The following reading was put together using Charles C. Mann's book 1491 (pages 7-18).

Perpetuating a False View of the Past

The running assumption is that when the Europeans "discovered" the "New World" it was either virtually empty of people or those people who lived here were without culture, a history or a future. This commonly held view is the one typically taught to secondary students through both a combination of out dated textbooks and teachers. The reality is scholars since the 1970s have radically challenged this view of the empty continent. Native peoples did not arrive through one migration only (around 12 or 13 thousand years ago). Archaeological evidence unearthed over the last four decades strongly suggests there wasn't just one significant migration of people from the Old World to the New. In actuality, it is quite likely there were multiple migrations from the Old to New worlds prior to Columbus. Although scientists continue to debate some of the details there is evidence suggesting:

- 1). Multiple migrations to the New World took place some 12, 20 and 40 thousand years ago.
- 2). Technologically advanced and long-lived civilizations existed in North, Central and South America, etc. of which only the most recent, e.g. Aztec, Maya, Olmec, etc. have been studied in detail.
- 4). Many ancient South American cities were larger in size and had larger populations compared to either London or Paris.
- 5). From Atlantic to Pacific, from the Canadian Midwest in the north to the southernmost tip of South America, etc. was molded and shaped human populations over thousands of years.
- 6). The population of the so-called "New World" prior to Columbus actually numbered in the tens of millions as opposed to the tens of thousands.

Why aren't these new lines of evidence and reasoning making their way in to secondary classrooms?

There are many answers why this is the case. The main problem is that the majority of teachers teach exactly the way (and what) they were taught. Teachers were students at one time just like you; and rightly or wrongly they too trusted that what their teachers taught them was accurate, honest and true. In my own personal experience as a student, I never came across a teacher who *deliberately* deceived students (although these types of people certainly exist). When I was 16 or 17 I wasn't nearly knowledgeable enough to identify when a teacher was exactly right or somewhat wrong or somewhere in between. I suspect most of you fall in to that category. However, some students are capable of

recognizing mistakes but keep it to themselves for fear of angering the teacher. The reality is most people, not just teachers, do not like being shown (publicly no less) how they are wrong. In all honesty, we tend to learn more about ourselves and the topics we are studying through such tension. Students don't need to blurt out "Teacher you are dead wrong!" Be diplomatic. Ask the teacher questions for clarification. Odds are the teacher might have forgotten an important detail or that you might simply have misunderstood the teacher's intentions. *Asking questions is good a good thing.*

Yet, the problem remains that some teachers transmit incorrect information to students. Sometimes teachers make innocent mistakes by simply getting a detail wrong, e.g. In 2013, my son Alec's grade five teacher incorrectly communicated to his social studies class that Canada had a total of 308 ridings. The number of ridings in Canada was 308 in 2010; however, the number of ridings was increased to 338 by an act of Parliament in 2011 in response to Canada's growing population. Sometimes history teachers literally change history to fit their own narrow-minded belief system, e.g. James Keegstra, a history teacher in Alberta in the 1980s, taught hundreds of students over a ten year career that the Holocaust never happened and that there existed a world-wide conspiracy of Jews to take over the world. How did he manage teaching these ideas for ten years?

What stops a teacher from either deceiving themselves or being deceived by others?

To be honest I don't know if it is entirely possibly to avoid some form of self-deception. There are a few things a teacher can do to at least reduce the challenge of presenting accurate information to their students: firstly, teachers should adopt the following definition for literacy, e.g. a literate person is one who knows what they do not know. Secondly, teachers should never quit learning; they should read widely and extensively and be willing to unlearn ideas that they've long believed to be true; and they should also expose themselves to information that falls outside of their narrow area of expertise. Unfortunately, many teachers quit reading or learning after finding a job. This is a real problem for two reasons: a). Students are influenced by their teacher's lack of enthusiasm for reading; and b). Time didn't somehow mystically stop in 1998 (or whenever you happened to complete your teaching degree); you have a responsibility to continue reading and too continue learning. For instance, if a teacher of Canadian history quit absorbing new information, grappling with events, etc. then they would not know about, and be capable of teaching, students that in 1942 the Canadian Government approved experiments be conducted on First Nations people to learn about the effects of nutrition depravation. This information was classified and only became available in 2013. Teachers who do not read do not

learn anything new; and one of the only ways we can end self-deception (assuming you believe this is important) and the accidental deception of others is by reading. Lastly, when and if a teacher is wrong and they *know* they are wrong they should admit it to the class and reteach the concept. Many teachers are reluctant to do this because they feel students won't trust them any longer if it is admitted a mistake was made. There is probably some truth to this (that students lose trust in such teachers); however, this is the wrong position to take. The reality is that those teachers who are willing to correct themselves are *more* trustworthy. They admit they don't know it all; and they love truth and its pursuit over just the appearance to be trustworthy.

What can a student do to avoid deceiving themselves or being deceived by others?

Read widely so you gain the knowledge necessary to think critically about the things you are taught. Also, you need to be willing to think about what you think about. (This is called metacognition.) However, a lot of us do not actually ask questions of ourselves like "why do I think this is true as opposed to that"? When you think about what you think about you increase your awareness of the following: the history of the world did not begin with your birth; that the world turns despite of you, not because of you; that that world isn't quite as black and white as you once believed; that belief does not a thing make; you have more options than you once thought; that you don't know quite as much as you thought you did; and that it is important to be able to unlearn what you were taught previously. Also, when possible ask questions of and have conversations with thoughtful people. You'd be surprised how much you'd learn from these informal interactions. Lastly, quit being a passive learner; and don't believe everything you read, see or are told is true without thinking critically about it. You need to keep your mind nimble to avoid being deceived or deceiving yourself. Although by and large you can trust that your teachers are doing their very best, you should still possess a questioning attitude and be willing to ask them questions for clarification or to investigate matters for yourself. This is called being skeptical and it is your best defense against deception. Ultimately, the worst thing you can do is just take what your teacher tells you and believe it is the undisputed truth. As you grow older you'll come to see that the world isn't quite as simple a place as you thought while a kid.

Holmberg's Mistake

In the 1940s, the anthropologist Allan R. Holmberg lived among the Sirionó people of the Beni (the lowlands of Bolivia, South America). He published an account of their lives which he called *Nomads of*

the Longbow in 1950. His book was an influential text. Parts of the book filtered through countless scholarly articles and the popular press, and it became one of the main sources for the outside world's image of South American Indians. The Sirionó, Holmberg reported, were "among the most culturally backward peoples of the world. They lived in constant want and hunger...they had no clothes, no domestic animals, no music, no art or design, and virtually no religion, etc. etc."

Holmberg postulated the Sirionó had lived this way for a thousand years—existing almost without change in a landscape unmarked by their presence. Before Columbus, Holmberg believed, both the people and the land had no real history. This idea—that the indigenous peoples of the Americas floated about unchanged through thousands of years until 1492—may seem ludicrous to us now. But flaws in perspective often appear obvious only after they are pointed out (or if we possess evidence to the contrary). In this case it took decades to recognize that Holmberg was completely mistaken.

Gradually a small number of scientists returned to the Beni after Holmberg to study its peoples and the land. These scientists discovered that the Sirionó were among the most culturally impoverished people on earth. But this was not because they were unchanged holdovers from humankind's ancient past but because smallpox and influenza laid waste to their villages *in the 1920s*. Yes, that's right, the 1920s. Holmberg studied them in the 1940s and from this brief experience concluded they'd been "backwards" and without a history for a thousand years! Before the epidemics at least three thousand Sirionó, and probably many more, lived in eastern Bolivia. By Holmberg's time fewer than 150 remained—a loss of more than 95 percent in less than a generation. So catastrophic was the decline that the Sirionó passed through a genetic bottleneck. (A genetic bottleneck occurs when a population becomes so small that individuals are forced to mate with relatives, which can produce deleterious hereditary effects.)

The effects of this bottleneck were described in 1982, when Allyn Stearman of the University of Central Florida became the first anthropologist to visit the Sirionó since Holmberg. Stearman discovered that the Sirionó were thirty times more likely to be born with clubfeet than typical human populations. Even as the epidemics hit, Stearman learned, the group was fighting the white cattle ranchers who were taking over their region (the movie *Avatar* comes to mind). The Bolivian military aided the incursion by hunting down the Sirionó and throwing them into what were, in effect, prison camps. Those released from confinement were forced into servitude on the ranches. The wandering people Holmberg traveled with in the forest had been hiding from their abusers. At some risk to himself, Holmberg tried to help them, but he never fully grasped that the people he saw as remnants from the Paleolithic Age were

actually the persecuted survivors of a recently shattered culture. It was as if he had come across refugees from a Nazi concentration camp, and concluded that they belonged to a culture that had always been barefoot, starving and wore striped pajamas. Holmberg's Mistake has subsequently shaped the way in which life prior to Columbus has been taught in high schools, universities and how it exists in the popular understanding.

The problem with it though is it is wrong, hugely wrong. Holmberg cannot be entirely blamed for the view of the New World he helped create. For almost five centuries, Holmberg's Mistake—the assertion that Native Americans lived in an eternal, unhistoried state—held sway in scholarly work, and from there fanned out to high school textbooks, Hollywood movies, newspaper articles, romantic adventure books, and silk-screened T-shirts. It existed in many forms and was embraced by both those who hated Indians and those who admired them. Holmberg's Mistake explained the colonists' view of most Indians as incurably vicious barbarians; its mirror image was the dreamy stereotype of the Indian as a Noble Savage. Positive or negative, in both images Indians lacked what social scientists called agency—they were not actors in their own right, but passive recipients of whatever windfalls or disasters happenstance put in their way.

Subsequent work in the Beni has revealed an extensive network of ancient roads, causeways (think waterways akin to Venice), dikes, reservoirs, earthworks known as mounds, raised agricultural fields, and possibly ball courts. The peoples of the Beni also trapped fish in seasonally flooded grasslands. This was not a case of a few Indians casting their nets in to the water. The massive scale of the flooded grasslands makes it necessary to conclude that fishing was a society-wide effort in which hundreds of thousands of people fashioned dense, zigzagging networks of earthen fish weirs (fish-corralling fences) among the causeways. In addition to the fish weirs and Venetian like causeways, the peoples of the Beni practiced pyrophilia—the burning of trees, foliage, etc. to control what grew and what did not in regions inhabited by the indigenous peoples. The evidence for this practice is found both in the strata of the ground in the region and the existence of fire-resistant/adapted plant species. What is more the Beni region is not exceptional, i.e. the entire New World from coast to coast to coast to coast has evidence of large scale civilizations which were technologically advanced and long-lived.

In our day, beliefs about Indians' inherent simplicity and innocence refer mainly to their perceived lack of impact on the environment. This notion dates back to at least the early 19th century. In the wake of the first Earth Day in 1970, a group named Keep America Beautiful Inc., put up billboards that portrayed

an actor in Indian dress quietly weeping over polluted land. The campaign was enormously successful. For almost a decade the image of the crying Indian appeared around the world. Yet though Indians here were playing a heroic role, the advertisement still embodied Holmberg's Mistake, for it implied Indians were people who never changed their environment from its original wild state. *Because history is a record of change, they were people without history*.

Textbooks reflected Holmberg's Mistake faithfully. In a survey of U.S. history schoolbooks, the writer Frances Fitzgerald concluded that the characterization of Indians had moved, "if anything, resolutely backward" between the 1840s and the 1940s. Earlier writers thought of Indians as important, though uncivilized, but later books froze them into a formula: "Lazy, childlike, and cruel." A main textbook of the 1940s devoted only a "few paragraphs" to Indians, she wrote, "of which the last is headed 'The Indians Were Backward.'"

Since the time of Holmberg new disciplines and new technologies have been developed. These new technologies provide us with new ways of examining the past, e.g. demography (study of populations), climatology (study of climate), epidemiology (the study of disease), economics, botany, and palynology (pollen analysis); molecular and evolutionary biology; carbon 14 dating, ice-core sampling, satellite photography, and soil assays; genetic microsatellite analysis and virtual 3-D fly-throughs—a torrent of novel perspectives and techniques suddenly came into use. And when these new techniques were finally used, the idea that the human occupants of North, Central and South America were without a history began to seem implausible. To be sure, some researchers have vigorously attacked the new findings as exaggerations. But after several decades of discovery and debate, a new picture of the Americas and their original inhabitants is emerging.

Advertisements still celebrate nomadic, ecologically pure Indians on horseback chasing bison in the Great Plains of North America, but at the time of Columbus the great majority of Native Americans could be found south of the Rio Grande (a river flowing from southwestern Colorado). They were not nomadic, but built up and lived in some of the world's biggest and most opulent cities. Far from being dependent on big game hunting, most Indians lived on farms. Others subsisted on fish and shellfish. As for the horses, they were from Europe; except for llamas in the Andes, the Western hemisphere had no beasts of burden. In other words, the Americas was immeasurably busier, more diverse, and more populous than researchers had previously imagined.

And older, too.