

I. What is History?

History: the awesome *written* story of humanities struggles and triumphs through time.



II. Why Should We Care About History? There are two reasons.

1) *“Those that cannot remember the past are condemned to repeat it.”–George Santayana*

- ⇒ Were the people of 5,000 years ago any different than the people of today? The answer is no they were not. The school children of ancient Rome and Egypt misbehaved in the same ways that you do today. People had the same hopes, passions, dreams and fears. Certainly we have different ways of living and different technologies but, at the core, in our souls, we are the same.
- ⇒ Were your schoolteachers or your parents really any different than what you are? Don't you think we messed up, got in trouble, felt stupid or worried about what other people thought about us. In fact you could probably learn from how we messed up. That is if you would listen.
- ⇒ There were great civilizations in the past, Egypt, Greece and Rome that lasted for thousands of years. Our country has only existed for about 230 years. We must either learn from the mistakes of these past civilizations or we will become like them – THE PAST.

2) To completely understand our society you must understand the past that made it, just as to know a person you must understand their childhood and experiences.

- ⇒ Everything in our culture and civilization is a result of the past. We try not to repeat our mistakes, but we do copy what is good and useful. Our laws, religion, government, our technology, everything, even sewage and garbage pick-up is something we have learned how to do as a civilization over time. Imagine our civilization as a child always learning, always growing because it learns from its past. If you do not know the past well, then see what Cicero says below.

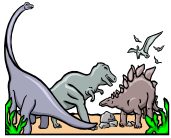
“To not know the past is to forever remain a child” – Cicero

III. Alright so how much history do we know? Well not much. Let's compare.



The Earth is 4 billion years old or so geologists tell us.

Geologists: scientists who study the earth (rocks).



By comparison dinosaurs ruled the earth for 200 million years

Paleontologists: scientists who study plants and animals of the distant past.



Humans? Ha! The earliest remains we find of our ancestors is from about 2.5 million years ago. Our earliest ancestors couldn't read or write so therefore much of this part of humanity's story is known as:

Prehistory: human history before writing was developed. So how long have humans been able to write?



History begins with the first writing which, at the earliest, begins about 5,000 years ago. Wow humans have been around for 2 million years and yet only 5,000 of it is written down. But it's worse than that. Many of our earliest human writings have been lost or destroyed, and thus our knowledge of early civilizations is limited. Much of our early history is clouded or fuzzy. Kind of like the dust bunnies under your bed. They exist and you can see them, but they are hard to grab on to. Mr. Herman calls this:

Fuzzy History: history for which we only have partial records and is thus not well understood. Therefore we could be repeating all kinds of mistakes ☹️

IV. How do we learn more about prehistory and this fuzzy stuff?

Don't despair we can still learn more about ourselves but its just more complicated.

Here are *three ways* we can still learn about the unwritten past. 😊

1) Archaeology: the study of the remains and artifacts of past civilizations.

artifacts: item from the past - pottery, tools, clothing, etc.

Archaeologists scour and dig into the earth looking for the homes and remains of our past ancestors. From the artifacts they find they can piece together a picture of how our ancestor's lived just as if you went through your neighbor's garbage you could piece together a picture of their life. I like to call archaeologists glorified garbage men because of this.

2) Anthropology: the study how people and cultures live today.

How can anthropologists explain the past by studying people today? Simple many people today still live very primitively. In fact many people in the rainforests and deserts of the world live exactly as our ancestors probably lived thousands of years ago. By studying these people we get an idea of how we survived in prehistoric times.

Aborigines: hunter-gatherers who live in the deserts of Australia.

Bushmen: hunter-gatherers of the Kalahari desert in south Africa.

3) Legends: great stories that once were historical truth but have become distorted with time.

Before we developed a written language our ancestors tried to preserve their history through stories. Great battles or events would be remembered and passed down from generation to generation. Over thousands of years, however, we believe the stories would slowly be distorted until the truth in them is hard to find, but it's still in there. You just have to find it.

⇒ *Examples of legends:* King Arthur, Robin Hood, Atlantis, Flood Stories

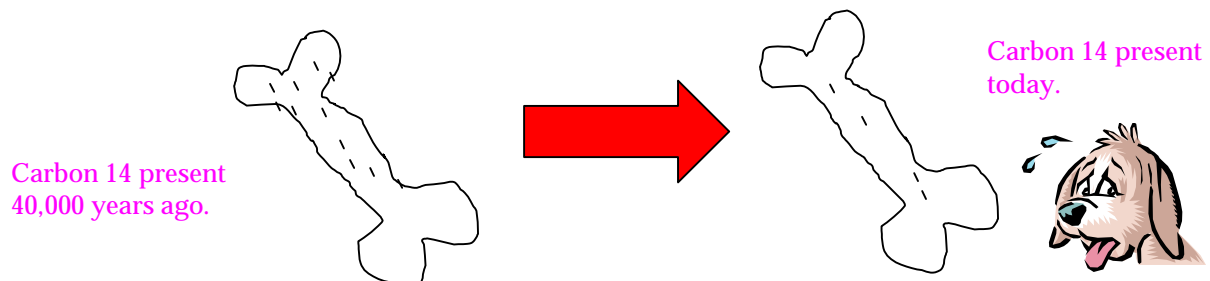
⇒ All cultures from all over the world have a flood story. The one you know is Noah's Ark. Well if all cultures have a flood story then what's the truth? Probably that there really was a great, catastrophic flood that affected much of our planet.



V. Alright so that's how we find out about prehistoric times, but how do archaeologists know how old the artifacts are that they find?

Well the answer to this one is kind of tricky. We don't have a fail-safe way of dating objects that we recover out of the ground. We have many ways of doing it but none of them are perfect. We have pollen analysis, tree ring dating, uranium decay, and the list goes on and on. These are the two that I want you to be aware of, but keep in mind there are other ways.

- 1) Strata dating:** Over long periods of time objects that were once on the surface slowly settle deeper and deeper into the ground. Also later generations often build on top of older ruins. Thus by how deeply the object is buried, or the layer of rock strata that it is located in, we can tell how old an artifact is. The closer to the surface an object is buried the more recent and the deeper the older it is. Thus we would expect dinosaur bones to be buried a lot deeper than the first human remains, and the artifacts of early civilizations to be buried more deeply than artifacts from forty years ago. Generally this works fairly well, but because of natural events – earthquakes, floods, the burrowing of animals- it's not perfect.
- 2) Carbon 14 dating:** This method was discovered by scientist Willard Libby. Carbon 14 is a specific type of carbon, or an isotope of carbon. Carbon 14 is radioactive and all living things contain it. (Its only slightly radioactive so do not panic.) Because carbon 14 is radioactive, it decays or disappears over time. While we are alive the amount of carbon 14 in our bodies stays constant as we constantly replenish our supply by eating. However after we die the carbon 14 in our bodies is no longer replenished, and it slowly fades from our bones. The key is it decays very, very slowly. Thus when we find human, animal or plant remains, we can date how old they are by measuring how much carbon 14 is left in them. Scientists believe this method of dating is very accurate, but it only works for objects from the last 50,000 years and it won't work on stone, metal or pottery. It only works on things that were once alive like leather, grape stains or cotton clothing.



VI. We've got the bones, we kind of know how old they are, but what do they tell us about us?

Well remember the earliest humans appeared about 2.5 million years ago. Interestingly, according to the bones, our earliest ancestors didn't exactly look like us. Their bone thickness, the shape of their bodies and cranial size were different than yours or mine. The skeletons are certainly human but not exactly like us. To explain this scientists have developed a theory to try and make sense of this puzzle. Well first things first, what's a theory?

Theory: it's an idea or a proposed explanation to explain evidence. Theories are like good educated guesses. Theories can be elevated to fact after enough evidence seems to support its explanation.

The theory scientists have about people and animals because of the different bones we dig up is called the:

Theory of Evolution: theory that all living things adapt and change over long periods of time due to their environment.

The earliest dated human remains are found in south central Africa. It is there that we find the first of our ancestors that scientists call human. The following is a list of our evolutionary ancestors starting with the earliest:

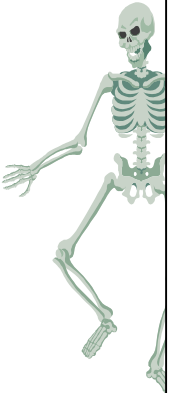
Homo habilis: name means *man with ability*. Appeared 2.5 million years ago, made crude stone tools, probably wore no clothing and could not use fire.

Homo erectus: name means *man who walks upright*. Lived around 500,000 years ago. Made tools, wore clothing, used fire, and probably had simple speech.

Homo sapiens neanderthal: homo sapien means *man who thinks*. Neanderthal comes after the German town Neander where these bones were first found. Simply known as Neanderthals they were incredibly powerful men of the ice age. Shorter but stockier than the men of today they were extremely strong. Their brains were as large as ours but we don't believe as advanced. They lived from 100,000 – 40,000 years ago. Why they died out is a mystery.

Homo sapiens cro-magnon: modern humans. They appeared around 40,000 years ago to the present day. Cro-magnons lived and survived the last years of the ice age which we believe ended about 10,000 years ago.

VII. Cool Evolutionary Thoughts: Whoooooa!



We find the earliest human remains of homo habilis in central Africa right around the equator. Although we just find their bones and we don't have any skin or tissue samples, because of the constant direct sunlight in this region of the world, it makes sense that your first ancestors were dark-skinned.

The human body is 70% water. In fact it's 70% salt water. Well the salt water in your body just happens to contain the exact same salt composition as the world's oceans did about 100 million years ago. Therefore you are walking around as a big container of ocean water. Combine that with the fact that some people are born with webbed toes and that all babies can swim at birth causes some scientists to theorize that if you went far enough back into time, maybe hundreds of millions of years, you would find our ancestors living in the oceans. We never could live without the ocean so when we left it, we took it with us, and we still carry it around today.

Neanderthals are a different type of homo sapien human being. They are to us as black bears are to brown bears. If you saw a neanderthal walking the streets of Titusville, dressed in a normal fashion, you probably wouldn't give him a second look.

VIII. How were these primitive humans even able to survive. After all compared to animals we are weak, naked and slow.

Humans have three advantages over the animal kingdom which have allowed us to tame and throttle the natural world.

- 1) **Walk upright** – makes us slower but gives us two free arms to throw or make stuff.
- 2) **Thumbs** – our thumbs are engineering marvels. They allow us a sure, firm grip.
- 3) **Brains** – perhaps dolphins are smarter, but they can't build death rays with flippers.

Combine these three gifts, and we don't need claws, or fur, or need to see in the dark, or have a great sense of smell. With these three things we can make tools.

Tools: what makes us unique among creatures on this planet. It defines us. Everything about us is a tool to better enable us to survive and prosper. Other animals might use tools but we are unique in that we make them!

- ⇒ Important early tools of homo erectus, neanderthals and cro-magnons – flake tools, language, fire, and clothing.

IX. Humanity emerges out of Africa to face the last Ice Age!

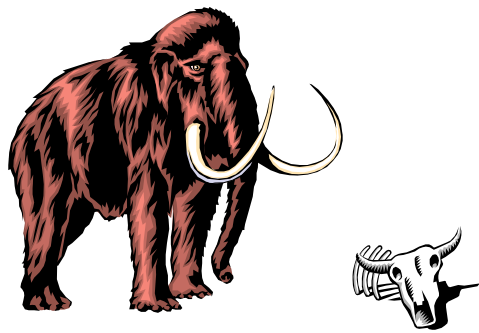
Well these early humans would need all the ingenuity and tools they could muster to survive a harsh world. Early humans didn't live in towns or villages, rather they were nomadic, they moved from place to place hunting and gathering their food. One of our more brilliant anthropologists named this lifestyle as:

Hunter-gathering: moving from place to place to hunt and gather food.

In the course of this hunting and gathering, early humans slowly but inexorably spread out of Africa into Europe and Asia. Moving from Africa they found much harsher climates especially since the earth was still in the throes of the last great ice age.

Ice Age: period when great glaciers covered much of the earth's surface. Ended just 10,000 years after lasting over 1 million years.

- ⇒ No one knows why ice ages happen or even if this one is over for sure. Even during ice ages glaciers can retreat and advance dramatically over thousands of years. Anyway the earth has had about half a dozen great ice ages, and our ancestors had to battle through the last one.
- ⇒ The ice age was cold, but a time of great giants in the animal world. Some of them humans hunted, and others surely hunted humans. Animals like the woolly mammoths, the saber-toothed tigers, wooly rhinoceros, giant elk, giant sloths, giant beaver, and the list goes on and on. Neanderthals and these animals were specially adapted to this colder world, and when the ice age ended they also seemingly disappeared, leaving us with many questions as to why they are gone.



⇒ So much of the earth's seas and oceans were locked up into glacier ice over top of the land that earth's continents looked much different than they do today. Ocean levels were 300 feet lower than they are today, thus creating land bridges between Asia and Australia, and most notably for us, between North America and Asia where today you see the Bering Strait. Cro-Magnons, probably following the reindeer herds, began crossing over about 30,000 years ago populating the Americas with the people that would become the great Native American Indian tribes.

Land Bridge: bridge of land, exposed during the ice age, which allowed humans to cross into the Americas.

X. Prehistoric Belief: Humans have populated the far corners of the globe thriving as hunter-gatherers, but what did they believe?

⇒ How in the world could we possibly know the spiritual beliefs of people who didn't leave any written records? Well in truth we can't know for sure. However, anthropologists study modern day primitive peoples in the rainforests and deserts to perhaps give us a peek at what we all may have once believed spiritually. Did early humans believe anything at all? Well even neanderthals buried their dead and placed possessions into the grave. They even tied the legs together of their dead. Perhaps to insure that ghosts didn't follow and haunt them? One of the earliest hints at the spiritual beliefs of cro-magnon people is also one of the finest examples of prehistoric artwork.

Lasceaux cave paintings: paintings of hundreds of animals. Many of the animals are being hunted while even more are pregnant.

⇒ Why are the animals pregnant? Well probably because for these hunter-gatherers their very survival depended on these herds. If their numbers dwindled they would starve. The paintings, many anthropologists believe, were part of a magical ceremony to ensure the herds continued to thrive. And that gets us to what we think our ancestors believed in spiritually. If you're familiar with Native American belief then this shouldn't sound much different and many primitive people still believe in this today.

Animism: belief that everything, whether it's living or not, has a spirit. Yes that means rocks, trees, animals, the wind, rain, sun, moon, stars, and Mother Earth all have spirits according to this belief.

⇒ What is totally cool about animism is that if everything is alive and has a spirit then many believed you could also communicate with these spirits. Well if you can talk to rocks and trees and to the wind and the rains, then maybe just maybe, you could ask them favors, or get them to do what you wanted them to through magic!

Imitative Magic: if you imitate the action you want to happen, then it will happen! Examples – rain dance, paint pregnant animals on a cave wall, don't break a mirror while you're looking in it.



Contagious Magic: a part of someone or something, remains a part of that thing. Examples – your hair, teeth, nails, clothing, your shadow – voodoo dolls.



Think its foolish nonsense? Ha silly knave then explain this. Not only do primitive people today believe this stuff, but we have proof that your ancestors did too. The proof of course is in the silly superstitions that we still cling to which harken back to our past belief in animism and magic. Look at these common superstitions and find the imitative and contagious magic within them. Why are these relics still around? Because your ancestors once believed in magic, and these superstitions are the echo of that bygone day!

- black cats crossing path
- lucky rabbit's foot
- breaking mirrors
- step on a crack break mom's back
- weeping willows
- walking under ladder
- hold your breath when you go by a graveyard

The End of Mr. Herman's Prehistory Unit – Check out the links and study guide!