Matt Kasuba

2/27/11

Math Across Culture

Prof. Little

Broken Record

Most people view our world as L.P. Hartley does: that the great empires of the past did things differently than we have and it is for that reason that they were unable to survive. But just how different is our world from the fallen civilizations of the past? Certain people, like Jared Diamond, would strongly disagree with Hartley’s viewpoint, considering that it stands as a direct contrast to Diamond own views. To Diamond, the poor choices of past civilizations, their obliviousness to signs of the problems around them, and finally the misfortunes that led to the collapse of those societies are as prominent now as they were then. In reality, the problems of society are trapped in a loop, a broken record that repeats itself with each new generation of civilization that arises. As humans have been able to adapt and evolve the world around them, so too have the issues that plague societies been reborn through new names. The best way, if not the only way, to deal with these issues is to first accept that these problems are repeating, then to look back to see how other civilizations dealt with those problems. Only in preventing global problems from repeating themselves are we able to solve them.

In order to eliminate the problems that continue to plague societies over and over again, we need to first identify the set of factors that lead to the collapse of these civilizations, then solve them either by using alternative methods or simply putting an end to our self-destructive ways. Of the issues that could have caused the downfall of a society, author Jared Diamond makes it clear that five factors in particular seem to repeat themselves amongst the great civilizations of the past. Many of these ancient nations caused a considerable amount of damage to their environment, whether overusing precious resources or clearing land in order to expand as a people. Climate change also played a key role in determining the fate of a society, with many nations falling due to plague, flooding, or other natural disasters. Hostile neighbor nations were also a contributing factor to the collapse of ancient societies, typically serving as the “coup de grace” to nations whose power had been drained by economic troubles, political discord, environmental issues, or any combination of the three. A decrease in support by friendly neighbors serves as the other side of the neighbor relation coin, due largely to how often, “the partner and the enemy are one and the same neighbor, whose behavior shifts back and forth between friendly and hostile.” (*Collapse*, p. 14) Although these factors play critical role in the collapse of a civilization, none plays a greater role than the final factor: how a civilization responds to those other four factors. While the other four factors can vary in the downfall of a society, how that society decides to react to those factors can determine whether that society will survive or join the long list of civilizations that fell before it.

Easter Island is a prime example of how a society’s natural resources can dry up if used without limitation. Situated 1200 miles from the nearest body of land, the citizens of Easter Island needed to rely on their forests to build their homes, their canoes to trade with other islands, and as supports to construct the famous Eastern Island Head statues. Prior to the deforestation of Easter Island, the society there was a thriving one, with a trade relationship to the smaller islands surrounding it and countless numbers of statues scattered across the island. When the rulers decided that more statues needed to be built, leading to a higher usage of trees, society quickly began to unravel. The lack of trees to hold down the soil led to the topsoil drying up and blowing away, destroying nearly all the crops planted on the island. The loss of trees also led to a growing lack of materials necessary to construct both homes and boats that citizens used on a daily basis. No boats meant that the close-nit trade between Easter Island and the smaller islands surrounding it evaporated in an instant, decimating the already small communities on nearly all the surrounding islands. All these elements ultimately culminated in a civil war amongst the island’s inhabitants, leaving behind a legacy of scattered arrowheads, toppled statues, and a people left in an endless struggle to survive.

If the remains of a society are any indication as to how the society fell from grace, then the collapse of the Mayan Empire is astonishing to say the least. The Mayans had four out the five factors that lead to collapse; yet their vast cities and great temples have remained untouched, preserved by the vast jungles that cover Central America. The Mayans abused the resources available to them, constructing their cities and temples by destroying their surrounding environment through deforestation and erosion. The destruction to their environment inevitably led to severe climate changes, most notably through drought to their farmlands. The Mayans themselves contributed to their own decline, choosing to put, “a chronic emphasis on war and erecting monuments rather than on solving underlying problems.” (*Collapse*, p. 160) To this day, it is unknown which of these factors served as the breaking point that lead to the end of the Mayan Empire, although some historians suspect that a series of severe droughts served as the shatter point of Classic Mayan empire. Nor is it known why the Mayan people, “the most advanced societies (or among the most advanced ones) in the pre-Columbian New World” (*Collapse*, p. 159), choose to abandon their glorious cities and monumental temples. The only information that is certain is that the last Mayan text was written about 900 C.E. and the great city of Itza collapsed nearly 350 years later, though it still exists today as Chichen Itza. Though their cities and even their people still lives among us today, the fall of the Mayan Empire is prove that even the greatest and most advanced of civilization can fall.

With our advances in technology and communication with one another, the individual nations that make up our present world are slowly coming together into one united global community. Yet despite the numerous cultural and linguistic barriers we have overcome over the past few years, our global community is not without its faults. The damage we have done to our environment has been extensive, destroying hundreds of thousands of miles worth of land either to get to resources or simply to create more homes to house our ever-growing population. Global warming has also become a serious issue due largely in part to deforestation across the globe and a dangerous increase in fossil fuel burning over the past few decades. Even the alliances between countries aren’t as secure as most people would like them to be, ranging from working closely with one another to barely tolerating each other. Despite these problems with modern society, we have already taken action in reversing or at least halting these issues and in turn, slowing our own fall.

While the four factors are prominent issues in our society, many modern nations have already begun to take the necessary steps needed to counter those factors. While the damage we have done to our environment cannot be entirely repaired, we’ve taken huge steps in rebuilding, preserving, and replanting wildlife areas that have been subject to either deforestation or erosion. We’ve also taken it upon ourselves to reduce our carbon footprint, finding renewable energy resources and reducing the amount of pollution we produce as a means of reducing carbon dioxide levels in the air. For the most part, alliances between leading nations are more secure than ever, with global organizations such as the North Atlantic Treaty Organization (NATO) and the United Nations (UN) not only bringing issues of particular nations to the global table, but also allowing other nations to assist those nations in need. Communication amongst individuals have also greatly improved, allowing So while we face many of the same problems that other civilizations have dealt with in the past, the fact that we recognize these problems and have taken action to deal with them greatly increases our chances of survival.

References:

Jared Diamond, Penguin Books, *Collapse: How Societies Choose to Fail or Succeed*, 2005