7

RECORDKEEPING & HISTORY

BIG HISTORY PROJECT
RECORDKEEPING & HISTORY

HOW WE CHRONICLE THE PAST

By David Christian, adapted by Newsela
Many species note the passing of time, but only humans can share memories of past events and turn them into stories or “histories.”
What is history anyway?

As humans have progressed, we have discovered more precise ways of keeping track of time. We have also developed more accurate ways of keeping records and recording history.

What exactly is history? Let’s agree that it means “a shared knowledge of the past.”

Why is it important to know about the past? How does that help us?
Do animals need history? Did our ancestors have a sense of history in the Paleolithic era? How has that sense changed over time?

How do animals and plants “do” history?

All living things carry “memories” of the past. Animals need to be able to keep track of the seasons so they know when to hibernate, when to hunt, and when to have children. Many rodents and birds store nuts and other food in special hiding places. They need to remember where they stashed them so they can find them months later. Wolves mark the perimeters of their turf. It creates a sort of record that says to other wolf packs: “This is owned by the BHP pack. Keep out!”

Even plants seem to record the passing of time. If you slice through a tree, you’ll see “growth rings.” Every year a new layer grows just under the bark. There is often a light part formed early in the year and a darker part that forms later. Each ring represents one year of growth.

Rings are more noticeable in a region with lots of seasonal changes. Wet seasons typically produce thicker rings than dry seasons. That enables us to often figure out the exact year in which each layer was formed. Dendrochronologists — the scientists who study growth rings — cut trees open. They can date trees by counting the rings. They can also see evidence of climatic events. Droughts or forest fires will also show up in the rings.

But “tracking the past” isn’t the same as having a “memory” of the past. A tree ring might show the date of a major fire. But the tree wouldn’t respond if I asked, “Do you remember the great fire of 1730?” Only humans can share their knowledge of the past.
The first histories

We don’t really know when humans first began to share their knowledge of the past. But our understanding of collective learning suggests that they probably did so early on. We have assumed that even early humans were capable of collective learning. If this is true, then we must assume that they could share ideas. Sure, they could describe where water holes or lions are. But they’d also be able to talk about last year’s bush fire. Maybe they discussed the fight that took place with the people who live beyond the river. They might even talk of earlier geologic events.

All modern foraging societies tell stories about the past. Many stories focused on ancestors. Others explained the creation of what’s around us. Indeed, most humans tell “origin stories.” And origin stories are history because they share ideas about the world.

Here is the beginning of an Australian Aboriginal origin story:

In the beginning the Earth was a bare plain. All was dark. There was no life, no death. The Sun, the Moon, and the stars slept beneath the Earth. All the eternal ancestors slept there, too. At last they woke themselves out of their own eternity and broke through to the surface.

We don’t know if the people who told this story believed it was literally true. We do know it provided a way of thinking about how things came to be as they are. Here is the same origin story recounting the creation of humans:

With their great stone knives, the Ungambikula carved heads, bodies, legs, and arms out of the bundles. They made the faces and the hands and feet. At last human beings were finished.

History based on memory

At ancient sites like Blombos Cave in South Africa, we have discovered human remains from more than 70,000 years ago. They lived and worked there and made different colored paints.

But if there were historians in Blombos Cave, they didn’t write anything down. No written records were found. We know from studying hunter-gatherers today that people who cannot write down information rely on “oral tradition.” To remember oral histories, storytellers developed powerful ways of remembering.

Ancient storytellers could tell stories for days. Poets had many techniques to help them recall long epic poems. Then they could recite them at will. The Greek poet Homer used rhymes and regular rhythms to help him remember his epics.
In ancient Greece, Mnemosyne was known as the goddess of memory. The
word mnemonic, which means “a technique for remembering things,” comes
from her name. And even in societies with writing, memory remained an
admired skill. The Roman philosopher Augustine of Hippo had a friend who
could recite backward the works of the poet Virgil. In the Muslim world it
was common to memorize the entire Qur’an. As history progressed, people
continued to develop ways of memorizing.

The importance of evidence

As societies advanced they became more interconnected. People began to
compare different accounts of the past. They became more concerned with
a crucial question: Which version is truest?

Let’s look at a modern portrayal of human origins: “Our hominin ancestors
evolved over several million years. During the last million years, species
appeared with very large brains. Our own species, Homo sapiens, probably
appeared about 200,000 years ago. We know this because we have fossil
remains of individuals that seem identical to modern humans, and we begin
to find evidence of technological innovation and symbolic activity.” I wrote
that. But it is typical of today’s history writing. You can tell because it is so
concerned with evidence. There are often competing versions of the past. If
you want to be taken seriously, you have to give evidence for yours.

We can already see this growing concern with evidence 2,000 years ago.
This period was the “classical era.” Evidence appears in the writings of
the great historians Herodotus of Greece and China’s Sima Qian. Both lived
in worlds where different peoples made different claims about the past.
As a result, both understood the need to base their accounts of the past on
evidence wherever possible.

Herodotus (c. 484 — 425 BCE) traveled widely in the eastern Mediterranean.
He also went to Olbia, on the northern shores of the Black Sea. There he
met Scythian nomads. Modern archaeologists have shown that his gruesome
accounts of Scythian royal burials were very accurate. He also described
some Scythian origin stories. And he did so with all the skepticism of a mod-
ern anthropologist.

About three centuries later, the Chinese historian Sima Qian (c. 145 — 86
BCE) described the Xiongnu people. These nomads lived north of China, in
Mongolia. He wrote that “they move about in search of water and pasture
and have no walled cities or fixed dwellings, nor do they engage in any kind
of agriculture.” His account was not made up. It was based on the writings
and memories of many Chinese travelers who had visited Mongolia.

History based on written records

Today, we don’t expect history writing to be based on the memory of the
historian. We expect it to rely on evidence. And written evidence is most
important. I think you’d worry if a history teacher said, “Well, I think World
War I began in about 1914 because that’s what my grandmother’s dad told
her.”

History based on written records appears quite late in human history. The
first written records date back a little more than 5,000 years in Egypt
and ancient Sumer. The earliest Sumerian records were made using reeds.
They were cut at an angle to make triangle-shaped (cuneiform) marks on
clay. The clay tablets were then baked until hard. Many of these clay tablets
survived. Scholars today can still read them. The earliest records were
lists of property, cattle, sheep, and wheat. But even that is history of a sort.

Within a few centuries, we begin to find elaborate written chronicles. The
great Sumerian epic of Gilgamesh, the king of Uruk, was one of the first.
We also find stories of floods, of gods, and of the creation of the world.
Some of these stories made their way into the Jewish Scriptures, the
Christian Bible, and the Muslim Qur’an.

Wherever writing appeared it was used to write accounts of the past. At the
time most people were not able to read or write. Despite this, those
accounts started to become the basis for further historical accounts. Written
documents were seen as more trustworthy than oral stories. Once some-
thing was written down it was much harder to keep changing the story.
Written history really progressed during the Enlightenment. In the eighteenth century, history based on evidence became truly important. All professional historians today know they must get the history right. That means checking all the details against hard evidence. Written documents are often a very good form of evidence.

But documents have some serious limitations. Documents often only tell us about the lives of the rich and powerful. That’s because until a century or two ago most other people could not read or write. So, ordinary people weren’t well recorded in early documents.

Sometimes, archaeology and anthropology can help us. It’s possible to understand something about earlier times without the help of documents. Ordinary people may not have left written records. But they left behind houses, clothes, bits of pottery, or skeletons. Archaeologists and anthropologists can study these objects. Or they may use studies of similar modern societies for hints about how ordinary people lived in the past.

Written records have another serious limitation. They only reach back a few thousand years. It wasn’t until the 1950s that we learned to date events that happened before written records. In the 1950s, the American chemist Willard Libby found a way to date events using science. He discovered that the breakdown of radioactive materials could date objects. If materials contain carbon they can be dated. Luckily carbon is in nearly every living thing. This includes bones and food remains. Other methods soon emerged for dating events in the distant past. Dating techniques can now take us right back to the Big Bang. Those dates make it possible for us to write Big History.
Have we gotten better at studying the past?

Today we have access to better records. We have more types of evidence about the past than ever before. We now have so much evidence about recent centuries that historians will never be able to use it all. So in some sense it seems that we must be doing history better than our ancestors did.

But maybe we lost something when we began writing down history? Haven’t we lost a sense of engagement with the past that existed in oral cultures? It must have been more exciting when history was always told as a story. Almost 2,500 years ago, Plato described this sense of loss in his book the Phaedrus. In this dialogue, Socrates tells of Thoth, an Egyptian god. Thoth claimed to have invented writing. Socrates says Thoth bragged that his invention would improve people’s memories. Another Egyptian god, King Thamus, called this nonsense:

This invention will produce forgetfulness in the minds of those who learn to use it. They will no longer practice their memory. Their trust in writing, produced by external characters which are not part of themselves, will discourage the use of their own memory within them. You have invented an elixir not of memory but of reminding. You offer your pupils the appearance of wisdom, not true wisdom. They will read many things without instruction. And they will therefore seem to know many things. In fact, they will be for the most part ignorant... since they are not wise, but only appear wise.

(Plato in Twelve Volumes, sections 275a–275b)

Maybe both arguments have a point? Maybe speech and memory have distinct, perhaps irreplaceable, advantages over writing. Perhaps, though, writing has both broadened and sharpened our collective memory.
Sources


Image credits

A Babylonian astronomical calendar, c. 1000 BCE © Science Source

Growth rings of a tree © Georgette Douwma / Photo Researchers, Inc.

Detail from the fifth-century Ambrosian *Iliad* © Heritage Images/CORBIS

An illustration of Herodotus reading his history by Heinrich Leutemann, 1885 © Bettmann/CORBIS

A relief depicting Thoth from the tomb of Chamuas in Luxor, Egypt, c. 1200–1085 BCE © Gian Berto Vanni/CORBIS
Articles leveled by Newsela have been adjusted along several dimensions of text complexity including sentence structure, vocabulary and organization. The number followed by L indicates the Lexile measure of the article. For more information on Lexile measures and how they correspond to grade levels: http://www.lexile.com/about-lexile/lexile-overview/

To learn more about Newsela, visit www.newsela.com/about.

The Lexile® Framework for Reading
The Lexile® Framework for Reading evaluates reading ability and text complexity on the same developmental scale. Unlike other measurement systems, the Lexile Framework determines reading ability based on actual assessments, rather than generalized age or grade levels. Recognized as the standard for matching readers with texts, tens of millions of students worldwide receive a Lexile measure that helps them find targeted readings from the more than 100 million articles, books and websites that have been measured. Lexile measures connect learners of all ages with resources at the right level of challenge and monitors their progress toward state and national proficiency standards. More information about the Lexile® Framework can be found at www.Lexile.com.