for printing systems that use movable type. Along with his press, Gutenberg invented the process of casting type in lead, and that method continued to be the primary technique for printing text for the next several centuries. However, wood-block printing was used for wallpaper and fabric, especially in France, until well into the nineteenth century. And as a technique used by artists, it is still in active use today.
Wood-block printing is a relief technique in which ink is transferred off a raised surface. This set of mid-twentieth-century wood-block letters illustrates how part of the matrix, the wood, is removed to create the image. The now-raised letter or image can be inked and then used to print. The removed section will show as white in the final print. If another block is created in which only the lines are carved so that the surfaces that were cut away in the first block are now present and can be inked, then those areas can be printed in a different color.

Text produces another level of complication, however, because the direction of the resulting print will be “reversed” from the block. In order to create legible text, a wood block must be prepared so that it will print in the proper direction. Notice how some letters are the same regardless of direction—the O, for example. Others—the N, the lower case y, or the number 2—are carved in reverse.

**Impact of printing**

The impact of the invention of printing on the world is impossible to overstate. It had the immediate result of allowing the mass production of books. By 1500 printing presses in Western Europe had produced over twenty million volumes! The availability of more economical reading material democratized knowledge. That is, ideas and information could spread more easily, a process that led to many social changes. The circulation of revolutionary ideas, a sharp increase in literacy and widespread education, the flowering of local languages, even the development of a new type of media (the press)—all these and other changes may be said to have created the modern world.

By the nineteenth century, with the invention of steam-powered mechanical presses to replace the hand-operated ones based on Gutenberg’s design, the power of print spread around the globe. It became the de facto technology for information delivery everywhere. Even with the development of modern digital technologies, we still use the vocabulary of printing—page, font, cut and paste, watermark, footnote, bookmark—to negotiate our digital text world.
Alphabetization

One consequence of the spread of literacy was the establishment of alphabetical order. Although there are some examples as far back as ancient Alexandria in the 1st century BC of using letters to organize lists, the most common tradition of organization throughout the Middle Ages and beyond was by classification. In a classification scheme, words that are related to each other by meaning are grouped together. So, for example, one might produce an encyclopedia in which all the animal words were put together and then all the flower words, and so on. This kind of thematic arrangement has the advantage of semantic association, making learning and memorization easier.

You may be surprised to learn that alphabetical order in English was not fixed until the first monolingual English dictionary, *Table Alphabeticall* by Robert Cawdrey, appeared in 1604. Soon, learning and reciting the alphabet became the standard method of initiating children into the world of literacy. Even though there were still complaints into the early nineteenth century that the “accidental” association of initial letters was a poor way to organize things, the idea of alphabetical order was a tremendous success, and the ability to recite (or write) the alphabet was a marker of learning.
The idea of a “sampler,” a demonstration of stitching skills, goes back to the early modern era. In the absence of printed patterns, needleworkers in the fifteenth and sixteenth centuries made samplers in order to record a new or interesting stitching pattern. Such samplers became a kind of reference work and they were often highly valued and passed down the generations. The tradition of samplers was also passed down and by the middle of the seventeenth century it was common to find samplers that included alphabets.

**Demonstration of hand skills and literacy skills**

Like many other young girls of her time, Miss Hannah O. Smith made this needlework sampler to demonstrate her abilities both to read and to sew. She embroidered three versions of the alphabet itself: an upper-case set, a series in small caps, and a lower-case series. In addition, she included a set of numbers as well as a text that identifies her by name, age, and residence. She uses various decorative bands and non-text symbols to illustrate her knowledge of, and skill in producing, various stitching styles. While the general design and content of samplers were more or less standardized, any individual sampler is personalized by a particular combination of elements, color choices, and quality of work. In this way, a sampler is a small work of art in which letters, text, image, composition, design, and sewing skills are creatively joined.
A sampler like this one provides a glimpse into an earlier time when a young woman’s domestic skills were an important part of her worth as a potential marriage partner. Samplers are still popular today, often being created from pattern kits that reproduce historic styles or offer contemporary designs and materials. No longer required of schoolgirls as part of their training for adult gender roles, samplers offer us another example of the artistic interest in the design potential of letters, whether as decorative elements or as part of meaningful text. They also remind us of the enduring lure of handwork as a basic human enterprise.

**New technologies of print and design**

As we have seen, technological advances always create new opportunities for artists and in the early 19th century—around the time Hannah Smith was embroidering her sampler—a technology of reproduction began to be adopted by artists in Europe. The technique was **lithography** in which an image is drawn on a stone using a waxy or oily crayon that will repel water and attract ink. The image does not have to be carved into the stone, as is the case with etchings and other printmaking techniques. To make color prints, a different stone might be used for each color, and keeping the paper aligned (in register) to the image in successive runs through the press is an important determinant of quality.

When lithography was first invented in Germany in 1796, it was not very interesting to artists. By the 1820s, though, various technical problems had been resolved, and many artists began to experiment with the process, especially in France. By the mid-1800s, color lithography was a major source for commercial applications such as the sale of print editions of copies of great paintings and the publication of drawings of current events in newspapers. At the end of the century, Toulouse-Lautrec and other artists were making litho prints in limited editions, and the technique had become accepted as a fine art process.
The mass production and vibrant colors made possible by lithographic techniques led in 1870 to the invention of the poster. A poster is any printed paper intended to be attached to a wall or other vertical surface. Posters have been used for advertising and announcing events, political protest and propaganda. Modern posters have always combined text and image, and poster artists often experiment with unusual ways of forming letters and of laying the text out on the page.

The involvement of artists in the poster revolution created a new dialogue between fine art and commercial applications, a dialogue related to art styles such as pop art and to the use of text in the work of many contemporary artists. Thus, the development of the poster is an important step in the transition to modernism in art.
This poster dates to the very beginning of the art poster revolution. The artist who created it, Frank Hazenplug, was a leading artist and designer in the art nouveau movement (1890–1910). Art nouveau was a style that featured dynamic, flowing, and curving lines, and was applied to various categories of design including architecture, painting, sculpture, and decorative objects. Hazenplug, working in Chicago, designed this commissioned poster as a placard for a fund-raising event. Later the placard was produced in a reduced size (this version) as part of the Les Maitres de l’Affiche series published in Paris. If you look closely you can see an embossed seal in the lower right corner that identifies this poster as one in the series. Subscribers to the series got four lithographs each month; Living Posters appeared in autumn 1897.

Notice the “handwritten” style, the curving informal line quality, and the vibrant color. You can also see where the artist signed his initials directly on the stone under the chair. Living Posters is a wonderful example of an emerging art form, one that continued to evolve in the twentieth century. It has influenced rock concert posters and album covers, and the variety of advertising design innovations we see today.

Art and the alphabet in the twentieth century

The dialogue between art and commerce and the expansion of mass media forms was a constant theme in the twentieth century. Artists created pop art: art that removes imagery from its contexts in popular culture sources such as news, advertising, comics, and manufacturing, rather than from traditional fine art sources and genres. Pop artists liked to use ordinary objects such as soup cans, household utensils, and “found” materials as the subjects of their art. In contrast to elite art attention to originality and uniqueness, pop artists used mechanical reproduction techniques and challenged the basic ideas of fine art through parody and irony.
Besides new philosophies of artistic production, the twentieth century also saw the refinement of photography as a technology for producing multiples and for artistic experimentation. This intersection of art, commerce, mass media, popular culture, and graphic design can be seen in an object from the museum’s permanent collection.


Charles Bell is best known as a photorealist oil painter, but he also produced many photographs. Pinball machines were among his most frequent and highly regarded subjects. Photorealism cannot exist without the technology of the photograph since it is through photography that the artist gathers the detailed information required in order to produce a painting that “looks like a photo.” His glossy, close-up photograph of part of a pinball machine’s playing surface combines attention to surfaces and textures with an unusual perspective and brilliant color processing. Text elements—letters and numbers—become part of the overall composition. Their meaning is subordinated to their identity as purely graphic elements. Like many such artworks, this one features as its subject a mundane and easily overlooked object that is given a sense of majesty through the treatment.
Learning the alphabet and the alphabet as art

Learning and writing the letters of the alphabet in order has been a teaching tool since Etruscan times. An inscription or book that treats the alphabet in this way—as a series of ordered individual letters—is known as an abecedarium. The embroidered sampler seen earlier is a type of abecedarium. The linear structure of an abecedarium also invites the creator to include sample words that begin with the letter and images that illustrate the word. The abecedarium has often been used by artists to create what are called artist books, an artistic work in book format. Today artistic abecedaria are still being created by book artists all over the world.

This object is a charming example of an abecedarium used to teach not the alphabet but an artistic technique—the linocut. The linocut printing technique produces a relief print from a single block that has been carved and inked. In this abecedarium, each letter is presented in a single block and the graphic letter forms are composed together with related imagery. The image is also identified by an accompanying word. The design of each block thus requires careful attention to the way the text, the graphic letter form, and the image are combined. Each block was then printed and the prints were bound in alphabetical order to form a book.
This particular book was created in 1924 by a group of eighth-grade boys in an art class at Fairmount Junior High School, which was located in Cleveland near the Cleveland Museum of Art at East 107th and Euclid Avenue. Jesse Owens entered that school just three years later, and began running track. If he took an art class there, he may well have made a book like this one!

As an interdisciplinary teaching tool, it records investigations about animals and birds made by the art students. As an artistic product, it displays their training and skills in the techniques of linocut printing and graphic design. And as an artifact in a museum collection, it reminds us of the persistence and success of the book form and of the alphabet. The letter G is here represented by a goat, an animal depicted by some Sumerian farmer over five thousand years ago. When he began to associate his drawing of a goat with the word for goat and then with the sounds of the word, humans began to develop writing and that process led inevitably to those eighth graders in Cleveland about ninety years ago and to this Art to Go suitcase in the twenty-first century.
In spite of many changes in publishing, formats, and image techniques that have affected twenty-first-century uses of writing, the alphabet is still very much part of the production of commercial and artistic creativity. As we have seen, close ties continue to exist between writing, society, artistic innovation, and technology. This history of the alphabet and its applications and adaptations by artists gives a taste of the rich dialogue between image and text that has persisted since that day, several thousand years ago, when a farmer decided to record the numbers and categories of his herd animals by inventing a little squiggle that set Western civilization on the road to literacy.
Suggestions for further reading for teachers


*Reading the Past series*

The British Museum and the University of California Press have published a series of accessible and well-illustrated introductory works covering scripts of the world, for example Chinese, Mayan, Anglo-Saxon runes, and all the scripts mentioned in this Art to Go suitcase. Relevant titles include:


In 1996, six of the series essays—including all the above except for *Latin Inscriptions* which is replaced by *Linear B* by John Chadwick—were collected in *Reading the Past: Ancient Writing from Cuneiform to the Alphabet*, with an introduction by J. T. Hooker (British Museum Press).
Online Resources

Evolution of alphabets
http://terpconnect.umd.edu/~rfradkin/alphapage.html
(Accessed April 22, 2013)

Excellent curriculum unit on the early development of the alphabet:
http://edsitement.neh.gov/curriculum-unit/alphabet-historic-0
(Accessed April 22, 2013)

Samplers:
http://etd.auburn.edu/etd/bitstream/handle/10415/782/BOWDEN_ANTONIA_9.pdf?sequence=1
(Accessed April 22, 2013)

Exhibition of alphabet books by members of the Guild of Book Workers in 1998:
http://www.guildofbookworkers.org/gallery/abecedarium/abc1.htm
(Accessed April 22, 2013)

Exhibition of alphabet books at the University of Utah in 2009 that includes historical examples:
http://www.lib.utah.edu/collections/rarebooks/exhibits/past/abc.php
(Accessed April 22, 2013)

Information on linocuts:
(There are many instructional sites and videos available as well.)
(Accessed April 22, 2013)

History of the poster:
(Accessed April 22, 2013)
Using *The Art of the Alphabet* in the curriculum

Here are some suggestions for connecting the contents of this suitcase to the disciplines.

**Geography and culture**

Locate each country represented in the presentation on a map or globe. To which continents do they belong? Learn more about some of the features of the ancient cultures who lived in the area.

Trace the development of writing from country to country. Consider the geography of the Mediterranean region and its influence on the history of writing in the West. Why were the trading Phoenicians so successful in spreading their alphabet?

What types of materials have been used for writing in different places and times? Why did the Egyptians develop papyrus rather than some other support for writing? Research the history of paper and its spread around the world. How does the availability of natural resources seem to interact with technology?

**Technology**

Describe the advantages of the different materials on which various cultures have written, for example, writing on stone as opposed to paper. What are the advantages or disadvantages of writing in clay or on fabric?

How does the use of digital technology today continue the pattern of knowledge democratization seen with earlier writing technologies?

**Math**

Research the numerical systems of the cultures represented in the presentation. Which ones used the position of a number to determine its value and which did not? Write various numbers in these different systems and try some simple addition, subtraction, or multiplication. What are the advantages of our numerical system, which was borrowed from the Arabs in the thirteenth century?

Consider the ways in which alphabet letters are used in mathematical notation. See if you can discover when this practice began, and for what reason.

**Computer Science**

Imagine doing word processing in cuneiform or hieroglyphs. How does an alphabetic system make computing more efficient? How are ideograms used in computer writing?

There are many different scripts used on web sites around the world today. Explore some of them and consider the issues raised by differences in scripts and reading order. For example, why would Japanese emoticons be oriented differently from English-based ones?
Social Studies

Besides the alphabet, what other ideas or objects has our own culture inherited from the ancient Greeks? How might writing have helped spread these ideas and objects?

Consider the status of people who knew how to read and write in Egypt and Mesopotamia. If rulers were mostly illiterate and had to rely on scribes to write, what special power or influence might scribes have had?

Consider how an alphabetic script changes a society. What might be lost when other script systems are replaced by imported alphabetic writing? What scripts have existed in the past that we cannot now decipher or understand?

Research some examples of contemporary scripts that do not use European-derived letters, for example, written Hebrew, Arabic, Hindi, Korean, Tamil, or Thai. What issues do these scripts raise for computer users or web addresses or library cataloguing or classes that teach those languages to English speakers?

Investigate Hangul, the Korean writing system. It was invented by a great Korean king in 1444, and has many unique features. For example, it is a true alphabet but its letters are combined into blocks that include both consonants and vowels, like a syllabary. What might be the advantages of building a writing system from scratch instead of repurposing one from another language?

Investigate the writing system used in Cherokee, an Iroquoian language. It is a syllabary invented around 1819 by a man who had seen English, Hebrew, and Greek but did not know how to read them. What are the special characteristics of this writing system? How has it helped preserve the Cherokee language?

Literature

Read stories from some of the cultures mentioned in this presentation, for example, the Epic of Gilgamesh. How might some of these stories be related to each other? Could a writing system influence the literature of a culture?

Language arts

Research some of the vocabulary related to books and writing: paper, biblio-, parchment, vellum, scroll, volume, library, codex, Bible, Koran, Torah, book. What does the history of each word reveal about the history of the technologies of writing and the interaction of cultures?

Look at some children's books that combine text and image. How does the layout of each page contribute to the process of learning to read or to the development of a sense of narrative?

How do text and image work together in modern graphic novels or video games?
Art

Choose a theme: animals, seasons, foods, etc. Then create a class-wide (or individual) alphabet book that combines individual words and/or longer texts (for example proverbs, couplets, example sentences, etc.), with related images. Use drawing, printmaking techniques (such as wood block, monoprint), handmade stamps, collage, photography, or other techniques to produce the text-image pages.

Consider taking a field trip (for example, to the Cleveland Museum of Art or another institution, to a park or the zoo, a mall, or store) as a way to gather ideas and content for a study of the way artists combine text and image.

Research the art work of such artists as Roy Lichtenstein, Andy Warhol, Robert Rauschenberg, Jasper Johns, Georges Braque, Pablo Picasso, or more contemporary artists such as Jenny Holzer, Ellen Rothenberg, Clarissa Sligh, Harvey Pekar, or Matt Siber, and discuss the ways in which they use text or letters as graphic, informational, and aesthetic elements.
List of objects


Details: 1922.404, 1914.604, 1923.112

Cylinder Seal with Hero Figure, 2750–2334 BC. Mesopotamia, Sumer, Early Dynastic II/III. White stone; 2.6 x 1.5 cm. Educational Purchase Fund 1915.140

Saluting Protective Spirit, 883–859 BC. Neo-Assyrian, Iraq, Nimrud, Northwest Palace. Gypsum; 229.9 x 137 cm. Purchase from the J. H. Wade Fund 1943.246 (COVER)

Tablet, about 541 BC. Akkadian cuneiform fragment. Mesopotamia, Babylon. Clay; 1.91 x 6.35 cm. Educational Purchase Fund 1915.127

Book of the Dead of Hori (detail), 1069–945 BC. Egypt, New Kingdom, Dynasty 21. Papyrus; 23 x 158 cm. The Charles W. Harkness Endowment Fund 1921.1032

Modern papyrus sample. Photography by Ben Hauser

Shawabty of Djehutyirdisu, 360–342 BC. Egypt. Late Period, Dynasty 30, reign of Nectanebo II. Pale green faience with hieroglyphic writing; 21 x 5.5 cm. Bequest of James Parmelee 1940.616

Leaf from Excerpts from the Evangelists, 1390. Byzantine Greek. Calligraphy on chain lined paper; 30.64 x 21.11 cm. Educational Purchase Fund 1949.344

Prayer Niche (Mihrab), in the style of the early 1600s. Isfahan, Iran. Ceramic mosaic; 290.7 x 245.3 cm. Gift of Katharine Holden Thayer 1962.23

Leaf from Shahnama of Firdausi (detail), 1520. Persian poetic text in cursive shekasteh nastaliq calligraphic style on paper; 28.9 x 21 cm. Educational Purchase Fund 1928.796

Calendar Page from a Book of Hours, 1480. France. Painting with text in French on parchment; 17.8 x 12.4 cm. Educational Purchase Fund 1949.351


ABC Book Illustrated with Pictures of Birds and Animals, 1924. America, Cleveland, Ohio. Gift of Fairmount Jr. High School through Sarah Clark 1929.1026