Chapter 1 - Prehistory Transcript

Namikas Chapter 1 - Prehistory.mp3

Transcript

Speaker 1

The Louisiana Board of Regents e-learning Innovation Grants Program presents learn with podcasts, creating podcast lectures to enhance dual enrollment students. Engagement with history. Today we look at the question who are we and where do we come from? This is a trendy question, but also one continuously asked. We all seem to ask this very same question at one time or. Other it starts from the idea that we as humans are all the same and have the same basic interest, but luckily I have with me today, associate professor of history at Baton Rouge Community College, Lisa Namikas, now Professor Namikas, is there a political or pop culture reference that you can start us off with to help ask the question? Who are we and where do we come from?

Speaker 2

There are so many different references to this question, I'll just list a few President Joe Biden at a graduation speech just last year, May 2022. He asked the question, who are we? What do we stand for? What do we believe? And more importantly, he asked, where are we going? Where are we? Going to be and also too, if you like music and you like the Boyzone band. In 2014 they had a song that included the words every battle, every scar. Hear us shouting from our hearts. This is who we are.

Speaker 1

I like that reference.

Speaker 2

So we didn't see that. Yeah, that it's with us. It's present in so many different ways. The answer is all about how we make sense of the world. If you think about it too, it all begins with the idea of. In essence, people studying hominid evolution ask what makes us human.

Speaker 1

Now that's interesting. So can you explain to us what is evolution exactly?

Speaker 2

Evolution is the idea that organisms or any living thing develop different characteristics depending on the environment in which they live. So the big question here is that early hominids, which include all primates like all apes and. Early hominids evolved and eventually became who we are today. The Biological Classification officially is sapien sapiens.

Speaker 1

Now it's said that apes and humans are related. I mean, I hear this all the time, but Professor, is this real?

Speaker 2

Well, it is true that apes and humans are related, but that's a view that is a bit simplistic. The DNA we share with chimpanzees tell us. That we are related. Created in turn, we share much less DNA with gorillas. We did not evolve from chimpanzees, though we share a common ancestor that lived 10 million years ago and 10 million years ago is a long time. That's why we don't look so much alike anymore. So what does this mean? Where do we come from? Anthropologists are one group of scientists who ask these questions.

Speaker 1

Anthropologists, you say, well, who are they?

Speaker 2

Anthropologists study the origins of human development. They use archaeological remains, language and cultural artifacts to understand our earliest life. Anthropologists also use DNA studies to confirm the classifications, or the genus really begins with Australopithecus.

Speaker 1

Uh, sure. Like what?

Speaker 2

Did you know that the most famous specimen of Australopithecus is Lucy or Dinknesh by her Ethiopian name? She dates back to two 3.2 million years ago.

Speaker 1

Yeah, that name does sound familiar, but why is she called Lucy and not Dinesh?

Speaker 2

European researchers discovered her listening and they were listening to The Beatles song. Lucy in the sky with diamonds and the name Lucy stuck. The problem is when we hear the name Lucy, which is typically the name for a white girl, it seems that whites are claiming the history of evolution, but Dinesh emphasizes her African origins. This is important because all hominids. Originated in Africa and the African name Dinknesh means wondrous, and it's much more accurate. Ethiopia really is the land of origins, after all.

Speaker 1

OK, wait, so how did evolution actually?

Speaker 2

For a long time, under the lead of anthropologists, we have viewed hominid evolution through three characteristics. These three characteristics are one how advanced was the tool use? Two, how fully upright the hominid walked related to the pelvic bone and shape, and three. How large was the brain size? So we traced the topies as evolving through a series of forms. First, we see Australopithecus about 3.2 million years ago. Then we see phobia this about 2.3 million years ago. habilis means handyman or hand human, a name designed to emphasize the more advanced tool use and then about two million

years ago, we see eroticism as a form that's walking fully upright. Later in this evolutionary process, we'll see sapiens about 300,000 years ago. It's very own genus, right? And are the term sapiens means wise humans, and it refers to the brain size, of course.

Speaker 1

So this seems all pretty logical and a bit of a natural way to see life change.

Speaker 2

It all seemed to be logical, but we're always learning new things. In 2013, there was a new hominid discovery and now we are beginning to question whether these three characteristics are the only way to see evolution.

Speaker 1

Wait, wait, hold on. So really, there was a new discovery. How do you discover something new from millions of years ago?

Speaker 2

In a cave in South Africa, researchers found new bones that date back only to about 350,000 years ago. But the strange thing is, some features seem to be more like Lucy or Dinesh than humans today. The discovery of naledi helps us ask new questions. We have someone right here in Louisiana. Her name is Doctor Juliette Brophy at LSU in the geography and Anthropology Department. She was one of those very researchers and she can tell us more about this exciting discovery.

Speaker 1

OK. I'd love to hear what she has to say.

Speaker 2

So I interviewed Dr. Brophy and I asked her to tell us how the homo naledi bones were found.

Speaker 3

There was a fall season, there was some recreational cavers in the fall of 2014 that were wandering around Dina Letty Chamber and came across these bones. They contacted a man. Called named Lee. Berger from the University of Witwatersrand. He put out a call for. These small body hominids. To help him. Excavate the site, he put out the call on. Facebook and you, but you basically had. To drop everything and. He, you know, he would fly to South Africa and you would be. He got tons of applications. But and he ended up with four men, four women and one. Male and the. Male dropped out, so it ended up being. Just female cavers. That were donated that the female dubbed these underground Astro. So they excavated for two weeks in the fall of 2014, and then another two weeks in the spring of. 2015 and they brought up. Just tons of fossils and as. They were excavating. They found that. The fossil concentration was so dense in some areas there were more bones than sediments in The Cave. That they had to switch to barefoot excavations, and these are very close quarters they had. There's one area called Superman's crawl where you literally have to lay on your stomach, and you have to turn your head to the side in order to slide through these regions. Then next that gets you to the area

called Dragons back where you have to climb up these jagged rocks in Or to get up and then down. Into the chute that leads to the daylight.

Speaker 2

And Doctor Brophy, can you tell us how you became involved in this research?

Speaker 3

So yes, I became involved in the. Research at hormonal naledi. Because I had a large data set. After I worked on also at the Cascadia I worked on the dentition to try to determine the classification of that species. And so I. Applied to work on the hormonal naledi. Workshop and was accepted as one of the researchers they. They had about 300 applications and they ended up accepting about 30 individuals from. 16 different countries. And so I was able. To help them to identify and describe and analyze what this species. Is based on the. Overall dentition, there was a big, large group of us that went down. And studied the, studied the teeth.

Speaker 2

Another question I asked Doctor Brophy is if she could explain to us the characteristics of homo naledi.
Speaker 3

Based on the analysis of the teeth, it looks like we have a minimum of 15 individuals and they're. Old and young, so we. Have a good mix of old and young and what we think male. And female as well. But some of the most unique. Characteristics of hormonal naledi are that has a really small. Brain size that. As you were told, dates to about 3:00. 100,000 years. And before we had seen this trajectory of brain size increasing over time and here this isn't one of the exceptions to the rule. In that the brain size isn't very. Big, but the shape of the. Skull is very globular and that's very much like a modern human skull. This is again the smaller brain size from our early australopithecines. That's not shaped the same way as they are with the genus. So this has a small brain, but shaped like a modern human. It also has these very versatile hands, so the wrists and the thumbs that has a finger like a thumb to finger ratio. Suggesting that it could have it would have had the ability to make tools. This is consistent. With other species. That do make tools, we just don't have any evidence of them of tools in their site right now. They had long legs just. Like we did and very. Human like feet. So it's they had so. Very bipedal but. And they would have. Walked very similar to how we would have walked. There are some primitive. Characteristics that make it also very interesting. It's the suite of traits that this species. Has that makes it so fascinating? I think it has somewhat primitive shoulders. So they probably would have walked with their shoulders a little. Bit higher up than we do. And the pelvis is very flared. To me, that's on very. Fasting right after the brain size, the very flared pelvis that. Looks to be morphologically a little bit like a 3,000,000 year old species Australopithecus operantis or more. Most. Famously known as Lucy. That dates to about 3,000,000. Years so that. Is definitely not. What we would have necessarily expected to. See in a young species. Found in southern Africa and the last. Thing is that the digits are. Curved so the fingers would have been curved. And so we think. That maybe this could have been. Used in climbing because he was. Climbing around the caves, but this is. Something we see consistent with individuals. Climbing around in trees, but. So it's a mix of. Primitive or ancestral older traits. Combined with these more derived or more like. Modern human traits.

Speaker 2

Doctor Brophy, can you sum up for us to what we can learn about evolution from homo naledi?

Speaker 3

This has huge implications for human evolution in that we kind of have to rethink what the word. What we mean by the genus homo? And so one of those is that. But the brain size we have consistently said, oh, it's the brain size increase or over time, the brain size increases as we get closer in modern humans. So now we have a species at 300,000 years that doesn't have that really large brain. So we have to change the definition to talk about the reorganization of the brain. And that's what we think is more important. Then the overall increase in. Brain size relative to the. Rest of the. Body the second one is that we have to look at. The tools that were found in southern Africa, there's. Lots of sites that. Are found there that don't have a hominid. Or human or homo ancestor that. Is directly associated with those stone tools. So we have. To leave open the possibility that homo naledi could have been involved in making.

Speaker

Those stone tools.

Speaker 3

A third thing that changes with human evolution is that with our perspective is that we now have solid evidence of two species living at the same time, 2 homeo species living at the same time in Africa. We did not have this before homo naledi. The current evidence the newest evidence? That we have. Anatomically modern home sapiens, found at 300,000 years ago in Morocco at a site called Jebel or Hood, and this overlaps with. homo naledi in South Africa. Now, Morocco was really far north. South Africa is very far. South, but we did not. Have evidence of two homeo species living at the same time in Africa before, whereas we have that evidence in other in other areas so that to me is also fascinating. We have this. Coexistence of species.

Speaker 2

So as Doctor Brophy tells us, we really do have a lot left to learn, but the exciting thing is particularly that she leaves us with the idea that there are several species from the genus that probably coexisted.

Speaker 1

So what about the Neanderthals? I mean, we were talking about them earlier. Didn't they coexist with modern humans? Who were they after all?

Speaker 2

Within Neanderthals are considered the closest human relative, some researchers even call them human homo sapiens and Neanderthals branched off from a common ancestor even earlier than homiletics, perhaps around 700,000 years ago. And the Neanderthals are considered to have existed in themselves about 400,000 years ago. Neanderthals evolved in Europe and. Asia, they're not found in Africa. While sapiens evolve in Africa and then eventually left Africa to populate the rest. Of the world. It's thought in Europe around 40,000 years ago. That there were some. Coexistence of Neanderthals and sapiens, although this is around the time that the Neanderthals die out too.

Speaker 1

Well, this is all so fascinating. What else do we know about this?

Speaker 2

Homeo sapiens and Neanderthals even share some DNA, meaning that some of their encounters were pretty intimate, and some of us have 2% of Neanderthal DNA. But Neanderthals have a strong like Eyebrow Ridge, and they're relatively short, with wide hips, usually portrayed with a light hair covering their larger nose. Moistened and warmed the air so that helped their stalk of your bodies. And it's not fair to say by the way, that they were rude or not very smart, like your little brother who calls your best friend, a Neanderthal trying to be mean. Or tease him. The Neanderthals were very smart. They could make fire jewelry out of eagle talons and ivory, and painted their bodies, and they were voracious meat eaters. There are new findings of Neanderthals and other early humans all the time, so if you're exploring caves, especially in Europe, watch out for them. Even IN 2022 A Neanderthal family was found in a Russian cave in Siberia. It was a father, his daughter and some other relatives. They, like most, lived in small groups.

Speaker 1

The initials are so cool to learn about, I'll never again insult somebody by calling them that name. In fact, they seem a lot like us. But what were early sapiens? Or we, shall we say, early modern humans? Like, did they look the same as us, the ones that lived 40,000 years ago? Do you think we would even recognize them today?

Speaker 2

Well, yes and no. Early humans were hunter gatherers. They probably looked a lot like us, but we're more muscular. And the ones that survived were Hardy because of the hard work they had to do to keep themselves alive. Some examples of early human life are found in Lassoo, France, and are known as Cromagnon people. They ate a lot of different kinds of foods from nuts and berries to meat and fish. They made knives and axes, and they notched scrapers and had fine bone tools. They learned to smoke meat to preserve it for winter. In summer, they lived in tents. In winter, they built more permanent huts. They had the ability to talk and they use signs and symbols. They left some amazing and beautiful artwork on cave walls and they drew female figures. Obviously pregnant women, which certainly had a significance for fertility rights.

Speaker 1

Ah, I see now. It seems like the question of who we are and where we come from are important questions that we can still learn a lot about.

Speaker 2

It all comes down to what we think it means to be human. Even the earliest art and artifacts left behind seem to ask the same question we started out with. Who are we? Where did we come from and what is? Our purpose where are we? Going there are new discoveries all the time and we are constantly learning more about what makes us human. And remember some of those discoveries are by researchers right here in Louisiana like Doctor Brophy. We might have a long way to go to improve our understanding of

what it means to be human, but after all, we've come a long way. In this class, we'll talk a lot about our unique. Sisters, our unique practices and even our unique religions, but each culture has a worldview that reflects its place as part of the whole. It's our interconnectedness and our relationship with the world around us that really matters. What matters is what brings us together. In many ways, the ancients understood this better than we do. But in this class, let's try to unlock the mystery of our existence.

Speaker 4