The deep history of white supremacist laws and Canada's Indian Residential Schools: agriculture, civilization, the Great Chain of Being and the Great Commission

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[Agriculture was] the worst mistake in human history. ... Hunter-gatherers practiced the most successful and longest-lasting life style in human history. ²

The average farmer worked harder than the average forager, and got a worse diet in return.

The Agricultural Revolution was history's greatest fraud....

This is the essence of the Agricultural Revolution: the ability to keep more people alive under worse conditions. ... No body agreed to this deal: the Agricultural Revolution was a trap. ...

If we accept a mere tenth of what animal-rights activists are claiming, then modern industrial agriculture might well be the greatest crime in history.³

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1. Introduction

After the completion of my work as General Legal Counsel with the Truth and Reconciliation Commission of Canada, I set upon a project of writing about all of the laws and court decisions that created, ended and litigated Canada's Indian Residential Schools from the beginning of the schools to the present.

Once I completed the above, I asked: what was happening in Canada's legal system that led to the creation of the Indian Residential Schools in the first place? What did the invention of modern international law have to do with England and France invading Canada? What did papal bulls of discovery have to do with Canada? What is meaning of "civilization"? What was the origin of law? What was the origin of racism? Why wasn't any of this included in my seven years of Canadian university education which culminated with a Master of Laws degree? Answering these questions has turned out to be a far more ambitious a project than I expected.

Here is my conclusion: any legal history of colonialism, the doctrine of discovery, indigenous peoples, Canada or Indian Residential Schools must investigate root causes. The root cause for our ideas of inequality and civilization is agriculture.

Agriculture is based on violence and hierarchy in a scale that hunter-gatherers could never possibly imagine. Agriculture starts with the idea of waging war against nature and against diversity. We seek propagation of a very few species of "domesticated" plants and animals to the exclusion of all else. We put ourselves above nature, and our domesticated species above natural diversity. We inflict violence to steal the lands that we want for our agriculture. We inflict violence to force people to provide the backbreaking labour that is necessary for our agriculture. We create a legal regime to justify all of this theft and violence. We create elites that declare white males to be superior to all others, and we rank life forms through what we call a Great Chain of Being. We worship hierarchy in all things. All of this is directly the result of agriculture.

Any legal history must explain to students how agriculture produced our current legal system, produced our monotheistic religions, how it dispossessed indigenous people, and how it made us believe that there is hierarchy in nature and between humans, with white males at the very top.

Words like civilization, colonialism, complex, development, discovery, imperialism, progress and sophisticated are all lies; more politely, they are euphemisms. I have concluded that the history of law in Canada is nothing less than the history of white supremacy, expressed and enforced by white legislators, laws, police, lawyers and courts. I have been shocked by the complete refusal of any of our historians to use the words "white supremacy" to describe our legal system - even the historians with the greatest empathy for indigenous and other persons of colour refuse to use these words.

Saying the words "white supremacy" is taboo. Saying that the history of Canada is and continues to be built on white supremacy is taboo. Saying that Canada's legal system, its history and its present, is fundamentally a system for enforcing white supremacy is taboo. Drawing the connection between agriculture, civilization, colonization, inequality, slavery, white supremacy and Canada's legal system is taboo. This paper and the ones to follow break through these taboos.

A Word About Vocabulary

This research has made me question the origins and meaning so many words: affirmative action, agriculture, best, capitalism, Caucasian, Christian, civilization, colonialism, commonwealth, complex, development, discovery, equality, freedom, Great Britain, imperialism, Indians, indigenous, law, monotheism, natural, progress, rights, *sapiens*, serf, slave, sophisticated, United Kingdom, villain. The list goes on.

Also, in this series of papers, I will not be capitalizing the words king, queen and pope (except at the beginning of a sentence) because the choice to capitalize them is a signal of European white supremacy and inequality. Further, I do not capitalize indigenous, white or black because they are each adjectives.

The First in a Series of Research Papers

This series of research papers traces Canada's history of white supremacy in law through five papers: part 1: agriculture and civilization; part 2: doctrine of discovery and other white supremacist doctrines; part 3: white supremacy in international law; part 4: white supremacist law in Canada between 1496 (John Cabot) – 1791 (Canada Act); and part 5: white supremacist law in Canada between 1791 (Canada Act) – 1960.

I have published another paper that separately traces the steps in Canada's glacial pace of civilizing our legal system, which covers events into the 21st century: "Why Did It Take So Long for Indian Residential School Claims to Come to Court? The Excruciatingly Gradual Civilization of Canada's Legal System" (May 6, 2017) https://ssrn.com/abstract=2844543.

I have published several papers tracing the legal history of the Indian Residential Schools and the subsequent court cases and settlement agreement: "'We Must Teach the Indian What Law Is': The Laws of Indian Residential Schools in Canada" (April 18, 2017) https://ssrn.com/abstract=2954877; "Indian Residential Schools were a Crime and Canada's Criminal Justice System Could Not have Cared Less: The IRS Criminal Court Cases" (May 4, 2017) https://ssrn.com/abstract=2906518; "The Horrors of Canada's Tort Law System: The Indian Residential School Civil Cases" (June 9, 2017) https://ssrn.com/abstract=2983995; "And Then the Pope Died' – The Timeline for How Canada

Reached a Settlement Agreement on Indian Residential Schools" (July 1, 2017) https://ssrn.com/abstract=2995639; "The Final Abuse of Indian Residential School Children: Deleting Their Names, Erasing Their Voices and Destroying Their Records after They Have Died and without Their Consent" (May 4, 2017) https://ssrn.com/abstract=2812298; and "The Supreme Court's Indian Residential Schools Cases: The Beatings Continue" (February 27, 2018)_
https://ssrn.com/abstract=3129464.

I do not bother in these papers with the white supremacist private citizens or with the Ku Klux Klan in Canada. My focus is on the real white supremacists, the ones with power: the English monarchy, the English Parliament, the Canadian parliaments and courts; standing behind them are the rich white men who fund and control these institutions.

The current paper identifies the root cause of Indian Residential Schools and white supremacy in Canada as the agricultural revolution of *homo sapiens*, occurring some ten thousand years ago. The agricultural revolution created ideas about civilization, law, inequality, and appropriate and inappropriate uses of land, and created conditions for pandemics, particularly from domesticated animals. Agriculture led to a legal system designed to destroy hunter-gatherers in favour of farmers and the "civilization" that farming created. Agriculture has been at war against hunter-gatherers since its inception.

I did not expect to find that agriculture was the root cause of Indian Residential Schools. I had never previously questioned the importance and supremacy of farming. I had never considered in any depth the relationship between farming as the fundamental origin of our legal system. But here I have arrived.

2. Before Agriculture

The First Wave Extinction, which accompanied the spread of the foragers [indigenous peoples], was followed by the Second Wave Extinction, which accompanied the spread of the farmers, and gives us an important perspective on the Third Wave Extinction, which industrial activity is causing today.⁴

Agriculture and civilization have been a mere blip in the history of the universe and humanity

In the high school in my little town, there is a massive, framed time line full of interesting milestones in human history. The timeline is a timeline of humans since "civilization". Human and Earth history before that time are utterly ignored and irrelevant. To appreciate civilization and the agricultural revolution, it is useful to see where they fit in the bigger history.

The big bang was approximately 13.8 billion years ago. There are about 10 trillion galaxies in the universe and about 100 billion stars in our galaxy. The Earth is approximately 4.5 billion years old and the earliest life on Earth emerged about 3.8 billion years ago. The first large organisms evolved about 600 million years ago and an asteroid destroyed the dinosaurs about 65 million years ago. About 7 million years ago, a population of African apes split into two distinct species, one of which would eventually become modern humans. More than 4 million years ago, one of the species on the path to becoming human started walking on two legs. Around 2 million years ago, a species of bipeds began using stones and bones as tools. This species was the first to be called *homo*. By 300,000 years ago, the various *homo* species had mastered the use of fire. About 200,000 years ago, the branch of the *homo* species that we call *homo sapiens* developed. About 100,000 years ago, a group left Africa for the Middle East; more than 60,000 years ago they had travelled all the way to and settled in Australia, moved to Europe about 40,000 years ago, and about 15,000 years ago they travelled to and settled in the Western Hemisphere. New

discoveries of fossils change these estimates on a regular basis. Some 10,000 years ago the earliest signs of farming can be found. Evidence of cities, states and agrarian civilizations began about 5,000 years ago.

If plotted and condensed chronologically to the present day, the universe began 13 years 8 months ago, humans diverged from chimps 2.5 days ago, *homo sapiens* developed 100 minutes ago, farming 5 minutes ago, and "civilization" 2.5 minutes ago.⁶ The huge timeline in my local high school is a timeline of 2.5 minutes of the history of the universe.

Put another way, humans have been hunter-gatherers for 4 million years (or 200,000 years depending on which version of humans you want to begin with), farmers for only 10,000 years and "civilized" for only 5,000 years.

Before examining the agricultural revolution, let's review some of the human revolutions that preceded agriculture.

Upright Walking Revolution

Upright walking leads to better communication, better cooperation and premature babies. By learning how to walk upright, *homo* species freed their hands for more intricate work such as developing tools and signalling others. Being upright gave a better view of the surrounding landscape, but also created more dangers for childbirth. Humans began delivering babies in a premature state, which required greater cooperation between humans to protect and nurture the babies. It takes a village to raise a human.

Around 2 million years ago, a species of bipeds began using stones and bones as tools. This species was the first to be called *homo*. There was a time when there were varieties of *homo* animals. There were *Australopithecus*, *homo neanderthalensis*, *homo erectus*, *homo soloensis*, *homo floresiensis*, *homo denisova*, *homo rudolfensis* and *homo ergaster*. Wherever *homo sapiens* encountered other species of humans, the other species eventually disappeared. We do not know why, how or how quickly this happened.

Fire Revolution

Scott argues that the use of fire was *the* decisive change that allowed humans to become the dominant species on Earth. By about 300,000 years ago, different *homo* species were using fire on a daily basis. Developing fire allowed us to develop the ability to control and change our environments in ways that no other animal has achieved. "Through the prescribed use of fire, Woodlands communities created browse and graze areas, which attracted and concentrated large game animals, in order to facilitate hunting." We used fire to burn undesirable plant species and to make it easier to see prey and predators. We also used fire to systematically fertilize land, creating new plant growth and bringing new animals who came to eat that new growth¹⁰

Fire freed up more energy to allow for further development of our brains in several ways. Fire led to cooking, which enabled humans to eat more kinds of food, spend less time eating, and develop smaller teeth and shorter intestines. Because intestines and brains require a lot of energy to function, developing smaller intestines that required less energy allowed for more energy to be diverted to growing our brains. Because fire brought new animals to humans, the distance needed to find meals was reduced, thus reducing the energy spend on travel. Softer, cooked food also allowed earlier weaning of babies, freeing more energy.¹¹

As noted above, the bison population hit its largest extent after 1500 CE because the larger population of indigenous peoples provided the labour that was needed to manage more extensive fire programs. The availability of the bison gave plains indigenous peoples a semi-sedentary existence. Wild food was plentiful. (Coastal fishing cultures had the same abundance and semi-sedentary lives.) James Daschuk writes.

Communities that continued to specialize in bison hunting did so because their material needs were more than adequately met. Walde asserted that prehistoric populations on the Canadian plains, rather than small, nomadic, band-level societies, were large, sophisticated, 'tribally' organized communities made up of as many as 1,000 individuals working communally to produce 'an almost industrial level of resource exploitation.' These large groups provided enough labour to drive herds over large distances and then kill and process them, creating large surpluses of food that were traded (often for corn and other crops) or stockpiled for future use. Food surpluses gave communities time to pursue quests for more than just food, developing formal institutions within them based on age, gender, or expertise. Instead of roaming the plains in search of food, these communities were semi-sedentary, remaining in place for as long as six months at a time, alternating between river valley complexes and the open plains. Because these communities were pedestrian, with only dogs as beasts of burden, the distance between winter and summer residences was probably not more than a walk of a few days. 12

Fire was the main tool for providing plains indigenous peoples the level of food security and comfort they enjoyed.

Migration Revolution

According to current understanding of the DNA evidence, all modern humans originated from Eastern Africa. We all share the same genetic mother. It was only in the past 200,000 years that the rise of *homo sapiens* brought humans to the top of the food chain. Between 70,000 and 12,000 years ago, *homo sapiens* survived and all other species of *homo* disappeared.

As noted above, about 100,000 years ago, a group left Africa to the Middle East, travelled and settled all the way in Australia, went to Europe, and about 15,000 years ago they travelled and settled the Western Hemisphere; there is still much that we do not know about these travels. For 95% of human existence, we lived in small, mobile, disperse and relatively equal hunting and gathering groups.¹³

For those who argue that indigenous people spontaneously developed in the Western Hemisphere without any migration at any time, they are implicitly arguing that the Western Hemisphere's indigenous peoples are a completely separate species from the rest of us. Details about the migrations change as we discover new information, but all available evidence is that we are all one species with one origin. In the nineteenth century, one of the most racist arguments for white supremacy was that whites and people of colour were different species, which justified discriminatory treatment by the superior whites. The argument of polygenesis has long been discarded, even though white supremacy continues.

We are all one species. We move around, learn each others' cultural practices, sometimes we learn each others' languages; we inter-marry, join each others' groups, trade for each other's goods, and adopt and adapt each others' technologies. So none of us is inherently better than each other, and none of us is inherently different either. Different life circumstances and a variety of DNA combinations create our differences.

Cognitive Revolution and Gossip Theory

According to Diamond, approximately 50,000 years ago humans experienced what he calls a Great Leap Forward. Harari and others speculate that the reason for *homo sapiens* being the only surviving *homo* species is because we developed unique abilities with language between 70,000 and 30,000 years ago – what is often called the Cognitive Revolution. ¹⁵

Because humans depend on social cooperation for survival and reproduction, our language developed a unique ability to convey information about other members of our groups. Harari says, "Reliable information about who could be trusted meant that small bands could expand into larger bands, and Sapiens could develop tighter and more sophisticated types of cooperation." The "gossip theory" and sociological research holds that most people cannot know or effectively gossip about more than 150 individuals.

Harari describes that it is the ability to cooperate that has given humans power over the rest of nature. He describes this ability to cooperate as passing through four stages of developing our data-processing systems: 1. Cognitive Revolution; 2. Agricultural Revolution; 3. Invention of writing and money; 4. Scientific Revolution (beginning around 1492). Harari does not say these developments made humans better, more civilized or closer to some god.

Shared Fictions Revolution

How did humans succeed in breaking through this gossip limit of 150? Harari contends that the most important development in humans was our ability to communicate about things that do not exist at all, such as legends, myths, gods, religion, nationalism and laws. This ability allows us to share common imagined fictions, which expands the range of humans we can cooperate with – all those who share imagined fictions can become part of our trusted group, even if they are strangers. Harari observes that there are no gods in the universe, no nations, no money, no human rights, no laws, and no justice; these are all fictions created by humans. He writes, "Just try to imagine how difficult it would have been to create states, or churches, or legal systems if we could speak only about things that really exist, such as rivers, trees and lions." The ability to invent and communicate different shared fictions quickly created the conditions under which humans were able to change faster than would be possible on a biological evolutionary timescale. Cultural change was faster than evolutionary change. *Homo sapiens* far outpaced all other species in our ability to cooperate across large numbers of strangers and across vast distances. Many others scholars have made similar observations.²¹

Upright walking, fire, cooperation, communicating about fictions - these were the fundamental revolutions for humans until the agricultural revolution.

Before our farming civilization can claim to be even *equally* successful to hunter-gathering, we need at least another 195,000 years of continuous agricultural society. This seems profoundly unlikely. In barely 5,000 years, we have almost completely destroyed hunter-gathering peoples and convinced ourselves that our "civilization" is superior. We are well on the way to destroying ourselves and the environments we require. Nature will continue long after we are gone. It seems more likely that humans will return to being hunter-gatherers over the next few centuries than to think that agriculture will continue as we know it today. If that happens, then human agriculture will have proven to be a mere blip in time.

Scott contends that it was not until approximately 1600 CE that the state hegemony over most of the earth can be found. In other words, only two-tenths of one percent (0.2%) of human existence has been under state control.²² Virtually all of human existence has been free, healthy, egalitarian and "uncivilized".

Agricultural states were confined to relatively small places on the floodplains of a few major rivers. They could not flourish or exert control in arid areas, swamps, marshes or mountains. The costs of attempting to do so could not be repaid.²³ It became natural that agricultural communities would be situated on waterways and would develop expertise in water transport, navigation and long-distance and large-quantity trade made possible by water transportation.²⁴

Further, "Agricultural sites were never remotely self-sufficient. They required a constant subsidy, as it were, from that excluded nature: wood for field and building, fish, mollusks, woodland grazing, small game, wild vegetables, fruits, and nuts." They also required trade with humans from other places: timber, firewood, leather, obsidian, copper, tin, gold, silver, honey in exchange for pottery, cloth, grain and artisan products. The trade required water transport, being exponentially more economical than transport by donkey or cart. Plus, ships could carry far more cargo than donkey or cart.

But above all, what the "barbarians" captured and sold to the "civilized" peoples were slaves.²⁷ The "barbarians" would also accept payments to become mercenary soldiers for one state against another. In these ways, "barbarians" helped "civilized" states become stronger: "the barbarians willingly dug their own graves." Frye notes that indigenous North Americans were supplying soldiers for both sides of every conflict. The English defeated the Wampanoags and their allies in King Philip's War (1675-76) because they hired the Mohegan and Pequot to the English side of that war.²⁹

Let's emphasize this last point: indigenous peoples were complicit in their own demise. Trading with the "civilized" agricultural societies, and becoming military allies and soldiers for them, inflicted uncountable harms on indigenous peoples.

Indigenous-Caused Extinctions of Horses, Bison and Beavers

Before launching into a study of the evils of agriculture, let's be clear-eyed. Indigenous peoples also engaged in destruction of nature, wars, slavery, "us vs. them" mentality, and were even complicit in their own destruction because of their desire for the material things that agriculture produced.

Columbus created the dual stereotype of the "new" world's indigenous peoples: those who received Europeans with friendliness versus those who were more hostile to the invaders. "Thus was born the dichotomy of the Indian as either a noble savage who could be civilized or a wild beast who could at best be tamed and at worst should be exterminated". ³⁰ When indigenous peoples had nothing of value to offer the Europeans and posed no threat, they were peaceful and noble; when they had something the Europeans wanted and especially if they resisted the Europeans, they were wild beasts. ³¹ When indigenous peoples were meeting newcomers, they showed their peaceful generosity. When indigenous peoples learned that the newcomers considered themselves to have become the owners of the land and to have sovereignty over the indigenous peoples themselves, the indigenous peoples resisted. ³² The reality is that indigenous peoples are neither noble nor wild. They are complex and diverse humans who make mistakes and have the capabilities for both good and harm within them.

All humans (and thus all indigenous peoples), all hunter-gatherers followed by farmers, were guilty of mass extinctions of animals. None of us were careful custodians and friends to nature except to the extent it suited us and our technologies limited us. Large defenceless mammals were exterminated by indigenous hunter-gatherers. Easy hunting suits us. Hunter-gatherer technologies limited the extent of the damage they could inflict on nature.

The capacity to adapt and cooperate and control the environment allowed *homo sapiens* the ability to move into almost every climatic and geologic zone on Earth. After *homo sapiens* moved into an area, mass extinction of other human species and of other animal species soon followed. Indigenous huntergatherers were no exception. Cooperation between humans usually meant oppression and exploitation of nature and other humans.

Diamond finds that a great wave of extinctions in the Western Hemisphere happened between 17,000 to 12,000 years ago, coinciding with when many people believe humans first populated the hemisphere. A similar mass extinction appears to have occurred about 35,000 years ago in Australia and New Guinea, coinciding with the dates when humans first arrived there.³³

In the Western Hemisphere, it is easier to count the genera (genus) that went extinct rather than the dozens of individual species within each genus that went extinct. Thirty-three genera of large mammals went extinct in North America and seventy-two in South America. The causes of the extinctions are obscure, but likely involved a combination of climate change and over-hunting.³⁴ However, the fact remains that wherever humans went on Earth, mass extinction soon followed. Mastodons, saber-toothed tigers, giant emu, giant sloths, "all of these species appear to have been wiped out by well-organized bands of primitive human hunters".³⁵

In North America, among the most interesting extinctions for the purposes of this paper was the extinction of the horse, followed about 10,000 years later by the near extinction of the beaver and bison. Indigenous people were hugely responsible for each one of these extinction events. The near extinction of the beaver and bison were caused in large part because of the desire of indigenous peoples to trade for products from Europe once Europeans arrived after 1500 CE. "Once one tribe had acquired firearms, it became a matter of simple survival for its neighbours to seek the same... Instead of taking a beaver or two from a lodge, the whole colony was taken; and for this, more efficient killing implements were needed: traps, ice chisels, axes, knives, hooks, guns and ammunition. In the matter of clothing and bedding, the traders made the Indians' life more comfortable and secure. The Indian soon became dependent on the traders' blanket coats and woollen trousers and socks, and also on blankets. Indian women, in a life of threadbare slavery, benefitted perhaps most from the trade goods. Apart from mirrors, beads and trinkets, they prized instruments for cooking and sewing. Till the advent of metal cooking vessels, the process of boiling was performed by dropping red-hot stones into vessels of skin or birchbark. Before the needle, only a bone-splitter or a thorn was available for sewing; while sinew or rootlet had served for thread."36 Because of the desire for and dependency on European products, the indigenous population caused the near extinction of horses, beavers and bisons.

Horses have lived on earth for more than 50 million years. The first horses originated in North America and then spread to Asia and Europe, but they went extinct in the Western Hemisphere. According to Forrest, the migration was so long ago (2.5 million years) that it was from *eastern* America to *western* Eurasia. Over 1.8 million years ago, humans left Africa and began hunting horses for food, just as they hunted many other animals. As humans hunted horses more aggressively, the horses moved to the Iberian peninsula and the grasslands between the Carpathians and Siberia, also known as the steppe. It is on the steppe that humans domesticated the horse. It is believed that horses were first domesticated in Asia between 3000 and 4000 B C ³⁷

Fukuyama writes that after the development of agriculture, "perhaps the most critical technological development was the domestication of the horse." Horses were the ultimate military weapon for thousands of years until the implementation of the internal combustion engine in the 20th century. Frye

writes that at some point around 1000 B.C., horse-drawn chariots became obsolete as military weapons and were replaced by warriors fighting from horseback.³⁹ Horses eventually made it all the way to western Europe, and then, "[w]hen Columbus made his second voyage to the 'new' world of the Americas in 1494, he brought twenty-four stallions and ten mares with him."⁴⁰

It was indigenous-caused extinction of horses in North America that made it possible for Asians and Europeans to domesticate horses, turn them into military weapons, and bring them to North America almost immediately after Columbus' "discovery" to wage and win war against far larger numbers of North American indigenous people. Ironically, it was the indigenous-caused extinction of horses in North America thousands of years ago that made it possible for the horses to not only return, but to be instrumental in European genocides against indigenous peoples and the dramatic near extermination of indigenous peoples in Spanish America.

After the Europeans brought horses to North America, indigenous peoples adopted them into their cultures. Indigenous pedestrian cultures turned into horse cultures by merging with the European technology of the domesticated horse. When indigenous peoples acquired horses they acquired a human-domesticated tool engineered through selective breeding technology. Hunting and warfare on horse was safer, faster, more efficient and more deadly.

Domesticated horses from the Spanish conquest made their way into indigenous communities and were hugely popular with indigenous peoples. It is estimated that the Shoshone of Idaho acquired horses between 1690 and 1700 and with their aid, the northern Shoshone were able to push north to the Saskatchewan River valley. ⁴¹ Indigenous communities routinely stole and traded horses from and with each other. In some tribes, there were six horses per person. Hundreds of thousands of horses owned by indigenous peoples competed with bison for grazing. For example, in 1855 2,400 Arapahos, in what is now Arkansas, had approximately 15,000 horses for which they needed 100 acres per day of grazing range for the horses, and thus those acres were not available as grazing land for the bison. ⁴²

Indigenous cultures also adopted European guns. Soon, indigenous peoples who were skilled with horses were colonizing indigenous peoples who did not have as many horses or were not as skilled with horses. Indigenous communities that were more successful with horses and guns began taking territory away from indigenous communities that were less successful. On the great plains of North America, "[v]irtually every tribal group associated with the plains today migrated there during the eighteenth century as the horse cultures spread across the West." This was indigenous colonialism.

As indigenous peoples mastered the horse and gun culture, they nearly exterminated the bison on the Great Plains. They hunted the bison for many reasons: for their own food, dramatically increasing their own populations; for the food to feed fur trappers and traders which nearly resulted in the beavers going extinct, and; for sale to European settlers in exchange for Europeans goods indigenous peoples were determined to acquire.

The near-extermination of the bison in the 19th century was not the first extermination event experienced by the bison. The historically larger species of bison went extinct thousands of years earlier in the First Wave Extinction committed by indigenous people.⁴⁴

Why the current smaller species of the bison did not go extinct is not known, so it is speculated that perhaps their smaller size and faster reproduction rate saved them.⁴⁵ Bison populations fluctuated over time, primarily in response to the presence or absence of rain and grasslands due to climate changes. As early as 9,300 years ago, indigenous peoples developed communal strategies for killing bison, such as

stampeding them over cliffs or into enclosures that made for easier killing with arrows and spears. Indigenous peoples could not control the precise numbers of bison that were killed, and certainly dozens and hundreds were killed beyond the communities' needs. 46 Market trading of bison between indigenous communities was happening at least as early as 1000 BCE, but it was sustainable until the trade with Europeans accelerated the killing. 47

On the great plains of North America, indigenous peoples mastered the use of fire.

Fire was the Indians' most powerful tool transform landscapes. By intentional and controlled use of fire Indians expanded the size of the grasslands tremendously, provided more habitat conducive to bison, and thus raised the carrying capacity of the bison range. Before European pioneers brought their famous broadaxes to North America, Indians had already cleared the continent of millions of acres of forest and replaced it with grassland. ... Without Indian burning, the tall-grass prairie would have been forest. 48

It was not until the year 1000 CE that bison first crossed the Mississippi River into newly created prairie through what is now Iowa and Illinois. Populations of bison on the plains grew to their highest number ever in the 16th century. The bison population hit its largest extent after 1500 CE because the larger population of indigenous peoples provided the labour that was needed to manage more extensive fire programs. By burning trees, indigenous peoples expanded the grasslands and bison populations increased accordingly. Thanks to this fire program of indigenous peoples, it is estimated there was an all-time high of 29 million bison on the great plains by 1700 CE.⁴⁹

As a result of the growing bison population, populations of indigenous people on the plains also grew. "To simply feed, clothe, and shelter themselves, Plains Indians over-hunted their resource, and the bison population began to decline by the late eighteenth century." ⁵⁰

Indigenous communities with horses and guns killed far more bison than indigenous communities with fewer horses and guns.⁵¹ The destruction of bison herds would not have happened without horses. Organized horseback hunts could take as many as 300 bison in one day. With horses, more and more indigenous groups spread into the great plains to take advantage of the bison herds. "Almost as soon as they acquired horses and moved into the plains – at least by 1790 – Indians began overhunting the herds, killing more than annual reproduction could replace".⁵²

Horses and guns also allowed indigenous peoples to select which bison they wanted to kill; they always wanted to kill the fattest bison possible.⁵³ They preferred females, the cows, as bulls were generally leaner, with rough, coarse meat that tasted especially bad during the rut.⁵⁴ The end of the summer was when cows were fattest from summer grazing but also pregnant from the rut. Their hair was thickest and best for robes.⁵⁵ Because of this, hunters overwhelmingly preferred to kill female bison⁵⁶; this preference had a dramatic effect on the reproductive capacity of the herds. In addition, once the fur trade began, massive amounts of bison fat were required for pemmican to feed the fur hunters and traders.⁵⁷

It was not the white man who destroyed the plains bison. It was indigenous peoples – because they had independently developed agriculture in meso-America, leading to increased indigenous populations, and because they wanted to trade for European goods. Certainly, white people administered the final blow to the bison in the mid to late eighteenth century, but the bison were already being hunted well beyond what their birth rate could replace. In the United States in the mid-19th century, the westward expansion of railways, settlers, horses and guns caused substantial damage to the herds. In Canada, the bison were gone before the railways and farmer-settlers arrived on the plains in the late 19th century. Indigenous people

caused the near-extinction of the bison using European tools like horses and guns, and the indigenous people were largely motivated by a desire to use bison as a way of acquiring other European goods. White people participated in the extermination by encouraging that trade and in the end, by applying the final mass killings in the United States great plains.

As for the beavers, from 1670 onwards, the Hudson's Bay Company sent two or three trading ships into Hudson Bay every year. They bought furs from indigenous hunters and brought the furs (mainly beaver) to Europe and sold them, sometimes by private treaty but usually by public auction. The fine furs went to the Netherlands and Germany, while the beaver fur was bought mainly for the English hat-making trade. The beaver hat became one of the preferred status symbols in Europe, as in its earliest days, the Hudson's Bay Company gave beaver hats (worth £34) to wealthy individuals to entice them to become investors in the Company.⁵⁸

Kirkpatrick Sale estimates that between 10 and 15 million beavers, perhaps as many as 20 million, and maybe one to two million other fur-bearing animals, were killed in North America for the European market during the 1600s. Sale says of the 1700s, "[t]his Century of Exploitation was unlike anything the world had seen before." He also writes, "[b]eavers, once numbering perhaps 60 million or more in North America, were effectively extinct in most parts of the northeast as early as 1640." Beavers were killed primarily by indigenous trappers who wanted to sell them for European goods. As beavers went commercially extinct in one region, fur traders moved west, and by the end of the 1700s the beavers were mostly gone, only a generation after traders established a presence on the Saskatchewan River. 61

The beaver were saved when prince Albert (queen Victoria's husband) popularized silk over beaver felt in the 1840s and the beaver hat fell out of fashion.

(I provide more details about the near-extinction of the bison and beavers in the next paper in this series about doctrines of discovery and invasion.)

Indigenous Examples of Us vs Them, War, Colonialism and Slavery

Virtually every tribal group associated with the plains today migrated there during the eighteenth century as the horse cultures spread across the West. 62

It is part of the human condition to create ideas of "us" vs "them" and to think of "us" as superior to "them", or, at a minimum, to think of "them" as being threats to "us". Indigenous peoples and "civilized" peoples invented enemies and sought to enslave or destroy their enemies, or simply to tax them.

Historically and anthropologically peoples have always had a name for themselves. In a great many cases, that name meant "the people" to set the owners of that name off against all other people who were considered of lesser quality in some way. If the differences between the people and some other society were particularly large in terms of religion, language, manners, customs, and so on, then such others were seen as less than fully human: pagans, savages, or even animals. 63

Most humans have identified themselves by their social grouping, as being the people, or the good people, and others as being different and barbarian. For the Dinka of Sudan, "dinka" means "people," their enemies are the Nuer which means, in their language, "original people." The Yupik in Alaska and northeastern Siberia means "real people," Inuit means "people," one meaning of "Anishinaabe" means "good persons living on the path given to them by the Great Spirit" or, alternatively, as the people created by divine breath.

Further, humans are primates. Fukuyama explains that human nature is remarkably similar around the world. Human beings never lived as isolated individuals; we were always in a society of some kind. Natural sociability revolved around kinship and reciprocal altruism; in other words, humans naturally act altruistically with genetic kin in rough proportion to their shared genes. Reciprocal altruism does not depend on genetic ties but on repeated, direct relationships that build trust. Humans naturally give up some freedoms as part of maintaining peace within a group and wish to receive recognition within the group. Just as other primates do, humans have a natural propensity for violence against other humans.⁶⁵

Miller explains that indigenous "wars" were small scale, focused on revenge or commercial interests, not religious or ethnic, not seeking to conquer peoples or significant parts of their territories, and relied on small groups conducting quick raids with arrows and clubs and withdrawing. 66 They did not have iron and firearms for inflicting mass harms and "their animistic religion restrained them even from developing the desire to do so." 67 It takes little effort to determine which groups of indigenous peoples were enemies of other groups of indigenous peoples. Indigenous peoples frequently went to war with other indigenous peoples and took their territories. 68 The Iroquois burned Huron villages, the Zulu incorporated Nguni tribes into their kingdom, the Nuer expanded territory as they raided the Dinka. 69 The Cheyenne and the Sioux waged war against each other. 70 The settled fishermen of the Pacific northwest coast waged war ruthlessly. 71 In 1870, the last major inter-indigenous war occurred between the Cree and the Blackfoot. 72

Europeans were not the first colonizers in the Western Hemisphere. The Aztecs, Incans, Mayans and others created empires over other indigenous peoples (note that this is where indigenous farming began; note also that the distinction between hunter-gatherers and farmers is not simply a distinction between indigenous peoples and whites). As will be discussed later in this paper, agriculture causes empires. The agriculturalist Maori invaded and committed genocide against the hunter-gatherer Moriori as recently as 1835.⁷³

The first slave-owners in Canada were indigenous peoples. Many of the indigenous peoples of the northwest coast were slave-traders. The Great Slave Lake in Canada's Northwest Territories, the world's tenth largest lake, the Slave River that feeds the lake, Lesser Slave Lake (the second largest lake entirely within Alberta), the town of Slave Lake which is adjacent to Lesser Slave Lake, and the Slavey people were all named because the Cree enslaved the Dene in that region. The Kwakiutl, Klamath, Tlingit and Yurok of North America's west coast, the Creek of Georgia, Comanche of Texas, Pawnee of the great plains, Callinago of Dominica, Tupinamba of Brazil, Inca of the Andes, Tehuelche of Patagonia and the Aztecs of Mexico all stole humans and owned slaves.

Indigenous societies had battles between themselves and captured, tortured and killed slaves. "Slavery, though generally tempered with assimilation and upward mobility, was common among manpower-hungry Native American peoples." First Nations of Canada routinely captured slaves from neighbouring tribes. The Haida, Nuu-chah-nulth, Tlingit, Coast Tsimshian and some other tribes who lived along the Pacific Northwest coast were traditionally known as fierce warriors and slave-traders, raiding not only among neighbouring people, particularly the Coast Salish groups, but also as far as California. Slavery was hereditary, with new slaves generally being prisoners of war or captured for the purpose of trade and status. Among some Pacific Northwest tribes about a quarter of the population were slaves. 78

Indigenous warfare focused on captive taking, rather than killing. Captives would be subjected to a brutal series of events that were designed to strip the individual of any identifications from prior groups while also supplying lasting demarcations and scarring that would signify the individual's captive status to others in the community. This process was often cruel and frequently resulted in death. The ritual of

captive integration was a public affair involving all sections of the society. Survivors would become part of the capturing community, serving distinct social functions within it. Generally, slaves were not typically seen as transferable property. Instead, they were intended to serve the social role of a lost community member; when one member would be murdered or taken from the community, a captive would be provided to take this member's place and assume her or his roles. Male slaves could be forced to perform female tasks, such as serving meals, providing farm labour, preparing skins, and carrying packs when hunting. Female slaves were often used as secondary wives, utilized for routine household acts as well as providing sex and reproductive labour. In addition, slaves could provide diplomatic services, such as translation, linking separate regions' peoples to one another through ethnic and linguistic boundaries, and could be used as symbolic gifts between peoples.⁷⁹

Indigenous nations gave slaves to Europeans as part of their efforts to seek alliances. ⁸⁰ Long after Europeans had abolished slavery in England and in Canada, it continued, deeply entrenched by indigenous nations everywhere along the west coast from the Aleutian Islands to northern California. In 1845, two British lieutenants estimated there were 5,100 slaves west of the Rockies. ⁸¹

Indigenous peoples were very conscious of territorial "rights" and "property" and frequently engaged in wars to push some groups off desirable lands. On the Canadian prairies, indigenous peoples followed the bison within territory that allowed for pedestrian hunting. This included winter camps that were sheltered close to where bison sheltered for the winter, and more mobile summer camps following the bison. Indigenous people considered the bison within their winter territory to be their property. The bison summer range was unclaimed or shared with all indigenous groups because of the mobility of the bison and their mingling from various winter sheltering areas. Any trespass by unfriendly indigenous peoples was considered an act of war. On the prairies, beaver were generally not hunted because their role in providing surface water that was of critical importance to humans and others was well understood. In the forests, indigenous groups did not have the same rules limiting the hunting of beavers, because there is so much water easily available in the Canadian boreal forest. Further, "[a]ccessibility to guns and ammunition was largely determined by whether or not the group hunted beaver. Beaver hunters were given preferential treatment by traders." 82

Morgan's book *Beaver*, *Bison*, *Horse* is also nearly an inventory of all of the battles, dispossession or even colonialism between indigenous peoples on the Canadian prairies after horses became widespread and the fur trade well started. "Most researchers agree that increased intergroup animosities were related directly to the horse... The mobility of horses greatly facilitated increasing warfare, which in turn was stimulated by the need for horses." Further, the pasture needs of horses forced indigenous peoples to move several times even during winter. The result was that horses, which had not reached the prairies until the early 1700s, disrupted bison herds because of a new form of hunting (the chase), increased warfare between indigenous groups and made indigenous peoples move more frequently (increased nomadic lifestyle). All because of the horse. ⁸³

The living conditions of hunter-gatherers sharply limited the amount of damage they were capable of. A hunter-gatherer lifestyle, by its *nature*, keeps human population relatively low, healthy, happy, equal as between humans and equal as between humans and nature, and resulted in very limited capacity for inventing technologies that kill and control both people and nature. The hunter-gatherer lifestyle kept populations small and left enough room on the planet for hunter-gatherers to walk away from conflict rather than spring to war at the slightest provocation. None of this is true of our agricultural age.

The historical reality is that some indigenous peoples also established empires and that hunter-gatherers engaged in battles and war, captured, tortured, killed and enslaved people and took over lands of enemies.

However, due to limited technologies and a variety of practical reasons, the scale of indigenous slavery, war and colonialism does not remotely reflect the differences in the scope of those practices in comparison to agricultural empires.

Flannery and Marcus have written a fascinating study of inequality in some indigenous forager societies as well as early agricultural societies.⁸⁴ It is important to keep the reality of the strengths and weaknesses of indigenous peoples in mind and not to romanticize them. But with the above information, we can now explore how the agricultural revolution changed everything, and paved the way for white supremacy in Canada.

3. The Agricultural Revolution

From 2.5 million years ago until only a few hundred years ago, most of the Earth was inhabited by humans who were hunter-gatherers and not agriculturalists. Around 12,000 years ago, the Earth settled into a warmer, more stable climate. The agricultural revolution occurred independently in a small number of locations around the world, with the first about 12,000 years ago. From its various locations, and especially from the "fertile crescent" in what is now Iraq, agriculture slowly spread across the Earth. Only 240 generations of humans have lived since the first adoption of agriculture and only 160 generations since agriculture became widespread. Be pespite the First Wave extinction caused by hunter-gatherers and the harms caused by the indigenous use of fire, horses and guns, "any definition of sustainability must concede that an economy that survives for thousands of years is well adapted to its environment. By comparison, Euro-American agricultural settlement on the plains has so far lasted only one-sixtieth as long."

Wells concludes that the biggest revolution of the past 50,000 years occurred "when a few people living in several locations around the world decided to stop gathering from the land, abiding by limits set in place by nature, and started growing their own food." 87

Our ten-thousand-year-old urban civilization could be summed up in the throwaway line 'we are what we eat.' ... These societies, these food empires, can only exist if three things happen: Farmers need to grow more food than they eat; they need a means of transporting it to willing buyers; and they need a way to store it so it doesn't dissolve into sludge before reaching its economic apotheosis. When these three premises are met, urban life flourishes.⁸⁸ ...

These three functions – surplus, storage/shipping, and exchange – are the pillars of every food empire from ancient Egypt to Victorian England. Just as there is no life without food, so there is no civilization without a food empire. 89

Fukuyama confirms that before states can form, the following conditions must be present: surpluses must exist, which agriculture provides; there needs to be a large population with a hierarchy, which agriculture creates; the population must be limited in its ability to simply walk away when coerced; and, the population must have sufficient reason to accept the state as having authority over them. For example, a combination of a nearby violent neighbour to prevent walking away and a violent leadership willing to harm resisters at home fulfills these conditions. ⁹⁰ Agriculture and civilization create empires.

Did Canada Create the Agricultural Revolution?

We do not know exactly why or how humans developed agriculture. One theory is that it occurred out of necessity – climate change forced humans to do it. The Last Glacial Maximum (LGM), the most recent time that glaciers covered the most earth, started receding around 18,000 BCE. This melting included the Laurentide Ice Sheet, which covered millions of square kilometres including most of Canada and a large portion of the northern United States.

The melting of the Laurentide Ice Sheet caused major disruptions to the global climate cycle, because the huge influx of low-salinity water into the Arctic Ocean via the Mackenzie River is believed to have disrupted the formation of the North Atlantic Deep Water, the very saline, cold, deep water that flows from the Greenland Sea. The warm Gulf Stream moves above this colder, more saline water mass. It is thought the massive influx of fresh water from the melting Laurentide Ice Sheet caused a decrease in the strength of the Gulf Stream, thus causing a cooling of the climate in Europe. The Younger Dryas was a period of rapid cooling in the late Pleistocene 12,800 to 11,500 calendar years ago. The Younger Dryas lasted for about 1,300 years, then ended as abruptly as it started. Morris says there have been many climate fluctuations since 9600 BC, but none has been remotely like the Younger Dryas. Yarm-weather fruits among other foods vanished. The ultimate collapse of the Laurentide Ice Sheet is also suspected to have influenced European agriculture indirectly through the rise of global sea levels.

The effects of the melting of the Laurentide Ice Sheet are thought to have lowered the capacity of the European-Middle Eastern area to support wildlife. In turn, it is thought this would have caused people to rely on cereal grains, which were more difficult to eat and process. The early Natufian population, for example, were forced to rely on these hardier, yet more difficult, grains. In turn, they were forced to live in more permanent sites close to their grains. Yet While relative consensus exists regarding the role of the Younger Dryas in the changing subsistence patterns for the Natufian people, its connection to the beginning of agriculture at the end of the period is still being debated. Yet

Whatever the case, it seems generally agreed that humans do not undertake agriculture unless forced by necessity; it is simply not as agreeable or healthy as being hunter-gatherers. David Christian notes, "We can be pretty sure that the first farmers took up farming reluctantly, because living standards seem to have declined in early agrarian villages." The bones of the first farmers are shorter than those of nearby foragers, which suggests their diets were more limited. Because they relied on a small number of crops, in case of crop failure, famine was much more likely and devastating. Their bones show the stress associated with farm labour. Their sedentary living attracted vermin and diseases that spread among the sedentary humans more quickly than would have been possible with hunter-gatherers. (A later section of this paper goes into details about how we can determine that hunter-gathering was a better lifestyle choice.)

To rephrase the above from a Canadian point of view, Canadian ice was so enormous that when it melted it flooded the oceans with fresh water, which pushed the warm ocean currents lower, which then interrupted the Gulf Stream, causing cold weather to be brought to Europe and the Middle East. As a result, warm weather fruits vanished from the wild, which forced hunter-gatherers who had the very good fortune to have abundant wild wheat in their region to learn how to grow that wheat through human intervention. In this way, Canada created the agricultural revolution.

There are several other theories about the factors leading to the agricultural revolution. One is that in various locations hunter-gatherers killed off so many of the local wild animals, or wild foods became depleted for other reasons (Canadian ice?), that those hunter-gatherers who lived close to the best foods that could be domesticated, such as wheat, corn and rice, began to domesticate and farm them. Another is that farming did not become ascendant until humans were able to create necessary tools for harvest and storage. Once developed, we found out we could use them to successfully domesticate, harvest and store

certain plants. Yet another theory is that population growth happened *before* agriculture. A larger population depleted the surrounding wild diet and created a need for domesticated plants to feed the larger population.

Certainly more than one factor could have been present in the creation of the agricultural revolution. ⁹⁵ It was not entirely about Canada's Laurentide Ice Sheet. Even if Canada caused the agricultural revolution in the Middle East, Canada did not cause the agricultural revolutions that arose independently in other places.

It seems clear that agriculture developed in specific parts of the world that were blessed with the very small number of wild plants that have proven to be both nutritious and able to be domesticated. Agriculture developed in various "sweet" spots around the world, at different times, and spread with different distances and speeds. Agriculture began first in the Afro-Eurasian zone, such as the "fertile crescent" of Mesopotamia and the Nile river plains, and spread widely across a vast landmass with a similar climate. It emerged quite early in Papua New Guinea and eventually in a few locations in the Western Hemisphere. Agriculture did not develop or have a dramatic impact in most other places. ⁹⁶

In the Western Hemisphere, agriculture developed in meso-America without any influence from elsewhere. Meso-Americans developed mainly corn, beans and squash. On the eastern Great Plains, horticultural-hunter-foraging societies developed much later, between 250 BCE and 1000 CE. Agriculture supported large populations and a large reciprocal market for bison and other hunted animals. ⁹⁷ Hunter-foragers would trade meat and fat with more southern horticulturalists for corn and dried beans, thus diversifying the diet of all, and, for the northern groups, providing easier-to-preserve food for winters. Beginning around 900 CE, plains woodland cultures shifted to becoming agricultural settlements. ⁹⁸ "Before European contact, agricultural products accounted for about 75 per cent of the food consumed by North American Indians. The most intensive cultivation was in meso-America where a large population was sustained." Agriculture developed in North America and became important for trading purposes. It increased indigenous populations, but it did not lead to domesticated animals.

The relatively few people associated with the agricultural revolution have had 12,000 years to get used to it in its wide variety of aspects. Indigenous peoples in Canada, too far north for much agriculture and with an abundance of wild food available, have barely had 150 years to lose their hunting-gathering lifestyle and get used to all the changes that agriculture brings, 500 years to get used to domesticated horses and about 1,000 years to get used to trading for some agricultural products. But most of Canada's indigenous peoples remained hunter-gatherers until the 19th century. Put another way, we have been forcing indigenous peoples through 12,000 years of massive change within the space of about 150 years and we have been amazingly impatient, intolerant and condescending of their ability to manage these changes to our satisfaction. In fact, we barely even acknowledge all of the changes that accompany the agricultural revolution. But it doesn't matter: we have their land and that is the only thing that ever really mattered to us.

Now let's look at some of the details. What were the specific changes that agriculture created? Let's find out why we equate agriculture with "civilization".

4. Agriculture Creates Human Supremacy Over Nature

The destruction of habitat is not a by-product of agriculture. It is the point of agriculture....¹⁰⁰

By its very nature, farming required a manipulative attitude to the environment. While foragers thought of themselves as embedded within the biosphere, farmers saw the environment as something to be managed, cultivated, exploited, improved, and even conquered. ¹⁰¹

My only earthly wish is ... to stretch the deplorably narrow limits of man's dominion over the universe to their promised bounds. ... The mechanical inventions of recent years do not merely exert a gentle guidance over Nature's courses, they have the power to conquer and subdue her, to shake her to her foundations. 102

Nature is free. Nature moves and is not confined to assigned spaces. Nature is diverse and symbiotic. Nature is egalitarian – everything has its place. Nature has many colours that work together.

Jensen writes that "[t]he biggest difference between Western and Indigenous worldviews is that Indigenous humans generally perceive the world as consisting of other beings with whom they can and should enter into respectful relationships, and Westerners generally perceive the world as consisting of resources to be exploited." Further, traditional indigenous peoples do not believe in a hierarchy of beings with humans superior to all other parts of nature. "[I]nstead, they believe the world consists of other beings with whom we should enter into respectful relationship, not inferior others to be exploited." ¹⁰⁴

Miller states that all indigenous peoples of North America had ideas that are categorized as animistic. "All people, animals, fish and physical aspects of nature were animate; all had souls or spirits. Even items of human manufacture had souls – and souls required respectful treatment at all times ... humans held no special place on the earth and in the cosmos". 105 Further, "Indians' relationship to the spirits and to the Great Spirit was no different from that of the beaver or the stream or the trees." 106

Indigenous religious and spiritual beliefs, and their creation stories and other myths, came from the above point of view. Agriculture forced an enormous change in our relationship to nature; subduing nature means harming nature, rather than respecting it. This change of relationship also required a change in our religious beliefs. Humans were no longer one equal participant in nature appreciating all the abundance that nature gave us; we were now the demi-gods fighting against nature to implement agriculture. Subduing nature means a basic belief in the supremacy of humans over nature and the supremacy of masters over labourers who did the work of subduing nature.

The idea of human supremacy over nature goes back to the beginning of agriculture. This ideology was incorporated into agricultural religions, such as Christianity. The idea of human supremacy was not caused by and does not require religious support. For example, as the impact of religion began to fade in the past 500 years, rationalism and science took its place, with the scientific revolution beginning in the 16th century. Whether it was agriculture, the Great Chain of Being (discussed later in this paper), Christianity, rationalism or science, the goal was always the same: subdue nature and declare humans to be the most superior beings on Earth.

Agriculture is controlling and demands domination by humans over nature. Agriculture requires monoculture in straight lines and single colour, requiring that nature and people be confined to their assigned spaces. Agriculture says that nature exists to serve the whims and needs of humans. Harari writes that agriculture requires subduing nature and treating nature as property - this makes it impossible to view nature as being equal to humans. ¹⁰⁷

Jensen states that "[a]griculture destroys more nonhuman habitat than any other human activity. This has been true from the beginnings of agriculture. The destruction of habitat is not a by-product of agriculture. It is the *point* of agriculture: to convert land specifically to human use, and then to impede succession, that is, to stop the land's attempts to heal itself. ... Every single biome on the planet whom human supremacists have tried to manage [over the last 6,000 years] has been dramatically harmed. Every single one. There has not been a single success, in terms of biotic health." ¹⁰⁸

In the 15th century,

there still lingered in many places in Europe the common wisdom that gods and spirits inhabited the elements of nature – trees, certainly, streams and rivers, forests, rocks – or in some parts of the Church itself, that nature was sacred because God was immanent in all that He created. The task of rationalism, through science, was to show – no *prove* – that there was no sanctity about these aspects of nature, that they were not animate or purposeful or sensate, but rather nothing more than measurable combinations of chemical and mechanical properties, subject to scientific analysis, prediction, and manipulation. Being de-godded, they could thereby be capable of human use and control according to human whim and desire, and Europeans – uniquely as near as we can tell, among all cultures – could assume, in Descartes's words, that humans were the 'masters and possessors of nature'. 109

. . .

This separation from the natural world, this estrangement from the realm of the wild, I think, exists in no other complex culture on earth. In its attitude to nature in general, a heightening of its deep-seated antipathy to nature in general, European culture created a frightening distance between the human and the natural ... To have regarded the wild as *sacred*, as do many other cultures around the world, would have been almost inconceivable in medieval Europe – and, if conceived, as some of those called witches found out, certainly heretical and punishable by the Inquisition. 110

England, for example, was significantly deforested as early as the eleventh century, with probably no more than 20 percent of it still wooded (and not more than 2 percent virgin) by the time of the Domesday Book in 1086.

Thus the legacy given to fifteenth-century Europe was straightforward: it was right and 'natural' for human societies to fell trees, clear brush, 'recover' fens and marshes, till soils, plant crops, graze herds, harness beasts, kill predators and 'vermin', dig canals and ditches, and in general make use of the bounty of nature that a benevolent Lord had given them. Increasingly from the twelfth and especially the fourteenth century on, they did just that with a vengeance. ... by the sixteenth century there were virtually no old-growth areas, no natural ecosystems, left.¹¹¹

Francis Bacon, one of the most important founders of scientific method, law, and colonialism, ¹¹² wrote: "My only earthly wish is ... to stretch the deplorably narrow limits of man's dominion over the universe to their promised bounds. ... The mechanical inventions of recent years do not merely exert a gentle guidance over Nature's courses, they have the power to conquer and subdue her, to shake her to her foundations."¹¹³

If humans are supreme over nature, then it follows that humans are closest to the gods. If something bad happens on Earth, it must be because the gods were angered. Humans caused trouble by angering the gods; animals and plants did not cause the trouble because they are lesser beings without power and

without a direct conversation with the gods.¹¹⁴ Under Christianity, the idea of communicating with other parts of nature that had no souls made no sense. There is only one time in the Bible that an animal begins a conversation with a human: when the serpent tempts Eve to eat the forbidden apple.¹¹⁵ "The belief that humans have eternal souls whereas animals are just evanescent bodies is a central pillar of our legal, political and economic system. It explains why, for example, it is perfectly okay for humans to kill animals for food, or even just for the fun of it."¹¹⁶

Humans had to ask gods to intervene to produce rain, sun, food; only supreme beings like humans could be responsible for angering the gods. In this way, humans imagined themselves so important that they became the causal engine for what happened on Earth. Under animism, humans and the Creator could and did talk directly with the other elements of nature.

One way to express our idea of supremacy over nature is to build things that endure; things that say "Hey, look how great I am" and "look how my things dominate nature" through their existence. Olson speculates that the monument building in north-western Europe, of which Stonehenge (whose first stage of construction is estimated around 3100 BCE) is a later example, might have been a very tangible and symbolic turning point. He suggests that monument building might have been a way for humans to declare that they were no longer an equal within nature but were masters over nature, and were masters over very specific parcels of land. He suggests that there is a close relationship between the invention of agriculture and a need to declare that, going forward, our relationship with the world is fundamentally different.¹¹⁷

When humans travel the world, we marvel at long-lasting human-made structures. We say "this is history". Europe has history; Canada does not. When we see lands where indigenous peoples have existed for hundreds of thousands of years without leaving a trace, we forget all about those peoples. We never say "this is history." We celebrate our monument building in ways that we do not celebrate successful zero footprint coexistence with nature. This is what agriculture brings to us.

Two of the most famous thinkers about civilization were Will and Ariel Durant, who wrote what was once thought to be the definitive human history, *The Story of Civilization*, which had eleven volumes in all. This was followed by *The Lessons of History* and Will Durant's *The Greatest Minds and Ideas of All Time*. With the exception of Confucius in the top ten, all of the greatest minds of all time as defined by Durant were white European men. With the exception of Li-Po, the top ten greatest poets were also white European men; most of whom in both categories were British.

The Durants defined "progress" as the domination of nature by humans. They defined fire and "the conquest of the animals" as two of the greatest steps in human progress, and agriculture as the essential condition for civilization; what came before was savage and barbarous. Agriculture made possible all of the other steps of progress: social organization, morality, tools, science, education, writing and print.

Durant made a list of the twelve most important dates in human history. One of those dates he gave to the year of death of the English monk Roger Bacon, who was the first European to explain the formula for gunpowder. He justified this decision, writing, "it was gunpowder that turned war from a gentleman's game, occasionally fatal, to a form of standardized mass destruction". ¹¹⁸ Gunpowder originated in China, spread to the Islamic world and from there to Europe. If gunpowder was not one of the most important dates in human history, then perhaps that title belongs to Orban's time when he built canons large enough to destroy the walls at Constantinople in 1453. Orban "had revolutionized cannons, warfare, and the manner in which civilized people had lived for ten thousand years" (i.e.: behind walls). ¹¹⁹

Durant concluded that Columbus' "discovery" of the Western Hemisphere in 1492 was another of the twelve most important dates in human history. It "opened up a vast market for European goods and a vast area for Europe's surplus population. This is the secret of Europe's rapid growth in wealth and power, and its conquest of Africa and Asia and Australia." All of which Durant calls a "magnificent adventure". 120

In truth, the European exploitation of the "new" world and colonization the world over was the greatest theft in the history of humanity, the greatest crime against humanity both due to the destruction of indigenous peoples and for African slavery, with a lot of piracy thrown in – stealing indigenous gold and silver from the Spaniards who stole it from indigenous peoples first. As we know now, the march of "progress" has really been the destruction of nature and the greatest criminal enterprise imaginable. ¹²¹

5. Agriculture creates the Great Chain of Being

At the zenith was God, followed by the Angels. Beneath these came human beings, in particular European Christians. As one went down the Chain of Being, one eventually encountered people who were not quite human and not quite animal; in fact, they might even occupy that realm where the human and the animal merged.

Europeans slotted the Natives of the New World into this realm. 122

After law school, I travelled through Africa and Asia. I noticed things that I would not have had I stayed home. It became obvious to me that humans are always striving to get further away from nature. Who wants a hole in the ground instead of toilet to sit on? Who wants to "sit" by squatting on our feet instead of getting above the ground onto a stool, chair, throne? Who wants a house with an earthen floor instead of a concrete foundation? Who wants to walk instead of riding on a horse, in a train, a car, an airplane or a spaceship? Who wants to be naked or wear clothing designed for the weather instead of wearing fashionable clothing that is unrelated to our natural needs and that is intended to set us above other persons? Who wants to own land without putting a fence around it? Who wants nature intruding inside our fences? Humans are always trying to get further away from nature. The further our society can remove itself from nature, the more civilized we declare ourselves to be.

The idea of human supremacy over nature can be seen in the human idea of the Chain of Being. Arthur O Lovejoy wrote a dense, comprehensive discussion of the evolution of the Great Chain of Being in his seminal 1936 book *The Great Chain of Being*. ¹²³ Lovejoy traces the idea back to Plato and Aristotle, although he states that the idea attained its widest diffusion and acceptance in the 18th century. ¹²⁴

The Great Chain of Being is

the conception of the plan and structure of the world which, through the Middles Ages and down to the late eighteenth century, many philosophers, most men of science, and, indeed, most educated men, were to accept without question – the conception of the universe as a 'Great Chain of Being,' composed of an immense, or ... an infinite number of links ranging in hierarchical order from the meagerest kind of existents [sic], which barely escape non-existence, through 'every possible' grade up to ... the highest kind of creature ... ¹²⁵

The idea that human evolution has a "missing link" is an echo of the Great Chain of Being: the chain has no gaps. If we have not found every link in the chain, then there is a missing link, waiting for us to find it, presumably.

Jensen has written an entire book on the myriad ways that humans are inferior to many, many other life forms: *The Myth of Human Supremacy*. ¹²⁶ Humans are not superior to anything; there is no hierarchy in nature. Jensen comments about the Great Chain of Being:

One of the most harmful notions of Western Civilization – and one of the most foundational – is that of the Great Chain of Being ... It is a hierarchy of perfection, with God at the top, then angels, then kings, then priests, then men, then women, then mammals, then birds, and so on, through plants, then precious gems, then other rocks, then sand. ... You see this hierarchy everywhere within this culture, only now as we've secularized we've gotten rid of God and angels, leaving civilized (especially white) men at the top. ... The Great Chain of Being has long been used to rationalize whatever hierarchies those in power wish to rationalize. It has been and is central to the notion of the Divine Right of Kings, to racism, to patriarchy, to empire. It is a very versatile tool. 127

Jensen explains that the idea of the Great Chain of Being

is a profoundly body-hating notion, as, according to those who articulated the hierarchy, those at the top – the perfect – are pure spirit; and those at the bottom – the imperfect, the corrupt – are pure matter, pure body. Then both men and women live in a battleground of spirit and body, with men tending to be put more in the box representing mind/spirit/better, and women tending to be more in the box representing body/life/death/corruption/imperfection. ... within each category [of the Great Chain of Being] there are sub-categories. So civilized man is far more perfect than 'primitive' man, who is barely removed from animals. ¹²⁸

In other words, the Great Chain of Being holds that the further something is removed from nature, the higher on the hierarchy. We believe that we, the white super beings, are superior over all other beings. We have spent millennia telling ourselves that it is a "natural" law to believe that the humans furthest removed from nature are superior. Almost nobody who teaches the concept of "natural law" discusses the obvious contradiction that somehow "natural law" idolizes those that are furthest from nature. What is natural about that?

Miller states that "At the irreducible core of Christianity was the dictum that God created man in the deity's image, and that the non-human world was available for human use and God's glorification ... humans were on a higher level than animals, fish, and the rest of the natural world. This world view had fuelled Western society's development of science and the subjugation of nature by means of technology ever since the Renaissance." ¹²⁹

Ptolemy's book on astrology stated that the Earth was the centre of the universe. Later, Christians added that beyond the stars was the world of God and that his angels were keeping the various planets, sun, moon and stars in safe orbit above earth. "It was pleasant to believe that we were at the center of all God's creation, and that the heavens circled around us, and that the sun, moon, and stars shone only to give us light. The whole conception made us feel important, as if we mattered. The idea that the heavens circled earth fitted nicely with another pleasing European, or Christian, belief: namely, that human beings are a special creation of God." ¹³⁰

European societies were highly stratified and their governments were coercive. There was a well-established hierarchy of monarchs, nobles, priests, gentries and common people. Everyone expected that once the leadership had arrived at a decision or policy, it would be enforced and imposed on the people. ¹³¹

Jordan writes:

The idea of the Great Chain of Being possessed all the power and all the weaknesses of any gigantic synthesis. The Chain of Being, as usually conceived, commenced with inanimate things and ranged upwards through the lowliest forms of life, through the more intelligent animals until it reached man himself; but it did not stop with man, for it continued upward through the myriad ranks of heavenly creatures until it reached its pinnacle in God. By definition a chain was without gaps, the more so with the Great Chain forged by the Creator. The gradations between ranks on the scale were merely subtle alterations, so that the assembled hierarchy always remained a harmonious whole. ...

To summarize baldly for the moment: it served to dramatize the Christian view of man as a creature with a divine soul; it served to formulate men's vague sense of the beast within themselves and their capacity for rising above bestiality; it served to satisfy the eighteenth century's ravenous appetite for hierarchical principles in the face of social upheaval; and it served as a powerful means of organizing the facts of the natural world. 132

Gods and angels, with no physical bodies are highest; humans, with souls that cannot be found and who, we tell ourselves, look like God, are next highest.

Christianity says that only humans have souls. The idea that God created humans in God's image, and that God gave humans souls but decided not to give souls to any other part of nature (and maybe not to indigenous or black humans either), is essential to justify our ideas of human supremacy. Nature, plants and animals have no souls and thus have no importance except whatever importance humans choose to give them.

If the distinction between those with and without souls does not make sense, Europeans had another theory to explain human supremacy: only humans have consciousness. In the 17th century, the great enlightenment thinker René Descartes said that only humans feel and crave, whereas all other animals are mindless automatons. This theory was widely accepted.¹³³

In the 1500s, when Spain and other "civilized" white people debated whether or not indigenous peoples were rational, had souls or had legal rights, indigenous peoples were considered animals or mostly similar to animals. White people were far superior.¹³⁴

Lindberg states, "[t]he Doctrine of Discovery has its origins in the notion of superiority." ¹³⁵ There is no empire or colonialism without belief in one's own supremacy. The doctrine of discovery is just one example of supremacist belief in action. Canada would not have the laws of England imposed on it without the belief in white supremacy over indigenous peoples, nations and their laws. "English-Canadian judges and legislators long saw the English common law as the fount of all wisdom and English legislation as a desirable model for federal and provincial law." ¹³⁶

At Indian Residential Schools, the Great Chain of Being was reinforced this way:

In their missionary work, the Oblates made successful use of a teaching tool that came to be known as "Father Lacombe's Ladder." Based on earlier illustrated timelines that set out humanity's pathway to heaven, Lacombe's version was novel in that it included a separate pathway to hell. As a sign that their cultural and spiritual ways were sinful, most of the Aboriginal people in the illustration were travelling this road. It was reproduced and used throughout the Northwest by the Oblates. ¹³⁷

All law schools should teach agriculture, inequality and the subjugation of nature as the origin of our idea of law. All law schools should teach how the idea of human supremacy over nature leads to the idea of a Great Chain of Being, which in turn leads to ranking different life forms into a hierarchy.

6. Agriculture creates monotheism

The theology, mythology and liturgy of religions such as Judaism, Hinduism and Christianity revolved at first around the relationship between humans, domesticated plants and farm animals. 138

And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. Genesis 1:26

Foraging involves finding food from a wide variety of sources, and moving to where the food is. When one food type is not ripe, eat a different food source. When one location suffers from drought or floods, walk to another location. Foraging values diversity of food and places.

"Diversity" is a special word. It can mean equality – equality of place within the natural environment, equality of species and equality of peoples. It implies a recognition that diversity is an advantage to be valued, not a problem to be managed, much less a problem whose solution is assimilation and uniformity. Diversity means that hierarchy is trouble; pretending that we are on a ladder to the "best" culture or the survival of the "fittest" is a sure way to demean and undervalue diversity, which consideres differences and variety to be better than a singular greatness.

Polytheism is a type of diversity. It produces religious tolerance. ¹³⁹ Peoples and emperors who believed in many gods did not try to force their subjects to abandon their local gods and did not send missionaries or armies to force others into the same beliefs. Polytheism accepts a diversity of many gods.

Hunter-gatherers "are traditionally animists, and their belief in a multitude of spirits and gods mirrors their reliance on a complex variety of natural resources. By contrast, food empires disregard the first rule of ecology that diversity equals strength." Food empires tend to focus on a shockingly small number of products, grown in monoculture farms. Food empires also produce monotheistic religions, which promote uniformity and attack diversity. Agriculturalists, with their relatively simple food supply and their view of nature as something that needs to be *controlled* rather than *cooperated* with, were sociologically predisposed to create religions with fewer, more powerful gods – and gods in their own image at that. 141

Diamond proposes that religions generally fill several important functions for humans, ¹⁴² including that religion provides comfort. Hunter-gatherer societies have far less inequality, more diverse and plentiful diets, more daily exercise and time for leisure, and live in less densely packed places with no domesticated animals, which results in fewer diseases and fewer opportunities for any disease to spread widely.

Civilized societies have so much inequality and pain that people need something to explain why they are suffering while living virtuous, law-abiding lives while others are rich and frequently committing gross excesses and trespasses. Societies needed to explain why good people were suffering and evil people were benefitting; they turned to religion. Moller explains,

Everyday life in late antiquity was extremely precarious, even for the wealthy 5 per cent or so of the population who weren't peasants or slaves. Disease and death stalked every household, hunger and disaster were never far away. Add to this hordes of invading barbarians trampling your crops and murdering your family and the picture becomes very bleak indeed. But there was one glimmer of light in the darkness, a faint spark of hope in the chaos – religion. ...

People clung to the promise of salvation. The idea that the more you suffered here on earth, the better your time would be in the afterlife was a potent shield against the desperate realities of everyday life in the fifth and sixth centuries. This doctrine was central to the success of Christianity's victory over paganism, which had traditionally championed the pursuit of happiness and denounced pain as evil. The triumph of suffering over pleasure had its most extreme expression in the early monasteries. ... Self-flagellation, self-deprivation and a lifestyle of acute asceticism was demanded of their inhabitants. But these monasteries were also places of peace and safety in a terrifying world, the only place where anything approaching an education or library could be found. ...

The battle between Christianity and paganism was long and violent, and there were many casualties. Scholarship ended up in the no-man's land between the two, as the prevailing force of the Church struggled to destroy or assimilate the philosophy, science and literature of the ancient world, which were, by their very nature, pagan.¹⁴³

In addition, agriculture regularly fails, through drought, flood, heat and cold, pestilence and disease. Humans invented new gods and gave sacrifices to the gods to ask for blessings of fertility, rain, sun and health.

Farmers believed in gods, built temples, held festivals, observed holy days, offered sacrifices, and gave lands, tithes and presents to their gods. Since gods never died and had no children to fight over their inheritance, they accumulated more and more riches and power. Priests ran the entire operation. Surpluses and sedentary living allowed for the creation of a priest class, just as it created tax-collecting, law-making bureaucrats and permanent soldiers. The more powerful and singular the god, the more powerful the priests. Monotheism thus enriched the priests.

As kingdoms and empires and trading networks developed, local gods became less useful, and gods with a more universal reach were required. Ultimately, this meant humans wanted a single god who might intervene on their behalf anywhere they travelled.

Rulers wanted a single god across their domain, so that their subjects would all understand that the most powerful god favoured the ruler. Otterbein finds that as rulers increased in power, they also made their gods more powerful and singular. He writes, "I view the belief in a high god, who is the only god in a belief system, as a device that can be used by the ruler of a newly formed state to consolidate his power." The belief in a high god, and even more in a singular god, is a means of legitimizing the new state and its ruler.

The idea of a universal order developed. Hammurabi was the sixth king of the Amorite First Dynasty of Babylon, and reigned from 1792 to 1750 BCE. Under him, all of ancient Mesopotamia was conquered. Hammurabi's Code was one of the first legal codes; it asserts that the laws and "Babylon social order is rooted in universal and eternal principles of justice, dictated by the gods." ¹⁴⁵ Around 550 BCE, Cyrus the Great of Persia began claiming that his rule, his conquests and his empire were for the good of everyone. The vision of universality was passed from emperor to emperor. Similar ideas developed in central America, the Andes in South America and in China. "[E]mpires have justified their actions – whether

road-building or bloodshed – as necessary to spread a superior culture from which the conquered benefit even more than the conquerors."¹⁴⁶ Justifying conquest over others as the spreading of a universal and superior culture (civilization) now seems like a permanent way of thinking for most humans. A singular god suited the needs of an emperor very well.

Monotheists were more violent than polytheists. For example:

The only god that the Romans long refused to tolerate was the monotheistic and evangelising god of the Christians. The Roman Empire did not require the Christians to give up their beliefs and rituals, but it did expect them to pay respect to the empire's protector gods and to the divinity of the emperor. This was seen as a declaration of political loyalty. When the Christians vehemently refused to do so, and went on to reject all attempts at compromise, the Romans reacted by persecuting what they understood to be a politically subversive faction. And even this was done half-heartedly. In the 300 years from the crucifixion of Christ to the conversion of Emperor Constantine, polytheistic Roman emperors initiated no more than four general persecutions of Christians. Local administrators and governors incited some anti-Christian violence of their own. Still, if we combine all the victims of these persecutions, it turns out that in these three centuries, the polytheistic Romans killed no more than a few thousand Christians. In contrast, over the course of the next 1,500 years, Christians slaughtered Christians by the millions to defend slightly different interpretations of the religion of love and compassion. ... More Christians were killed by fellow Christians in those twenty-four hours [August 23, 1572, the St Bartholomew's Day Massacre, where Catholics killed up to 10,000 Protestants] than by the polytheistic Roman Empire throughout its entire existence. 147

Monotheistic religions are directly connected to agriculture. Harari writes, "The theology, mythology and liturgy of religions such as Judaism, Hinduism and Christianity revolved at first around the relationship between humans, domesticated plants and farm animals." ¹⁴⁸

For the next discussion, I will focus on Christianity because that is both my upbringing and the central reality of law in England, Canada and the Anglo-American world. What follows are merely examples of religious texts. Christianity did not create agriculture, did not create racism and sexism, did not create environmental degradation; those existed long before Christianity. But Christian texts give us clear examples of how these social facts became entrenched into the Christian religion.

There are numerous quotes in the Old Testament that teach a Chain of Being or hierarchy, and that justify and encourage genocides against others. ¹⁴⁹ We could start with the Book of Genesis:

And God said, Let us make man in our image, after our likeness: and let them have dominion over the fish of the sea, and over the fowl of the air, and over the cattle, and over all the earth, and over every creeping thing that creepeth upon the earth. So God created man in his own image, in the image of God created he him; male and female created he them.¹⁵⁰

It does not get more hierarchical than to declare that humans are god-like. Genesis describes this hierarchy further,

And God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living that moveth upon the earth. Then God said, 'I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. And

to all the beasts of the earth and all the birds in the sky and all the creatures that move along the ground--everything that has the breath of life in it--I give every green plant for food.' And it was so ¹⁵¹

Subdue the earth, have dominion over living things: human supremacy and farming at its most basic.

Genesis 2 continues, describing the tree of knowledge of good and evil, which is planted in the middle of the Garden of Eden. God decrees:

But of the tree of knowledge of good and evil, thou shalt not eat of it: for in the day thou eatest thereof thou shalt surely die 152

Adam and Eve lived as foragers in the Garden of Eden – the ideal life. Nature provided everything they needed. Here we see that human's original sin was knowledge, which made them god-like; in fact, it made them immortal like gods. By eating from the tree of knowledge, humans knew for the first time about good and evil. The specific bit of knowledge that the Bible cites as demosntrating knowledge of the difference between good and evil is nudity. In Genesis 2:25, "they were both naked, the man and his wife, and were not ashamed." ¹⁵³ But in Genesis 3, after eating from the tree of knowledge, the Bible tells us that humans realized, for the first time, that they were naked and for some reason, that knowledge of how God made them originally caused them to be them ashamed. Suddenly, nakedness became equated with evil; surely this is a sign that being closer to nature was considered inferior and distancing oneself from nature was considered superior.

A vindictive God did not want competition in immortality. God cursed Adam and Eve for having eaten from the tree of knowledge. God condemned them to the hard work of farming – "by the sweat of thy face shalt thou eat bread." – and to mortality: "from dust thou are and, and unto dust shalt thou return". ¹⁵⁴ The Bible teaches that animals and nature outside the Garden of Eden should be feared and subdued and that humans must live by hard labour through agriculture. Upon Adam's admission of having eaten from the tree of the knowledge of good and evil, "the LORD God sent him forth from the garden of Eden, to till the ground from whence he was taken". ¹⁵⁵ In this way, God commanded humans to be farmers and drove them out of the Garden of Eden and the easy living of a forager. ¹⁵⁶

Among humans, God made males superior to females. Genesis again:

And the LORD God caused a deep sleep to fall upon Adam and he slept: and he took one of his ribs, and closed up the flesh instead thereof; And the rib, which the LORD God had taken from man, made he a woman, and brought her unto the man. And Adam said, This is now bone of my bones, and flesh of my flesh: she shall be called Woman, because she was taken out of Man. 157

Then, when God is punishing Adam and Eve for eating from the tree of knowledge, "To the woman he said, 'I will make your pains in childbearing very severe; with painful labor you will give birth to children. Your desire will be for your husband, and he will rule over you." Not only were women expelled from Eden, but also cursed to being ruled over by men, experiencing severe pain in childbirth and, if that were not enough, owing a duty to God to bear the domestic brunt of the order to "be fruitful and multiply". God is male, Jesus is male, all of Jesus's apostles are male, the four books of the Gospel are written by men and all of the central characters in the Bible are men. Man's wife exists as a spare part taken from man and is considered to be united as one in the husband.

After the great flood, God blesses Noah in the same way as he blessed Adam and Eve. Again, he instructed Noah and his family to "be fruitful and multiply". 159

Francis Bacon was a strong defender of the importance of male superiority. As Solicitor-General of England in 1608 he argued that monarchy was the best form of government because it was based on the "platform" of male domination. He governed his wife "by prerogative of sex," his children by age, his servants because of his greater "virtue," all of which were the model of a king. 160 Laws would provide that a man could assault his wife in any manner, that a woman could neither testify against her husband, inherit, own or manage property, nor enter into contracts.

Other parts of the Bible teach that Christians are superior to non-Christians. For example, in the second books of John:

Everyone who goes on ahead and does not abide in the teaching of Christ, does not have God. Whoever abides in the teaching has both the Father and the Son. If anyone comes to you and does not bring this teaching, do not receive him into your house or give him any greeting, for whoever greets him takes part in his wicked works. ¹⁶¹

Deuteronomy states that [sic],

When you go out to war against your enemies, and see horses and chariots and an army larger than your own, you shall not be afraid of them, for the LORD your God is with you, who brought you up out of the land of Egypt... When you draw near to a city to fight against it, offer terms of peace to it. And if it responds to you peaceably and it opens to you, then all the people who are found in it shall do forced labor for you and shall serve you. But if it makes no peace with you, but makes war against you, then you shall besiege it. And when the LORD your God gives it into your hand, you shall put all its males to the sword, but the women and the little ones, the livestock, and everything else in the city, all its spoil, you shall take as plunder for yourselves. And you shall enjoy the spoil of your enemies, which the LORD your God has given you. 162

Thus, Deuteronomy provides a foundation for supremacy, war, slavery, rape, child exploitation and looting.

Genesis 9:18-27 suggests that agriculture began with vineyards and wine, leading directly to Noah getting drunk (through no fault of his own) and being naked in his tent (also through no fault of his own). He was seen naked by his son Ham, which caused Noah to curse Ham's son Canaan, leading to all Africans being condemned to slavery forever after; this is the Curse of Ham. Noah states, "Cursed be Canaan, a servant of servants shall he be unto his brethren. And he said Blessed be the LORD God of Shem; and Canaan shall be his servant." Christians believe that Noah divided the world between his three sons, giving Europe to Japheth, Asia to Shem and Africa and the Middle East to Ham. He Thus, once again, the great sin of nudity arises and God is so enraged that he curses Canaan, who had nothing to do with Ham's offence against Noah, and subsequently curses every single African who will ever live to slavery.

In this way, the Book of Genesis puts agriculture and slavery into the same passage; although, there are many, many problems with the interpretation and translation of the texts surrounding the Curse of Ham, not least of which is the absurd injustice of permanently condemning every dark skinned person for eternity. ¹⁶⁵ I discuss details of the Curse of Ham in my subsequent paper on doctrines of discovery and invasions.

This is not an all-loving, all-merciful God who loves all his children equally; this is a vengeful God who puts white males above all others in a hierarchy. This is a God who says that knowledge, nudity and agriculture are curses and, moreover, that they lead to death. Given that agriculture has led to the scientific revolution (knowledge), which in turn led to the immense burning of fossil fuels, which are now leading us to a global climatic catastrophe, perhaps Genesis was correct after all – maybe agriculture does lead to death. Dust to dust.

Christianity is a religion of monotheism, human supremacy over nature, a chain of beings, agriculture, slavery and death. And, adherents hope, some of kind of immortal salvation.

7. Agriculture creates the Great Commission

Go ye therefore, and teach all nations, baptizing them in the name of the Father, and of the Son, and of the Holy Ghost. Matthew 28:19

And other sheep I have, which are not of this fold: them also I must bring, and they shall hear my voice; and there shall be one fold, and one shepherd. John 10:16

Compel them to come in. Luke 14:23

With agriculture creating the idea of hierarchy, placing monotheism at the top followed by god-like white Christians, Christians decided that God wanted them to change the world-views and religions of all humans. This is called the Great Commission. Given the Chain of Being, it should be expected that there is a hierarchy of belief systems, with white religion at the top.

Christians believe that God instructed Christians to proselytize and convert non-Christians, to spread the "good word." Of particular importance is the book of Matthew:

And [Jesus] saith unto them [Peter and his brother Andrew], Follow me, and I will make you fishers of men. 166

Then Jesus came and said to [the disciples], "All authority in heaven and on earth has been given to me. Go therefore and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, teaching them to observe all things whatsoever I have commanded you. And behold I am with you always, even unto the end of the age. 167

The Roman Catholic Church believes that God chose Peter to be his representative on Earth and that Peter was the first pope. Matthew writes, "Thou art Peter, and upon this rock I will build my church; and the gates of hell shall not prevail against it. And I will give unto thee the keys of the kingdom of heaven: and whatsoever thou shalt bind upon earth shall be bound in heaven." ¹⁶⁸

St Bernard taught in the twelfth century that Jesus had left the government of the whole human race to Peter. ¹⁶⁹ The Roman Catholic Church believes that each of its popes has a direct connection as the rightful successor to Peter; thus, each pope is God's representative on earth and whatever the Church orders on Earth will be sanctioned by God. If you believe in hierarchy, might as well place yourself at the top.

Jesus said: "And other sheep I have, which are not of this fold: them also I must bring, and they shall hear my voice; and there shall be one fold, and one shepherd." Here we see the idea that non-Christians (sheep not of the Christian fold) also belong to God and they "must" be brought into the Christian church until everyone is converted to Christianity ("one fold") and subject to Jesus ("one shepherd") and subject to Jesus's self-appointed spokesperson on Earth: the pope.

John reports that Jesus told Peter three consecutive times (and therefore told all popes), "Take care of my sheep." ¹⁷¹By telling Peter to feed God's sheep, God was implicitly telling every Catholic pope that the Catholic Church has universal authority and responsibility over all humans - according to the Catholic Church.

Pope Innocent IV asserted that the requirement to "feed my sheep" applied to all humans, because "the infidels are sheep of Christ". ¹⁷² Psalms also states, "The earth is the LORD's, and the fullness thereof; the world, and they that dwell therein" ¹⁷³. Because the flock of Jesus's sheep included all people, the gospel had to be preached to all people. ¹⁷⁴ Notice the constant references to sheep. "The lord is my shepherd". Clearly agriculture and domestic animals serving humans is part of God's plan. Luke 14:23 says: "Compel them to come in." ¹⁷⁵ In other words, use force to make them part of the church.

The idea of the Catholic Church and the pope specifically having universal authority became an important legal justification for invading the lands belonging to non-Christians, waging war against them, enslaving them, and stealing their resources.

The Great Commission was a great success for Christianity. Moller writes, "As the Church gained power and popularity, its leaders became more and more determined to stamp out competing belief systems and Christianize the whole world. By AD 500, it was well on the way to achieving this mission." ¹⁷⁶ By the sixth century AD, Augustine said that even unusual races could become Christians. He defined humans as being rational mortal creatures, all of whom were descended from Adam. Missionary activities among foreign peoples became a popular idea. ¹⁷⁷ Adiele further explains,

The rights of non-Christians was closely related to the idea of one universal church with one person, the pope, acting for God on earth. The establishment of this universal ecclesiastical empire dominated the pontificates of the major powerful and very influential medieval popes... That means, from the early eleventh century and up to the early beginnings of the fourteenth century, this hierocratic concept of jurisdiction preoccupied the papacy and through the pursuit of this aim, the office of the pope attained the heights of its glorious and worldwide influence. All these popes were famous intellectuals, canonists and lawyers and were united with this single papal universally authoritative view of the Church.¹⁷⁸

We have embraced the idea of a single God, a single religion, a single worldview. Just as humans have caused various waves of extinctions over time, we have also radically reduced the diversity of religions. With the idea of universality and civilization in hand, among *Homo sapiens*, a type of mass extinction is occurring. As recently as 10,000 BC, we had many thousands of groups of *Homo sapiens* living very separately from each other. They developed different languages, different tools, different religions, different diets, different clothing, different arts, different methods for organizing themselves, different ideas of justice. By 2000 BC, the numbers of separate groups had dwindled to the hundreds. Around 1000 BC, large numbers of peoples began imagining a single world, with the clear potential for universally shared concepts of money with which to trade, universally shared concepts of kings and imperial rule, and the idea of a universal religion such as Christianity, Islam or Buddhism. By 1450 AD, almost 90 percent

of humans lived in Afro-Asia (including southern Europe along the Mediterranean), with substantial cultural, political and economic ties. The Afro-Asia behemoth swallowed up the rest of the world in the following 300 years.

Today almost all humans share the same geopolitical system (the entire planet is divided into internationally recognized states); the same economic system (capitalist market forces shape even the remotest corners of the globe); the same legal system (human rights and international law are valid everywhere, at least theoretically); and the same scientific system (experts in Iran, Israel, Australia and Argentina have exactly the same views about the structure of atoms and the treatment of tuberculosis). ¹⁷⁹

8. Agriculture creates surplus, cities, professional soldiers, taxes, law, civilization, colonialism, writing, money, new technologies

Agriculture Creates Surplus

When hunter-gatherers sought food, they moved wherever nature offered food. They were usually confident in their ability to find sufficient food on a daily basis and they needed to move lightly. There was neither need for nor advantage to acquiring surpluses of any kind. If there was sufficient food to sustain semi-sedentary living, they became more sedentary, using fire for drying food for longer preservation; however, they did not need to create surplus when natural abundance was all around them. Extending beyond just food, giving away possessions was the mark of a great leader. Nonetheless, societies such as in the Pacific northwest such as the Chumash, Nootka and Kwakiutl, had so much abundance at hand that they created semi-permanent villages, sometimes with hundreds of residents, houses, possessions and slaves.

Recall that walking upright, fire, the cognitive revolution and the ability to share fictions all resulted in huge advances in cooperation, and these revolutions can be thought of as artificial ways that humans acquired surplus energy.

Agriculture allows humans to acquire even more surplus energy, as it allows us to indirectly capture solar energy that we cannot capture with our own bodies. This extra energy is decisive in making humans the dominant species. Solar energy, or photosynthesis, is in the plants, which convert solar energy into new growth. Humans cannot eat grass but our domesticated animals can (as can wild animals). If we eat the animals, we consume the solar energy stored in the grass that the animals ate, which we cannot consume directly. The more animals we can kill, the more energy we can derive from the sun and the grass. The more energy (calories) we have available to us, the larger our populations become.

Eating is not the only way that animals give humans an energy boost; we also acquire a surplus of energy from our domesticated animals by using their physical strength rather than our own for our farming purposes. We use the animals to generate vastly more energy for plowing and other tasks than we are capable of producing ourselves. Bomestication of animals gives us vast energy advantages over any other species and over any humans that do not have domesticated animals; this is a form of surplus. More calories equals more people equals more technology equals more use of energy equals more people, etc.

All of these methods of acquiring surplus energy combined into our scientific revolution, which created our ability to find, use and burn fossil fuels at an unimaginable scale. This combination of energy boosts allowed humans to use energy to evolve and act at speeds that far exceeded our evolutionary make-up. Changing and acting faster than humans could change by biological evolution has consequences.

So, how did agricultural surplus change human societies?

Agriculture produces surplus food in a fixed location. This leads to sedentary living, which leads to attachments to a specific piece of land with houses, possessions, irrigation, etc. As agricultural societies closed off land, the option of wandering the surrounding area for food became closed as well. Acquiring, possessing and storing surplus went hand in hand with agriculture, larger populations, private land control, war and inequality. Accumulating possessions rather than giving them away became the mark of a great leader.

Diamond explains that there could be no states until there were developed surpluses of food to build up densely populated places, which then required a state government to enforce peace between strangers. He finds that there were no states anywhere before 3400 BC and the first state was in the Fertile Crescent, followed by China, Mexico, the Andes and Madagascar¹⁸³ (note: he did not find states in Europe, which was "barbaric" until agriculture spread there).

Otterbein writes that there are three essential requirements for state formation: first, the idea of a state (an example of one of Harari's shared fictions); second, a surplus; and third, a strong military organization. ¹⁸⁴ Two major causes of inequality are resources that can be defended by states using force and goods that can be effectively transferred to one's own possession (including resources that can be passed down to descendants or to the state; i.e. non-perishable possessions). These conditions can also be met by some hunter-gatherer societies where wild food occurs in great abundance. ¹⁸⁵

Agriculture creates surplus which leads to many other changes, including creating the necessary conditions for inequality to flourish.

Agriculture Creates Cities

The new forms of energy obtained through agriculture resulted in "a quantum leap in the complexity, diversity, size, and intricacy of human societies". 186

The population of modern humans began small, perhaps just 20,000 people some 150,000 years ago. It grew to one million 65,000 years ago and then to between two and four million 10,000 years ago, ¹⁸⁷ just before the agricultural revolution – less than one one-thousandth of what it is today. That works out to approximately 7 billion humans who had ever lived during that entire 150,000 year period.

Seven billion people across 150,000 years compared to seven billion all alive at one time today; that is thanks to our agricultural revolution.

Wells writes, "With the invention of agriculture, though, the [human] growth rate suddenly jumped to levels never before seen in the evolutionary history of a large primate. The small Natufian villages became towns virtually overnight". ¹⁸⁸ Around 8,500 BC, the largest settlements in the world were villages. Numbers and estimates vary, but by 7,000 BC, the town of Catalhoyuk in Anatolia numbered between 5,000 and 10,000 individuals. By 4,000 BC, the Fertile Crescent contained cities with tens of thousands of inhabitants. ¹⁸⁹

Over the first 10,000 years of agriculture, up to the year 1 AD, it is estimated that 26 billion humans had been born. Over the next 1750 years, an additional 32 billion humans had been born. Since 1750 to the

present, more than 16 billion humans have been born. ¹⁹⁰ There were approximately one billion people alive in 1800; 1.6 billion in 1900; and 6 billion in 2000. ¹⁹¹ The population explosion continues.

Strangers within a state are united in different ways: by allegiance to a widely shared religion, to a king, to a group with a shared ancestry, to shared economic endeavours that are different from the economic endeavours of others, to shared cultural practices including food and clothing, to specific regions of land, among others. These develop into what we currently think of as "ethnic groups", which creates a broader group of "us" and many broader groups of "them". 192

Agriculture and sedentary living allow for storage of the surplus, which is essential for feeding non-farmers – people who are able to specialize in other endeavours. Hunter-gatherer societies do not have full-time specialists, which include kings, soldiers, bureaucrats, priests (who provide justifications for conquest), weapons-makers and scribes (who preserve far more information, far more accurately than can be done in a mobile, small, oral culture). Diamond points out that, "those complex political units are much better able to mount a sustained war of conquest than is an egalitarian band of hunters." ¹⁹³

Women in hunter-gatherer societies averaged one baby every four years. After agriculture, this increased to one every two years. Sedentary living makes it possible to have more babies more frequently, as mothers do not have to carry and care for babies over long distances or protect them from as many predators. Rather than being a burden, more babies means more shared labour in the fields. There are more people, located closer, who can assist the mother with child-rearing. A high-carbohydrate diet increases ovulation and extends a woman's reproductive life. 194 Humans developed an ability to digest animal milk, 195 which allowed for earlier weaning and, thus, more babies. 196 Morris states that the typical farm-wife carried seven babies to term, spending most of her adult life pregnant or minding small children. Farm foods such as grains required more processing than foraged foods (threshing, sifting, grinding, baking) and permanent houses required regular cleaning; both these activities could be done while simultaneously minding small children. This reality pushed women into houses and out of the fields and forests. 197

Go to any underdeveloped country. There is inadequate food, health care, water, sewage and garbage disposal. There is no unemployment insurance, sick pay, pensions. There is little to no education. There is little gender equality and little access to birth control. The infant mortality rates require more children to be born than many would otherwise choose. Children are a personal labour force, who provide their parents with food, sick leave and a pension – they are their hope. Inequality and poverty increase population, as having children becomes a strategy for survival. More people means a lot of changes to society and a lot of inequality. The bigger the population and the bigger the surpluses, the bigger the inequality.

The idea of cities was celebrated in our religions. In the Gospel of Matthew, Jesus tells his listeners, "You are the light of the world. A city that is set on a hill cannot be hidden." The city is also the foundational metaphor for the greatest work by a Roman Christian: St. Augustine's *De Civitae Dei*, 'The City of God' (written about 413-426 CE). The image of a city as being the proper state of civilization, guided by Christianity, was carefully nurtured by the city states of fifteenth-century Italy. The image of a City of God being a beacon of light to barbarians was used by preachers to justify the invasion and establishment of settlements in what they called New England by English Puritans. 199

Population explosion continued. During the First World War, Germany ran short of natural fertilizers and two of its scientists, Fritz Haber and Carl Bosch, discovered how to draw nitrogen out of the air to make artificial fertilizers. Their process requires so much energy that it is only possible with fossil fuels.²⁰⁰

Agriculture boomed worldwide with the new fertilizers, fossil fuels and machines, which were controlled by the people with the best mastery of technology, finance, weapons and laws. The technologies produced a world-wide system of states, money, communications, transportation, finance and protection against famine. Together with better medicines and enough food (at least at a survival level), the world population grew quickly to 7 billion humans.

Agriculture Creates States, Empires, Full-Time Soldiers and Taxes

Hunter-gatherer societies are generally organized in small groups of kinship. Christian writes that the world was generally divided into two groups: kin (usually members of the tribe) and everyone else. Larger, farming populations go beyond individual kin and create vast numbers of strangers living in close proximity. Villages turn into towns, and towns butt up against each other and are amalgamated into larger political entities. "Everywhere, as farming spread, we begin to see new and more hierarchical structures that overlay village communities organized by traditional kinship rules. ... As people lived closer together in large villages, disputes increased over land rights, inheritance, assaults, or damage to property". New hierarchies of strong or persuasive men developed, the women having been confined to child-rearing and domestic duties. In addition, the new farming required irrigation ditches, canals and dikes in many places. This in turn required the organization of a large number of people working with the same purpose, which required more violent male leaders to enforce the work regime. ²⁰¹

Cities grew. Larger cities took over smaller cities. They grew into states, and then empires.

Agriculture and "civilization" did not offer peace. Farmers were sedentary, had farm implements, stored food and had land and possessions that they had to defend; they could not simply walk away from a fight. Agriculture gave us kings, empires, laws, and food surplus to feed soldiers and elites who had time to study and create ever more effective weapons. Agriculture steadily eroded land and constantly forced a search for "new" land (the land of others) for further farming. Agriculture's requirement for "new" land, which would be taken by force, created war on a massive scale. With powerful kings and religions, full-time soldiers could be fed and organized into collective action and instructions issued on a wide scale.

Not only did they facilitate the creation of large-scale warfare, but the shared fictions of king and god, together with a fixed place of living - a fixed place to defend - and paid soldiers, all combined to create an entirely new attitude about fighting. Agriculturalists are more than willing to fight with little regard for their own lives out of religious and patriotic fervour, and fighting and dying for one's country is a badge of honour. Diamond writes, "[W]e forget what a radical break it marks with previous human history ... Such sentiments are unthinkable in bands and tribes." Bands and tribes used raids of ambush or superior force in order to minimize the risk of dying for the village. This attitude severely limited their military options compared to state societies. Diamond continues, "Fanaticism in war, of the type that drove recorded Christian and Islamic conquests, was probably unknown on Earth until chiefdoms and especially states emerged within the last 6,000 years." ²⁰³

It is difficult to establish just how much war existed for hunter-gatherers. Ferguson argues that "War is hardly ubiquitous and does not go back endlessly in the archaeological record. Human warfare did indeed have a beginning." Ferguson says that war coincides with the development of agriculture and/or sedentary living:²⁰⁴

The preconditions that make war more likely include a shift to a more sedentary existence, a growing regional population, a concentration of valuable resources such as livestock, increasing

social complexity and hierarchy, trade in high-value goods, and the establishment of group boundaries and collective identities. These conditions are sometimes combined with severe environmental changes... Many social arrangements impede war, such as cross-group ties of kinship and marriage; cooperation in hunting, agriculture or food sharing; flexibility in social arrangements that allow individuals to move to other groups; norms that value peace and stigmatize killing; and recognized means for conflict resolution. These mechanisms do not eliminate serious conflict, but they do channel it in ways that either prevent killing or keep it confined among a limited number of individuals.²⁰⁵

Ferguson adds as well that war, once established, creates a culture and momentum of its own. Violent people replace less violent ones. Violent states develop and militarize their boundaries and trade routes. Environmental upheavals create conflict and war. Although humans have always had the capacity to make war, it is only in the past 10,000 years that war became common, "and, in most places, much more recently than that." Archaeological findings prove the point. Ferguson cites Margaret Mead's 1940 article "Warfare is only an invention - not a biological necessity." He also cites studies of chimpanzees, because humans are compared to chimpanzees and we frequently stereotype chimpanzees as being violent by nature; however, "[c]ritical examination of a recent compilation of killings from 18 chimpanzee research sites—together amounting to 426 years of field observations—reveals that of 27 observed or inferred intergroup killings of adults and adolescents, 15 come from just two highly conflicted situations, which occurred at two sites in 1974–1977 and 2002–2006, respectively. The two situations amount to nine years of observation, tallying a kill rate of 1.67 annually for those years. The remaining 417 years of observation average just 0.03 annually." We must stop making assumptions about human nature and innate violence. We must pay more attention to archaeology, including sites where no evidence of violence is present; the evidence is that war only began in human history in the past 10,000 years.

Frye notes the close connection between walls and the agricultural revolution. It stands to reason: the point of agriculture is to wage war against nature and keeping it out of the domestic. Fences and walls are essential for that purpose. Walls are also essential for violence. They establish zones of control by which military leaders can keep their slaves, serfs, agricultural surpluses and things penned in, from which they can be protected against neighbouring invaders and from which they can maintain a base from which to launch invasions against others. Frye's book presents an extremely simplistic look at civilized people – who live within walls, and barbarians, who live outside of walls. "On one side of the walls were the builders, their history illuminated by every sort of literature. On the other were the people without any history." Frye adds "One path, beginning with walls, had led to writing, architecture, astronomy, and math. The other, open and unwalled, led only to militarism." It is an astonishingly supremacist and incorrect outlook.

Nonetheless, Frye makes some useful observations. "Civilization and walls seems to have gone hand in hand. ... No invention in human history played a greater role in creating and shaping civilization." Further, "Like early farming communities everywhere, cities in Mespopotamia focused their greatest efforts on surrounding themselves with fortifications. Massive bullworks protected the people, their food supplies, their wealth, and their animals." Agriculture produced war and walls in ways never seen before agriculture. ²⁰⁹

Bigger states and warfare called for tougher rulers, so the 'big men' gave way to iron-fisted warrior-kings who claimed that they had been chosen by the gods. The warrior-kings fought their neighbours over water rights and land, and if they defeated their neighbours the victorious warrior-kings changed the border markers.²¹⁰

Although agriculture began around 12,000 years ago, it was not until around 3,200 BC that the entire Nile Valley was united into the first Egyptian kingdom. Around 2250 BC, the world saw tits first empire: the Akkadian Empire, with over one million subjects and a standing army of 5,400 soldiers. The next empires were also in the Mesopotamian-Egypt area: the Assyrian Empire (2025 BCE – 605 BCE), Babylonian Empire (1894 BCE – 1595 BCE), Hittite Empire (1600 BCE – 1178 BCE), Egyptian Empire (1550 BCE – 1077 BCE), Kushite Empire (760 BCE – 656 BCE), and the Carthaginian Empire (650 BCE – 146 BCE).²¹¹

Between 1,000 and 500 BCE, the world's first mega-empires appeared: the Achaemenid Empire, or the first Persian Empire, followed by the Mauryan Empire in northern India and the Han Empire in China, to name only some. The mega-empires ruled over many millions and commanded tens of thousands of soldiers. In 221 BCE, the Qin dynasty united China and shortly afterwards the Roman Empire controlled the Mediterranean basin. Over time, the earth moved from being exclusively natural to becoming more and more unnatural, with humans beginning as hunter-gatherers, then developing towns, cities and countries that covered very little of the Earth's surface, then creating empires that dominate virtually the entire surface of the Earth today.

It is not possible to sustain non-farming soldiers, bureaucrats, priests and royalty without taxes. Scott believes that originally only cereal grains could serve as a useful basis for taxation. Cereal grains lend themselves to taxation for several reasons: they are easily seen by tax collectors, as they grow above ground, frequently in large, open fields; their harvest time is predictable; and, the grains can be stored (and left unhusked until needed), transported and rationed to pay slaves and soldiers and other citizens. Grains had a higher value per unit volume than almost any other foodstuff.²¹³ Thus, agriculture created taxes. Harari explains,

Taxes levied on 40 million Qin subjects paid for a standing army of hundreds of thousands of soldiers and a complex bureaucracy that employed more than 100,000 officials. The Roman Empire at its zenith collected taxes from up to 100 million subjects. This revenue financed a standing army of 250,000-500,000 soldiers, a road network still in use 1,500 years later, and theatres and amphitheatres that host spectacles to this day.²¹⁴

Another form of tax was cotton, which had taxation advantages similar to those of cereal grains. Rulers everywhere demanded cotton cloth as tribute or taxes, and indeed it might be said that cotton was present at the birth of political economy. Cloth was an ideal medium of exchange because unlike raw cotton it could be easily transported over long distances, was not perishable and was valuable. Nearly everywhere in the pre-modern world, a piece of cotton cloth could buy necessities such as food, manufactured goods, and even protection.²¹⁵

Graeber notes that originally taxes (tribute) were imposed only on conquered populations. The "free citizens" of the home power were not taxed. In fact, the home power would sometimes give money to its free citizens taken from taxes imposed on conquered peoples.²¹⁶

There were many empires over time, but for most of the agricultural revolution the vast majority of Earth was not governed by states or empires. It was not possible for states to collect taxes from non-agricultural peoples because they were too diverse, too dispersed, too few in number, too mobile and their foods did not have the taxing advantages of cereal grains and cotton cloth. Where cereal grains and cotton ended, so did states.

Agriculture Creates State-Enforced Law

How can anyone understand what law is, where it comes from and how to explain its contents without expressly discussing the worldviews that created that law? As discussed above, the ideas of human supremacy, of hierarchy among humans, of God favouring humans and their warrior-leaders above all others, of states and our concept of civilization are essential elements to the worldview that gives us our understanding of what law is.

Jensen writes, "Unquestioned beliefs are the real authorities of any culture. A central unquestioned belief of this culture is that humans are superior to and separate from everyone else. Human supremacism is part of the foundation of much of this culture's religion, science, economics, philosophy, art, epistemology, and so on."²¹⁷ To which I would add, emphatically, that human supremacism and supremacism in general is the foundation of our culture's laws. Any legal history course that ignores supremacism is not a history worth learning, or teaching.

As populations grew, humans had to move out of constricted, mountainous areas and onto the plains. In turn, this required access to water, which meant ditches, canals and the organization of public works. "[T]his brought the second consequence of agriculture: governments. ... they needed something else that had never existed before in human history: a formal government, with specialized bureaucracies and, most important, authority."²¹⁸

Rousseau wrote:

The cultivation of the earth necessarily brought about its distribution; and property, once recognised, gave rise to the first rules of justice; for, to secure each man his own, it had to be possible for each to have something. Besides, as men began to look forward to the future, and all had something to lose, every one had reason to apprehend that reprisals would follow any injury he might do to another. This origin is so much the more natural, as it is impossible to conceive how property can come from anything but manual labour: for what else can a man add to things which he does not originally create, so as to make them his own property? It is the husbandman's labour alone that, giving him a title to the produce of the ground he has tilled, gives him a claim also to the land itself, at least till harvest, and so, from year to year, a constant possession which is easily transformed into property.²¹⁹

Laws were needed not only to manage public works, but to manage relations between strangers living in close quarters and the surplus food, and to enforce the inequality that accrued for the managers of the surplus food and the misery for the people consigned to doing the actual farming. With government comes military – to defend against attack, to conquer new lands for agriculture and to enforce laws at home.

Agriculture Creates Civilization

"Civilized" states first arose in the relatively few places that had plant and animal species which could be domesticated. Diamond writes: "Europeans, living near the world region (the Fertile Crescent) with the most valuable domesticable wild plant and animal species, ended up expanding over the word, while the! Kung and Aboriginal Australians [for example] did not." Agriculture produced towns and cities, which then created "civilization". For both early Greeks and Romans, "cities were the only places where virtue could be practiced." 221

The origin of the words 'city,' 'civil,' 'civilization,' and 'citizen' is the Latin word 'civis' (pronounced in Latin as key-wis) whose origin goes back to the Indo-European word 'kei,' which means to lie down in a

place; in the context of civilization, it means living in one place instead of roaming for food, and also means for people to share a dwelling place (not just a house, but a region) united by law.

'Civis' is a way to distinguish between "us" (the citizens) and "them" (the non-citizens). People are "civil" when they have law to govern relations between "us" and the strangers who live within one region and when there are mechanisms to force people to obey a unifying law. "Civilization" is the group of people who follow the same laws. Our modern ideas of law can only arise where there are relatively large populations in a concentrated area under one ruler. In addition, and crucially important, as has been discussed, agriculture created surplus which in turn created speople who could control the surplus for their own enrichment and who created laws to enforce how the surplus would be controlled in order to entrench their elite status.

In ancient Greece, all non-Greeks were called barbarians and usually regarded as inferior. The word "barbarian" was invented by the Greeks to mimic what they thought they were hearing from strangers who did not speak Greek; to the Greeks it was gibberish that sounded a bit like "bar bar". ²²² Anyone who did not speak Greek or who was not Greek was a barbarian and deemed uncivilized. Aristotle saw the state as a small aristocracy of Greek citizens who ruled over a barbarian peasantry who cultivated the land for their masters and had no share in the state; ²²³ the Greeks were civilized, the barbarians were not.

"Civilization" was often used to describe people rising up from barbarity to a more polite form of behaviour, but in fact "civilization" was always designed to create an "us" vs. "them", to create elites and inequality over any non-elites to whom they could extend their laws. The entire idea of "civilization" means that our peoples and our laws are superior to your peoples and your laws, especially if your peoples do not engage in agriculture and seem to be polytheistic. It also means that we will be the judge of how civilized you are.

Agriculture Creates Colonization

Not only is agriculture about "civilization," inequality and subduing nature, it is also about acquiring more land. The word "colonization" derives from the Latin word "colere" meaning "to cultivate," "to put to use," "to make of value." Colonization literally means cultivation and agriculture.²²⁴ Thus, both the words civilization and colonization are directly tied to agriculture and agricultural societies.²²⁵ Agriculture created hierarchies of authority and fed kings, soldiers and weapons-makers.

Agriculture brought humans and animals into close proximity, which in turn created germs that would become genocidal to peoples who did not have millennia of prior exposure. Agriculture made it possible for sedentary people to become experts in developing new technologies and weapons. Diamond's book title *Guns, Germs and Steel* is an abbreviated quip of his central message: agriculture caused guns, germs, steel and white invasions.

Agriculture produced horses and armed cavalry and battle chariots. Only after many thousands of years and the invention of the internal combustion engine were horses replaced as the main vehicle of war. Agriculture "involved the dispossession and dislocation of hunting and herding peoples. And it was often made possible by the horse. Horses had had more influence on the rise and fall of civilizations than any other factor, including the weather."²²⁶

Any hunter-gatherers were by definition not cultivators and not civilized, therefore the invasion and theft of their lands and discrimination against them by law was justified. This constellation of factors explains the genocidal colonization of the western hemisphere and other places by white Europeans.

Agriculture Creates Writing

Agriculture and its creation of surplus is the foundation for our idea of "civilization". Without surplus, there could be no hoarding. As stored surplus amassed, it became necessary for those in control of the surplus to keep track of and allocate it. There was simply too much to track in one person's head; developing a system for keeping track of agricultural products, land ownership, taxes and debts, became necessary. Notably, keeping track of debts owed and quantifying those debts is essential for creating inequality.

Graeber cites a passage from Peter Freuchen's 1961 *Book of the Eskimos*. One day Freuchen returned home hungry from an unsuccessful day of hunting. An Inuit dropped off several hundred pounds of meat for him, and Freuchen thanked him. The Inuit was indignant.

'Up in our country we are human!' said the hunter. 'And since we are human we help each other. We don't like to hear anybody say thanks for that. What I get today you may get tomorrow. Up here we say that by gifts one makes slaves and by whips one makes dogs.'

Graeber adds that the refusal to calculate credits and debts can be found throughout the literature on hunting societies. Here, the hunter was stating his belief that *refusing* to quantify debt is what made a person truly human - that quantifying debt inevitably led to reducing humans to slaves and dogs. ²²⁷ "To thank someone suggests that he or she might *not* have acted that way, that therefore the choice to act this way creates an obligation, a sense of debt – and hence, inferiority." ²²⁸ Graeber adds that in equal societies, there is a moral obligation to share basic necessities: "Early missionary accounts of native North Americans almost invariably include awestruck remarks on generosity in times of famine, often to total strangers."

In indigenous hunter-gathering societies, gift-giving or exchanges happened frequently, but without the idea of debt and without accounting. It was important to avoid making precisely equivalent reciprocation, and important that relationships be preserved. If reciprocal obligations, or favours, could be calculated, recorded and paid off in full, then the relationships could be ended. Preserving undefined reciprocal obligations and favours was essential to preserving community and society.²³⁰ Graeber argues further that "[a]ny system that reduces the world to numbers [387] can only be held in place by weapons... [i]t can also only operate by continually converting love into debt... by turning human sociality itself into debts, we, ultimately, except the sum of the relations we have with others – into matters of fault, sin, and crime, and make the world into a place of iniquity".²³¹

Fukuyama concludes that agriculture created the need for private property and the necessity of having things to own, buy and steal, increased the proximity of humans to each other and their organization, and as a result, increased their warfare.²³²

Between 3,500 and 3,000 BCE, the Sumerians invented both writing and money.²³³ Surviving tablets from Uruk (often described as the first city in human history, located on the Euphrates River²³⁴), circa 3,300-3,100 BCE, are focused on topics such as barley (both as rations and taxes), war captives, and male and female slaves.²³⁵ Sumerians invented symbols representing donkeys, chisels, male or female slaves, jugs of beer, etc. In fact, someone in Uruk compiled a "standard professions list" – a list of a hundred different specialized roles in Uruk society, including kings, courtiers, priests, tax collectors, scribes, silver workers, potters and entertainers. Similar lists were made for many centuries afterwards.²³⁶

Non-farmers were wage-earners. In agricultural societies, "government" was required for taking resources from farmers to give to non-farmers. [W]age earners, unlike peasants, cannot survive without governments. [They] depend on the existence of laws, markets, employers, shops, and currencies." Taxation was essential. Impoverished farm labourers were essential to establish non-farming elites. The first recorded word for freedom was in Sumer, with the word "amargi", which literally meant "return to mother – since this is exactly what freed debt-peons were finally allowed to do." 238

Egyptians developed hieroglyphics. The earliest known example of Egyptian hieroglyphics dates to 3,200 BCE with a tablet describing how the pharaoh Narmer unified Upper and Lower Egypt.²³⁹ Thus, writing also assumed the role of spreading propaganda about the greatness of the rulers.

Sumerian writing expanded its symbols into a full set of cuneiform and around 2,500 BCE, kings were using writing to issue decrees and priests to record oracles. China developed its own script around 1,200 BCE and central American peoples developed writing around 1,000-500 BCE.²⁴⁰ To emphasize: meso-Americans developing farming, writing and empires completely independently of Europeans. Yet Europeans called meso-Americans uncivilized. To emphasize further: indigenous peoples who had agriculture formed surpluses, cities, inequality, laws, states, empires and non-farming elites.

Kings and priests and bureaucrats, fed by agricultural surpluses grown by others, did not want ordinary people to learn how to read and write. They did not want them to write ideas about a better life and to hatch plots to achieve a better life. "As the anthropologist Claude Levi-Strauss put it, ancient writing's main function was 'to facilitate the enslavement of other human beings'." The elites used writing to exchange information about new places and new technologies, issue instructions from a centralized bureaucracy to various locations and servants, create maps, and create laws to regulate the conduct of people. The purpose of writing was to control and impoverish people, not to educate them.

Sedentary living led to building structures and creating things that would be left behind for later generations to find. It led to writing, which created a history for later generations to find. We study what is available to us and we continue to write about and discuss it. Hunter-gatherers neither needed and nor developed stone homes, metal possessions or writing. They did not leave much for future generations to find, study, discuss and glorify.²⁴²

It is astonishing for a North American to go to Europe and say "wow, look at all of Europe's history" and believe that somehow Europe has more history than North America does. They have both existed the same amount of time, with humans, animals and plants on them for more or less the same amount of time, but because Europeans built stone towns, wrote about themselves and engaged in durable fine arts, somehow we say that Europe has more history. They both have the same amount of history; one simply left more debris behind. The one that left more debris behind is the civilized one, and we are told that the one that did not leave debris was the barbaric one.

A society with writing does not equate to a superior society. Some have argued that hunter-gatherers rejected writing, or did not develop it, because it was a tool for being caged into taxation and state control. Put another way, if people are free, living in small communities and enjoy a life of hunting and gathering without surpluses or a collection of possessions, what purpose would writing serve? Stories were constantly being told and remembered without need of writing.²⁴³

Agriculture Creates Money

Hunter-gathering societies have always had economies and engaged in trade, but agriculture invented money as we know it today. Fiat money has value only because a ruler says *fiat* ("let it be done"). Fiat money requires writing and accounting. All those specialists who did not feed themselves needed new methods for exchanging their services for food, clothing and other items. Christian explains, "This is why trade and markets and accounting devices such as coins and writing were as vital to complex societies as arteries and veins are to human bodies. They made it possible to transfer objects and the energy flows they represented, from person to person and from group to group."²⁴⁴

Money is a system of trust – the buyer and seller must trust that whatever they use as "money" will have value somewhere else, for some other transaction; it "is the most universal and most efficient system of mutual trust ever developed,"²⁴⁵ and is essential in large communities of strangers working under one set of laws with individuals performing a wide range of specialized, separate functions.

Due to a lack of written records, it is impossible to know for certain when and where trade first changed to keeping records of debts and credits, and, later, when and where tokens were first developed to represent a debt, credit or monetary value. A tally stick may date to 30,000 years ago among the Aurignacians, some of the earliest humans to leave Africa for the Middle East and southern Europe. The 20,000 year old Ishango Bone found in the current Republic of Congo near one of the sources to the Nile River appears to have been a tally stick. Accounting records dating back more than 7,000 years have been found in Mesopotamia, showing lists of good received and traded and expenditures. Tokens to represent monetary value appeared in the ancient empires of Egypt, Babylon, India and China.

Graeber notes [sic],

this is what money meant to the majority of people for most of human history: the terrifying prospect of one's sons and daughters being carried off to the homes of repulsive strangers to clean their pots and provide occasional sexual services, to be subject to every conceivable form of violence and abuse, possibly for years, conceivably forever, as their parents waited, helpless, avoiding eye contact with their neighbors, who knew exactly what was happening to those they were supposed to have been able to protect.²⁴⁶

In other words, writing created the ideas of debt, money and legitimate state force (law), which, combined, led to the enforcement of the debts in a systematic fashion – extracted from people who could not read and did not have money, and so their bodies were taken instead. Graeber notes that compensation in ancient Welsh law codes was specified in number of cattle or "bondsmaids"; female slaves were so plentiful and important that they were actually used as a currency in law. Graeber says that the power of a father to sell his children has been present since the beginning of agrarian civilizations, emerging approximately at the same time as the invention of money, markets and interest-bearing loans.²⁴⁷

Although China was the first country to use recognizable coins, the first minted coins were created not too far away in Lydia (now western Turkey).²⁴⁸ Paper money was invented by Kublai Khan around 1260 CE. The cause for the invention of money was the agricultural nation-state that wanted to wage war but was looking for a way to pay for it.

In 1694, England's king William was looking for a way to pay for war against France. He came up with a new idea: borrow the money and repay the amount, with interest, through taxes on goods coming into England from abroad and beer and spirits. The lenders were allowed to incorporate themselves as the "Bank of England", allowing citizens to deposit gold with them and giving depositors receipts for their gold called "bank notes". The deposits were then lent to the king. People were pleased to have the

convenience of bank notes instead of physical gold.²⁴⁹ The king was happy to have a new method to pay for war.

Agriculture Accelerates the Discovery of New Technologies

Diamond explains that sedentary living based on food surplus results in the accumulation of more possessions, as they do not have to be carried somewhere on a daily basis. Surplus enables inventions. People can specialize in developing new technologies if there are food surpluses available to feed them. "[T]echnology develops fastest in large productive regions with large human populations, many potential inventors, and many competing societies."²⁵⁰

One of the earliest technologies was growing plants and animals for clothing and finding ways to take the plant or animal and create enhancements such as wool, linen (from flax), silk (from worms) and especially cotton. Cotton cloth became a hugely important type of money or barter. The significance of cotton was a critically important reason used for stealing indigenous lands, enslaving Africans and the invention of the industrial revolution.²⁵¹

Verlinder discusses colonialism by the Greeks, Romans, Germans, Spain, Portugal, Russia and the United States. In each case, violence was used against the original inhabitants. "[I]n every case colonization constituted a process of technological development. ... It can be stated, without fear of error, that no historical phenomenon has contributed as much as colonization to extending man's control over nature". He would have been just as correct to say that nothing contributed to colonization more than humans fighting against nature with agriculture.

The Scientific Revolution, which was made possible by the Agricultural Revolution, started about 500 years ago, although some key technologies such as steel, gunpowder and cannons had already been invented a few hundred years before that. Only around 1000 AD in China and 1600 AD in England did coal surpass wood as an energy source. In addition, it is very recently that humans learned that steam created by heating water could be used to move pistons and create motion and replace labour. ²⁵³ The new technologies that were developed over the past 500 years included guns, dynamite, steam engines, internal combustion engines and every form of modern warfare. They produced the industrial revolution. The steam engine was invented to clear water away from coal deposits to allow greater use of coal for various tasks, including machines in industrial factories. Coal taught us lessons that were applied to the use of all fossil fuels. Agriculture, technological development and colonization are part of a continuum.

9. Agriculture Creates New Diseases and Epidemics

Hunter-gatherers had diseases. Hepatitis, polio, intestinal parasites, encephalitis, arthritis, pinta, Chagas' disease and American leishmaniasis all were present at different pre-contact times. ²⁵⁴ But small groups of mobile hunter-gatherers did not accumulate domesticated animals, produce waste that attracted vermin, create crowded, unhygienic communities, build roads, or establish far-flung trading networks. The populations were low and small groups of people would not infect larger groups, or even come into contact with any significant number of them. The ability to spread disease to large numbers of peoples was very limited. This changed with agriculture and domestication of animals.

Humans began domesticating animals around 8000 BCE. Domesticated animals cause epidemics aplenty, as Wells describes,

For the first time, people and animals were living in the same communities. ... Most of the scourges of human health until the advent of vaccination in the eighteenth century were imports from our farm animals, including measles, tuberculosis, smallpox, and influenza. Bubonic plague was transmitted to us by fleas from rats living in human settlements ... all seem to have arisen in the Neolithic with the spread of farming.²⁵⁵

We cannot know for certain the history of epidemics before the advent of writing, but it seems clear that agriculture's reliance on close living quarters of humans and animals, combined with trade to acquire items from other places, vastly increased disease among humans. We share sixty-five diseases with our dogs, fifty with cattle, forty-six with sheep and goats, forty-two with pigs, thirty-two with rats and mice, thirty-five with horses, and twenty-six with poultry.

Agriculture combined a number of disease spreading vectors, including domesticated animals. Wells writes,

[N]early every single major disease affecting modern human populations – whether bacterial, viral, parasitic, or noncommunicable – has its roots in the mismatch between our biology and the world we have created since the advent of agriculture. Malaria, influenza, AIDS, diabetes – all could only exist as significant global scourges in the modern world, with its high population densities, large populations of domesticated animals, and high levels of mobility.²⁵⁶

Agriculture's high density populations and trading routes both helped spread disease tremendously. The Four Horsemen of the Apocalypse were a standard part of farming civilization: disease, famine, war and death. Take Malaria as an example:

Although the parasite responsible for malaria has been in existence for 50,000–100,000 years, the population size of the parasite did not increase until about 10,000 years ago, concurrently with advances in agriculture and the development of human settlements. ... References to the unique periodic fevers of malaria are found throughout recorded history. Hippocrates described periodic fevers, labelling them tertian, quartan, subtertian and quotidian. Malaria may have contributed to the decline of the Roman Empire, and was so pervasive in Rome that it was known as the "Roman fever". ²⁵⁷

Scott adds:

Little wonder, then, that southeast China, specifically Guangdong, probably the largest, most crowded, and historically deepest concentration of Homo sapiens, pigs, chickens, geese, ducks, and wild animal markets in the world, has been a major world petri dish for the incubation of new strains of bird and swine flu ²⁵⁸

And now, of course, the novel coronavirus COVID-19 has come out of that same densely populated, agricultural, domestic animal petri dish.

Diamond further points out that, "[n]ot until the beginning of the 20th century did Europe's urban populations finally become self-sustaining: before then, constant immigration of healthy peasants from the countryside was necessary to make up for the constant deaths of city dwellers from crowd diseases." ²⁵⁹

Agriculture produced so many more people that it eventually crowded out and dominated the wildlife and hunter-gathering humans. Once a sedentary population becomes exposed to certain pathogens over time, they develop some resistance to the disease. But peoples who have never had exposure have little to no immunity and can be catastrophically affected by the pathogens. "It was for this reason, of course, that the encounter between the Old World and the New World proved so cataclysmic for the immunologically naive Native Americans, isolated for more than ten millennia from Old World pathogens." Does our ability to create pandemics make us more civilized and superior?

Famine was more common in agricultural communities because they relied on a small number of foods, and the plants in particular were subject to drought and floods. Humans had not yet invented fertilizers or other methods of maximizing yields and developing crops that are highly resistant to pests and drought. Farmers could not simply move on to find food somewhere else. As their populations grew, farmers came into more conflict with neighbours, which led to more wars that were more violent than hunter-gatherers could produce with smaller populations and fewer, less developed weapons. Death came with the other horsemen of the apocalypse.²⁶¹

The excess food allowed people to devote time to building cathedrals and allowed them to have more babies; the population grew. Monopolization of food growing and trade developed; monetary inflation followed. Then, at the turn of the 14th century, the financial system imploded, the Medieval Warm Period ended, an epidemic carried by Mongol raiders (perhaps anthrax) devastated livestock, and rains over 1314-1316 created the worst European famine ever. Approximately 10% of Europeans starved to death. Peasant uprisings, particularly in France, resulted in massacring Jewish people and lepers. In 1347, the Black Death - bubonic plague - arrived in Europe, having been transmitted on Genoese vessels that had returned from trading Slavic slaves for Asian spices on the Black Sea. Once in Europe, the diseases spread by the roads that had been so important to agricultural trade and population growth. As many as 45% of the remaining Europeans died²⁶² (between 75 to 200 million people in Eurasia and peaking in Europe from 1347 to 1351).²⁶³

Whites Export Their Agricultural Diseases to the "New" World

Epidemics imported by white European invaders were key to destroying the indigenous Guanches in the Canary Islands, among other factors. When people are exposed to epidemics of never before encountered diseases the following happens: the disease affects almost the entire population; the impact is severe and death is frequent; there are very few care-givers available such that people die simply for inability to fetch water or a little food, and; crops are not planted or harvested, livestock are not tended, home fires are not started and many die of hunger and cold. Of course, all of this affects the ability and desire to continue to defend your homeland. Once conquered, the Canary Islands became the first stop in the Atlantic for Europeans on their way to the western hemisphere. The first sugar cane in the west was almost certainly from the Canary Islands, setting the stage for more slavery of indigenous peoples and Africans and ecological devastation in the Caribbean islands for more than 350 years.

Almost from Columbus' arrival, Spanish colonists began to degrade and enslave the indigenous peoples, naming them *negros da terra* (Blacks from the land), transferring their racist constructions of African people onto Native Americans. Over the years that followed, they used the force of the gun and the Bible in one of the most frightful and sudden massacres in human history. Thousands of Native Americans died resisting enslavement. More died from European diseases, from the conditions they suffered while forcibly tilling fields, and on death marches searching and mining for gold. Thousands of Native Americans were driven off their land by Spanish settlers dashing into the colonies after riches.²⁶⁴

In 1520, smallpox reached Mexico from an infected slave arriving from Cuba. The resulting epidemic killed nearly half of the Aztecs, including Emperor Cuilahuac. By 1618, Mexico's indigenous population had fallen from about 20 million to about 1.6 million. Smallpox arrived in the Inca homeland around 1526, killing Emperor Capac and his designated successor, leading two other sons of Capac into a civil war, dividing the Incas just as the Spaniards were about to arrive.

For the New World as a whole, the Indian population decline in the century or two following Columbus' arrival is estimated to have been as large as 95 percent. The main killers were Old World germs to which Indians had never been exposed ... Smallpox, measles, influenza, and typhus competed for top rank among the killers. As if these had not been enough, diphtheria, malaria, mumps, pertussis, plague, tuberculosis, and yellow fever came up close behind.²⁶⁵

The European expansion into the western hemisphere was motivated first by a search for the riches of Asia, and second by a search for gold, silver and sugar profits from the "new" world. Europeans tried enslaving the indigenous peoples for their purposes, but between resistance and disease, the Europeans settled for clearing the indigenous peoples off their lands and bringing in African slaves. The "discovery" of the "new" world was equal parts removing indigenous peoples from their lands and importing slave labour, all to generate massive profits for Europeans who had no moral claim to the lands or to the labour that was generating the profits. The European plantation agriculture was devastating to the land as well as to the people.

"The Taino peoples disappeared, their place taken by Creole cultures dominated by Africans but controlled by Europeans. And they were driven forward, from the 1640s, by the engine that was the sugar industry." Among so many aspects of Taino culture that Columbus had no interest in, he did not appreciate that the Taino system of agriculture was "extraordinarily productive and perfectly adapted to the conditions of the island environment." This working agricultural technique was replaced by European row-style, plowing plantation agriculture, causing great erosion and necessitating almost completely clearing the old-growth forests. A 2004 report of the World Wildlife Fund stated that "[g]rowing sugar cane may have done more damage to wildlife than any other single crop on the planet". 269

Europeans needed cheap labour to generate profits from the stolen land. "Few people wanted to work long hours in malaria-infested sugar fields under a tropical sun. Contract labourers would have produced a commodity too expensive for mass consumption. Sensitive to market forces, and greedy for profits and economic growth, European plantation owners switched to slaves." In fact, within twenty years of Columbus' "discovery", "almost the entire native Caribbean population was wiped out. The Spanish colonists began importing African slaves to fill the vacuum." 271

Rivera notes the argument that the vast population losses were due primarily to disease and epidemics spread through a population that had not previously been exposed to European germs. Rivera criticizes this simplistic approach. He argues that these analyses ignore the devastation of the ordinary, healthy living conditions of the indigenous peoples including the breakdown of their traditional social order, disaster in traditional agricultural production and the effects of enslavement. He argues that too many over-emphasize smallpox and ignore routine causes of death by colds and flus, "which in conditions of excessive work, inadequate nutrition, constant exposure to rain, change of environment, and maltreatment can be and generally are fatal".²⁷²

In the Caribbean itself, Columbus and Spain installed slavery almost everywhere they went, by the name of the Spanish practice of *encomienda*, where people were "commended" to the possession and service of colonists in exchange for the colonists teaching them about Jesus Christ.²⁷³ The entire interaction with the invaders, through slaughter, slavery and diseases, reduced the indigenous population of the Hispaniola by some 99%, from 8 million to 28,000, in just over 20 years.

Neither the indigenous peoples nor the African slaves ever shared in the unimaginably large profits that went to Europe. "From the sixteenth to the nineteenth centuries, about 10 million African slaves were imported to America. About 70 per cent of them worked on the sugar plantations. Labour conditions were abominable. Most slaves lived a short and miserable life, and millions more died during wars waged to capture slaves or during the long voyage from inner Africa to the shores of America. All this so that Europeans could enjoy their sweet tea and candy – and sugar barons could enjoy huge profits." ²⁷⁴

Epidemics were present and used by colonizers in Canada as well. In 1763, the same year as England's Royal Proclamation, Jeffrey Amherst, veteran of the Seven Years' War in Nova Scotia, Governor of Quebec, Crown Governor of Virginia and a Lord, wrote a letter to a Swiss mercenary named Henry Bouquet. Bouquet replied with a suggestion of giving out smallpox infected blankets to "inoculate the Indians." Amherst replied: "You will do well to try to inoculate the Indians by means of blankets, as well as to try every other method that can serve to extirpate this execrable race. I should be very glad if your scheme for hunting them down by dogs could take effect, but England is at too great a distance to think of that at present." 275

Concerning indigenous peoples in Newfoundland, "no Indigenous group suffered more than the Beothuks from disruption to traditional patterns … the Beothuk had their access to the main source of livelihood, the salmon fishery, drastically reduced by European incursions into their territory and the consequent competition for the resource. The last known Beothuk died in St. John's in 1829."²⁷⁶ The Beothuk had been enslaved by the Portuguese, driven inland, hunted by the French and English, and ultimately exterminated.²⁷⁷

As soon as the Europeans came to Newfoundland – fishermen, hunters, explorers – the Beothuks were steadily displaced and eliminated, and in the summertime cod fisheries from the mid-sixteenth century on took it as a matter of policy to hunt down and shoot nearby natives and despoil their villages. ... But as it was to the south, the main killer was probably diseases, particularly the one that went into Beothuk legend as 'the cough demon' – tuberculosis. After no more than a century or so, the island caribou and beaver had been hunted to extinction, and the Beothuks were down to only a few hundred. By the twentieth century, they were extinct.²⁷⁸

In 1864, indigenous peoples in British Columbia were in the midst of a smallpox epidemic that killed nearly half of B.C.'s indigenous people in a matter of months. Tsilhqot'in chiefs took action to prevent settlers – a road-building crew intent on gaining access to gold on indigenous land – from encroaching on their territory. The Tsilhqot'in were responding to allegations that one of the road workers had threatened to spread smallpox and that the road-building crew violently took some Tsilhqot'in women hostage, subjecting them to sexual abuse. It was Tsilhqot'in land that the road crew had no permission to enter. Fourteen road workers were killed. Enticed into a peace meeting, five chiefs were arrested and a sixth arrested later, while trying to offer reparations. All six were hanged. It was only in 2018 that Canada apologized for these killings of people who were simply defending their own lands and peoples.²⁷⁹

Meanwhile, the impact of introducing cattle and their diseases to western North America from the mid-19th century has been devastating to the bison and to indigenous peoples.

From the end of the American Civil War to the turn of the twentieth century, between 7 and 10 million cattle and 1 million horses were driven north from Texas... With them came diseases such as anthrax, Texas tick fever, brucellosis, and, significantly, bovine tuberculosis. According to one study, 'Historical evidence indicates that the disease did not occur in bison prior to contact with infected cattle.'... One characteristic of *M. Bovis* posed a particular threat to the aboriginal populations that preyed on infected herds. The bacterium can be transmitted by the ingestion of infected meat. ... [103] As cattle replaced bison as the dominant ruminant in the west, aboriginal people across the region were exposed to a new and as yet unrecognized source of tuberculosis. Infection that came with the introduction of cattle by so many might explain the sudden and widespread explosion of clinical TB in the late 1870s.²⁸⁰

The French brought smallpox and other infectious diseases to Canada. Due to these diseases, the Huron-Wendat population declined by roughly 60% by 1640. Smallpox epidemics swept through Louisbourg in 1732-33 and again in 1755. As European fur-trading posts moved west, so did the virus. From 1779 to 1783, smallpox spread to areas that now form parts of Manitoba, Saskatchewan and Alberta. Some communities of plains indigenous peoples lost 75% or more of their members. It is estimated that more than half of First Nations people living along the Saskatchewan River (territory of the Nehiyawak, Saulteaux, Assiniboine and Niitsitapi) died of smallpox or epidemic-related starvation.

In 1838, a second smallpox epidemic struck the Prairies.²⁸¹ In addition, "horses became vectors for diseases that killed both bison and humans. When combined with extreme exploitation of the beaver for fur, to the point of extinction, this unravelled the ecology of the Northern Plains and, with it, the lifeways of the Plains communities."²⁸² The Truth and Reconciliation commission found that, "[t]he impact of famine and disease was devastating. According to one contemporary estimate, between 1880 and 1885, the First Nations population on the Prairies dropped by more than a third—from 32,000 to 20,000."²⁸³ Throughout the "new" world, agricultural diseases devastated indigenous peoples.

10. Agriculture Creates Inequality and Slavery

through these repeated acts of violation we come to perceive each new violation as reinforcement not only of our superiority over this other we have violated, but as simply the way things are. ²⁸⁴

from the moment it appeared advantageous to any one man to have enough provisions for two, equality disappeared, property was introduced, work became indispensable, and vast forests became smiling field, which man had to water with the sweat of his brow, and where slavery and misery were soon seen to germinate and grow up with the crops. 285

the idea of property "as a passion over all other passions marks the commencement of civilization." ²⁸⁶

Agriculture Creates Inequality

Hunter gatherers had to live and move lightly, going from food source to food source. Everyone needed to play a role in the hunting-gathering work. There was no need or benefit for having slaves or accountants. There was no need for writing, a state, written laws, police and soldiers to enforce the written laws against its own citizens. There was no need for cities. Indigenous peoples did not have storage facilities sufficient to permit long-term accumulation by an upper class, no wealth in the form of domestic animals and no

other form of wealth that would support taxation for a leisure class of military-political-religious bureaucracy. ²⁸⁷

Certainly a forager community could have a chief, could collectively choose to ostracize members and could engage in raids against neighbouring communities, including taking slaves from them. Nonetheless, the vast part of human history is as hunter-gathering, egalitarian, democratic small communities. Agriculture changed all that.²⁸⁸ Miller wrote that in indigenous societies, "sharing and redistribution of goods was not just admired by required ... selfishness was considered by indigenous peoples to be not merely antisocial but evidence of witchcraft."²⁸⁹

Surplus means inequality. Jensen says that it is not possible to believe in one's own supremacy except by proving the inferiority of others; every violation or domination over nature proves to us that we are superior to every species and superior to nature itself.

In turn, every domination over other humans proves our superiority over them. "Others" may be of a different sex, different skin colour or different religion – just so long as they can be readily identified as "other." To prove they are inferior we must violate or exploit them. If they are equal or superior, it would not be possible to violate or exploit them. "Each new violation then reaffirms our superiority, as through these repeated acts of violation we come to perceive each new violation as reinforcement not only of our superiority over this other we have violated, but as simply the way things are." 290

For these reasons, foragers are more equal than horticulturalists, who are more equal than farmers, because the surplus available to be controlled by an elite increases with each different method of subsistence.²⁹¹ The potential for surplus production determines the extent to which inequality can develop.²⁹²

Kohler and Smith infer from numerous studies, "that *any* mechanism increasing group size in the past increased the probability of inequalities within the group... Size increases created opportunities for the emergence of differential wealth and prestige within groups." ²⁹³

Locke wrote in 1690 that the law of nature was changed by the invention and accumulation of money and things. Locke argued that the original limitation of the law of nature that a person should not accumulate more than they can use had been changed. According to Locke, God wanted man to accumulate as much as possible, to develop trade and manufacture to serve those purposes, and to use an organized government to put down protests against the resulting inequality.²⁹⁴

Jean-Jacques Rousseau in 1754 wrote about the origin of inequality of mankind and commented on the importance of law and civilization:

So long as men remained content with their rustic huts, so long as they were satisfied with clothes made of the skins of animals and sewn together with thorns and fishbones ... they lived free, healthy, honest and happy lives ... But ... from the moment it appeared advantageous to any one man to have enough provisions for two, equality disappeared, property was introduced, work became indispensable, and vast forests became smiling field, which man had to water with the sweat of his brow, and where slavery and misery were soon seen to germinate and grow up with the crops.²⁹⁵

In 1877, Lewis Morgan wrote that the dominance of the idea of property "as a passion over all other passions marks the commencement of civilization. It not only led mankind to overcome the obstacles

which delayed civilization, but to established political society on the basis of territory and of property."²⁹⁶ Societies that did not properly value the idea of private property were not civilized.

Kohler and Smith propose that the most important factor in inequality was large domesticated animals – present in the "old" world but not in the western hemisphere. The energy and labour of the animals produced more crops, their use for transportation allowed farmers to develop larger fields and to move farm products more efficiently and further. The animals were not equally distributed across the society and the owners of the animals were able to rent them out to non-owners, generating even more inequality. Domesticated animals are so important that our words "capital," "chattel" and "stock" markets either derive from or refer to animals. 298

In addition, all of the non-farmers needed to be paid and fed in one way or another. "As specialization increased, so did inequality." Agriculture equals surplus equals inequality.

Agriculture Requires Slaves

Frye cites an ancient Mesopotamian myth where the gods dug the first irrigation ditches and wells. They did not like the work. They complained and then they burned their tools and baskets. Then they created humans to do the work for them. "Someone had to move all that mud." 300

There are many forms of slavery or forced labour. Taxation represents a type of forced labour: you labour in order to pay taxes to some authority or suffer consequences. Debt represents a similar type of forced labour, especially debt servitude. Whether it is called corvée labour, debt servitude, serfdom, share-cropping or slavery, I am including all of these in the present discussion.

Slavery has existed, and continues to exist, almost everywhere, although it seems to have been especially important for western civilization and Islam. Certainly hunter-gatherer societies enslaved people, but hunter-gatherer slavery involved very low numbers. Hunter-gatherers did not need for slaves for producing food; they did not need to have specialists whose full-time job was to supervise slaves and devise technologies and laws for controlling slaves. They used slaves to replace lost members of their own tribes, but frequently incorporated slaves into families where they acquired equality with other members of the tribe over time.

There have been two basic types of slavery. First, domestic slavery (or household or patriarchal slavery). The other major type of slavery is called productive slavery (or chattel slavery). It was found primarily in ancient Greece and Rome, in 9th century Iraq and in the western hemisphere after Columbus' voyage in 1492. Temple slavery, state slavery and military slavery were distinct and much less common.

Serfdom was the condition of most European peasants from the demise of the Roman Empire until the French Revolution. Serfs were usually bound to the land; slaves to the owner. Serfs had more legal rights than slaves. Indentured servants and peons were variations of debt slaves, frequently considered to be thieves and criminals.

In England's Domesday Book of 1086, approximately 10% of the population were slaves. "Perhaps as many as half of all the white settlers in North America were indentured servants, who agreed to work for someone (the purchaser of the indenture) upon arrival [in North America] to pay for their passage." In effect, agreeing to be an indentured servant was the price for transportation to North America and the hope for a better life (once the term of the indenture was fulfilled).³⁰¹

Why is agricultural slavery necessary? Hunter-gatherers avoided agriculture for as long as possible because it was too labour-intensive, boring, provided poor quality diets, and created risks of famine. Scott finds that [sic] "planting and livestock rearing as *dominant* subsistence practices were avoided for as long as possible because of the work they required. And most of the work arose from the need to defend a simplified, artificial landscape from the resurgence of nature... The tilled agricultural field was not only labor intensive; it was fragile and vulnerable." ³⁰²

Agriculture is a constant war against nature. We are always trying to keep nature out so that we can maximize the yield of our few, preferred, domesticated species; but this endless fight is labour intensive. "Threatened by the diseases of crowding and monoculture, domesticated crops must be constantly defended by their human custodians if they are to yield a harvest." In times of drought, more irrigation for agriculture is needed, which required slaves. In turn, irrigation combined with arid conditions in non-irrigated places contributed to greater concentrations of humans in small spaces. 304

Scott says that peasants will not willingly produce surpluses for elites and authorities – they must be forced to do so. [sic] "[O]nly through one form or another of unfree, coerced labor – corvee labor, forced delivery of grain or other products, debt bondage, serfdom, communal bondage and tribute, and various forms of slavery – was a surplus brought into being." ³⁰⁵ By developing ideas of private property owned by landlords, and preventing citizens from acquiring lands by which to feed themselves, the people would have been so restricted that they would be forced by hunger to work the fields and produce surpluses for the elites.

Wolf wrote in his book *Peasants*, "[i]t is only when a cultivator is integrated into a society with a state, that is, when the cultivator becomes subject to the demands and sanctions of power-holders outside his social stratum... that we can appropriately speak of peasantry."³⁰⁶

The price paid for feeding the ever-growing populations was [sic] "constant, backbreaking labor. The relatively leisured foragers of Sahlin's primitive affluent society make a striking contrast with the brutally overworked farmers documented by historians, anthropologists, and development economists." 307

Once family is no longer sufficient as unpaid farm labour, forced labour comes next. [sic] "Forced labor was almost unknown within foraging societies. Horticulturalists often took slaves in raids and wars, but these captives (especially the women) were normally incorporated fairly rapidly into their captors' kinship structures – unlike the slaves in many of the more developed farming societies, who remained permanent, subjugated outsiders. Farming societies seem to have shifted toward forced labor because they had to: neither kinship nor the market could generate the labor needed to build the ships, harbors, roads, temples, and monuments without which their (relatively) huge populations could not have fed themselves or maintained their societies." 308

Morris notes that farming advanced quickly across Eurasia until it came within 50 miles of the Baltic coast around 4200 BC and the shores of Japan around 2600 BC, "but at both these points, it stopped in its tracks more than a thousand years. Japan and the Baltic boasted wild resources of such richness that foragers had little to gain from working harder and cultivating plants and animals, and if horticulturalists tried to force their way into these hunter-gatherer paradises, disrupting the abundance with farms and fences, they found themselves outnumbered by natives who knew how to fight." But even in these locations, agriculture eventually overcame the resistance and took over every place on Earth that could be farmed for profit.

People frequently ran away from their states. They did not flee only to seek a hunting-gathering lifestyle. They fled for many reasons: to escape forced labour, taxes, conscription, epidemics, oppression, soil exhaustion, floods, droughts, fires in the town, attacks on the town by outsiders or simply to seek freedom.³¹⁰

Wherever there was some kind of frontier between state and non-state, it was much easier and safer to run away than to try to stage a rebellion at home. Europeans fled to the "new" world because there were no states to control them here. The fled to pursue religious freedom and they fled to seek economic opportunities they could not find in Europe or to avoid slavery or imprisonment in Europe.³¹¹

Once they had arrived on the eastern edge of the western hemisphere, the settlers continuously expanded westward, seeking freedoms and economic opportunities they could not find in the eastern colonies. This process did not end until virtually the entire world was ruled by states. There was nowhere else to run; when you cannot run, slavery becomes much more likely.

Given a choice between hunting-gathering and agriculture, people prefer the lifestyle of hunting and gathering. Canadian Prime Minister McDonald told the House of Commons in 1883 that the disappearance of the bison was not a bad thing: "I am not at all sorry that this has happened. So long as there was a hope that buffalo would come into the country, there was no means of inducing the Indians to settle down on their reserves." Getting indigenous peoples to "settle" onto reserves was the key to stealing their remaining land and making it available to white farmers. The destruction of the primary food source on the Canadian prairies, the bison, was necessary for Canada's farming revolution to occur in the late 19th century.

Agricultural kingdoms and empires use slaves on a much larger scale than hunter-gatherer societies. Agricultural societies need farmers to produce surplus food to feed non-farmers. Agriculturalists have fixed locations with large populations, which in turn require farm production, services related to producing farm goods and public works such as irrigation and roads, and thus they have more uses for slaves. Agriculturalists are better at and use war more frequently and thus are able to capture more slaves. They developed accounting, trading and money and were able to buy and sell slaves.

Christian writes [sic]:

Indeed, the use of force to extract labor or produce or wealth became ubiquitous in agrarian civilizations. And the methods used to extract wealth and labor from peasants show that their condition was often little better than that of slaves...

Coercion was fundamental to mobilization [of resources] in all agrarian civilizations, which helps explain the importance of warfare and the pervasiveness of physical punishments in society and within households and families.³¹³

Rulers and agriculture require slaves, and a system of slavery requires laws and standing armies to enforce those laws. States and empires thus developed laws and police to control slaves.³¹⁴ Further, the more different the slaves are from the monarchs and their kin, the more willing the general state population will be to capture and enforce slavery against those "others". As often as possible, slaves are "them" to be governed by "us".

Agriculture and production slavery both date from about 3500 BCE in the fertile crescent. A Mesopotamian poem *Atrahsis* tells that the gods became tired of digging irrigation ditches and so they created humans to do the work for them.

Equality changed with surpluses:

Mesopotamia at its height was a land of palaces and slums, where some people were born as living gods, but most were slaves. The same thing happened in China, Egypt, India, and the Americas... agricultural surpluses – stable wealth – invariably had the effect of breeding absolute monarchs.³¹⁵

The inequality that accompanies agriculture and civilization creates slavery:

Once the farms bloomed into cities, a bruising social inequity was created. In China and Sumer, a permanent majority underclass tilled the fields and repaired canals and dikes, supporting a tiny group of oligarchs. It wasn't so different from the sweatshop economies of today's developing world. Whereas hunter-gatherers had strolled under the Paleolithic stars in a state of rough egalitarianism, the sedentary farmers had kings. 316

By definition, slavery can only exist where it is approved by the slave-owning society. "Practically every society that possessed slaves wrote about them in its laws. The Sumerian king Ur-Nammu wrote what was probably the first code of laws. One of the laws stated: "If a man violates a virgin slave girl without the owner's consent, that man shall pay five shekels of silver" – to the slave-owner. Throughout history, it seems that every time slaves are violated or manage to free themselves through revolution or abolition, it is the slave-owner who has been harmed and must be compensated in the eyes of the law. Slaves are never compensated for what is done to them.

Hammurabi gave the world perhaps the most famous early legal code. It consists of 282 laws. Offences and punishments depended on the social status and gender of offender and victim. There were three classes of persons: property owners, free men and slaves. The eye of a male commoner (free man) was worth 60 shekels, while the life of a female commoner was worth 30 shekels, and a slave woman's life was worth 20 shekels. Offences against slaves would be lightly punished, offences committed by slaves would be severely punished. Men were permitted to have affairs with their servants and slaves, whereas married women would be harshly punished for committing adultery.

The earliest legal codes were filled with injunctions and punishments for running away from their agricultural-state-taxation obligations. "The Old Babylonian legal codes are preoccupied with escapees and runaways and the effort to return them to their designated work and residence... the later well-known code of Hammurabi fairly bristles with punishments for aiding and abetting the escape of slaves." ³¹⁸

"Slaves, at the time of the great Babylonian King Hammurabi [the sixth king in the First Babylonian Empire], about 1800 BC, were divided into two grades: native and foreign, the native slaves having more often than not lost their freedom through crime or indebtedness, the foreign ones being prisoners of war or destitutes". Enslavement for native-born debtors was only temporary. 319

If most of the people in Babylon accepted their positions and the laws, then Babylon as a whole could grow enough food to feed them all, could defend itself against enemies, and could take over lands from other peoples to enhance its power and wealth. The majority who accepted this state of affairs would enforce the laws against any dissidents; such is the way of all empires, states and religions.

The Hebrew Pentateuch allowed enslavement and Leviticus 25:44-46 does so as well. The *Laws of Manu* in India, first century BCE, contains numerous laws on slaves. The Roman laws on slavery were extraordinarily elaborate, and some found their way into the Byzantine *Ecloga* of 726 CE, the Procherion *Nomos* of around 879 CE, the Bulgarian Court *Law for the People* at the end of the 9th century CE and the Ethiopian *Fetha Nagast* in the 13th century CE, to mention only a few slave laws around the world.

A slave-owner in ancient Greece and the Roman Republic, India, Islamic countries, Anglo-Saxon England, medieval Russia and many parts of the southern United States before 1830 CE could kill their slaves with impunity. Some slave codes placed limits on killing or maiming slaves, but none had any sympathy for slaves who rebelled against their owner. Slave-owners had rights concerning slave marriages and slave newborns. Some slave codes prohibited sexual relations between slave-owners and slaves in order to avoid "contamination" of the white race. Slave codes might, or might not dictate that slave-owners had an obligation to provide clothing or food for their slaves, prescribe limits on how much work could be forced onto slaves, define slaves to be property that could not acquire any belongings in their own name, and define conditions when a slave could become free. Enforcement of any laws against slave-owners for what happened on the farm was generally non-existent. All societies had laws for the pursuit, capture and return of runaway slaves. When a stranger killed a slave, compensation to the slave-owner for loss of property would usually be required.

Whenever necessary, wars would be started to capture slaves to provide labour. Wars for slaves were far more frequent and arose far earlier than wars to acquire land. Remember: most of the world was stateless. Expanding into mostly unpopulated non-state areas was not the issue; forcing enough people to produce surpluses for the elites was.

Concerning the origins of prostitution, Lerner wrote:

Another source for commercial prostitution was the pauperization of farmers and their increasing dependence on loans in order to survive periods of famine, which led to debt slavery. Children of both sexes were given up for debt pledges or sold for 'adoption.' Out of such practices the prostitution of female family members for the benefit of the head of the family could readily develop. Women might end up as prostitutes because their parents had to sell them into slavery or because their impoverished husbands might so use them. Or they might become self-employed as a last alternative to enslavement. With luck, they might in this profession be upwardly mobile through becoming concubines. By the middle of the second millennium BC, prostitution was well established as a likely occupation for the daughters of the poor.³²⁰

To distinguish between upper and lower classes, virginity and purity of the upper class daughters (family honour) became essential. It did little for the women, but it was (and is) a status symbol for the upper class males. Thus, sexual slavery for poor girls and women became entrenched in various modes, enforced in a strictly unequal, patriarchal society. Further, Morris notes that once the idea of owning private property became entrenched, the idea of inheriting property from a parent followed; success now depended much more on the wealth of your parents than your own skill in hunting, gathering, and coalition-building. The importance of bequeathing property dramatically increased the importance of the idea of the legitimacy of children and the "purity" of women. Controlling legitimacy had enormous practical impacts in agricultural societies.³²¹

Around 3,000 BCE, the Minoans on Crete grew into a trading empire, connecting the middle East with Europe. "From this trade came money, which allowed Minoan elites to set their hands to painting, to

architecture, and to building a civilization. The less fortunate spent their lives picking grapes" and social inequity deepened. Minoans were followed by the Mycenaeans, who in turn were followed by Greeks.³²²

Greece is frequently called the cradle of western civilization (where "western" is a euphemism for white European). Our education systems teach reverence for the brilliant thinkers of Greece; we are rarely taught the fact that slavery was an omnipresent fact of life in Greek "civilization". Citizen slavery was abolished by Solon about 594 BCE, which meant new slaves had to come from outside - the "us vs them" mentality is every present.

The Greeks saw slavery as essential for their own freedom. In order for Greek citizens to perform their democratic functions, they needed servants who were not part of the state, according to Aristotle. Plato also saw citizens as being landowners while the productive classes would have no political rights. 323 Slaves were predominant in ancient Greece and "were responsible for the prosperity of Athens and the leisure of the aristocrats, who had time to create the high culture now considered to be the beginning of Western civilization."324In Athens, there were approximately 200,000 slaves compared to 168,000 "citizens". Iriarte writes, "The culture that gave the world the Parthenon, the teachings of Socrates, Plato, and Aristotle, and the foundations for representative democracy was also a society dependent almost entirely on slavery." Aristotle wrote that slavery is not "a violation of nature" because some people "are marked out for subjection, others for rule."325 Everett elaborates: "Those that were 'by nature slaves' and 'whose business is to use their body and who can do nothing better' should 'be under the rule of a master'."326

Earlier in this paper we discussed Harari's theory that the great leap forward for humans was the ability to communicate and share imaginary fictions. Harari states that we create and share fictions about distinctions between free persons and slaves, whites and blacks, rich and poor. There are no biological distinctions between their natural beings, but we invent distinctions anyway. Harari adds that "it is an iron rule of history" that every ruler, empire, state and religion pretends that it is NOT built on fictions but is instead built on some idea of what is "natural" law or God's desire. Hammurabi's Code asserts the laws and "Babylon social order is rooted in universal and eternal principles of justice, dictated by the gods." Aristotle agreed that slavery was "natural". Harari elaborates,

For instance, many people who have viewed the hierarchy of freed persons and slaves as natural and correct have argued that slavery is not a human invention. Hammurabi saw it as ordained by the gods. Aristotle argued that slaves have a 'slavish nature' whereas free people have a 'free nature'. Their status in society is merely a reflection of their innate nature.³²⁸

. . .

Contrary to Aristotle, there is no known biological difference between slaves and free people. Human laws and norms have turned some people into slaves and others into masters. Between blacks and whites there are some objective biological differences, such as skin colour and hair type, but there is no evidence that the differences extend to intelligence or morality.

. . .

[I]t's a proven fact that most rich people are rich for the simple reason that they were born into a rich family, while most poor people will remain poor throughout their lives simply because they were born into a poor family.³²⁹

During the Roman Empire, Rome's population grew to approximately one million. Roman farmers were diverted to becoming soldiers for the empire, which resulted in a great flood of captives. These captives were put to work farming, focusing on grapes and olives, the two crops which created much of Rome's prosperity.³³⁰ The plantation owners used slave labour on a massive scale; the people depended on food from outside the city, and it took approximately 19 rural people to feed one "citizen" in Rome.³³¹ This is civilization.

In the third century, Roman emperor Diocletian increased taxes in order to pay for his army and his bureaucrats. The taxes were so onerous that farmers left their fields and other workers left their workplaces. Diocletian imposed laws that prohibited citizens from leaving their places of work. On farms, not only were farmers prohibited from leaving, so were their children after their parents' death. The system of tied serfdom originates from a decree issued by Diocletian that required peasants to register in their locality and never leave it, which by law "turned farmers into serfs, whom one purchased when he bought the land they worked on." 332

Villein was a term used in the feudal system to denote a peasant (tenant farmer) who was legally tied to a lord of the manor. The term derives from Late Latin *villanus*, meaning a man employed at a Roman villa rustica, or large agricultural estate, with an alternative term being serf, from the Latin *servus*, meaning "slave". Villeins occupied the social space between a free peasant (or "freeman") and a slave, and made up the majority of medieval European peasants. Because of the low social status of villeins, the term became derogatory. In modern French *vilain* means "ugly" or "naughty"; in Italian, *villano* means "rude" or "ill-mannered". A villein was a bonded tenant, so he could not leave the land without the landowner's consent. This system is the same as the "pass system" that Canada imposed on indigenous peoples who were prohibited (without any basis in law) from leaving their reserve without a permit from the Indian agent.³³³ To emphasize: a villein – a villain – was a person on a farm who was under the control of the landowner.

After the Roman Empire dissolved, Europe sank into the Dark Ages, suffering vast population losses, shrunken cities, and lack of trade and subsistence livelihood. The old methods for transporting and trading agricultural products ended.³³⁴ However, the Visigoths who replaced the Romans continued slavery and in turn so did the Christians. The Viking Rus', who moved east and became the foundation of Russia,

were ruthless when it came to enslaving local populations and transporting them south. ... Slavery was a vital part of Viking society and an important part of its economy – and not just in the east. So rampant was the desire to profit from slavery that, although some Scandinavians obtained licences from local rulers to plunder new regions and take prisoners, others were more than willing to put each other under bond – 'as soon as one of them catches another,' recorded one well-informed cleric writing in northern Europe in the eleventh century. ... Huge numbers were imported from sub-Saharan Africa ... Slaves were also taken from the Turkic tribes of Central Asia. ... Slave markets thrived across central Europe, stocked with men, women and children waiting to be trafficked to the east – and also to the court at Cordoba, where there were more than 13,000 Slavic slaves in 961. ... 335

It was the sale of slaves that paid for the imports that began to flood into Europe in the ninth century. The spices and drugs that are increasingly visible in the sources as highly desirable luxury objects or as medical necessities were funded by large-scale human trafficking.³³⁶ ...

So widespread was slavery in the Mediterranean and the Arabic world that even today regular greetings reference human trafficking. All over Italy, when they meet, people say to each other,

'schiavo,' from a Venetian dialect. 'Ciao,' as it is more commonly spelt, does not mean 'hello'; it means 'I am your slave.' 337 ...

The wealth [Venice] accumulated from slave trading and human suffering was to lay the basis for its transformation into one of the crown jewels of the medieval Mediterranean.³³⁸ ... Eventually, the slave trade began to dwindle – at least from eastern and central Europe. One reason for this was that the

Viking Rus' shifted their focus from long-distance trafficking to the business of protection rackets.... Instead of pillaging and stealing peoples, the Viking Rus' would simply demand payments not to do so.³³⁹

"In the eighth to tenth centuries, the base commodity for sale had been slaves." But as western and eastern Europe became wealthier and more populous, this led to the requirement for a system of payments – money. "Money, rather than men, began to be used as currency for trade with the east." ³⁴⁰

Slaves were taken from Slavic countries to such an extent that the Latin word *sclavus* and its various derivations such as the English, French, Spanish and Arabic words "slave," "esclave," "esclave" and "siklabi" (plural "sakaliba") derive from the fact that Slavs were so often used as slaves. (In earlier times, the Latin term used was *servus*, *mancipium*, *puer* and *puella*; Muslim slaves were called *sarrancenus* and *maurus*). The Baghdad caliphate founded in the 7th century CE and lasting through the 10th century acquired many tens of thousands of slaves from central Asia. In 9th and 10th centuries several tens of thousands of black slaves were imported from Zanzibar to Iraq. The Khanate in Crimea, from roughly 1475 to 783, raided Slavic and Caucasian societies for slaves such that approximately 75% of the Crimean population were slaves. Slaves from the white Slavic north and black African south poured into the Ottoman empire. Through Islamic west Africa, slavery was widespread. After Columbus, the Caribbean, Brazil and North America acquired vast numbers of slaves. Slaves

Of course religious beliefs informed laws and attitudes about slavery. "The Judeo-Christian-Islamic tradition has been the most tolerant of slavery. Judaic and Islamic canonical texts refer frequently to slavery and treat it as a natural condition that might befall anyone." Islamic practice was that slaves should and would become full members of the society in six years. That is why Islam had so many raids for slaves, because their slaves were constantly becoming members of the society and needed to be replaced. Christianity did not have any such rules. Christianity was very focused on salvation after death and thus Christians were able to persuade themselves that whether or not a person was a slave in the present did not matter. In addition, medieval thinkers argued that there were only two alternatives for a defeated enemy: death or servitude. In this way, people were able to convince themselves that slavery was an act of mercy because the only alternative was death.

Experienced merchants of Italy, Provence (France) and Catalunya (Spain) moved slaves all over the Mediterranean world. In Spain, King Alfonso X of Castile created *Las Siete Partidas* (circa 1265), which was one of the great legal codes of the Middle Ages. Among other things, *Las Siete Partidas* relied on Roman Law to set out the laws of slavery. The Spanish jurists who wrote the code did not see slavery as a result of racial inferiority, but rather as an unfortunate condition that could befall anyone. Slaves were recognized as human beings who possessed some rights and deserved some protection.³⁴⁵ In the 13th century, African slaves were being sold in Portugal, having been brought there mostly by Muslims; it was not until the 15th century that Portugal's non-Muslims began stealing and buying their own slaves.³⁴⁶

Almost all slave societies tried to destroy the cultural identity of the slaves. They were expected to abandon their traditional beliefs and customs and adopt at least part of the slave-owners' culture.

In England, and elsewhere, there was slavery and serfdom for the poor. By the Middle Ages, "nine Europeans out of ten worked the land and made life possible for the one who didn't." Serfdom slowly disappeared after about 1250 but life was still difficult. After the Black Plague, workers were in short supply and the king took steps to reduce the bargaining power of the workers in order to favour their wealthy masters. When English peasants rebelled in 1381, they complained "We are made men in the likeness of Christ, but you treat us like savage beasts."³⁴⁷

England also had perhaps the most severe criminal laws in Europe. Aside from extremely harsh sentences including death for a wide variety of offences (it is estimated that some 72,000 were executed during the reign of Henry VIII, yet it is his daughter Mary who is called Bloody Mary for executing hundreds of Protestants), England had laws to force vagrants and offenders out of England to serve as free labour in the colonies.³⁴⁸

The vast oppression and expulsion of the poor in England, Scotland and Ireland is one part of the story of colonialism in Canada. England forced people, peasants, and serfs off of their lands in England, Scotland and Ireland, using various laws that permitted private enclosures of lands that used to be available for all to use in common with each other (thus, "commoners" and the "House of Commons" to represent commoners). England then adopted draconian laws against the people forced off their lands (vagrancy), all in favour of private ownership of land for farming profits that would not be shared with traditional tenants. These laws of private agricultural lands and evictions of farmers led to mass migrations to Canada and other countries in England's empire.

Slavery, Capitalism, Credit, Purchasing Shares of Human Beings, Derivatives

In general, slaves were rarely employed in growing grains such as rye, oats, wheat, millet and barley. Instead, slave-owners preferred for slaves to work on cash crops such as olives, grapes, sugar, cotton, tobacco, coffee and certain forms of rice. "The presence or absence of such crops and their relative profitability were among the major determinants of whether or not a slave-owning society became a slave society."³⁴⁹

Capitalism developed to assist the process of profiting from slave-produced cash crops. England's merchants sold weapons and cotton to African rulers in exchange for slaves; they then transported the slaves to the western hemisphere to produce cheap sugar, tobacco, cotton and other goods on stolen indigenous lands, and finally took these cheap goods to Europe to sell at a massive profit.

The world's way of conducting itself was reinvented in the 15th and subsequent centuries. Beckert writes: "Slavery, the expropriation of indigenous peoples, imperial expansion, armed trade, and the assertion of sovereignty over people and land by entrepreneurs were at its core. I call this system *war capitalism*." The invention of capitalism went hand in glove with the invention of the chattel slavery of Africans.

The great discovery in Brazil in the second half of the 16th century was the gang labour system, which was so cost-effective that it made Brazilian sugar cheaper in Europe than the sugar produced in the islands off Africa [such as the Canary Islands]. A plantation using gang labour could produce, on average, 39 percent more output from comparable inputs than could free farms or farms employing non-gang slave labour... Tobacco and coffee cultivation also used gang labour, but cultivation of these crops was less physically demanding than that of sugar and cotton and led to much lower mortality rates than did sugar and rice.³⁵¹

Neither the indigenous peoples nor the African slaves ever shared in the unimaginably large profits that went to Europe from the theft of indigenous lands and the enslavement of indigenous peoples and Africans by the millions. Harari writes,

From the sixteenth to the nineteenth centuries, about 10 million African slaves were imported to America. About 70 per cent of them worked on the sugar plantations. Labour conditions were abominable. Most slaves lived a short and miserable life, and millions more died during wars waged to capture slaves or during the long voyage from inner Africa to the shores of America. All this so that Europeans could enjoy their sweet tea and candy – and sugar barons could enjoy huge profits. 352

Slavery also developed into its own economic force in Europe, legitimized on the stock exchanges and generating further profit for Europeans, more profits the slaves would never see.

The slave trade was not controlled by any state or government. It was a purely economic enterprise, organised and financed by the free market according to the laws of supply and demand. Private slave-trading companies sold shares on the Amsterdam, London and Paris stock exchanges. Middle-class Europeans looking for a good investment bought these shares. Relying on this money, the companies bought ships, hired sailors and soldiers, purchased slaves in Africa, and transported them to America. There they sold the slaves to the plantation owners, using the proceeds to purchase plantation products such as sugar, cocoa, coffee, tobacco, cotton and rum. They [331] returned to Europe, sold the sugar and cotton for a good price, and then sailed to Africa to begin another round. The share-holders were very pleased with this arrangement. Throughout the eighteenth century the yield on slave-trade investments was about 6 per cent a year – they were extremely profitable ...³⁵³

European governments became increasingly dependent on the customs revenues from these imports for war and other purposes, and wanted to ensure British merchants had the capital to keep the system working smoothly; "[t]hat helps explain why, in 1694, the government established the Bank of England, to make cheap loans available to British merchants, entrepreneurs and landlords. In the eighteenth century, cheap loans encouraged agricultural innovation and helped build canals and an extensive system of coach transport." 354

New financial tools were developed such that more and more of the white world was able to invest directly in US slavery. Investors and speculators buying and re-selling formerly indigenous lands in the southern US were backed up by credit – money that was to be repaid from the sales of cotton not yet planted by slaves not yet bought. The word "credit" comes from the Latin *credere* which means "belief"; belief must be created. People must have confidence in their ability to buy stolen indigenous land and retain that land; they must have confidence in their ability to buy and transport slaves, defeat any slave revolts and, of course, generate profits for themselves.

The government role in creating this belief, or confidence, or credit, is essential. Not only does the government use armed force to defend and enforce, it also extends credit itself. "[G]overnment-supplied credit had financed 93 percent of the cost of the land in the valley" of the Tennessee River. Credit was much more 'available to those with the luck of being born white, male, in the right place, and to the right family'."³⁵⁵ The slaves cleared fields on speculation of fertile lands, grew cotton to make interest payments and keep new loans coming to the slave-owners, and served as collateral for the slave-owners to obtain the loans as well. ³⁵⁶ In fact, two million slaves were worth over one billion dollars. "Owning more slaves enabled planters to repay debts, take profits, and gain property that could be collateral for even more borrowing." Credit – using someone else's money – multiplied the wealth generated by African American slaves working on indigenous lands; wealth that created vast fortunes for white men.

The banks, in turn, created pools of the debt that was owing so the debts could be sold in uniform chunks (what today we call "derivatives" – derived from the original debt), thus reducing the risks of any one borrower defaulting. If banks lent money to slave-owners at interest, then re-sold the debt to others at lower interest, the banks would hedging their bets and guaranteeing risk-free lending. Now, all buyers of portions of the debt would share in the profits while being shielded from risk. This financial product was sold throughout the western world. "Thus, in effect, even as Britain was liberating the slaves of its empire, a British bank could now sell an investor a completely commodified slave: not a particular individual who could die or run away, but a bond that was the right to a one-slave-sized slice of a pie made from the income of thousands of slaves." Slavery might be illegal, but investing in slavery was not. Any risk was shifted to the slaves: their labour would ensure repayment of the debts and if it did not, they would be sold to make repayment. If that still was not enough, taxpayers would buy the bonds. Continuous Indian removal and theft of their lands for plantation slave labour was another guarantee that there was money to be made. 358

English citizens invested heavily in the slave trade, with a common share being one thirty-second of a slave. English citizens also made money from ship building as carpenters, painters, mechanics, ironsmiths, rope makers, sail makers, repairmen, dock work loading and unloading ships involved in the triangular trade, manufacturing the shackles and metal collars, running insurance and investments related to the trade, feeding the workers, and collecting duties on the goods such as sugar, rum, tobacco and cotton arriving in England from the triangular trade. ³⁵⁹ Englishmen were very well aware of what they were doing and how they were profiting from slavery.

Slavery is a crime that continues today in all regions of the world.

It takes no effort at all to learn about the current epidemic in human trafficking in Eastern Europe, which is part of a millennia old pattern. Perhaps the most severely affected region is the country of Moldova [sic]:

For centuries, Moldova has experienced constant invasion and occupation by the Romans, Huns, Tatars, Ottomans, Mongols, Turks and Hungarians to name a few. Throughout hundreds of years of changing rule, human trafficking was regular practice. Captives from this region were carted to far off lands in Europe and the Middle East, bought and sold as sex and labor slaves. Girls from Eastern Europe have been coveted for their beauty and sold to Turkey in large-scale sex trades since the early $1800s.^{360}$

It is tragic that white supremacists trace the definition of beauty to the Caucasus region, and the beauty of the women leads them into slavery. It is shocking to see the large number of art "masterpieces" depicting naked Slavic women in slave markets. The web site fineartamerica.com advertises: "Choose your favourite slave market paintings from millions of available designs. All slave market paintings ship within 48 hours and include a 30-day money-back guarantee." Who doesn't want a semi-pornographic painting of naked young female slaves being sold at market as old, fully clothed, wealthy men inspect the goods?

It is important to think about what slavery meant for women especially. Just as humans domesticated plants and livestock by manipulating and controlling their reproduction and by confining them to spaces under our control, we did the same with women. We used women to produce slaves and labour for male elites. We used women for our sexual pleasures without any consideration for their consent. We hit and raped female slaves without any thought that doing so could be illegal; in fact, "[f]rom its very

beginnings, the slaveholder's right to rape any enslaved woman was a cornerstone of the institution of New World slavery." Scott further observes that [sic], "[i]n wars for captives, the strong preference for women of reproductive age reflects an interest at least as much in the reproductive services as in their labor. ... A combination of property in land, the patriarchal family, the division of labor within the domus, and the state's overriding interest in maximizing its population has the effect of domesticating women's reproduction in general." Agriculture enslaves the reproduction systems of nature in general; this enslavement includes the reproduction systems of women.

The International Labour Organization estimates that:

- At any given time in 2016, an estimated 40.3 million people are in modern slavery, including 24.9 million in forced labour and 15.4 million in forced marriage.
- It means there are 5.4 victims of modern slavery for every 1,000 people in the world.
- 1 in 4 victims of modern slavery are children.
- Out of the 24.9 million people trapped in forced labour, 16 million people are exploited in the private sector such as domestic work, construction or agriculture; 4.8 million persons in forced sexual exploitation, and 4 million persons in forced labour imposed by state authorities.
- Women and girls are disproportionately affected by forced labour, accounting for 99% of victims in the commercial sex industry, and 58% in other sectors³⁶⁴

The scourge of slavery in agricultural societies has never left the world. It remains wide-spread, prevalent, hidden, and our societies do not seem motivated to do much about it.

Let's stop for a moment to emphasize that slavery has two sides: the cruelty and misery suffered by the slaves and the enormous financial and other benefits experienced by slave-owners. Discrimination against some creates power and wealth for others. In other words, every single law and policy that discriminates against some people is an affirmative action program for the persons not discriminated against. Discriminatory laws are an affirmative action program.

The history of the world since agriculture, and especially since Christianity, shows that whites, and especially white males, are constantly adopting laws to give them advantages while preventing others an equal chance to participate in their wealth-making schemes. Discrimination by whites against non-whites is affirmative action for whites; privileges that whites give to themselves but not to others. And then whites pretend that it is their natural superiority that made it that way, their hard work, their clean living, and not their discrimination against less powerful people. It is galling to read any white person complain about half-hearted, ineffective, paltry efforts at affirmative action for non-whites in the 21st century.³⁶⁵

11. Agriculture Creates "Scientific" Racism

"Scientific" racism became predominant in the 17th-19th centuries. Of course, "scientific" racism was not remotely the beginning of racism.

"Scientific" racism as a term is problematic: it tries to confirm what is false. The racists argued that their racism was based in science and therefore factual and justified, when, in fact, racism has never been supported by science. The so-called science was always deeply flawed and biased. But "scientific" racism was all the rage between the 17th and early 20th centuries and is even experiencing a bit of a revival in the early 21st century, because racists desperately want to claim that some objective facts support their racism. "Scientific" racism was allowed to establish credibility because it was conducted by people who

were considered advanced scientists in their day, people who believed in and purported to rely on the "scientific method" of measurements and observation. Of course, measurements of unimportant and irrelevant data, with no proof of causation or even correlation, let alone a definition or method for measuring the ultimate conclusion ("intelligence"), amounts to nothing. It is not science.

Aristotle stated that slavery is an institution that is both natural and right.³⁶⁶ He has been called the "father of scientific racism" and "the granddaddy of all racial theorists". Aristotle, as a world famous "great thinker," stated that hierarchy and inequality is a fact of nature which humans should accept. For example he felt that, "[i]f nature, including hierarchies and natural slavery, is simply a fact, then society can function properly only if it is ordered with this fact in mind."³⁶⁷ It is astonishing the degree to which we celebrate Aristotle without talking about his commitment to racism and slavery. Aristotle was wrong; there are no hierarchies in nature. Instead, there are differences and everything fits together; parts of nature that thrive in certain conditions or at different times may struggle as conditions change.

Every Christian was taught that all of the peoples of the world were descended from Noah's three sons and their wives, all of whom were white, so some explanation for black skinned peoples was needed.³⁶⁸ The Bible itself does not mention the skin colour of Noah's sons and their wives because it is not important to the story; the idea that Noah's sons were born white is found in sixteenth century literature including Guillaume Postel's best-selling *Cosmographia*.³⁶⁹

Noah divided the world between his three sons, giving Europe to Japhet, Asia to Shem and Africa and the Middle East to Ham. The Christian idea that all persons on Earth descended from the white Noah and his three white sons, beginning in the old world, created a problem for whites. How could they explain indigenous peoples in the new world? The answer was that white people must have walked there across Asia. In both Europe and America, whites mostly ignored the difference in skin colour with indigenous peoples, other than to emphasize the greater difference with Africans. There was general consensus that indigenous peoples were originally white but their complexion was darkened by the application of dyes from roots and barks and oils. Jordan notes, [sic]"[w]hite men seemed to want to sweep the problem of the Indian's color under the rug. The question of the color of man was pre-eminently the question of the color of the Negro."³⁷⁰

Adiele writes that "the theory of a tripartite classification of mankind spread throughout the Christian Europe in the late Middle Ages portraying Ham and his descendants as those under the curse of slavery as punishment for the sins of their forefather Ham."³⁷¹ It was not difficult to connect Ham, immoral sex and Africa. George Best's theory "was a huge success in England as well as in France and Germany".³⁷²

As Europeans tried to cope with the violence and death all around them in the Middle Ages, they began to see that religion was failing them. They began to develop an idea of "rationalism", leading them to replace religion with the scientific method.

In addition, the scientific revolution was aided, or made necessary, by European explorations around the globe, which revealed that what the church had taught them about the world was obviously false in many aspects. Through their vast explorations, Europeans saw themselves as masters of the entire globe and learned that direct observation was the best way to learn about the world; it was not by listening to preachers.

Further, the explorations generated vast quantities of new information and data, which, combined with the newly invented Gutenberg Press, became available to millions who had no TV, radio, internet, movies,

and very few other ways to distract themselves. Those with an inclination and opportunity to develop literacy and curiosity were a ripe audience.

Rather than observing that racism was not founded in fact, scientific justifications for European racism instead began to simply replace religious justifications. Alexander Pope wrote *An Essay on Man*, a poem that was published in separate parts from 1733-1734. Pope wrote that natural law considers the universe to be perfect and a work of God; humans cannot understand God's work and intentions and therefore they must accept their place within the Great Chain of Being, where humans are between angels and beasts. "Whatever is, is right." Pope's essay became a best-seller, printed in America no fewer than 68 times between 1747 and 1809. If whites are powerful and blacks are slaves, "whatever is, is right". 373

Some suggest that scientific racism began in 1735 with the Swedish naturalist Carl Linnaeus who categorized humans in the primate genus, coined the term *homo sapiens* and then attempted to divide humans in to varieties: white, black, red and yellow. Red Americans were "ill-tempered, ... obstinate, contented, free"; yellow Asians were "severe, haughty, desirous"; black Africans were "crafty, slow, foolish"; and white Europeans were "active, very smart, inventive." (It is important to remember that white slave owners normally described black slaves as being crafty, slow and foolish because they would not behave precisely as their white masters wanted; in fact, some slaves tried to find ways to do less work for their slave-owners as a way to fight back against their enslavement.) ³⁷⁴ Linnaeus implicitly divided humans into four colours (white, red, yellow, black) but not brown. "[T]he durable heart of the schema was the differentiation Linnaeus made among Europeans, American Indians, Asians, and Africans." ³⁷⁵

What of the people in the Indian sub-continent? Physical anthropologists grouped them with whites because they had similar facial features. But some whites did not want to be grouped with brown-skinned people so they imagined that at some point in history India had been over-run by white people and the inter-breeding was so vast and long-lasting that Indians took on white facial features. In reality, all humans have physical similarities and differences, and that all of these came from Africans.³⁷⁶

The Scottish philosopher David Hume, another great white thinker, wrote in 1748 that black people are "naturally inferior to the whites. There never was a civilized nation of any other complexion than white ... No ingenious manufactures amongst them, no arts, no sciences."³⁷⁷

In 1748, Montesquieu published *Spirit of the Laws*, where he stated that it was not possible that a wise God would place a soul within people as ugly as black skinned persons. Montesquieu argued that it was "natural to look upon colour as the criterion of human nature".³⁷⁸ This was two hundred years after the great debate in Valladolid, Spain as to whether indigenous peoples were rational and had souls. (See my forthcoming paper on the doctrine of discovery.)

Montesquieu also described a world where human societies pass through different stages of development. This later became known as the stadial theory, or the four stages of development, perhaps most famously described by Adam Smith. What is important for our purposes is that this idea of stages of development locked indigenous peoples into a generalization of being primitive and that this was a theory of "law". Montesquieu wrote:

There must be a more extensive code of laws for a people attached to commerce and the sea than for a people satisfied to cultivate their lands. There must be a greater one for the latter than for a people who live by their herds. There must be a greater one for these last than for a people who live by hunting.

In other words, people of commerce and ocean-going ships are superior to farming societies, who are superior to livestock shepherds, who are superior to hunter-gatherers. The more laws a society has, the more superior it is.³⁷⁹

Property law had a central place in the four stages theory. As societies "advanced," they produced and acquired more private property, and ever more laws were required to ensure that individuals could hold onto their "private property". Of course, "law" is simply a euphemism for state violence. "Law" explains the rules for when state violence will be invoked. For example, if a law says that specific types of belongings are recognized as private property, and that taking another person's private property is punishable by the state, then we know how and when state violence will be imposed on citizens. That is perhaps the primary function of law.

Adam Smith describes this four-stage division of development and humans in his *Lectures on Jurisprudence* along with the idea that legislation is related to the economic stage of a society [sic]:

There are four distinct states which mankind pass thro: 1st, the Age of Hunters; 2dly, the Age of Shepherds; 3dly, the Age of Agriculture; and 4thly, the Age of Commerce. ... In the age of commerce, as the subjects of property are greatly increased the laws must be proportionally multiplied. The more improved any society is and the greater length the severall means of supporting the inhabitants are carried, the greater will be the number of their laws and regulations necessary to maintain justice, and prevent infringements of the right of property. 381

Williams wrote that Montesquieu and Smith, as well as other great Europeans writers such as Grotius, Locke and Hobbes, codified into colonial imagination the widely held belief that indigenous peoples were savages.³⁸² These writers will be discussed in the following section on international law.

In 1776, Johann Friedrich Blumenbach published *On the Natural Variety of Mankind*. "He was the first to trace the white race to the Caucasus, and he did so because of the reputed beauty of its inhabitants. He then went on to hypothesize that those he dubbed 'Caucasians' were the original human race from which the others had diverged or degenerated."³⁸³

Immanuel Kant, famous anthropologist and philosopher, stated that Europe was the cradle of humanity and the European had a "more beautiful body, works harder, is more jocular, more controlled in his passions, more intelligent than any other race of people in the world. That is why at all points in time these peoples have educated the others and controlled them with their weapons. The Romans, Greeks, the ancient Nordic peoples, Genghis Khan, the Turks, Tamurlaine, the Europeans after Columbus' discoveries, they have all amazed the southern lands with their arts and weapons" and that "humanity is at its greatest perfection in the race of whites". 385

Kant wrote, "I believe it is necessary to assume only four races of man in order to derive from them all the differences which are ascertainable [41] on first sight and which perpetuate themselves. They are (1) the race of Whites, (2) the Negro race, (3) the Hunnic (Mongolian or Kalmuck) race, (4) the Hindu or Hindustanic race." He included as 'white' the Moors of north Africa, the Arabs and the Persians as well all other Asians not included the other three categories. He included the indigenous peoples of the western hemisphere among the Hunnic.³⁸⁶

Kant described the world as divided among four races, observable by their skin colour, believing that white was the original colour and all other skin colours indicated a lesser quality. He ranked the four races

in a descending order of superiority, white followed by yellow, then black, then red (indigenous peoples). This order indicated who had the most natural talents and who had the least.³⁸⁷

Kant also wrote [sic], "The Negroes are born white apart from their genitals and a ring around the navel, which are black. During the first months of life the black color spreads out from these parts over the whole body." And further, "When a Negro burns himself the spot turns white. Long illnesses also turn the Negroes quite white; but a body that has become white through illness turns blacker in death than it ever was before." And even more: "This fellow was quite black ... a clear proof that what he said was stupid." It is important to remember that Immanuel Kant is revered even today as a very important thinker who had and has a tremendous influence over western (white) thought. When it came to describing humans, it was Kant who was clearly very, very stupid.

Jordan notes that [sic], "[i]n an age infused with the presuppositions of the Chain of Being, it was fatally easy to envision Europeans and the rest of mankind as constituting a Great Chain of Color." ³⁸⁹

Thus, "scientific" racism gave us four stages of "progress" of humans and four colours of humans. "Scientific" racism told us that there is a clear hierarchy as to who was superior, the most advanced, the most civilized, the most god-like, placing white Europeans at the top.

I have always wondered why the "traditional" medicine wheel of North American indigenous peoples has four colours and does not include brown. Now, having read about Linnaeus' and Kant's racist four-colour division of the world, I cannot look at a medicine wheel without some degree of suspicion that it is not nearly as "traditional" or benign as some people might say. We do not live in a four-colour world; humans are not divided and distinguished by four colours. If we believe in dividing humans by colour, the least we can do is add the colour brown. But it is not just the wrong-headedness of proposing a four-colour world, it is the generalization that humans fit into specific colours or races. This is simply not true. Our skin colours vary everywhere. We know exactly what chemical process makes some skin darker or lighter in colour. We know that the colour of our skin tells us nothing about the character, talents or experiences of an individual. We know that all of us have descended from Africa. Our varying skin colours might be characterized as just a series of different shades of black.

Christoph Meiners correlated physical beauty with intelligence in his *The Outline of History of Mankind* (1785). Naturally, "fair" people were both more beautiful and more intelligent. ³⁹⁰

In 1786, William Jones published an important book on the origins of languages, describing the similarities between European languages and those on the Indian sub-continent. Although he was not the first to make this observation, he was the first to "propose a racial division of India involving an Aryan invasion but at that time there was insufficient evidence to support it." Subsequent linguists,

noticed that the earliest Sanskrit speakers, who had invaded India from Central Asia more than 3,000 years ago, had called themselves Arya. The speakers of the earliest Persian language called themselves Airiia. ... British, French and German scholars wedded the linguistic theory about the industrious Aryans to Darwin's theory of natural selection and posited that the Aryans were not just a linguistic group but a biological entity – a race. And not just any race, but a master race of tall, light-haired, blue-eyed, hard-working, and super-rational humans who emerged from the mists of the north to lay the foundations of culture throughout the world. Regrettably, the Aryans who invaded India and Persia intermarried with the local natives they found in these lands, losing their light complexions and blond hair, and with them their rationality and diligence. The [303] civilisations of India and Persia consequently declined. In Europe, on the other hand, the Aryans preserved their racial purity. This is

why Europeans had managed to conquer the world, and why they were fit to rule it – provided they took precautions not to mix with inferior races.³⁹¹

This was an example of explaining facial similarities between Indians and Europeans – the Aryans did it.

In 1817, French born zoologist, comparative anatomist, natural scientist and paleontologist Georges Cuvier wrote in his work "The Animal Kingdom":

The Caucasian, to which we ourselves belong is chiefly distinguished by the beautiful form of the head, which approximates to a perfect oval. It is also remarkable for variations in the complexion and colour of the hair. From this variety have sprung the most civilised nations and as such have most generally exercised dominion over the rest of mankind ... The Negro race is confined to the south of mount Atlas. Its characters are: black complexion of the lower part of the face and the thickness of the lips. It manifestly approaches to the monkey tribe. The hordes of which this variety is composed have always remained in a state of barbarism.³⁹²

Numerous leading and prominent white "scientists" argued that it was a fact that black-skinned people are not humans at all, but are animals, and do not come from Adam and Eve. They would point to physical differences of various kinds, but also to the fact that black-skinned people did not have souls, and therefore could not join God in the afterlife and thus were not human or equal to white skinned people.

In the 1820s, famous German philosopher George Hegel wrote: "Africa has no historical interest of its own, for we find its inhabitants living in barbarism and savagery in a land which has not furnished them with any integral ingredient of culture ..." 393

Franz Gall was a scientist who published a book titled "On the Functions of the Brain and of Each of Its parts: With Observations on the Possibility of Determining the Instincts, Propensities, and Talents, Or the Moral and Intellectual Dispositions of Men and Animals, by the Configuration of the Brain and Head", detailing his vast research on brain function and localization. It was translated to English in 1835 by Lewis Winslow. Gall is known as the father of phrenology, a pseudoscience which involves the measurement of bumps on the skull to predict mental traits. His phrenological theories and practices were accepted in England, where the ruling class used it to justify the "inferiority" of its colonial subjects.³⁹⁴

In 1839, Samuel George Morton published his book *Crania Americana*. It has been called "the most influential book on scientific racism". Morton pretended that by measuring skull sizes and shapes he could rank the intelligence of specific skin colours. Morton wrote of Native Americans that they have a brown complexion, and long, black hair, among other physical traits, and that "mental character" meant they were "averse to cultivation, and slow in acquiring knowledge [apparently Morton knew nothing about the origins of maize and potatoes]; restless, revengeful, and fond of war ... They are crafty, sensual, ungrateful, obstinate and unfeeling ... Their mental faculties, from infancy to old age, present a continued childhood ... [Indians] are not only averse to the restraints of education, but for the most part are incapable of a continued process of reasoning on abstract subjects ..." Charles Darwin considered Morton to be an authority on the subject of race. ³⁹⁶

Morton believed in a divine hierarchy of peoples, with "Caucasians" as the most intelligent, followed by "Mongolians", then by Southeast Asians, then Native Americans and then blacks. His ideas were quickly taken up by supporters of slavery in the US.³⁹⁷

A Province of Canada assembly committee said in 1847 that white agriculture gave settlers a higher moral claim to the land. There were "natural laws of society to which even Governments must bend." 398

Charles Darwin released *On the Origin of Species* in 1859. Among Darwin's great contributions was the idea that humans are animals who followed an evolutionary course; not some creations of God. However, the theory of evolution carries racist baggage, whether Darwin intended it or not. The theory of evolution conveys a strong idea of hierarchy: less important life forms developed into more important life forms; new life forms were superior in various ways than the life forms from which they evolved.³⁹⁹ This can be used to support the idea that humans progress from being primitive to being civilized.

In 1863, the Anthropological Society of London was founded by Dr James Hunt, who wrote *On the Negro's Place in Nature*, where he describes the black person's "natural subordination to the European". 400

In 1864, Herbert Spencer published *Principles of Biology*, in which he coined the phrase "survival of the fittest". Spencer firmly believed that dominant races would prevail and inferior races would disappear and government should not interfere with the process (he did not object to those in government who were bent on using government to discriminate against the "inferior" races). ⁴⁰¹

In 1869-70, Thomas Huxley united the Anthropological Society and the Ethnological Society into the Anthropological Institute of Great Britain and Ireland, which later published *Notes and Queries on Anthropology for the Use of Travellers and Residents in Uncivilized Lands*, studying the differences between whites and "uncivilized" races. The uncivilized were objects of scientific study that only intelligent whites could measure and discern.

The British Museum was created in the mid-nineteenth century. While individual scientists gave racism a new vocabulary, scientific societies and institutions such as museums gave racists a status and platform by which to spread their "scientific" racism. They officially endorsed publications and public institutions aimed at the general non-scientific public and helped spread the ideas of scientific racism into "common knowledge". 402

In 1869, Francis Galton, the father of eugenics and of modern statistics (correlation, regression toward the mean, use of surveys to collect data), and Darwin's cousin, published *Hereditary Genius*. He used his theory to popularize the idea that intelligence was inherited and could not be improved by education, that "the average intellectual standard of the negro race is some two grades below our own". He coined the phrase "nature versus nurture" and declared that nature was undefeated. What he meant is that white people (those furthest removed from the natural environment) were naturally superior to non-whites, and that no amount of nurture or education could make non-whites equal. He urged governments to rid the world of inferior peoples, or at least stop them from reproducing, a policy that he called "eugenics". 403 Darwin praised Galton and saw the theory of eugenics as a great scientific achievement.

In 1871, Darwin published *The Descent of Man, and Selection in Relation to Sex*, where he doubted that races had different genetic origins but nonetheless believed that Europeans immeasurably surpassed "their former savage progenitors, and stand at the summit of civilization" and that the civilized races would replace the savage races throughout the world. He said that "the American aborigines, Negroes and Europeans differ as much from each other in mind as any three races that can be named". He said that "the American aborigines, Negroes and Europeans differ as much from each other in mind as any three races that can be named".

In 1876, a prison doctor in Italy, Cesare Lombroso, published *Criminal Man* and thus created the field of criminology (a term coined by one of his students, Raffele Garofalo). Lombroso claimed to have proved

that non-white men loved to kill, mutilate the corpse, tear its flesh and drink its blood. Criminals were born, not bred, he said. Dark skin had "always been considered the accompaniment of crime". In his 1895 book *The Female Offender*, he claimed that black women were the prototypical female criminals. A British doctor, Havelock Ellis, published an English version of Lombroso's work and popularized his writings in the English-speaking world. 406 Of course, centuries of European invasion, war and enslavement was not remotely considered a crime.

In 1892, American Charles Morris published "The Aryan Race: Its Origin and its Achievements," where he wrote: "It may be remarked that all the savage tribes of the earth belong to the Negro or the Mongolian races. No Negro civilization has ever appeared. On the other hand, the Caucasian is pre-eminently the man of civilization." ⁴⁰⁷

In 1896, the US Supreme Court issued its infamous ruling in *Plessy v Ferguson* which upheld the post-slavery world of segregation with the idea that it was possible to have segregated equality (separate but equal). Supreme Court justice Henry Billings wrote the majority opinion, saying "[i]f one race be inferior to the other socially, the Constitution of the [279] United States cannot put them upon the same plane". 408

In 1905, Ernst Haeckel, an anatomist in Germany, published *The Wonder of Life*, in which he said, "The lower races – such as the Veddahs [indigenous Sri Lankans] or Australian Negroes – are physiologically nearer to the mammals, apes and dogs, than to the civilized European. We must, therefore, assign totally different value to their life." 409

In 1910, Jules Harmand, who had helped oversee the French colonization of Indo-China, wrote:

It is necessary, then, to accept as a principle and point of departure the fact that there is a hierarchy of races and civilizations, and that we belong to the superior race and civilization, still recognizing that, while superiority confers rights, it imposes strict obligations in return. The basic legitimation of conquest over native peoples is the conviction of our superiority, not merely our mechanical, economic, and military superiority, but our moral superiority. Our dignity rests on that quality, and it underlies our right to direct the rest of humanity. Material power is nothing but a means to an end. 410

These many examples of "scientific" racism demonstrate the central message of the agricultural revolution: white male humans are best, and anyone who is not similar to white male humans must be given a lower value to their lives. This sense of superiority provided a powerful justification for intervening in the lives of others, since it was argued that these people would never be able to achieve civilization on their own.

The various measurements about different skull and brain sizes and other features have been totally discredited. "In retrospect, all of these ideas about the existence and origins of European 'races' are so ludicrous that it is shocking to realize how much effort went into formulating, defending, and debunking them... These movements [of humans into and out of Europe] bear no resemblance to the fantasies of the Aryan supremacists. What they resemble is something quite different: a tangled mass of yarn, thoroughly snarled yet all of one piece."⁴¹¹

This period of "scientific" racism is the period of time that whites call the "Enlightenment." In fairness, the Enlightenment also means that we stopped believing our priests and started believing in the scientific method. The jury is still out on whether that has been a good idea; climate change and nuclear weapons are upon us. God bless the scientists.

The above is merely the most cursory snippets of the "great" thinkers and their racist claims throughout the "Enlightenment."

12. Agriculture and International Law

As agriculture developed, rulers had three main options for increasing their wealth and power: encourage peasants to expand agriculture into previously unfarmed lands and encourage merchants to seek out new commodities; force their populations to work harder and take more taxes from them, or; wage war against neighbours to steal their land, people and goods. Of course, they could, and did, try all three approaches. Thus, most rulers were warlike and celebrated themselves as great warriors and celebrated war in general. Christian writes,

This was, after all, a world in which resources were mobilized primarily through the threat of coercion and in which the ability to mobilize and inflict violence was widely admired. If you were king, taking resources from your neighbours was one of the important ways of growing your economy. And if you succeeded... you would probably be admired, no matter how much misery you caused.⁴¹²

States and rulers use law, education and religion to persuade their subjects that their power is just. They use soldiers when persuasion does not work. This is the story of farming, of agriculture, of civilization. It goes back at least 5,000 years. The invasion of the western hemisphere is a continuation of a long established pattern, not a new idea. Law always made room for war and theft by rulers.

As the sixteenth century neared and papal authority waned, it became necessary to adapt old legal doctrines and invent new international law to justify the continuing theft of indigenous lands and destruction of indigenous peoples.

Thomas More published his influential novel *Utopia* in 1516, in which he advocated the settlement of territories where land was not being used because England's land-owners were forcing men off the lands in favour of sheep.⁴¹³ Over the next two centuries, the idea of settling mostly unwanted Europeans onto new countries where Europeans decided that land was not being used came to be viewed as a legal right for European rulers. The appropriate use of land slowly displaced the idea that mere discovery by European monarchs was sufficient to claim ownership of the "discovered" lands.

In 1625, Grotius wrote in his *De Jure Belli ac pacis* (*On the Rights of War and Peace*) that all behaviour of individuals and states was subject to natural law: that people in need had a right to take objects and land not being used by others, even if they were under another's jurisdiction, and; that war against those resisting European settlement and trade was justified.⁴¹⁴

While many cite Grotius as being the first important person to codify international law, it has also been argued that Grotius' early writings were mere propaganda for the Dutch East India Company. 415 "It is no longer possible to read Grotius without attending to the fact that much of his work seemed to be written as an 'apology for the whole Dutch commercial expansion into the Indies'". 416 Put another way, Grotius wrote "in the true fashion of lawyer as hired gun" and "was as slippery as an eel in twisting his arguments to favour the commercial interest of the [Dutch East Indies Company] and the growing Dutch seaborne empire." When it suited his Dutch masters, when the Portuguese were ascendant on the seas, Grotius would argue in favour of freedom of the seas; when the tables turned and the Dutch were ascendant, Grotius changed his arguments to defend the Dutch ownership of their seaways and ports. 417

In 1630, the importance of the Great Commission was again emphasized, along with the biblical reference to a "city on the hill," in the sermon of the Puritan John Cotton, "God's Promise to His Plantation," which he preached to the colonists about to head for the New World from Southampton. 418 Cotton cited Psalms 22: "All the ends of the world shall remember and turn unto the LORD: and all the kindreds of the nations shall worship before thee. For the kingdom is the Lord's: and he is the governor among the nations." In other words, the Christian God has universal authority as governor over all others; therefore, Christians have similar authority and are merely acting out God's wishes on earth.

Cotton also cited 2 Samuel 7:10: "Moreover I will appoint a place for my people Israel, and will plant them, that they may dwell in a place of their own, and move no more; neither shall the children of wickedness afflict them any more, as beforetime" 420. Cotton continued:

Now God makes room for a people 3 ways:

First, when he casts out the enemies of a people before them by lawful war with the inhabitants, which God calls them unto: as in *Ps.* 44. 2. Thou didst drive out the Heathen before them. But *this course of warring against others, & driving them out without provocation, depends upon special Commission from God, or else it is not imitable.*[my emphasis]

Secondly, when he gives a foreign people favour in the eyes of any native people to come and sit down with them either by way of purchase, as Abraham did obtain the field of Machpelah; or else when they give it in courtesy, as Pharaoh did the land of Goshen unto the sons of Jacob.

Thirdly, when he makes a Country though not altogether void of Inhabitants, yet void in that place where they reside. Where there is a vacant place [my emphasis], there is liberty for the sons of Adam or Noah to come and inhabit, though they neither buy it, nor ask their leaves. ...

To paraphrase: the Great Commission justifies warring and the theft of lands by Christians against non-Christians, but non-Christians have no justification to imitate this behaviour. If the Christian colonizers buy the land, if it is given to them or *if it is vacant*, God wants Christians to take those lands, and gives them permission to do so. Cotton continued that it is admitted:

as a Principle in Nature, That in a vacant soil, he that takes possession of it, and bestows culture and husbandry upon it, his Right it is. And the ground of this is from the grand Charter given to Adam and his posterity in Paradise, Gen. 1. 28. Multiply, and replenish the earth, and subdue it. If therefore any son of Adam come and find a place empty, he hath liberty to come, and fill, and subdue the earth there. This Charter was renewed to Noah, Gen. 9. 1. Fulfill the earth and multiply: So that it is free from that common Grant, for any to take possession of vacant Countries. Indeed no Nation is to drive out another without special Commission from heaven, such as the Israelites had, unless the Natives do unjustly wrong them, and will not recompence the wrongs done in peaceable sort, & then they may right themselves by lawful war, and subdue the Country unto themselves.

This placing of people in this or that Country, is from God's sovereignty over all the earth, and the inhabitants thereof: as in Psal. 24. 1. The earth is the Lord's, and the fulness thereof. And in Jer. 10.7. God is there called, The King of Nations: and in Deut. 10. 14. Therefore it is meet he should provide a place for all Nations to inhabit, and have all the earth replenished.

... if sovereign Authority command and encourage such Plantations by giving way to subjects to transplant themselves, and set up a new Commonwealth. This is a lawful and expedient case for such particular persons as be designed and sent: Matth. 8. 9. and for such as they, who are sent, have power to command.

... offend not the poor Natives, but as you partake in their land, so make them partakers of your precious faith: as you reap their temporals, so feed them with your spirituals: win them to the love of Christ, for whom Christ died. They never yet refused the Gospel, and therefore more hope they will now receive it. Who knows whether God have reared this whole Plantation for such an end?

Cotton's sermon was a heavy mixture of religion and law, telling the pilgrims that it was legal for them to go to the new world, set up a colony, command that colony and seek to convert the indigenous population to Christianity. They could "partake" in the lands of the indigenous peoples and repay the indigenous peoples by converting them to Christianity. It was legal because God wanted it; it was legal because the king authorized it; it was legal because nature intends for land to be cultivated, and; it is legal if the "natives" unjustly wrong them.

In these and other biblical passages, there is the idea of Christian superiority – God's chosen people; the light on the world; the city on a hill; and the people to whom God gave foreign lands and rights over non-Christians. End is emphasizes, "[a]s dissenters from the Church of England, Puritans believed themselves to be God's chosen piece of humanity, a special, superior people, and New England, their Israel, was to be their exceptional land."

One New England assembly adopted the following resolutions in the 1640s:

- 1. The earth is the Lord's and the fullness thereof. Voted.
- 2. The Lord may give the earth or any part of it to his chosen people. Voted.
- 3. We are his chosen people. Voted. 423

The New Englanders studied Aristotle and used his ideas of human hierarchy. Aristotle was confident that Greeks were superior to non-Greeks, so "Puritans believed they were superior to Native Americans, the African people, and even Anglicans – that is, all non-Puritans." ⁴²⁴

John Locke was secretary to the English owners of the Carolina colony. In 1690, Locke wrote *Two Treatises of Government*, in which he declared that, "In the beginning, all the world was America." By which he meant, the original state of the entire world was, "wild woods and uncultivated wast[e] ... without any improvement, tillage or husbandry."⁴²⁵ Private ownership in law should be assigned to persons who add something more than nature. Locke said that God ordered man to subdue the Earth by his labour. 426 "It cannot be supposed he [God] meant it [the world] should always remain common and uncultivated. He gave it to the use of the industrious and rational". 427 Naturally, the English were industrious and rational.

Locke argued that indigenous peoples did not have a politically organized society, did not live within defined boundaries, did not improve land through agriculture, did not use vast spaces at all, and therefore had no ownership or title to the lands. Locke believed in a dichotomy: either there was a political society (as he defined it, with a legislature, judiciary and executive that he could recognize 29) or there was pure nature. God, by commanding man to subdue the earth, also gave a right of ownership to the man who subdued the Earth through his labour. The man who lived in harmony with the Earth could not

acquire ownership. 430 Locke's arguments "provided justification and impetus to English expansion like no other" 431

Locke compared the profit that a Native American received from the produce of a fertile acre of land in North America compared to what an English landlord received from an acre in England, which made it clear that the indigenous acre was not worth one thousandth of the English acre. Because Locke deemed income from land to be the criterion for comparing societies, he concluded that an acre under indigenous control was little more than waste. Thus, it was not only permissible to seize the indigenous land, it was obligatory.⁴³²

Locke's arguments in the 17th century are similar to the writings of Gerald of Wales in the 12th century. Gerald of Wales became a royal clerk and chaplain to King Henry II of England in 1184. He was chosen to accompany one of the king's sons, John, in 1185 on John's first expedition to Ireland (Gerald of Wales was also a recruiter for the third Crusade). He wrote [sic]:

The Irish people are... a people getting their living from animals alone and living like animals; a people who have not abandoned the first mode of living – the pastoral life. For when the order of mankind progressed from the woods to the fields and from the fields to towns and gatherings of citizens, this people spurned the labors of farming.⁴³³

Plainly: it was justified to invade and rule over the Irish because they were not farmers.

Underlying every one of these arguments was the belief that the colonizers were bringing civilization to barbaric people who could never civilize themselves. This argument was used in the seventeenth century to justify an intensification of the British colonization of Ireland, which was marked by widespread dispossession, religious persecution, and the settlement of English and Scottish landlords and farmers. 434

In 1610, Sir John Davies, who oversaw the colonization of Ireland claimed that the Irish "would never, to the end of the world, build houses, make townships or villages, or manure or improve the land as it ought to be." To leave Ireland to the Irish meant the land would "lie waste like a wilderness." Since the British king was "bound in conscience to use all lawful and just courses to reduce his people from barbarism to civility," Davies wrote the king had little choice but to colonize Ireland. 435

Similar arguments were made by colonists around the world. In this way, colonizers convinced themselves they were spreading not only agriculture, order and trade, but also civilization. The 'civilizing mission' rested on a belief of racial and cultural superiority. Racial groups were often seen as being arranged in a hierarchy, each with their own set of mental and physical capabilities. Their special gifts made it inevitable that Europeans would conquer the lesser peoples. Beneath the Europeans, in descending order were Asians, Africans, and the Indigenous peoples of the Americas and Australia. Some held that Europeans had reached the pinnacle of civilization through a long and arduous process. In this view, the other people of the world had been held back by such factors as climate, geography, and migration. Through a civilizing process, Europeans could, however, raise the people of the world up to their level.

This view was replaced in the nineteenth century by the development of scientific racism, which, as previously discussed, erroneously held that the peoples of the world had different abilities, and, for genetic reasons, there were limits on the ability of the less developed peoples to improve. In some cases, it was thought, contact with superior races could lead to one outcome—the extinction of the inferior peoples. 436

Grotius and Locke differed on the importance or definition of political society, but they agreed on the right of the newcomer to acquire property over "waste" land and to wage war against those who would deny them that right, because whoever denies him that right is breaking the law of nature. At the same time, no European ever thought "waste" land within Europe was simply up for grabs by whomever tried to subdue it with their labour. Locke states that European political societies simply came to agreements to respect each other's territorial claims, and thus changed the natural law when they did so; however, theories about just wars would legalize any European monarch's wars against other European monarchs, and Europeans continuously developed their expertise in killing people and taking their lands.

Locke only contemplated European newcomers punishing indigenous peoples, not the other way around. 439 His views were used by others as a justification for taking indigenous lands. 440 "This so-called 'agriculturalist argument' became the foundation for much of the European discourse legitimizing empire from Locke's day through to the 20th century: it justified not only agricultural societies but also commercial and industrial empire." 441

Recall Cotton's sermons in 1630 in relation to the English invasion of what is now the United States, discussed earlier in this paper relating to the Great Commission. Cotton was also making the agriculturalist argument: that it is legal for whites to claim ownership of lands that are not being used for agricultural purposes. Locke's arguments are so similar to Cotton's "that one is moved to conjecture that Locke read Cotton's writings and incorporated his ideas into his own argument". 442

In 1750-1753, England and France established a boundary commission to attempt to decide which parts of indigenous Nova Scotia/Acadie belonged to England and France. France argued that John Cabot's voyage in 1496 was a mere voyage of discovery that was not intended to claim territory. They argued that: before 1585, England had never tried to establish a settlement in North America; England's first attempts to do so failed; England's first established colony was in Virginia; the name "New England" did not exist until 1614, and; Massachusetts was not founded until 1629. "These delayed settlements, according to France's commissaries, stood in stark contrast to French efforts in the region: Basques, Bretons, and Normans had been fishing the Grand Banks from at least 1504; Jean-Denys Honfleur published a map of the Newfoundland coast in 1508; and Jacques Cartier claimed possession of lands around the St Lawrence in 1535." This demonstrates that the arguments about "discovery" were changing to arguments about "possession". England disagreed with France's arguments and this boundary commission failed to reach agreement; England believed the right of possession had been established by treaty and the only issue was the extent of possession between the two countries. He French and Indian War would be needed to decide the issue, not arguments about discovery vs. possession.

The French legal writer Emmerich de Vattel in his 1758 *The Law of Nations* propounded the view that since the people of the Americas "roamed over them rather than inhabited them," the French colonization of their land was "entirely lawful." He wrote that nations "finding land of which the savages stood in no particular need, and of which they made no actual and constant use, were lawfully entitled to take possession of it and settle it with colonies... We do not, therefore, deviate from the views of nature, in confining the Indians within narrower limits." Vattel's argument "became the textbook account of the nature of natural rights of property." In other words, if you do not use land like Europeans do, you will not be recognized as owners of the land. Vattel's "dismissal of indigenous property rights and indigenous sovereignty joined territory with sovereignty with new clarity – a new clarity that Anglophone settler courts read, after 1820, as an injunction to exercise jurisdiction over indigenous crime in colonial peripheries." 448

In 1765-1769, Sir William Blackstone published the *Commentaries on the Laws of England*, which became one of the most important sources of the contents of English law. The *Commentaries* were the first methodical treatise on the English common law since at least the Middle Ages and are often quoted by US courts as the definitive statement of English common law before the US became a country. 449

Blackstone included a lengthy discussion of the evolution and nature of property rights, which began with the Chain of Being.

In the beginning of the world, we are informed by holy writ, the all-bountiful Creator gave to man "dominion over all the earth, and over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth." This is the only true and solid foundation of man's dominion over external things, whatever airy metaphysical notions may have been started by fanciful writers upon this subject. The earth, therefore, and all things therein, are the general property of all mankind, exclusive of other beings, from the immediate gift of the Creator.

Blackstone noted that in the beginning, both in North America and in Europe, nature and land were not susceptible to private ownership, but this changed; "when mankind increased in number, craft, and ambition, it became necessary to entertain conceptions of more permanent dominion". Blackstone commented on earlier legal writers, saying that Grotius and Puffendorf believed that first occupancy resulted in ownership as a matter of implied universally accepted principle, but that Locke, Barbeyrac, Titius and others did not rely on implicit universal acceptance but rather because labour is sufficient to gain property title. Blackstone agreed with the idea that agriculture and its associated labour created property rights because otherwise, humans would be no better than "mere animals of prey".

And the art of agriculture, by a regular connection and consequence, introduced and established the idea of a more permanent property in the soil than had hitherto been received and adopted. It was clear that the earth would not produce her fruits in sufficient quantities without the assistance of tillage; but who would be at the pains of tilling it, if another might watch an opportunity to seize upon and enjoy the product of his industry, art, and labour? Had not therefore a separate property in lands as well as movables been vested in some individuals, the world must have continued a forest, and men have been mere animals of prey, which, according to some philosophers, is the genuine state of nature

Blackstone added that labour "is universally allowed to give the fairest and most reasonable title to an exclusive property" in movable goods.

Blackstone explained how English law was transported to Britain's various colonies. He noted that the English law was the birthright of every English subject, and [sic]

so wherever they go they carry their laws with them... But in conquered or ceded countries, that have already laws of their own, the king may indeed alter and change those laws; but, till he does actually change them, the antient laws of the country remain, unless such as are against the law of God, as in the cases of an infidel country. [citing *Calvin's Case* of 1608]

Our American plantations are principally of this latter sort, being obtained in the last century either by right of conquest and driving out the natives (*with what natural justice I shall not at present enquire*) [my emphasis] or by treaties.⁴⁵⁰

In other words, English law automatically presumes that any laws in a Christian colony will be applied unless and until the King of England changes them, but the laws in any non-Christian colony will not be applied because they are presumed to be against the law of God. Of course, Canada was an infidel colony.

Further, no one was going to look into the morality, legitimacy or natural justice questions of taking indigenous lands away from them. This essential principle of English law (that we will not examine the legal basis for stealing indigenous lands) would be repeated by the US Supreme Court in *Johnson v. M'Intosh* in 1823, which would become the single most important court decision in Canadian law.

Finally, if anyone were to question how a king of England could become the owner of Canada, Blackstone reminded everyone: "That the King can do no wrong, is a necessary and fundamental principle of the English constitution." (This echoes the 1075 *Dictatus papae*, stating that the Pope may be judged by no one and "that the Roman church has never erred; nor will it err to all eternity, the Scripture bearing witness".) The infallible king and infallible pope were key principles of European law.

How would an indigenous person or nation make a claim against a king that can do no wrong? As lawsuits concerning Indian Residential Schools in the late 20th and early 21st century proved, the concept that the king can do no wrong would ensure there could be no residential school claims (or any other) against the Crown until the principle was repealed (or, more accurately, modified) in 1950.⁴⁵² In any other words, any harms arising from Indian Residential Schools before 1950 could not be litigated because the law until then was that the king could do no wrong.

Various international law jurists debated to what extent "discovery" gave title and what acts would be sufficient to establish "occupation". Today, it is the commonly held view that discovery by itself does not grant legal title. Instead, it might grant a first right to occupy, but if the discoverer does not occupy in a reasonable time, others may do so.⁴⁵³ This debate is designed to permit second and third European countries to claim ownership of lands previously claimed by an original European "discoverer". The debate between discovery and occupation never included the idea that indigenous peoples could be sovereign and own their own lands.

"Underlying Crown sovereignty" was always the law in Canada, since 1496. Whatever usufructuary rights the Crown was willing to acknowledge, whatever treaties the Crown found expedient for further expansion of white settlement (to avoid the financial costs and delays and risks of wars with indigenous peoples), the Crown never doubted that it had underlying sovereignty. The only way to occupy was to practice agriculture and build non-movable structures; only people who occupy land the way Europeans do could be said to have legal occupation and ownership of land.

Yet all this chatter about labour and occupation denied a very important fact: Europeans claimed ownership of an entire hemisphere without having any idea of what they were claiming and without having even set foot on those lands, let alone without having established any kind of society, boundaries, improvements, use, occupation, labour or improvements. Europeans claimed that "discovery" of one piece of land created land rights over all lands "contiguous" to that land, which meant and included the watershed of the place that was discovered. Thus, the entire St. Lawrence drainage basin, which extends all through the Great Lakes as well as into northern Quebec, was "discovered" by France. Similarly, when Thomas Button "discovered" the western shoreline of Hudson Bay in 1612, he implicitly claimed for England the entire watershed of Hudson Bay. This also explains how Portugal gained all of Brazil by discovering the mouth of the Amazon River on its side of the line of demarcation with Spain, while most of the Amazon River drainage basin is on the Spanish side of the line of demarcation.

The doctrine of discovery was linked to a second idea, namely that the lands being claimed were *terra nullius*: no man's land and therefore open to claim. It was on the basis of this concept that the British government claimed ownership of the entire Australian continent. *Terra nullius* remained the law until it was successfully challenged in court in 1992. ⁴⁵⁶ Imperialists argued that the presence of indigenous people did not void a claim of *terra nullius* since the indigenous simply occupied, rather than owned, the land. True ownership, they claimed, could only come with European-style agriculture.

Vattel, Locke and others based their arguments on a peculiar idea of "natural" law:

Vattel explicitly rejected any argument for conquest or occupation on the basis of a 'civilizing' or evangelizing mission. The state of other peoples' cultures, however deplorable it might be, was not, in itself sufficient grounds for claiming either sovereignty or rights of property over them. For Vattel, however, the cultivation of the land, Locke's 'mingling of labour', is not simply improvement; for him it becomes, in terms of the Aristotelian argument, that a crucial part of what it is to be human is the drive to actualize nature's potentiality, an obligation 'imposed upon many by nature'. Those, by implication all Native Americans other than the Aztecs and the Inka, who fail to fulfill this obligation do not merely choose one, albeit inferior, means of subsistence over another. They fail 'in their duty to themselves' as men, something which, since it clearly constitutes a violation of the law of nature, makes them less than human, creatures who are a threat to the race as a whole and who, in common with Aristotle's natural slaves, may be regarded as indistinguishable from wild animals. Claims which sought in this way to dehumanize hunter-gatherers emerge in a number of eighteenth-century defences of the conquest of America, and were to surface against in the British attempts to legitimize their occupation of Australia. Vattel's argument had the added advantage of reinforcing the French and British assumption that whereas their colonization had been both peaceful and, even when force had been involved, legitimate, that of the Spanish, who had eradicated recognized political communities in pursuit of their ambitions, was not.

The use, by so many English writers of the period, of the terms 'colony' and 'plantation' as synonymous became of real legal significance... The Spanish, by contrast, had founded colonies based not upon 'planting', but upon conquest. 457

To be clear: each colonizing white monarch used whatever "legal" argument would best support their own claims to own indigenous lands on other continents. The Spanish were happy with discovery, papal donation and just war. The Dutch, British and French were happy with actual possession, especially if conjoined with agriculture. "Natural law" meant for many that nature had a law that required humans to possess and destroy nature (what humans call "improvement"), and nature believes that any humans who refuse to enslave nature are not fully human and have no legal rights. That said, the British and French tried in various ways to invent claims of being the first discoverers of their particular territories. Their claims of first discovery "were poorly considered, weakly presented and inconsistently applied." With a handful of settlers in the malarial swamps of the St James River, the 1609 charter for the Virginia Company laid claim to all "territories in America either appertaining to us, or which are not now actually possessed by any Christian prince or people, situate, lying and being all along the sea coasts between four and thirty degrees of northerly latitude from the equinoctial line and five and forty degrees of the same latitude, and in the main land between the same four and thirty and five and forty degrees, and the islands thereunto adjacent or within one hundred miles of the coast thereof". 458

Whatever legal importance actual occupation, possession or improvement by labour or agriculture might have had, England was taking no chances: it was claiming everything it could. France was similar; it had only 107 settlers in a few isolated places on the eastern coasts of Canada, but claimed sovereignty from

Florida to the Arctic Circle. Only the Seven Years War, which ended in 1763, would resolve these imaginary and conflicting claims. If a major purpose of the doctrine of discovery was to prevent war between white colonizing countries, it was a complete failure. Pagden details lies told by both the English and French to support their wild claims of first discovery.⁴⁵⁹

While they were inventing their own discovery claims, England, France and the Dutch were telling the rest of the world about the feebleness of claims of discovery by others. Francis I of France told a Spanish ambassador "to pass by and eye is no title of possession". The Dutch lawyer Grotius argued in 1633 that "discovery" as a legal concept of acquiring rights meant not merely 'to apprehend it with the eyes (*occuli usurpare*) but to apprehend it'. 460 Of course, all of the white colonizing monarchs were claiming sovereignty over vast lands that they had not even "eyed", much less apprehended, occupied, possessed, improved or farmed. In developing their various arguments, England and France both pretended that they were peaceful settlers who had been given lands by indigenous peoples with no harm done to those indigenous peoples, in contrast to the violent military conquests of Spain. 461 The 'black legend' of a genocidal Spain was illegal; invasion by England and France was legal. Pretending to be loving Christian civilizers of indigenous peoples was part of a legal argument to legitimize English and French invasions.

Joseph Trutch became Governor of Vancouver Island in 1864. He and his officials refused to provide reserve lands to the local indigenous peoples and worked steadily to take whatever reserve lands the indigenous people already had "in response to settler demands that they be allowed access to property they regarded as standing unused. Government and settlers undertook these actions with a combination of legalistic justification and economic ambition to persuade themselves of the legitimacy of their actions. Tiresomely familiar doctrines about ownership of land being acquired only by the addition of labour in horticulture and husbandry were borrowed and articulated by the squeamish." The whole "labour" argument was never anything more than rhetoric to justify a white supremacist land grab.

Canada's and England's

official position stabilized on its perceived duty to 'civilize' migrating Natives by settling them down as farmers. Although there were those who wondered at the equation of farming with civilization, for all practical purposes it remained a guiding principle in Amerindian administration during the nineteenth century. 'Civilization' was to be achieved by education, which was to be entrusted to missionaries. In the words of Lord Glenelg (Charles Grant, colonial secretary, 1835-9), the aim was 'to protect and cherish this helpless Race ... [and] raise them in the Scale of Humanity'. 463

Carter writes,

Reed's belief that agriculture was the great panacea for what were perceived to be the ills of Canada's Indians was a conviction shared by most Canadians who pondered the future of the Indians. That the Indians were not farmers was viewed as an essential weakness of their society. Canadians in the Victorian era believed Indian life was full of imperfection, but at the foundation of their objection was the certainty that a life of virtue was dependent upon an agrarian base and that vice resulted from a hunting, migratory base. 464

In their refusal to progress, improve, develop, and prosper, the Indians were ignoring God's gift. It was inconceivable that this prospective home for millions could forever continue to be the hunting ground of the Indians. This was a land for a hardy, thrifty race of men who would farm and build houses, roads, and railways. The fertile prairies were too valuable to be kept as mere buffalo preserves; the land cried out for 'real occupation.' That the Indians were not perceived to be in 'ac-

tual and constant use of their land' was a conventional nineteenth-century rationalization for their displacement, a view that appeared self-evident to non-native observers. Citing the French jurist Emmerich de Vattel's *Law of Nations*, an 1844-1845 report on the affairs of the Indians in Canada argued that an 'unsettled habitation' did not constitute a 'true and legal possession' and that other nations were lawfully entitled to take possession and settle these lands. ... A crowded nation [England] was justified in laying [21] claim to land that 'belongs to mankind in general, and was designed to furnish them with subsistence.'465

The above mentioned 1844-1845 report was the report of the Bagot Commission (1842-1844), led by then Governor General of the Province of Canada, Sir Robert Bagot. The report proposed that the separation of children from their parents would be the best way to achieve assimilation. In his Report on Native Education (1847), Egerton Ryerson, superintendent for education, reiterated this idea, and also recommended that Aboriginal education focus on religious instruction and on agricultural training. Here was the Governor General of Canada stating that England had the legal right to take any lands that it needed and to take the children of the owners of the lands as well.

It can be said that international law has come a long way from papal bulls and an assertion of sovereignty on the basis of mere discovery. For those who think that something meaningful will happen if papal bulls are ostensibly repealed or the doctrine of discovery is denounced in some ways, they are mistaken. The evolution or sophistication of arguments justifying the taking of indigenous lands around the world has not benefited indigenous peoples, even if it has created careers and respect for the cleverness of (almost entirely) white lawyers.

In many ways, international law began as a rhetorical laboratory where writers and thinkers would try out various justifications for Christian conversion of indigenous peoples and European legal authority to take indigenous lands. Even though the philosophies evolved to a "recognition" that indigenous peoples are fully human, and moved away from war, conquest, slavery and forcible conversion to Christianity, the results were the same: imposition of European law on the entire western hemisphere, dispossession of indigenous peoples of almost all of their lands and all of their rights to self-government, and, later, the imposition in Canada of the Indian Residential Schools and an endless string of discriminatory laws and policies.

The founders of international law were looking for ways to justify taking indigenous lands that did not depend on papal "donations" or a recognition of papal legal authority over the white monarchs who were not Spanish or Portuguese. Francisco de Vitoria, Hugo Grotius, John Locke, Emerich de Vattel, among others, all found arguments that were used to justify colonial taking of indigenous lands. These were the founders of international law. How could indigenous peoples make "claims" defending themselves against this new, European, white supremacist, international law?

13. Agriculture Was the Worst Mistake and Greatest Crime in Human History

Agriculture made population explosion possible by providing more calories; but those extra calories did not make us healthier or happier. Hunter-gatherers were healthier and happier than humans in our agricultural age. Who says so? The following historians, anthropologists and archaeologists.

Diamond states that with the transition to agriculture (and civilization), social stratification and inequality increased, "the average daily number of work hours increased, nutrition deteriorated, infectious disease

and body wear increased, and lifespan shortened. Conditions deteriorated even further for urban proletariats during the Industrial Revolution, as work days lengthened, and as hygiene, health, and pleasures diminished." ⁴⁶⁶

Marshall Sahlins calls foragers "the original affluent society" because foragers did not have to work hard to feed themselves and provide the necessities of life. 467 Beckwith finds that nomads were better fed and led easier, longer lives than agriculturalists. 468

Wells states: "One of the great myths surrounding the development of human culture over the past 10,000 years is that things got progressively better as we moved from our hunter-gatherer existence to the sublimely elevated state in which we live today. ... In fact, nothing could be further from the truth." He then proceeds to examine a range of data comparing skeletons over the millennia, focusing on teeth (which helps estimate age at death), height and pelvic inlet depth index. "Overall, the data shows that the transition to an agricultural lifestyle made people less healthy."

The reality, say Fraser and Rimas, is that [sic]:

The invention of farming and urban civilization didn't improve the daily lives of most human beings – actually, it shortened lifespans, inflicted chronic malnutrition, caused disease to fester, and condemned nearly the entire population to Adam's infamous curse. Farming a light subsistence crop in the highlands, picking mushrooms and hunting the odd gazelle would have surely been more attractive.

Archaeologists have proven nearly every early agricultural center suffered a plunge in the quality of diet as the farmers switched from fresh meat and vegetables to gruel made from the seeds from grass. Apart from the loss of pleasure, the new menu caused tooth decay – no small misery in the predentistry era. Also, most grain crops are deficient in some micronutrient or other. Maize, for instance, lacks essential amino acids, while milled grains like millet and wheat lack iron. Rice is useless as a source of protein, and since a lack of protein inhibits the body's ability to use vitamin A, Asian farmers lost their eyesight.

Further, the agricultural revolution stunted children's growth rates. An analysis of juvenile long bones from Neolithic sites shows declines in length and density over the periods when farming took root. Hunter-gatherer skeletons are far more strapping than those of settled laborers, and it's only since the Industrial Revolution that we've regained the stature of our ancestors from ten thousand years ago.

The litany of farmhouse pains goes on. Diseases like tuberculosis and bone inflammations were part of the new lifestyle, incubating in cramped rooms that lacked fresh air and spread by the agriculturalists' habit of mingling with livestock. Worse, the actual farmwork ground away the laborers' joints and contorted their backs. Worst of all, while hunter-gatherers had to work an average of twenty hours per week, farmers toiled for an inhumane forty to sixty hours. To rest, and indeed to survive, they needed feast days and religious excuses for slacking. Agriculture is what gave the world an immovable division between work and play.

Another of agriculture's curses was warfare. Our earliest acts of organized violence might well have been undertaken in the name of feeding hungry families, perhaps in a village where the crops had failed but the scythes remained sharp. Farmers are far more willing to join gangs and commit organized murder than are hunter-gatherers. This may be partly because grain surpluses are an incentive for war as well as a resource for waging it – soldiers need feeding, and they can't fight

when they're running after bison. Advanced agriculturalists, too, are organized, accustomed to discipline, and have 'sunk costs' in their land. They can never turn the other cheek if a neighbour provokes them, since they've invested their whole existence in their farms. Faced with the threat of homicide, hunter-gatherers have the option of walking to a distant, more peaceable place to scrounge for berries. Agriculturalists must fight to the death. The elite of the ancient world, therefore, protected their magnificent statuary and bronze axes by hiring standing armies and keeping their treasures under lock, key, and savage legal edict.

Finally, while agriculturalists may not have invented sexism, they did institutionalize it. Historian Elise Boulding claims that in most hunter-gather societies, food was gathered rather than hunted, meaning that it was collected by the womenfolk. Women's role as breadwinners (fruitwinners?) gave them status, and since no one owned much more than a few strips of leather or flint, strong-armed men weren't needed much to fight over property. Not that there was anyone to fight, since hunter-gatherer groups likely kept their numbers down through infanticide and long years of breast-feeding. Academics debate details, but pre-agriculturalists probably lived in small egalitarian groups that had little temptation to kill and oppress one another. 470

Sale writes:

All in all, the presence of just a few hundreds of thousands of the European branch of the human species, within just a century after its landing, did more to alter the environment of North America, in some places and for many populations quite irretrievably, than the many millions of the American branch had done in fifteen centuries or more. It took a special kind of mind to see that impact as beneficial, as 'progress,' indeed as 'civilization.'471

Baptist states that in the 18th century,

Like the rest of the world, most Europeans were only one bad season from starvation. They all grew food by local traditions of agriculture that in technological complexity, efficiency, and productivity were closer to the year 0 than to 1900. The great masses of the poor and the peasantry were as short as the man in the collar [iron collar for slaves], for living standards for most people had not risen since the dawn of the agricultural era. 472

Harari adds:

While people in today's affluent societies work an average of forty to forty-five hours a week, and people in the developing world work sixty and even eighty hours a week, hunter-gatherers living today in the most inhospitable of habitats – such as the Kalahari Desert – work on average for just thirty-five to forty-five hours a week. They hunt only one day out of three, and gathering takes up just three to six hours daily. In normal times, this is enough to feed the band. It may well be that ancient huntergatherers living in zones more fertile than the Kalahari spent even less time obtaining food and raw materials. They had no dishes to wash, no carpets to vacuum, no floors to polish, no nappies to change and no bills to pay.

The forager economy provided most people with more interesting lives than agriculture or industry do. Today, a Chinese factory hand leaves home around seven in the morning, makes her way through polluted streets to a sweatshop, and there operates the same machine, in the same way, day in, day out, for ten long and mind-numbing hours, returning home around seven in the evening in order to wash dishes and do the laundry. Thirty thousand years ago, a Chinese forager might leave camp with her

companions at, say, eight in the morning. They'd roam the nearby forests and meadows, gathering mushrooms, digging up edible roots, catching frogs and occasionally running away from tigers. By early afternoon, they were back at the camp to make lunch. That left them plenty of time to gossip, tell stories, play with the children and just hang out. Of course the tigers sometimes caught them, or a snake bit them, but on the other hand they didn't have to deal with automobile accidents and industrial pollution.

In most places and at most times, foraging provided ideal nutrition. This is hardly surprising — foraging had been the human diet for hundreds of thousands of years, and the human body was well adapted to it. Evidence from fossilized skeletons indicates that ancient foragers were less likely to suffer from starvation or malnutrition, and were generally taller and healthier than their peasant descendants. [51] ... The foragers' secret of success, which protected them from starvation and malnutrition, was their varied diet. Farmers tend to eat a very limited and unbalanced diet. Especially in premodern times, most of the calories feeding an agricultural population came from a single crop — such as wheat, potatoes or rice — that lacks some of the vitamins, minerals and other nutritional materials humans need... Furthermore, by not being dependent on any single kind of food, they [foragers] were less liable to suffer when one particular food source failed. Agricultural societies are ravaged by famine when drought, fire or earthquake devastates the annual rice or potato crop...

Ancient foragers also suffered less from infectious diseases. Most of the infectious diseases that have plagued agricultural and industrial societies (such as smallpox, measles and tuberculosis) originated in domesticated animals and were transferred to humans only after the Agricultural Revolution... Moreover, most people in agricultural and industrial societies lived in dense, unhygienic [52] permanent settlements – ideal hotbeds for disease. Foragers roamed the land in small bands that could not sustain epidemics... Though they lived better lives than most people in agricultural and industrial societies, their world could still be harsh and unforgiving. Periods of want and hardship were not uncommon, child mortality was high, and an accident which would be minor today could easily become a death sentence... Modern foragers occasionally abandon and even kill old or disable people who cannot keep up with the band. Unwanted babies and children may be slain, and there are even cases of religiously inspired human sacrifice. 473 ...

The Agricultural Revolution certainly enlarged the sum total of food at the disposal of humankind, but the extra food did not translate into a better diet or more leisure. Rather, it translated into population explosions and pampered elites. The average farmer worked harder than the average forager, and got a worse diet in return. The Agricultural Revolution was history's greatest fraud.⁴⁷⁴

Who was responsible? Neither kings, nor priests, nor merchants. The culprits were a handful of plant species, including wheat, rice and potatoes. These plants domesticated *Homo sapiens*, rather than vice versa. ⁴⁷⁵ ...

[E]ven in AD 1850 the life of the average person was not better – and might actually have been worse – than the lives of archaic hunter-gatherers. In 1850 a Chinese peasant or a Manchester factory hand worked longer hours than their hunter-gatherer ancestors; their jobs were physically harder and mentally less fulfilling; their diet was less balanced; hygiene conditions were incomparably worse; and infectious diseases were more common."⁴⁷⁶

What agriculture offered was the ability for humans to greatly expand their population. Individual lives were worse, but humanity as a whole prospered – if more population is the same as prospering. "This is

the essence of the Agricultural Revolution: the ability to keep more people alive under worse conditions. ... No body agreed to this deal: the Agricultural Revolution was a trap."⁴⁷⁷

Daschuk reports that "There is no question that a diet based on a plentiful and reliable supply of bison afforded a high degree of nutrition. Physical anthropologists have described nineteenth-century bison hunters as the 'tallest in the world'." But the incursion of agricultural societies from Europe, through greater numbers, more travel-trade traffic, importation of diseases from Europe, domesticated animals, and indigenous malnutrition caused by disruption of their hunter-gatherer lifestyle to be replaced by colossal over-hunting of beavers and bison, all combined to result in widespread epidemics across indigenous communities. 479

Thornton states that there was no "Third World" before European expansion in the 15th and 16th centuries. The greatest determinant for poverty was the degree of inequality *within* a society. Citing Pierre Goubert's study of a specific region within France (the Bouveignes region), it was observed that the average standard of living, measured by infant mortality and life expectancy, was lowest in parts of the region with the most fertile soil, large surplus crops, and the wealthiest individuals. Thornton summarizes: "The cause of this unexpected difference appears to have been the merciless exploitation that the average poor farmer of the district experienced at the hands of the upper class – state, church, and wealthier landowner." Recard the most fertile soil produced the most inequality because it produced surpluses that the elites could hoard.

In the "new" world of the western hemisphere, the extent of inequality was determined by agriculture and

the return that export crop could bring – where there was a rich crop like sugar, the resulting colony was highly stratified, usually with an African underclass, and racially exclusive. Where there was not a rich product, the class differences and racial distinctions tended to be less, and government was often quite democratic. The strongest differences took place in those areas where Europeans arrived in family groups, particularly in North America, for there, even in a democratic environment, racial differences were emphasized; but in places where immigration was male only, racial differences were considerably less⁴⁸¹

Hunter-gatherers "were not poor or backward remnants of ancient people who had failed to progress". Instead, these small, gathering-hunting, egalitarian societies "were the most advanced cultures of their day", as measured by life expectancy, infant mortality, political participation and equality of incomes. 482 To rephrase: the hunter-gatherer societies were the most advanced cultures.

Fukuyama adds:

Band-level societies are highly egalitarian... There is relatively little differentiation between families, no permanent leadership, and no hierarchies. Leadership is vested in individuals based on qualities like strength, intelligence, and trustworthiness, but it tends to migrate from one individual to another... opportunities for coercion are very limited. 483

Morris says that

[e]verywhere from the Arctic to Australia, ethnographers have commented on foragers' aversion to political hierarchy... [34] Foraging groups sometimes have to make important collective decisions, particularly about where to move next in the endless quest for food, but most groups have developed methods that make it difficult for one person or even one small group to seize control of the decision-

making process. The most popular solution is to discuss every decision over and over again in subgroups, until a consensus begins to take shape... Nearly all groups also sometimes engage in activities that call for leaders... [t]hese positions, however, normally evaporate as soon as the activity is over... Men who get too bossy, or extend bossiness into inappropriate contexts, or try to turn their temporary influence into permanent power over others, rarely withstand their companions' disapproval. 484

Morris adds that in any place that rose above 10,000 kilocalories per capita per day and towns grew larger than 10,000, a few people had taken charge and someone declared himself to be king. To keep his position, he needed allies to whom he would give titles, privileges and land. The allies wanted to ensure they were indispensable to the king, so they specialized in religion, law, letters or war. Working together, they could impose forced labour, collect taxes or tribute, put down rebellions and convince the population that this is what God wanted.⁴⁸⁵

Scott says "[i]t would be almost impossible to exaggerate the centrality of bondage, in one form or another, in the development of the state until very recently. As Adam Hochschild observed, as late as 1800 roughly three-quarters of the world's population could be said to be living in bondage; [sic] "[w]hat states surely did invent, however, are large-scale societies based systematically on coerced, captive human labor." The early movements of people out of Africa were dwarfed by the population movements associated with the international slave trade. 487

Christian reports:

The numbers living in extreme poverty remain higher than ever before in human history... In 2005, more than three billion people (more people than the total population of the world in 1900) lived on less than \$2.50 a day. Most people in this group have seen few benefits from the fossil fuels revolution and suffer from the unhealthy, unsanitary, and precarious living conditions of the early industrial revolution that were described so vividly by Dickens and Engels.⁴⁸⁸

In 2018, 43% of the world's population lived on 5.50USD per day – *or less*. In other words, despite our agricultural surplus and civilization, nearly 3.3 Billion people live in poverty every day. Nearly 2 billion of those live on less than 3.20USD per day. It is estimated that if the COVID-19 pandemic results in an economic contraction of 20% worldwide, that could push another 500 million humans into poverty, which would mean a total of more than half of all humans are living in substantial poverty. Of course these are estimates based on a variety of assumptions, but quibbling around the margins does not change the enormous inequality and poverty that our agricultural "civilization" has caused. 489

The global slavery index estimates that in 2016, there were more than 40 million people living in slavery. In addition, the ILO estimates that about 152 million children, aged between 5 and 17, were subject to child labour in 2016.⁴⁹⁰ Of 183 countries assessed, only 31 have ratified the ILO's 2014 Forced Labour Protocol. Forty-seven countries have not criminalized human trafficking in accordance with the definitions outlined in the UN Trafficking Protocol; a further 96 countries have not criminalized forced labour, and 133 have not criminalized forced marriage. Ratifying the Forced Labour Protocol and criminalizing all forms of modern slavery are the most basic steps a country can take, but the slavery index found that many countries have failed to take these actions. Only 40 countries have investigated public or business supply chains to tackle labour exploitation. This includes mandatory reporting legislation in Australia, the UK, and the US, as well as the establishment of guidelines for public procurement specialists across the EU.⁴⁹¹

Every year, around 9 million people die of hunger, more than the death toll of AIDS, malaria and tuberculosis combined, according to the international relief agency Mercy Corps. 492

Let that sink in: hunting-gathering has been the way of humans for almost our entire 2.5 million year history. Agriculture has only been around for a tiny fraction of that period. Agriculture has brought neverending wars, disease, inequality, a population explosion beyond the capacity of nature to survive (commonly known as earth's sixth mass extinction event)⁴⁹³ and, now, run-away global climate change (to say nothing of the dangers of nuclear weapons). It is nearly impossible to imagine that agricultural humans can continue in this way for even two hundred more years, let alone for agriculture to ever approach the success of a hunting-gathering lifestyle.

There were around 500 million *homo sapiens* on Earth around the year 1500. Today, there are 7 billion. During those 500 years, human population increased 14 times but human consumption of calories has gone up 115 times. 494 Today, the combined mass of humans is about 300 million tons and the combined mass of our domesticated animals is about 700 million tons, while the combined mass of all surviving large, wild animals is less than 100 million tons. There are about 80,000 giraffes compared to 1.5 billion cattle; 200,000 wolves compared to 400 million domesticated dogs; 250,000 chimpanzees compared to 7 billion humans. 495 Harari writes: 496

Unfortunately, the Sapiens regime on earth has produced little that we can be proud of. We have mastered our surroundings, increased food production, built cities, established empires and created farflung trading networks. But did we decrease the amount of suffering in the world? Time and again, massive increases in human power did not necessarily improve the well-being of individual Sapiens, and usually caused immense misery to other animals... Worse still, humans seem to be more irresponsible than ever. Self-made gods with only the laws of physics to keep us company, we are accountable to no one. We are consequently wreaking havoc on our fellow animals and on the surrounding ecosystem, seeking little more than our own comfort and amusement, yet never finding satisfaction. Is there anything more dangerous than dissatisfied and irresponsible gods who don't know what they want?⁴⁹⁷

14. Different Ways to Rank Life Forms

If you zoom down to the level of cells, it's hard to distinguish between a human being and an amoeba. 498

The concept of race has no genetic or scientific basis. 499

The idea of a Great Chain of Being is so ingrained in the agricultural, white, Christian culture that we cannot imagine the basic idea of equality: that bacteria and ants and minnows and mice could possibly be equal to humans as part of God's/the Creator's creation. Our culture demands hierarchy in everything. We believe that superior beings evolved from lesser beings.

The Great Chain of Being needs to be taught if we are ever to understand why our society and our laws are the way they are. The Great Chain of Being is one way to rank life forms into a hierarchy, but there are many other ways that we might rank life that would produce an entirely different rank order (not that placing nature into a hierarchy is necessary, desirable or natural). Thinking about alternatives helps us learn that the Great Chain of Being should be challenged and is far from immutable.

For example, one of the curious aspects of the Great Chain of Being and Darwin's vocabulary is the notion of lower and higher life forms. For some reason, humans believe that the more complex the life-form, the "higher" it is in the Chain of Being.

Olson explains that the chronology of human evolution tends to portray the idea that human evolution has been quite linear, always moving from one improvement to the next, leading a parade into the most perfect being on Earth. A modern human, almost always male, leads the parade, marching resolutely toward the edge of the page. "He is followed by something resembling a caveman, then a bipedal ape, and finally a shambling, foolish-looking chimpanzee. The picture seems to suggest that we are at the end result of a preordained process, the inevitable goal of evolution. It re-inforces our belief that we are at the apex of a great pyramid of life, with all other living and extinct organisms arrayed below us." ⁵⁰⁰ (This image of chimpanzee progressing to human has become popular as Internet memes and t-shirts.)

But we need to challenge the idea that complex is superior to simple. The idea of the more complex being better cuts against what is known as Occam's Razor, which states, in its shortest form: simpler is better. In science, it is generally accepted that as between two hypotheses, the simpler one is more likely to be correct. ⁵⁰¹ Using this criterion, the simpler life forms, the life forms that adapt simpler living strategies, would be ranked superior while the more complex life forms would be inferior.

Another method for ranking life forms would be to recognize those entities that continuously existed for the longest period of time as superior. Rocks would do very well in this hierarchy. Cyanobacteria are believed to be the Earth's oldest known life form. ⁵⁰² Cyanobacteria must be the best form of life on Earth in this method; not humans.

Another method might be to rank species according to which ones are most important to sustaining other life. Plants would do well with this criterion, and humans would definitely be inferior.

Another method might be to rank species according to which ones have the longest lives (endoliths, actinobacteria, sea grass, clonal colonies, creosote bushes, and a very long list of other species before we reach humans). Humans would barely rate.

We might rank according to which life forms have the largest brains (certainly not humans; elephants, whales and orcas have substantially larger brains, octopi have the most and the largest large neurons). We might rank according to the largest brains measured as a proportion of body weight (again, certainly not humans; small birds, shrews and ants have far more impressive ratios). And why would we presume that brain size equals superiority?

Maybe we should rank things other than brains, such as number of appendages, length of appendages, overall body length, overall body weight, ability to withstand the widest climatic variations (without wearing clothes or building houses or using fire?). Humans would do terribly in this ranking.

Maybe the best is simply the biggest? Whales, elephants and redwood trees are big, humans are not. But the biggest living organism by area is the honey fungus. And under climate change, it's likely to have an advantage compared to its host species. Scientists discovered it when a massive tree die-off occurred in Malheur National Forest in Oregon. We cannot see most of the honey fungus because most of it is composed of underground filaments that connect the mushrooms we can see above ground. It's also very old, around 2,400 years old, with estimates ranging from 1900 to 8650 years. The honey fungus is able to grow so old because it can rely on both live and dead wood for its nutrients. In addition, the honey fungus has high environmental plasticity, which means it can acclimate or adapt to a relatively wide range of

environmental conditions.⁵⁰³ Maybe instead of ranking by area we should rank size by biomass? In that case, it's the Pando aspen grove in Utah.⁵⁰⁴

Maybe we should rank life forms according to who is the best linguistically? However, because we can't understand any other life form says, and barely even understand the variety of ways that life forms communicate with each other⁵⁰⁴, we have no ability to do this ranking, even though we always congratulate ourselves for being the most articulate of all life forms.

Another method might be to rank species according to which ones are able to achieve the most with least. For example, which life form is the strongest as measured by body weight (beetles, ants, gorillas, elephants, grizzlies, muskox, anacondas). Another method is to rank life forms according to who is able to communicate the most information with the smallest brain (or no brain at all). Trees, bees and ants would be so superior to humans.

Humans seem to rank ourselves superior because we have the greatest ability to destroy other life forms. Yay us?

A different method might be to rank species according to which ones are the most peaceful. Let's look at horses simply for an example of animal we think we know well. Lucy Rees wrote *The Horse's Mind*, published in 1985 and is still on reading lists for equestrian studies at universities. Rees explains that horses do not have hierarchies but they do operate by three rules of behaviour: cohesion (when there is danger, come together), space (do not bump into each other) and synchronicity (move as a group). "[I]n the wild, nothing could be more democratic than a slope of grass" whereas "aggression is learned in the stable and at the manger". Rees says "in all the places where I've worked, the first way of breaking in a horse is conflict." Horses do not like conflict and they respond to human pressures in the ways necessary to reduce the conflict. "They want to avoid pressure and fighting at all costs, so the moment they have a way of avoiding it, they choose it... They want things to be smooth between them and what's going on around them. They don't want even the most minimal sign of conflict. They don't want pressure, they want flow. They want that lovely feeling of all being in synchrony, in harmony, that's when it gets good for them and they start getting really pleased about things... Horses don't want to hoard things, they don't want to own bits of territory, there's enough for everybody, they don't fight over air and they don't fight over grass, but then they all come together in this collective defence, which just seems to be a beautiful model. Of society. Of how to live."506 How many other life forms fit this model?

Forrest continues by discussing how Russian political theorist Peter Kropokin, upon observing wildlife, concluded that "sociability is as much a law of nature as mutual struggle... Those animals which acquire habits of mutual aid are undoubtedly the fittest. They have more chances to survive, and they attain, in their respective classes, the highest development of intelligence and bodily organization... mutual aid... favours the development of such habits and characters as insure the maintenance and further development of the species, together with the greatest amount of welfare and enjoyment of life for the individual, with the least waste of energy." Survival of the fittest" does not have to mean war between individuals.

On this basis of ranking, humans, and especially white males, would be so inferior. The fact that some civilizations have invented technologies that allow them to dominate or even exterminate others, and even the willingness to do so, does *not* imply greater intelligence or superiority. It may well make them exceptionally stupid.

Another method might be rank to civilizations according to which provides the most leisure time. This turns the Protestant work ethic on its head. The idea that the more you work the more superior of a human

you are is, frankly, crazy. Hunter-gatherers enjoyed far more leisure time than farmers and factory workers and modern humans trying to earn enough money in the gig economy to feed, clothe and shelter themselves.

Maybe the most intelligent humans are those who enjoy the most freedom (hunter-gatherers). Maybe the superior humans are those whose lifestyle requires them to develop the most complex understanding of the natural world and to develop the skills to live in it without human-made artifacts? A hunter-gatherer must learn hunting, collecting, fishing, picking, making traps and weirs. They must know the movements of herds of game, migrations of birds, fish runs, cycles of ripening of different plants. They must know which plants to eat and which plants have medicinal value. They must create and use sickles, threshing mats, baskets, winnowing trays, pounding mortars, grinding stones.

By contrast, farmers are confined to one location, must learn to use "a handful of crops, a few species of livestock, and a radically simplified landscape that has to be constantly defended against a reconquest by excluded nature. At the same time, the domus was never even remotely self-sufficient. It required a constant subsidy, as it were, from that excluded nature: wood for field and building, fish, mollusks, woodland grazing, small game, wild vegetables, fruits, and nuts." The farmers in turn produced the industrial revolution and the assembly line: humans were learning and mastering fewer and fewer skills and engaging in ever fewer activities. The agricultural civilization is the one that is furthest removed from nature, works the most hours, has the worst diet, produces the most violence, and teaches its members less and less. Surely those are indicators of inferiority.

Another method might be to rank civilizations according to how long they lasted. Our current civilization has barely existed at all compared to hunter gatherer societies, and our current civilization is seriously endangering the potential of the human species for surviving.

Maybe instead of trying to define which life form is superior, we should come up with criteria for defining which life form is most inferior? Maybe we should say that the species that creates the most damage to life is the least intelligent of the species. Maybe the species that kills the most of its own species or that creates the most dangerous weapons is the least intelligent species? Maybe the least intelligent species is the one that thinks skin colour indicates an individual's worth, potential or intelligence?

Maybe the least intelligent species is the one that believes entities within nature can and should be ranked. After all, all organisms on Earth are related genetically and "if you zoom down to the level of cells, it's hard to distinguish between a human being and an amoeba".⁵¹⁰

Maybe the civilization with the least genetic variation is the inferior one. All humans originated from Africa at some point in time, so Africa holds by far the widest genetic diversity. ⁵¹¹ The further humans move away from the Africa, the narrower our genetic pool. Africans must be the superior ones! Minimal genetic variation makes it more likely that all members of a species will be vulnerable to the same pathogens.

Close living quarters, small genetic variation and well-trodden travel pathways are great ways to spread germs and epidemics. Maybe density of population is a sign of inferiority?

One of the ways we use to rank humans is with IQ tests. The inventor of IQ testing in 1904, Alfred Binet, said that "Intellectual qualities... cannot be measured as linear surfaces are measured" and that giving too much significant to IQ results "may give place to illusions". It has been proven that an individual's IQ

results can change over time, including by practicing taking IQ tests. Further, it has been shown that a society's average IQ changes over time, as the society includes in its school more teaching about abstract logic, "which is the sliver of intelligence that IQ tests measure". In other words, IQ is not a fixed measure of any person's intelligence, let alone an entire group of people generalized by skin colour. Maybe the species that invents IQ testing and cannot even understand the limits of the testing is the inferior species?

Craig Venter, the biologist who led the private-sector decoding of the human genome, said "There is no basis in scientific fact or in the human genetic code that skin colour will be predictive of intelligence" and that "The concept of race has no genetic or scientific basis". 513 Genetic research has proven that all humans are incredibly closely related genetically.

As for me, I have concluded that the idea of any ranking at all between life forms is incredibly stupid. And thus ranking white skin above others, males above females, rich above poor, militarily powerful above weaker, agricultural above forager, are all wrong-headed and lead to racism, misogyny, hatred, discrimination, inequality and diminished possibilities for everyone. Ranking humans above nature puts us in crisis we are currently in. This is not an age of reason, an enlightenment or science.

15. Legal Rights for Nature

When I was in law school in the 1980s, we had a discussion about human rights where I asked why only humans but not animals have rights. The rest of the class made me feel as though I was an alien for even asking the question. One classmate and friend, a devoutly Christian person, explained to me that it is because animals do not have souls. I had been taught this in my earlier years of Christian education but thought those ideas were left behind now that we were in higher education. I thought my friend was crazy. Now I understand that she was exactly correct: our entire idea of law and rights has been based on the idea of souls for humans but not for animals or nature. And that makes all the difference. And then I learned that after Columbus's "discovery" of the western hemisphere and subsequent genocidal attacks against the indigenous peoples they found there, European lawyers engaged in sincere debates as to whether indigenous humans had souls and slave societies debated whether slaves had souls. Did God only love and have mercy for some of us? I had been taught that God was all-loving and all-merciful. I found out in stark terms that this was never true.

In 2020 it has become necessary to teach whether some humans are superior to others and how discrimination against people works. But we need to go further. We need to challenge whether humans are superior to other parts of nature. We need to discuss whether nature has legal rights. If nature has (or should have) legal rights, this is a direct challenge to the whole idea of the Great Chain of Being.

When I attended law school in the 1980s, it was utterly absurd to discuss worldviews, the Great Chain of Being, or whether nature could possibly have legal rights. Only humans and corporations could have legal rights.

Things are changing (far too slowly).

There are activists working toward the creation of some legal rights for animals. In 1822, 'Martin's Act' was passed. It was the very first animal welfare law and it forbade 'the cruel and improper treatment of cattle'. (Of course, raising cattle for the express purpose of being fattened and slaughtered for humans has never been considered cruel.) The Royal Society for the Prevention of Cruelty to Animals was established in 1824.⁵¹⁴ Over time, the prohibition of cruelty was extended to dogs and other domestic animals, bear-

baiting and cock-fighting was forbidden, and it insisted on better standards in slaughter houses. There have been laws for lab animals, the abolition of fur farming in the UK, the ban of fox hunting with dogs and the Animal Welfare Act. These laws were motivated by a legal philosophy that humans should not be excessively cruel, rather than from a legal philosophy that animals have some equality in law to humans. Thus, they have not challenged the foundational belief in the Great Chain of Being.

The NonHumanRights Project is doing that. "Our mission is to change the common law status of at least some nonhuman animals from mere "things," which lack the capacity to possess any legal right, to "persons," who possess such fundamental rights as bodily integrity and bodily liberty, and those other legal rights to which evolving standards of morality, scientific discovery, and human experience entitle them." 515

Other organizations, and lawsuits, are arising to assert that nature itself (not just animals) have legal rights. For example, the Global Alliance for the Rights of Nature https://therightsofnature.org (see their timeline for the evolution of the idea and laws of the rights of nature: https://therightsofnature.org/timeline/); the Community Environmental Legal Defense Fund https://celdf.org/rights/rights-of-nature/; the Earth Law Centre https://www.earthlawcenter.org/what-is-earth-law/; Canada's own Ecojustice https://www.ecojustice.ca/about/our-story/.

In 2012, the country of Bolivia passed the Law of Mother Earth. The 11 rights listed include the rights to biodiversity, uncontaminated water and air, freedom from genetically modified crops and freedom from over-development. The law also creates an 'ombudsman' for Mother Earth, and outlines a framework for the responsible use of Bolivia's vast mineral and hydrocarbon reserves.

The law, which is part of a complete restructuring of the Bolivian legal system following a change of constitution in 2009, has been heavily influenced by a resurgent indigenous Andean spiritual world view which places the environment and the earth deity known as the Pachamama at the centre of all life. Humans are considered equal to all other entities.⁵¹⁶

It is becoming acceptable to question the idea of hierarchy of souls and of beings. As shown from the Bolivian example above, a religious view, or worldview, that considers all Earth and all beings to have value and to be equal, is something that can now be discussed more openly. Leroy Little Bear questioned how it could be possible for the English monarch to acquire sovereignty over the lands in Canada. Indigenous peoples "are not the sole owners under the original grant from the Creator; the land belongs to past generations, to the yet-to-be-born, and to the plants and animals. Has the Crown ever received a surrender of title from these others?" ⁵¹⁷

Our laws justified colonialism on the basis that primitive peoples were not using nature, which we described as waste unless it was subjected to agriculture. Our law schools do not teach: this fundamental belief in the Great Chain of Being; human supremacy over nature; how Europeans benefited from geography rather than superior intelligence or religion to develop food surpluses, governments, specialists and to expand across the globe; how agriculture was considered synonymous with "civilized"; how agriculture has been called the worst mistake in human history and is fundamentally destructive of the Earth, and; how agriculture, civilization and the Great Commission were used to justify colonialism and declare it to be "legal". When literally NONE of these topics is included in teaching about Canadian legal history, you can see how the fundamental layers that explain how England's laws were imposed on Canada, how indigenous peoples lost their lands and how Canada's current constitutional arrangements came to be are ignored by our law schools.

With agriculture came surplus came powerful men to control access to the surplus through laws and force. Then came slaves and then empires. "Civilized" empires grew and depended on slavery, especially of foreigners. And we are continuously taught to celebrate the brilliance of all of the foreign slave-owning "civilized" men who thought such great thoughts and who created and enforced so much inequality.

Jensen explains that it is not possible to believe in one's own supremacy except by proving the inferiority of others. "Others" may be of a different sex, different skin colour or different religion – just so long as they can be readily identified as "other." To prove they are inferior we must violate or exploit them. If they were equal or superior, it would not be possible to violate or exploit them, right? "Each new violation then reaffirms our superiority, as through these repeated acts of violation we come to perceive each new violation as reinforcement not only of our superiority over this other we have violated, but as simply the way things are." 518

When will Canadian law schools start teaching how the Great Chain of Being and the idea of human and white supremacy has influenced and infected our laws and current constitutional arrangements?

16. Conclusion

The cause of Indian Residential Schools was white supremacy.

White supremacy was caused by the idea that some parts of nature are superior to other parts; there is no white supremacy without the idea of human supremacy. White supremacy and human supremacy are caused by agriculture, the absolute need to control nature in order to preserve and promote monoculture – a lack of diversity. Agriculture brought with it increased populations, writing, money, technologies, extreme inequality, hard labour, taxation, nation-states, lack of freedom, monotheism, laws, police, lawyers and courts to impose these views and practices. Agriculture depends on violence against nature and humans, on de-valuing diversity in nature, among humans and among gods. Agriculture depends on theft of land and imposition of slavery. The agricultural revolution was the biggest mistake, fraud and crime in human history. The least we can do is acknowledge these facts, talk about them and teach them.

The next paper in this series of exploring how Canada's legal system developed to create Indian Residential System deals with the so-called "doctrine of discovery" and other more important "doctrines" (theft of land, resources and people).

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