

At Advent, we look into some new anthropological science on an old subject—
Where do we come from? Where did the Neanderthals go?
Unitarian Universalist Church of Olinda, Sunday December 3rd, 2017
Rev. Fran Dearman

[Author's Note: This sermon explores some anthropology questions. Please be advised: this is not my field. I'm skimming the surface of a deep field of study. If you are intrigued, as I was, then please refer back to some more authoritative source than my own ponderings here.]

INTRODUCTION

A short while ago I attended a Retreat with ministerial colleagues, over a dozen of us, in close conversation for about three days. I consider such opportunities very precious; I eagerly seek out their knowledge, experience, and wisdom.

One such piece of wisdom, about this season of Advent, came to me from a colleague out west, the Rev. Steven Epperson, settled these many years at the Vancouver Unitarian Church. Steven likes to begin the season of Advent reflecting on some new scientific development, and its ethical implications.

So I thought I'd look for something new in science to ponder.

I have been intrigued this past year with two separate questions in the field of Anthropology—the study of human origins, institutions, and beliefs.

There have been articles in the newspaper this past year about Canada's First Nations, and the Land Bridge theory, and how did the First Peoples arrive on this continent?

Also, there have been articles describing new findings about the Neanderthals, and what ever happened to them, anyhow?

PART ONE

I began by picking up a couple of textbooks from the University of Victoria bookstore, last summer. The first thing I learned is that college textbooks are very, very expensive!

The second thing I learned is that I'd already been scooped: remember Dan Brown, who wrote the "Da Vinci Code"—anybody read that? seen the movie? (Okay, I saw it three times.)

Anyway, Dan Brown published a novel earlier this year entitled "Origins", which is basically about the primordial soup and the beginnings of life on earth—millions of years earlier than my

own questions. But it goes to show that we humans can stay awake for stories about science, especially with sex, and death, violence, and a fast car chase tossed into the mix!

The third thing I learned, or re-learned, is that one does not hypothesize ahead of the data, as Isaac Newton and Sherlock Holmes were both fond of saying. We have more questions than answers. Assuming the data is reliable. For example, it's not much use looking for ancient DNA from the cells of what you think is a Neanderthal individual if you've accidentally mixed your own fingernail clippings into the batch.

The study of DNA in the remains of ancient ancestors can tell us how they were related to each other, and how we are related to them, and how humans have constantly migrated—constantly migrated—across the face of the earth, and the face of the waters.

PART TWO

At this point I am reminded of Stephen Jay Gould and his phrase, “non-overlapping magisteria”: that science and religion are two different fields, one dealing with facts, the other with human hope, purpose, and values. There does arise an overlap, at times, where perhaps a rigid and fearful religious orthodoxy attempts to confine science, or where a scientist thinks about values and ethics as beneficial for human survival as a species. It takes a village....

I am also reminded of some beautiful poetry, one of my favourites: Genesis chapter one, verse one: “In the beginning when God created the heavens and the earth, the earth was a formless void and darkness covered the face of the deep, while a wind from God swept over the face of the waters....” (NRSV Gen. I.1.) I am intrigued by that image, that metaphor, of the spirit breath sweeping across the waters....

We humans are curious about where we come from.

Do you remember the movie with Antonio Banderas, called “The 13th Warrior”? It was based on a novel by Michael Crichton entitled “Eaters of the Dead”. Michael Crichton published the book in 1976. He waited twenty years for it to be filmed; the movie was finally released in 1996. Me, I loved it, not least because much of it was filmed in my home province of British Columbia. I've seen it a dozen times.

There's a great story behind this book: the saga of Beowulf—an Anglo-Saxon write up of the legendary deeds of a Great hero in Scandinavia.

One of Crichton's friends was complaining bitterly that he had to teach a class on Beowulf. Boring, boring, boring. Not so, said Crichton! How could you call Beowulf boring? Heroes, villains, monsters, dismemberment—what's not to love! And to illustrate his point, Crichton wrote a novel of adventure, based on Beowulf. As a foil to Viking heroes he folded in the most civilized person of that era that he could imagine—an Arab poet from the Islamic capital of Baghdad, drawn from Arabic traveller's tales. And to make it a little more interesting, he included—Neanderthals.

A great mix, if untimely. Neanderthals were long gone, twenty thousand years long gone, by the time when Beowulf's story is set. But it served the needs of the narrative.

Here's the thing: between the time Crichton wrote the book, and the time he made the movie, the science on Neanderthals had shifted. DNA evidence was beginning to enter the picture, and the results were often contradictory. So Antonio Banderas, the actor who portrays the 13th warrior, the Islamic poet, spends much of his time in the movie spouting lines such as: it's a man; and then, it's not a man....

What makes us human?

Similarly, Jean Auel's 1980 book of popular fiction, "Clan of the Cave Bear", depended for its plot on the possibility that Cro-Magnon humans and Neanderthals could interbreed. And then the science shifted back and forth, saying they could not. Or could they? Nevertheless, she persisted, and wrote a series. Jean Auel has sold a lot of books.

What makes us human?

For me, the questions we ask of the data reveal as much about us and our times, our anxieties, our interests, as they do about ancient hominids and peoples.

PART THREE

In the anthropology textbooks, I found far more questions than answers. And I am still confused, but at a higher level, or so I hope!

So, my first intrigue: how did the First Peoples come to this continent?

The evidence begins with arrow heads—“fluted projectile points”—so-called Clovis cultures show at 13 kya (thousand years ago); (there’s another new thing I learned—a new abbreviation: kya is thousand years ago; and mya is million years ago). Artifacts even earlier than Clovis culture have been found, a pre-Clovis culture dating back to 15 kya. (ak/rl 288).

Fifteen thousand years is a very long time. Time immemorial....

The text book tells me that long ago, for a while, between Ice Ages, there arose a broad, fertile land bridge, which they called Beringia, across what we now call the Bering Strait; animals followed the grass, and people followed the animals, out of Siberia and into North America. How brave I feel they must have been. How very brave....

There would have been a Coastal Route, along the Pacific Ocean, and a Land Route, an ice-free corridor north and east of the mountain ranges, what we now call the Rockies.

An Atlantic Maritime Route from Europe was suggested in 2004, known as the “Solutrean Hypothesis”; but this theory was dismissed in 2012 as inconsistent with genetic evidence. Which leaves us with the Land Bridge across the Bering Strait. And a lot of stories about shipwrecked Buddhist monks, storm swept Polynesians, and Vikings gone astray. Stories, interesting, possible, but not entirely compelling, and not in the text book.

The textbook tells me: “Based on the low level of genetic diversity seen in modern Native Americans, researchers have argued that the founding population of the New World was small, numbering perhaps only 1,000 to 2,000 individuals.” (ak/rl 2008 citation; page 290).

Rough estimates suggest those one or two thousand individuals had become one million, and made their homes all across the Americas, North, South, and Central, by the time of Columbian contact, 1492. But they were not herders. European diseases acquired from close proximity to herd animals, diseases such as small pox, devastated the first peoples, with deaths estimated as more than eighty percent, in recurring epidemic waves over several hundred years.

Moving well beyond arrowheads, mitochondrial DNA suggests there was not just one migration from Siberia to the Americas, but multiple waves, at least three. Somewhere up in the Yukon, the text book tells me, is a place called the Bluefish Caves, where tools were found dating to about 25kya; published in 1999. (ak/rl 290) The Coastal or Pacific Route can be tracked in sites dating to 12 kya; but much of the “ancient coastlands are now submerged under hundreds of metres of water” (ak/rl 290). Recent findings keep pushing further back the dates for the earliest presence of humans on this continent.

What impressed me about the anthropology textbooks was their insistence on raising key questions for critical thinking at the end of each chapter.

Why does it matter to us whether the evidence points in one direction rather than another? What do our questions and our unacknowledged projections say about us?

For example, one textbook (St. Cloud p. 134) points out that artists stereotypically depict our cave-dwelling ancestors as unkempt; the prehistoric “bad hair day” is a visual stereotype that distances us from our ancestors. The artist is using hair as a visual marker. We have no evidence for how the old ones did their hair. Or how hairy they were.

Moving on, what about the Neanderthals, then?

The anthropology text books tell me that the Neanderthals lived 130 kya-35 kya. There is argument whether they are a separate species, or just a sub species, of homo sapiens. They were shorter and more robust than us, with heavier legs than ours, shorter limbs, and barrel chested.

We used to think they developed sinus cavities as a cold weather adaptation to help them get through the Ice Ages; that theory no longer holds. So that’s new to me. I had thought I could blame my winter sinus colds on my Neanderthal ancestors. Not so!

We know they used stone tools: flakes and cores, for scrapers and points. The bones of their hands suggest they used tools with more power than precision.

Their caves and rock shelters show ash from fires, and warmth from worked animal hides, but no evidence of sewn clothing.

They also suffered from periods of malnutrition, and joint diseases.

The trauma that marks their bones shows injuries to head and neck much as a modern rodeo rider would show; so we theorize they got in close to large animals, hunting. Accordingly, some anthropologists—some—would argue from the skeletal evidence of healed lesions and breaks, that the Neanderthals suffered injury, and survived it, that they were nurtured through illness and debility; and so we can read their recovery as evidence of compassion and community care.

Is that what makes us human?

There is some evidence of a flute. Or did a bear just bite it, to make the holes?

There is some evidence of ornamentation with worked shells, and paint. Maybe. But does that necessarily mean symbolic thought? Symbolic thought supports planning and communication. One can argue that it is possible they were equipped for speech, with a larynx and a hyoid bone.

It would seem that they buried their dead with deliberation. There is also some evidence of cannibalism. Was this for food? Or a ritual of removing flesh in preparation for burial? The jury is still out....

There is emerging mitochondrial and nuclear DNA evidence showing the presence of Neanderthal DNA in the modern human genome. There is a possibility that human-Neanderthal offspring, if male, might likely have been sterile hybrids.

And why do we care so much about the possibility of interbreeding, and how much of their DNA we carry? And how they died out? Neanderthal people seem to disappear from the record, around 45 kya in Asia, and 30 kya in most of Europe. The textbook tells me “There is no evidence that the replacement of Neanderthals by modern people involved conquest and extermination, although this has been proposed from time to time.” (St. Cloud 141))

The textbook tells me it not possible that Neanderthals simply evolved into modern people, based on the DNA record; that it is possible the Neanderthals did interbreed with modern people, to some extent.

Might they have been overwhelmed by diseases carried by modern peoples who followed them out of Africa? Or were they simply out-competed by people who were better equipped to adapt to changing circumstances? The evidence is at present insufficient.

I'm not sure why I care about the answers; but I do. I wonder why? Because of guilt, that I contribute to the extinction of so many endangered species as it is? Or because I fear my own species is at risk of extinction?

CONCLUSION

I close with this word from a colleague, the Rev. Melora Lynngood, co-minister at my home congregation in Victoria, where I attended the Sunday Service last weekend. First Victoria's theme during the month of November was about Ancestry and Ancestors. One needs to be careful about shaking the family tree; one never knows what'll fall out of those branches—good guys, bad guys, horse thieves.... You never know....

The Rev. Melora began with a children's story about carry-on baggage. She had this huge suitcase on the one hand, and on the other hand, a small haversack: she called them Ancestral Luggage and the Legacy Back Pack. Melora listed a few things and we got to decide what to stow in our Legacy Back Pack, and what we chose to leave behind.

The example of people who really listened to us? Shall we take that for a legacy? Or the example of folks who'd rather play with their smart phones than really listen, even while driving? Perhaps not.

We get to choose what we adopt as our legacy, and carry forward with us.

We get to choose.

I leave you with these words from Dan Brown, from his novel "Origins":

"May our philosophies keep pace with our technologies.
May our compassion keep pace with our powers.
And may love, not fear, be the engine of change." (Brown 413)

May it be so.

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