A COMPREHENSIVE OVERVIEW OF HUMANITIES RELATIONSHIP WITH DEBT, AND WHY DEBT IS SO PREVALENT ACROSS HUMAN CIVILIZATION

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Abstract:

Debt has been a rare constant throughout recorded human history. There has almost always been a form of debt in human civilization. Debt has seemingly become a universal constant in the human story. Adam Smith once mentioned an invisible hand as a guiding force; I would parallel debt as a guiding force of human economics and behavior. This paper examines debt mechanisms throughout recorded history and explains why debt is so seemingly innate in human behavior. Innate in the sense that debt is preprogrammed into human behavior and that when humans are left unprompted, they utilize debt mechanisms in their societies. I seek to answer why so many vastly different civilizations independently utilize the same fundamental conceptions of debt? Part of the answer is that humans innately use systems of debt, whether it is through bartering, religion, or social debt mechanisms. Mark Twain famously said, "history never repeats, but it does often rhyme," and so too does debt seem to be a recurrence throughout human civilization. My analysis looked at various civilizations such as Sumer, Athens, Egypt, and Rome, and in all those civilizations I found and analyzed debt mechanisms that conceptually found their essence in the barter system and IOUs. In ancient Sumer they developed accounting tools like modern credit cards. In Athens Solon dealt with a national debt crisis while in Egypt I analyzed the innateness of “the oath to the lord,” and its financial and religious context. I found that humans across time also perform massive amounts of debt forgiveness such as in the Neo-Assyrians. In the Vedas I found the oldest written religions belief on debt and guilt and how those ideas diffused across the globe to perhaps become innate to humanity over time. No matter where I looked, I always found debt mechanisms that resembled one another in some manner, and thus I concluded that debt is innate to humanity, because it is a foundational aspect of our very behavior.

Introduction:

As an avid history buff who studies economies and markets, I have always wondered how markets worked thousands of years ago. Do the modern economic models hold true back in time before the age of industry and globalization? Alternatively, how did economies function when the age of globalization did not exist? In my research, I came to the most apparent realization that debt drove civilization just as it does in our post-industrial world. This paper will

define *debt* as an obligation to someone or some entity. A debt mechanism is how an entity can create and repay a debt.

Today people have mortgages, credit card payments, and student loans, which is all just debt. It is becoming rarer and rarer for individuals to not be in debt and live in the modern world. Society's obsession with debt got me thinking that surely our society has only recently been built around debt post-industrial revolution and the implementation of large banking institutions. But no, just as Joe Smith worries about his mortgage and credit card payments, so did the ancient Sumerians, Athenians, and Romans worry about repaying their debts to an entity. In my quest to understand why our society is built upon debt mechanisms, I discovered that debt and humanity's relationship is a tale as old as time. This paper seeks to understand just how far back debt has been woven into humanity and establish whether different civilizations, mostly isolated from one another, implemented similar debt mechanisms that were important to the functioning of society.

Literature Review:

There exists a large amount of information on ancient debt mechanisms. Much of the information I referenced to find many of my sources were from David Graeber's capstone book *Debt: The First 5,000 Years*, one of the only significant pieces of literature collecting and commenting on ancient civilizations' debt mechanisms up to the present century. Graeber's book was instrumental in identifying precise debt mechanisms with accurate dates and identifying certain civilizations. Graeber comments on society's obsession with paying back debts and questions many misconceptions and unethical practices in the banking world (Graeber, 2012).

Graeber sheds light on how the Sumerian bureaucrats used debt to track resources throughout the kingdom and explains the modern misconception of the barter system. Graeber provides an in-depth overview of the usefulness of debt as a unit of universal value to measure goods and services and even currency against it (Graeber, 2012). Graeber also extensively comments on other topics I discuss throughout my paper, such as the Hindu Vedas.

Another useful source was Peter Temin's literature on ancient Rome. Temin wrote extensively on the day-to-day operations of the Roman Empire's economy and commented a lot on Rome's debt and market aspects. Temin's paper on the Financial Intermediation of early Rome is an encyclopedia of knowledge when understanding how debt mechanisms shape societies (Temin, 2006).

The other sources were unique aspects that I had to research hard to find and are very niche, such as the study of Solon's *seisachtheia* (shaking of debt/burdens) and the analysis of

ancient Egyptian society through recovered papyrus (Blok & Krul, 2017) and (Cruz-Uribe & Nims, 1990). There will also be an in-depth analysis of religion's relationship with debt.

My paper covers a topic much of the existing literature fails to mention. Excluding Graeber's book, there is little to no readily available literature on the comprehensive history of debt throughout human history and comments on why different civilizations end up with similar debt mechanisms. My paper will serve as additional material filling a grey area and attempt to explain why all these vastly different civilizations built their societies around debt. None of the existing literature comments on the origins of why vastly different civilizations implement such foundationally similar debt mechanisms some thousands of years apart.

Starting Off:

To begin analyzing debt mechanisms throughout human history, I, like Graeber, will begin by clarifying some misconceptions and overviewing what debt has meant to humanity. I want to begin by asking a question similar to how David Graeber begins it in his book *Debt: The First 5,000 Years.* If one asks someone today, "should one always pay one's debts," an overwhelming majority would answer with of course. The rationale behind this simple question is primordial. Most people would not think twice about repaying a debt because people naturally assume the debt was acquired by choice. Someone freely taking on a debt must be aware of the responsibility of repaying it. As straightforward as this approach appears, debt is much more complicated than most people would assume.

David Graeber sheds light on the complexity of debt by explaining the "go-go" banking practices by Citibank and Chase during the 80s that ultimately led to the debt crisis of the third world (Graeber, 2012, p. 2). The "go-go" banking practices were a debt mechanism at an international level where bankers were sent all over the world to encourage third-world dictators and leaders to take large loans out from these international banks at the low interest that deceptively skyrocketed and collapsed many third-world countries (Graeber, 2012, p. 2-3). This example is just one of the many debt mechanisms plaguing the modern world and shows how complex debt can get. This paper does not seek to establish the morality of debt but to how societies use debt to keep civilization thriving, or more realistically surviving. A much simpler example and one of the many misconceptions that Graeber mentions in his book is the barter system and physical currencies. What came first, the chicken or the egg? In my case, the egg is in currency, and the chicken is the debt. Unlike the great chicken or egg debate, a historically

proven fact exists: debt came first. Additionally, I also concur with Graeber that debt is also a history of money. These concepts are just two sides of the same coin.

To begin, the barter system was likely mentioned in any introductory economics course in high school or beyond. The bartering system is more complex than many are taught it is. Suppose we have two people, Rapunzel and Spock. Spock has a new Vulcan hairbrush, and Rapunzel has a new biology book that was never released to the public. In the classic barter example, Spock wants the book and Rapunzel the new brush. In economics, we call this simple exchange a "double coincidence of wants," meaning the two individuals equally want the good and are willing to exchange their goods for each other. I agree with Graeber that this rarely occurs in reality. It is likely that the book or hairbrush is valued very differently for each individual and that a one-for-one exchange is unlikely to occur. What occurs is a scenario where Rapunzel wants the hairbrush, but Spock does not want the book, so Rapunzel promises to repay Spock later or exchange more items in addition to the book for the hairbrush. The positions could be reversed in that Rapunzel wants more than just the brush for her book. The second scenario is that neither Spock nor Rapunzel arrives at an agreement.

Regardless of whether the two scenarios come to fruition, they are more likely to occur than a simple one-for-one exchange. You may wonder why I discussed bartering when I first began by discussing how debt came before currency. The reason is that historians have come to a consensus that bartering was one of humanity's first instances of a debt mechanism used to conduct commerce. Graeber highlights the bartering records from ancient Sumerian clay tablets from a minimum of three millennia ago (Graeber, 2012, p. 38). Returning to that first scenario, Spock needs more than just the book to give up his high-tech Vulcan hairbrush to Rapunzel. So, what does Rapunzel do when all she has to trade is her book? She makes an IOU. The classic IOU was one of if not the first debt mechanisms used in society. Ancient societies like Sumer utilized IOUs to keep track of resources and goods in their temples.

The IOU:

Now that it has been established how IOUs were one of the earliest forms of debt mechanisms, why did people revert to an IOU system? I believe it is part of human nature to create a debt system of IOUs instead of a physical entity. In Graeber's book, he mentions economists Paul Samuelson and his idea that "even in the most advanced industrial economies, if we strip it down to its barest essentials and peel off the obscuring layer of money, we find that

trade between individuals and nations largely boils down to the barter" (Graeber, 2012, p.44). Samuelson says that even the complications of world trade all boil down to the essence of the barter and the classic IOU, which are simple debt mechanisms.

In the modern economy, where cash is readily available at ATMs and applications that allow the paying for things through smartphones and smartwatches exist, world trade, like ancient Sumer, is built upon the barter and IOU systems. If there were a better system than the barter and IOU, then I believe humanity would have already gone down that path, yet these ancient systems are still commonplace today. These debt mechanisms have become an almost impossible financial and social constant to uproot.

Let us add another dimension to the simple debt mechanism of the IOU. Let us say that we still have Rapunzel with her book and Spock with his brush. Now we have a third person Merlin that has a sword to trade. First, Spock gives Rapunzel an IOU for her book instead of the brush, and now she only has an IOU. Rapunzel wants the fancy sword, and it turns out Merlin just so happens to have one. Rapunzel can exchange her IOU from Spock to Merlin in exchange for the sword. As simple as it sounds, this exchange of the IOU becomes one of the foundational aspects of the banking system. Say there are thousands of new characters with unique goods, and Spock's IOU gets traded to thousands of people. The IOU is not a physical good or service. It is just an official promise to repay something of a particular value to someone. Now replace IOU with "bank note," and entities can create complex, interwoven multinational banking institutions from the simple IOU.

The barter system can also be defined as a credit system. Credit systems are a more modern definition of debt mechanisms that the general public can grasp. Credit systems like bartering paved the way for debt to be an instrumental tool in ancient and modern economies. A general understanding of why people still default to the barter system's foundational aspects can be beneficial to understanding one of the central purposes of this paper. People default to bartering because they have grown accustomed to it for hundreds of years. Graeber comments on the fall of the Roman Empire and the later Carolingian Empire, even after a devastating collapse that some historians call "when the lights went out in Europe." Nevertheless, the economy of Europe went chugging along through the barter system (Graeber, 2012, p. 37).

Something worth mentioning is how vast barter systems can function without a currency. Take medieval Europe's post-Roman Empire collapse. The currency may have gone away, and

yet business was conducted, perhaps not at such an extensive scale as previously achieved, in the absence of roman currency. A misconception people have today is that money itself holds actual value. That is no longer true in the case of the US Dollar anymore. Money is no longer minted in precious metals and is only a placeholder of value to measure goods and services. Cash was no longer king in Europe after Rome fell, but people still measured their IOUs in Roman currency (Graeber, 2012, p. 45). Money can be viewed as a credit system similar to a debt mechanism. Money is a consistent way people can universally translate value to one another, similar to how the IOU for Rapunzel was a set value that Spock specified.

Credit Theory of Money:

Mitchell-Innes was one of the first individuals to pioneer the "Credit Theory of Money" and believed that money was not a commodity but a simple accounting tool (Graeber, 2012, p. 46). Think of money as a tool similar to how engineers use rulers to gather precise measurements of entities. Graeber likes to call money an "abstract system of measurement," which is a good general definition of its actual function (Graeber, 2012, p. 46). You may be wondering what unit the money ruler is measured in. The unit of measurement for money is debt. A $1 bill is a fancy way to establish a debt mechanism that, once boiled down and Paul Samuelson said, is an IOU. Think about the currency before the significant shift to fiat money. A dollar coin was minted in precious metal worth a specific value. All that value meant was a promise to pay for a good or service equal to that coin's actual value and not the coin's precious metal value. Credit Theorists are even further supported by the age of fiat money, where cash truly has no value other than as a unit of measurement (Graeber, 2012, p. 47).

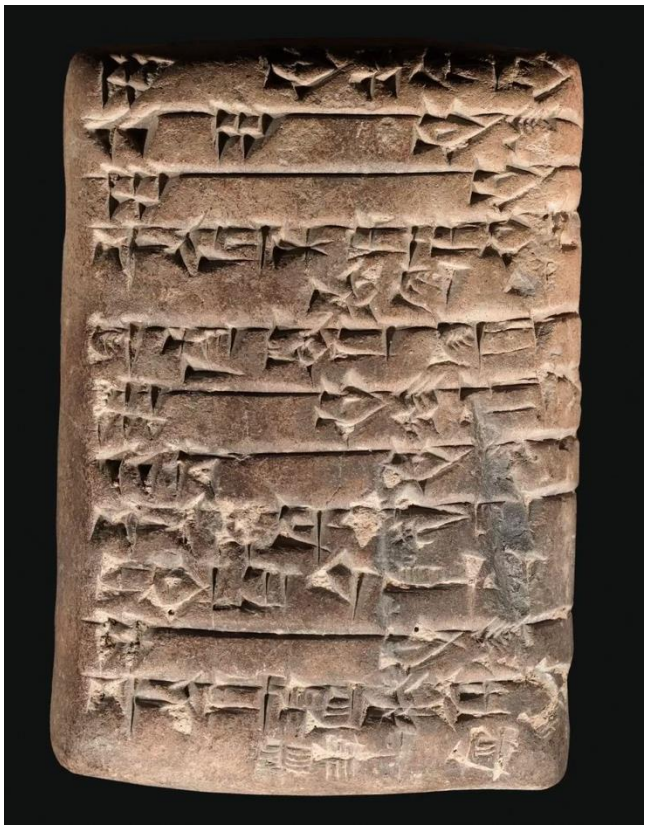
It is hard to imagine that the simple barter system created encompassing financial instruments like money and banknotes, which are all just glorified IOUs at their base level. Charles Darwin wrote about adaptations in animals through nature. I believe these primordial debt mechanisms have evolved with humanity as our markets, psychology, and identity have changed with time. Debt has been a constant in every civilization recorded in the history of humanity, yet no new or better system has come about. Perhaps economies built around debt are the best solution, or perhaps they are other reasons our societies are built on debt. This paper does not seek to dive into why no new systems have come about, but rather the reasons humans throughout history seem to default to debt as a market instrument. So far, it appears debt has been a reliable and helpful tool for people to measure value, and thus it seems debt mechanisms

have stuck around because they work. The old adage 'if it ain't broke, don't fix it" seems to fit humanity's use of debt mechanisms throughout the historical timeline.

Ancient Sumeria:

Now that I have laid out some of the foundations of debt, it is time to start going back in time in our imaginary DeLorean to our first stop in ancient Sumer in approximately 3,500 BC. Much is known about ancient Sumer, and many of the surviving cuneiform clay tablets are primarily records of finances. Historians know how the various temple administrators used debt as a unit of measurement to track resources throughout ancient Mesopotamia. In ancient Sumer, the currency used to measure debt was the silver shekel, which had its value tied in with "gur," a barley bushel. The one "gur" was then divided into 60 minas, which is one gur divided by sixty, and then over a 30-day month, each temple worker received two portions of the minas of the barely (Graeber, 2012, p. 39).

Figure 1: Sumerian Cuneiform about temple tracking Oxen: source BBC.com



This ancient accounting was perhaps the first instance of debt used by advanced civilizations to keep track of and transport resources between specific departments within the

temple. It is astounding that much of our modern accounting system has many roots traced back to ancient Sumeria. In addition to tracking resources, the temple bureaucrats also used the silver shekel to keep track of debt. The shekel would be used to calculate the debt value of loans, rents, and fees owed to the temple (Graeber, 2012, p. 39). One thing of importance to strengthening the idea that currency is just a measurement of debt is that the actual silver, much like today's money, was kept inside the temple vault or the bank in today's equivalent. Just like money became numbers on computers, the shekels were written down on tablets and used to track withdrawals and deposits, all while the actual money sat in the vaults collecting dust for centuries.

A unique distinction of Sumer was that when it came time to collect the debt or pay temple fees (taxes), the temple accepted items besides silver shekels. In Sumer, people could pay with livestock, minerals, and even agricultural products (Graeber, 2012, p. 39). In Sumer, the debts were tracked in shekels but did not have to be paid in shekels, which turned the temples into full-on industrial operations that managed and tracked tons of different goods and services.

Sumerian society achieved a debt-based administration system because it was the best option. In ancient Sumer, peasants did not have access to significant amounts of silver shekel to pay their debts, rents, and taxes. As I mentioned, most silver shekels were locked away in the temple vaults. So, the Sumerian bureaucrats created a debt-based stacking system using clay tablets. Does a debt-based transaction system where no cash is exchanged sound familiar? Yes, the ancient Sumerians came up with a glorified credit card. We use credit cards because they are much easier for us to use daily. It is also easy for government officials or banking entities to keep accurate records of all the various transactions that occur every day.

The credit card we know today is an invention of the modern era. It may be a stretch to call the clay tablets of Sumeria a credit card, but if you think about their intent, it parallels what the modern credit card does. Most people do not keep all their money in cash. Most people have their money deposited at banks. Modern banks keep money in their vaults, and I recognize that the whole fractional reserve system may leave vaults partially empty, but that is a topic out of the scope of the discussion of this paper. Keeping the comparison simple, banks have cash in their vaults and issue credit/debit cards for people to use. Temples in ancient Sumer kept most of the silver in the vaults and used clay tables to track and distribute resources between various

departments. Credit cards and clay tablets fulfill a similar role in keeping track of the money left in the vaults of their respective institutions.

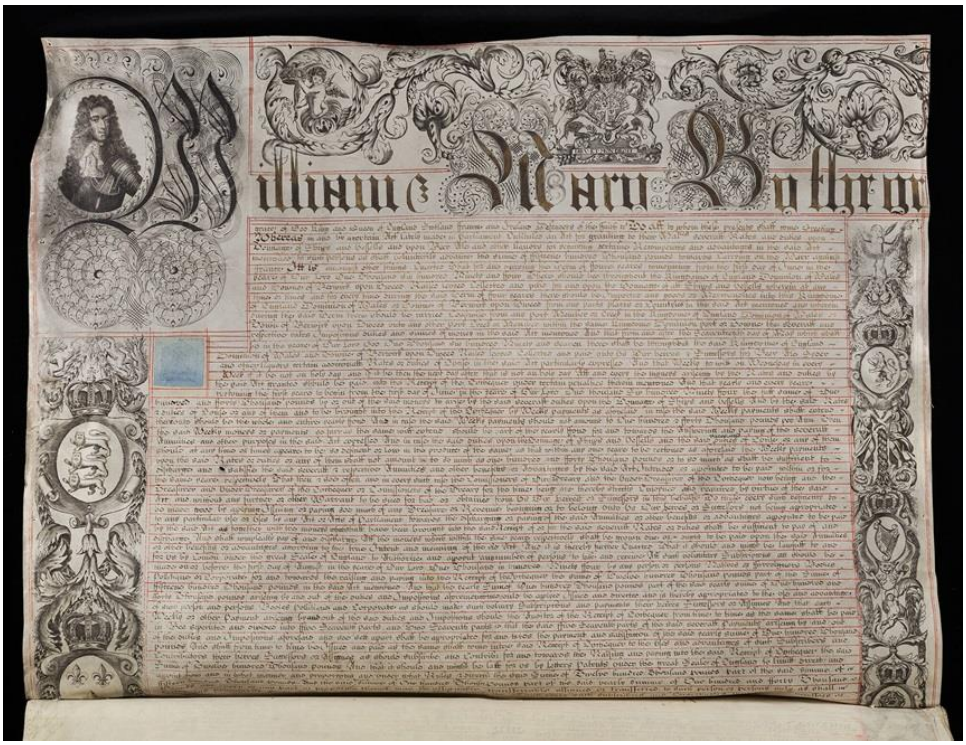
So why, even approximately 3,500 years ago, do humans still use the exact debt mechanism? Like the barter system, society will try many ways of doing something. Once a method has been established and works fine. Society will most likely accept that method and, instead of pioneering a new way of doing things, will stick with that method and let the process evolve with society's ever-changing preferences. I believe that society has, over time, become accustomed to using debt mechanisms like the Sumerian transaction tracking tablets, which have stuck with society and eventually evolved into the credit card system we know today.

Society seldom changes, and if it does, it takes time. We even know that even in ancient Sumeria, the laborers would gather around at local taverns to celebrate a hard day's work, festivals, and harvest season. At this celebration, they would not use silver but "run up tabs" that they would repay later, whether with goods, services, or cash (Graeber, 2012, p. 40). Society stills use a tab-based credit system to track debt owed. Society does this partly because it has how society has been doing things, and no one needs to make a better system. Like a bar tab, these seemingly "normal" processes, such as tabs and credit cards, have been with human civilization for several millennia.

England 1694:

Now let us move time forward to 1694 England to the creation of the first successful modern central bank. Today almost every country on the planet has a central bank, but a deep dive into why society became addicted to the idea of central banks started in England. In 1692 a group of bankers came together and offered the English King 1.2 million pounds with interest in exchange for a monopoly of the right to issue bank notes (Graeber, 2012, p. 49). Recall that bank notes are just IOUs wearing suits and ties. These bankers could then lend out bank notes worth the interest owed to them by the king. This meant that this new central bank could effectively loan out interest money that technically did exist but not in physical form and circulate or "monetize" the money to the whole English economy.

Figure 2: The charter that established the Bank of England circa 1694: source bankofengland.co.uk



To simplify this concept, imagine two people living in a town. Jack and Jill have cash burning a hole in their pockets, and the town's mayor wants to expand their military. Jack and Jill loan the mayor their cash in exchange for the sole right to issue town notes. The notes are separate from the cash but are backed by the interest the mayor owes Jack and Jill, making them a credible legal tender. The town folk trust the mayor. Similar to the town mayor, the king had the trust (authority) of his people, making the notes backed him credible. This new credibility enabled the bankers to loan out banknotes as currency.

The bankers never ran out of cash because of two reasons. One was that the king never repaid the outstanding amount. Secondly, the bank notes were lent out at interest and paid back to the bankers. The interest the bankers charged the king was simultaneously lent back to the entire country, which in turn was lent at interest, and that money was used to pay withdrawals when necessary. The significant problem a debt system like this creates for society is that it will perpetuate a system of loaning out money that technically cannot be repaid and necessitates a constant need for new loans to be generated for the banking system to survive, which can lead to economic depressions.

Human civilization has seen the great dangers of credit/loan banking system. The Great Depression was a bank run where people wanted their money in cash, and the problem was that money did not exist physically. The Great Recession was when banks would not make loans because interest rates became too high. If these banking systems started with England in 1694 and are so volatile, why does society continue to use these debt mechanisms? There has been and will continue to be a debate on whether the banking system we see today is good or bad for society. My purpose is to understand why this debt mechanism is still used, even with the countless high social costs society has endured under this system.

Like the barter, central banks serve a purpose society recognizes as beneficial. If it were not, central banks would have evolved into a better and safer system. Central banks issue dressed-up IOUs, which have been with humanity for thousands of years. A system used daily in society will become ingrained into that society. As I have previously stated, humanity will use debt mechanisms and adapt them to their ever-changing culture. Civilization advanced to the point where IOUs became banknotes and became easier to access and utilize. When trees need more water, they adapt and grow deeper roots. Just as when society needed a better way to use IOUs, central banks were created. This debt mechanism came about after many failed attempts to utilize IOUs best and persists because no other wide-skilled system of using IOUs has come about to replace the current central banking system.

Solon and a Societal View on Debt:

So far, the discussion on debt has been focused more on tangible aspects such as bank notes, credit tracking systems, and bartering things. I want to shift focus towards a societal view on debts role. In the ancient world, debt was more than a measurement. It was a person's entire livelihood and their reputation in their society. The next stop on my comprehensive overview of debt's role in society takes us to ancient Athens during the reign of Solon as the first Archon. In a paper published by Josine Blok and Julia Krul, they evaluated debt from the Near East to Solon's "*seisachtheia*" (Latin for shaking of burdens/debts). When Solon returned from one of his outings to the Near East, the area was commonly known as the "Fertile Crescent" or Mesopotamia in 594 BC; he was promoted to the position of Archon of Athens, which gave him king-like powers. According to Plutarch, one of his first new policies was his decree which virtually eliminated all debts owed in Athens (Blok & Krul, 2017, p. 607). Debt in the ancient world was not just monetary in nature. The biggest problem Solon had to deal with was the

slavery issue plaguing Athens. Slavery is one of the most known debt mechanisms throughout human history that sadly persists to this day.

Almost every civilization has had to deal with the slavery issue at one point in time. Whether slavery is kept or eliminated is not the crux of my analysis, but rather why all these various societies from ancient Athens to Britain in the 18th century. Instead of owing monetary debt, slavery introduced the debt mechanism that people owed themselves and or offspring to someone. Athens faced the problem that a significant majority of the peasant population in Athens was enslaved, causing a plethora of issues that Solon had to solve (Blok & Krul, 2017, p. 608). To better understand how influential slavery was in Athens as a debt mechanism, it is best to understand how this crisis came about.

Athenian society was built with debt as a central cornerstone of their civilization. To quote from Blok and Krul, "constitution was oligarchic in all other respects, and in particular the poor were enslaved to the rich—themselves and their children and their wives. The poor were called dependents (pelatai) and sixth-parters (hektemoroi) since it was for the rent (misthosis) of a sixth that they worked the fields of the rich" (Blok & Krul, 2017, p. 613). Blok and Krul lay out just how bad the slavery issue had become. When the peasants were enslaved, all their offspring were enslaved, which continued for many generations until Athenian society could no longer function. The rich in Athenian society used slavery for everything, whether agriculture, manufacturing or even war. Enslaved peasants were forced to leave their families to foreign lands to fight the wars of the Athenian nobility. (Blok & Krul, 2017, p. 614-615).

Solon's decree was a very radical and polarizing approach to handling a societal issue that revolved around debt. Athens was a society that had begun when slavery was commonplace and had survived decades, with slavery being a central figure of Athenian society. The debt mechanism of slavery had become ingrained into the fabric of Athenian society and led to a big fork in the road for Solon. On the one hand, many members of society had benefited from slavery in Athens, and on the other many Athenians had been hurt by slavery. When debt mechanisms like banks, IOUs, and slavery become so ingrained in society that it becomes commonplace without a viable substitute, it would take a radical approach to force a change that would not come about naturally. Solon, in essence, forced a significant change in Athenian society that would not have come about, at least in the foreseeable future, for Athens in 500 BC.

The *seisachtheia* did more than abolish slavery; it also affected other debt mechanisms in Athenian society. Historians know the precise details of the *seisachtheia* because ancient scholars recorded the details in many poems that were passed down and lost until their re-discovery in the fourth century (Blok & Krul, 2017, p. 609-610). One of the things Solon did was create artificial inflation of drachmas, in which the value of drachma fell as more was put into the economy. Solon made a mina, which is like a fixed bill amount, think a $20 USD bill, valued at 73 drachmae, and turned the mina into 100 drachmae. The peasants referred to this policy by Solon as the "unburdening," which not only lifted the debtors' burden but also ensured that, in the long run, the creditors still got their minas back, just at a different value (Blok & Krul, 2017, p. 611).

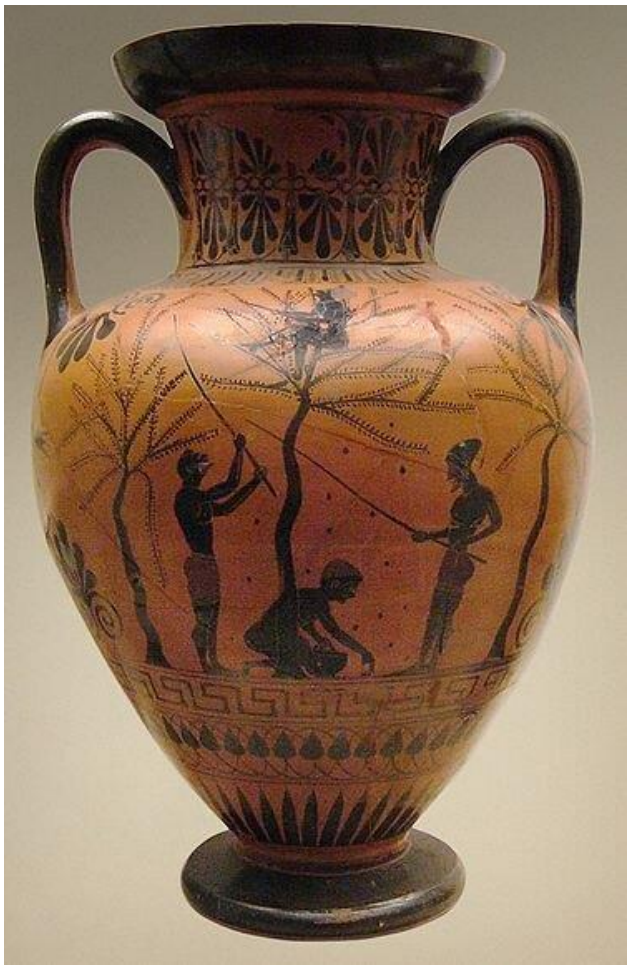
There are conflicting views in academia that studies Solon's *seisachtheia* on whether he absolved all debts or whether Solon enacted policies that only helped ease the values that the debtors owed. Blok and Krul are of the discipline that the *seisachtheia* was unique and has to be evaluated as more than a change in the unit measurement of debt measurement (minas and drachmae) (Blok & Krul, 2017, p. 612).

I argue that a society built around the debt mechanism of slavery would not have shaken loose from the mechanism unless a radical change was forced onto society. I believe that slavery had become an innate part of Athenian civilization and would have possibly adapted over time but would never have been cast aside unless a radical forced change occurred, which it did with Solon's decree. Bank notes (IOUs), and the barter system persists today. At the same time, slavery has been eliminated in most countries, even though I recognize that slavery still thrives today in many places worldwide. For specific debt mechanisms that become so culturally ingrained into society, like slavery, it does take a radical forced change to separate society from those harmful debt mechanisms. Solon was able to institute a massive societal upheaval with his new powers as Archon, but as I argue, It had to be forced and did come at a high price for Solon. Solon became the first champion of the people, but at the same time, the enemy of all of Athenian high society.

Slavery was only one of the debt mechanisms that ruled Athenian society. Another significant debt mechanism worth mentioning was agricultural debt. Back in the time of Solon, the vast majority of the population practiced subsistence farming on their individual plots of land. The farmers tended to be peasants who bartered their goods and services for daily

necessities. We see the barter system again, as Blok and Krul refer to as the "bedrock of their lives" for the Athenian peasant farmers (Blok & Krul, 2017, p. 619). A unique point that I want to argue is the shift in the existing barter system in Athens. Farmers would trade goods and services in the barter system, but then farmers started borrowing things instead of trading for ownership. This shift occurred relatively quickly in Athenian society.

Figure 3: Agriculture, a common use for slaves, black-figure neck-amphora by the Antimenes Painter, British Museum



The farmers would borrow (rent) livestock, tools, and land to conduct their day-to-day operations. As Blok and Krul highlight, "as soon as borrowing transcends day-to-day reciprocity, the possibilities for such peasants to pay back their loans are easily exhausted" (Blok & Krul, 2017, p. 619). The quote by Blok and Krul means that the farmers kept borrowing and borrowing that they became so indebted that they did not truly own anything and could not pay back their borrowing fees. Now step back and compare this practice to the modern equivalent of what was

happening. In the United States, much of the agricultural sector depends on subsidies from the government. Farming equipment is costly, and most farmers lease or finance their equipment.

Imagine that every government subsidy was to stop, and all the farming creditors wanted more considerable rent fees or the principal sum plus interest back on all their equipment. You can imagine that farmers would descend upon the nation's capital in protest as they have done in the past in the United States. This lack of subsidies and rising interest rates was what had happened in Athens during Solon's assignment as Archon. All the food production in Athens was based around a debt system, which was very fragile. The debt bubble kept growing and growing until the farmers could no longer operate within the inflated bubble. The bubble burst, and the Athenians were facing mounting food issues, not to mention ex-slave soldiers turned slave farmers who were not pleased with the ruling class, which were the only creditors for the farmers.

Notice just how similar debt mechanisms are across the timeline. Athens faced many problems because it built its agricultural and societal hierarchy on debt. Once the debts could no longer be paid, society began collapsing. This is what has happened in many old and modern civilizations. Society has faced similar detrimental shockwaves, for example, in the United States in 2008 when the housing bubble popped, and in other modern economies across the globe.

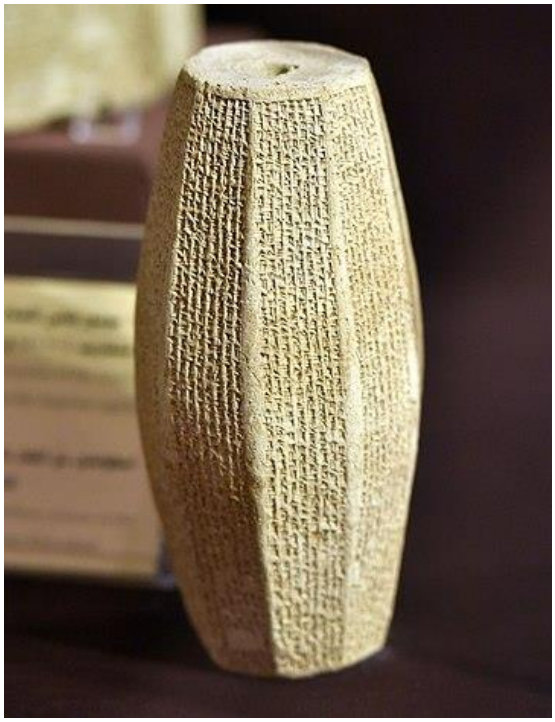
As observed, people always seem to revert to a form of bartering, and in the case of Athens, it was a barter system that got rid of tangible goods and replaced them with debits and credits for goods. The society chose entire debt-based agricultural sectors, yet the farmers and creditors backed the system. I argue that the Athenians naturally tended toward a debt-based system for agriculture because their day-to-day lives involved debt. The entire population was part of an extensive debt system. One part was the master, and the other part the slaves. After several generations had come and gone, ancient Attica (region of Athens) had become so used to slavery that they moved towards market systems based on a two-party debt-based system made of creditors and debtors.

Similarities in Debt Cancelations:

So far, the discussion on Athens has been centered on how the debt crisis came about and how it led to the reforms listed in Solons *seisachtheia*. Something interesting to evaluate is how humans are always canceling debts just as they tend to make them. In Solon's *seisachtheia*, he

took several of its arts from other societies that had canceled debts at a national level. This paper focuses on why debts are so frequent, but it is also important to note that the time's debt cancellation was similar across the timeline. Blok and Krul write about how "an inscription of the Neo-Assyrian king Sargon II (ca. 723–704 b.c.), one of Sargon's grandson, Esarhaddon (681–669 b.c.), and the biblical account of Nehemiah (ca. 445– 433 b.c.), specifically Nehemiah 5," were a preexisting instance of debt canceled that paralleled several of Solon's policies (Blok & Krul, 2017, p. 624).

Figure 4: Terracotta cylinder from Dur-Sharrukin narrating Sargon the seconds campaigns



We again go back to Sumer and Mesopotamia, where the text talked about the many social reforms Monarchs would implement that they received for a divine entity. Like Solon, the texts reference the absolving of debts and freeing enslaved people in Mesopotamian and Neo-Assyria (Blok & Krul, 2017, p. 625-626). To quote the "Great Inscription" of Sargon II on one of the palace walls in Khorsbad 709 BC, "I proclaimed debt remission [andurāru] for Ur, Uruk, Eridu, Larsa, Kissik, and Nēmed-Laguda," which as Blok and Krul highlight was the absolving of debt for the newly freed slaves" (Blok & Krul, 2017, p. 626). In Nehemiah 5 of the Bible, we

are informed of the enormous debts of the Hebrew people to their captors and the implementation of large debt-based societal systems. In the long Hebrew oppression of the Babylonians and Assyrians, they were absolved of their debts.

Solon debt-absolving reforms share similar elements to the reforms of the ancient civilizations. Perhaps not only has debt become an innate part of human civilization, but so has the large-scale cancelation of debt when they grow to be too burdensome on society. In the United States today, declaring bankruptcy is a modern form of *seisachtheia*. Excluding the ever-persistent student loans, when someone declares bankruptcy and is granted bankruptcy through the justice system, they are given "a bankruptcy discharge" which "releases the debtor from personal liability for certain specified types of debts" (US Courts. Gov, 2023). Society today has many common debts absolving mechanisms, just as ancient Sumer, Mesopotamia, and Athens had. Therefore, debt-absolving mechanisms can also be an innate part of human civilization, just as debt mechanisms are.

Egyptian Debt as an Oath:

The next civilization I will be examining is ancient Egypt. Egyptian society is one of the world's most interesting yet mysterious civilizations. Several of the world's greatest mysteries, such as the Sphinx, Pyramids, and Lighthouse of Alexandria, all have their place in Egyptian lore. A fundamental mechanism that persisted throughout pharaonic Egypt was the oath. John A. Wilson analyzes the crucial aspects that made up the Egyptian oath, specifically the promissory aspect of the oath. Wilson's work covers roughly 3,000-2,000 BC and comes from surviving papyrus texts passed through the ages. Wilson defines the Egyptian oath as "taken as a solemn appeal to divine authority, a god, gods, or the pharaoh who was himself a god" (Wilson, 1948, p. 148). Egyptian society was centered on religion, and the oath was seen as a legally binding act that bound your soul to your word.

The Egyptian oath was a debt mechanism so fundamentally ingrained in the Egyptian ethos that breaking the oath would literally damn someone both physically and ethereally. In society today, when someone hears something about debt, they are more than likely to think of monetary debt. Debt as a concept transcends the mere financial mechanisms people think about today. There are many different forms debt takes in society. Egyptian oaths encompassed many different forms of debt, such as fealty to a lord, promissory debt to another person, or an attestant to one's own words (Wilson, 1948, p. 132). To simplify the section of Wilson's paper that I am

referencing, the oath made in the view of god/pharaoh functioned very similarly to the IOU. It turns out that when someone makes a promise in the name of the Pharaoh, they cannot break it, or they will lose their soul or social standing.

To examine a particular case, let us look at an ancient papyrus from the time of the 20th Dynasty in Egypt: "a certain Qeni-khepeshef rented something from his father. If he defaulted, he promised some kind of personal loss and a payment of penalty. The man of the gang Qeni-khepeshef said: 'I will give him 21 sacks,' and he took the oath of the lord, saying: 'As Amon endures and as the Ruler endures, should I take away this income from my father, this award of mine may be taken away, and I will (give) a pair of sandals to the man of the gang Amon-nakht and a box (to) the man of the gang Maa-nakhtef, (in) payment for the writings which they have made about the deposition of their faith" (Wilson, 1948, p. 145). This story shows just one of the many instances Wilson highlights about the use of the "oath to the lord" to function as an IOU. Instead of having a bank note or some other tenure, the oath was a religious debt-backing tool.

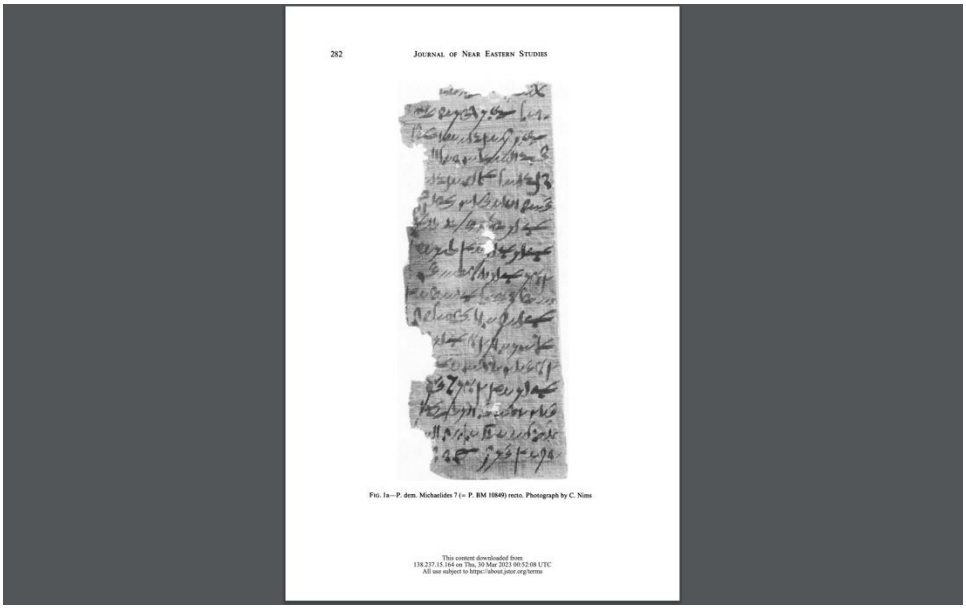
The oath issuer did not back the word with tangible assets but instead used their social standing and literal soul as payment for the transaction. Once again, the barter system returns to the discussion with the Egyptians using oaths instead of IOUs, cash, or goods. To the Egyptians, the arguably most important thing they had to offer was not themselves as slaves, their money, or even their family. The most important thing they had was their very soul. By enacting the "oath to the lord," the issuer placed their afterlife on the line to the creditor. The Egyptians knew that breaking the oath meant that they were" by the oracle of a god, bound to abide by this decision. "and he took the oath of the lord, with the words: 'As Amon endures and as the Ruler, whose power is for death" (Wilson, 1948, p. 146). Needless to say, the Egyptians were not messing around when they made their oaths.

Religion in Egyptian society was innate from birth until death. The unique debt mechanism of the oath-taking the place of IOUs in society involved their religion. The "oath of the lord" was an innate part of being Egyptian. It did not matter if one was a pharaoh or a simple workman; the oath was treated the same for everyone and had the same repercussions for breaking it. Not only was the fundamental IOU replaced with a unique oath mechanism, but the entire religious sector of Egyptian society was used to enforce the oath (debt). Separating the oath from the religious part of being Egyptian is impossible. It is, therefore, very likely that debt, in the case of the Egyptian oath, was an innate part and fundamental pillar of their civilization.

Examination of One Specific Papyrus:

To better help understand just how the oath played a role in Egyptian debt transactions, I want to highlight a surviving papyrus document that is now stored in the British Museum for Egyptian Antiquities. The papyrus is commonly referred to as P. dem. Michaelides 7, where Michaelides comes from the owner and donator of the British Museum (Cruz-Uribe & Nims, 1990, p. 281). Up to this point, the oath served an essential role in the daily lives of Egyptian society. Whether through transactions or religious fealty. Instead of focusing on Egyptian society in general with this papyrus as my reference, I want to perform an in-depth analysis of just what debts, including the oath, are discussed in P. dem Michaslides 7. Going forward, I will refer to the papyrus as P7 in my analysis of its content.

Figure 5: The Egyptian papyrus M 7 source Cruz-Uribe, E., & Nims, C. F. (1990)



P7 has some missing parts, but academics like Cruz-Uribe and Nims have been able to recreate the missing parts using knowledge about ancient Egypt. The document talks about the Egyptian Hor's problems with three of his deben (debts). The document begins with Hor having to pay three of his deben, which is overseen by a trustee, which in this case is a temple priest. The document does say that Hor made the oath to his creditor with the temple priest as a witness to the transaction (Cruz-Uribe & Nims, 1990, p. 284). As mentioned, the oath was used instead of tangible assets or banknotes in a simplified barter transaction. Here Hor makes his oath in the

presence of a religious official, thereby officially binding him to his newly created debts. Rather than facing financial collapse if Hor defaulted on his debt, Hor was now socially and religiously bound to his debts.

The evolution of the religious aspect of the oath in financial intermediation is a fascinating debt mechanism that Egyptian society utilized. Another familiar concept mentioned in P7 is the idea of a trustee. The trustee in the document was a temple priest who witnessed the oath and held the tangible deben documentation until Hor had paid his debts back. The role played by the Egyptian priest as a trustee is still prevalent today as it was in Pharaonic Egypt. The unique development was that the trustee served as a cog in the machine of debts by witnessing and officiating the debt transaction through the oath. Egyptian society utilized religious oaths to create and enforce debts, such as in P7. The everyday use of oaths as a debt mechanism was widespread in Egyptian society. I further enforce my belief that the oath as a debt mechanism had become an innate process in Pharaonic Egypt.

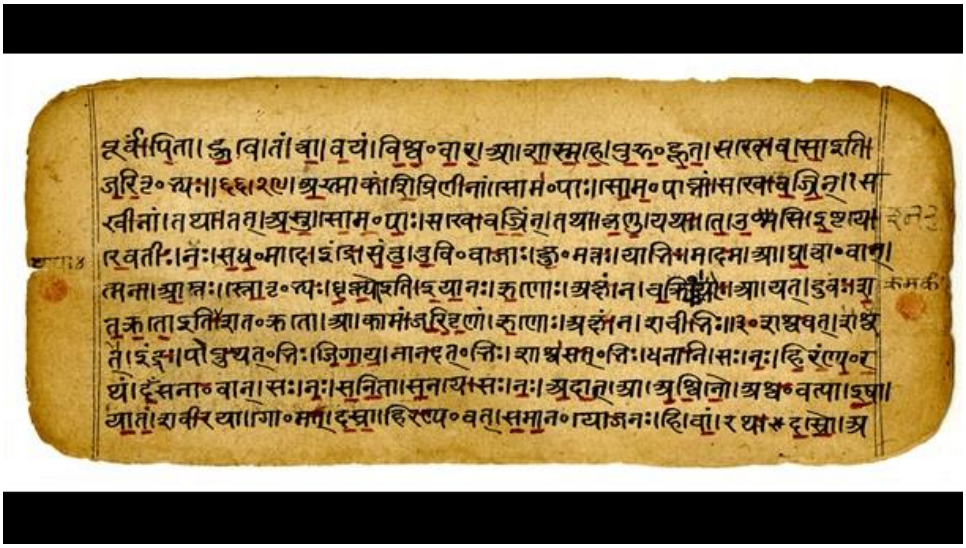
Oath as a debt mechanism became innate in Egyptian society for a few reasons. The first was that Egypt was a theocracy for many centuries where the Pharaohs were gods, making religion a foundational aspect of Egyptian society. The second is that because religion played such an essential part in their society, Egyptians used religious concepts such as the afterlife as collateral in debt transactions. So instead of Adam Smith having to place his home up as collateral for a loan, Hor can make an "oath to the lord," thereby setting his soul up as collateral in place of tangible goods. Egyptian placed a high value on the afterlife, and by making that oath, Egyptians like Hor placed an even more significant asset up for collateral than a home in that their collateral was their afterlife or their very soul.

Debt and The Hindu Vedas:

Speaking of souls and the afterlife, I return to Graeber's monumental book on debt, specifically his discussion on debt in the Vedas. The world's oldest religion to date is Hinduism. The Vedas are a religious text known to date from 1500 to 1200 BC. (Graeber, 2012, p. 56). The Vedas serve as the foundations of the modern Hindu religion and just so happen to talk immensely about debt. In the Vedas, debt is mentioned synonymously with sin and guilt. Hindu worshippers were to pray to their gods that they would be liberated from the shackles (debt). Some poems mention debt literally, such as in Rig Veda 10:34, which talks about forever

wondering gamblers that live in constant fear of Death for the debt they brought upon themselves (Graeber, 2012, p. 56). In other lines of the Vedas, debt was mentioned simply metaphorically.

Figure 6: Image of Rig Vedas 1495, British Library



Similar to the religious aspects in Pharaonic Egypt with the "oath of the lord," the Vedas place tremendous religious guilt with having debt. The Hindu god of Death, Yama, would place a great weight on people with debts. In the literal sense, these weights became the burdens of death itself. In contrast with how debt is viewed today as a financial concept, the Vedas, which are thousands of years old, talk about debt concerning the social concept of guilt or sin. The debt mechanism is the guilt one will feel by having debt. The Vedas warn of debts, and those who continue to carry debts are weighted down. This guilt is similar to the ever-famous "invisible hand" that Adam Smith talks about. In the social sense, the "invisible hand" is that little voice that tells you not to do something because it makes you look bad to society. Similarly, the significant debts (guilt) one has keeps one from becoming one with Brahma. I will note that the Brahmanas further comment on the idea of debt in Hinduism, but I am focusing on the physical texts of the Vedas for my analysis.

As Graeber highlights, the essence of debt in the Vedas was "that human existence is itself a form of debt" (Graeber, 2012, p. 56). I take this quote to mean that the Vedas talk about how guilt is the same as debt, meaning that the human condition will lead to sin and thus create countless debts. This unique debt mechanism functioned solely in a societal and religious medium. The Vedas then can be interpreted to mean that human lives are basically on loan from

the creator and that the second people are born, they are indebted. The only way to lighten the burden of debt is to offer sacrifices. I am not focusing my analysis on the Hindu religion as my paper is an economic historical view on different debt mechanisms. My important takeaway is that the earliest known religion makes human existence a form of debt. My research aims to understand why debt is seemingly so innately a part of human society, no matter the time in history. If what the Vedas say is true, then by our very nature, the second humans are born, they become indebted until the day they die. If this is true, it is no wonder why debt is such a monumental aspect of our civilization.

The Vedaic poems transcend the simple financial definitions of debt. Debt becomes a part of humanity where "one's very existence is a loan taken against Death" (Graeber, 2013, p. 57). The groundwork that the Vedas layout is considered a part of the Primordial Debt Theorists. These Primordial Debt Theorists believe the Vedas concepts go beyond the mere geographical boundary of the Ganges Valley, but were culturally diffused across the globe, laying the groundwork for the social behaviors common across human civilization (Graeber, 2013, p. 57). If what the Primordial Debt Theorists say is true, then the Vedas say human lives are born into a system of constant debt to Death itself. Then the idea of people being in debt would have diffused across the globe several thousand years ago. The most recent dating of the Vedas places them a 6,000 BC, which was before the Sumerian civilization sprung up approximately 4,100 BC because the Vedas existed before Sumer came into existence. The idea of debt could have originated from the Vedas and if Veda's concepts had diffused across the globe. Then perhaps the various debt mechanism I examine in this paper could all have their origins back to the Hindu Vedas. I am merely suggesting it as a possibility and not saying for sure that the Vedas have diffused to the rest of the Human civilization as the Primordial Debt Theorists believe they were.

I also want to comment on why humanity is always making symbols to explain things of a cosmic nature. When strange unexplained things happened to ancient people, they said it was the work of the gods. People created many different gods tied to many concepts, such as life, death, and money. So how did people explain their debts if their debts are of a cosmic nature? As Graber points out in an essay published by French economist Bruno Théret titled "The Socio-Cultural Dimensions of the Currency: Implications for the Transition to the Euro," people created the symbols of currency to repay their debts. Now recall that currency can take the form of IOUs, bank notes, and coins, but for simplicity, think of coins. To quote Théret, "at the origin of money, we have a "relation of representation" of death as an invisible world, before and

beyond life- a representation that is the product of the symbolic function proper to the human species and which envisages birth as an original debt incurred by all men, a debt owing to the cosmic powers from which humanity emerged" (Théret, 1999, p. n/a).

Théret further compares the human condition of birth a death with the constant urge to repay that debt even though you cannot repay the full debt and can only repay interest through sacrifices. To keep it simple, Théret then argues that people need to make sacrifices, and the best way to standardize this into a symbol was for the powers that be to create currency. Take Pharaonic Egypt as a good illustration of Théret's meaning. The Pharaohs were god-kings, as many ancient monarchs were regarded as such. People then owe a debt to the cosmos of the gods. If the Pharaohs were gods, and people could not fully repay the debt they were born into, how could they make sacrifices to decrease their debt or lighten their burden? Théret draws on the answer that the god-kings would stamp their currency and have the people use it and pay sacrifices to temples or pay taxes to the god-king for their debts. In summary, people are born into debt to the god, so the god-kings can create currency to get sacrifices from the people to lighten the burdens of their debt.

This debt mechanism is based on that people are born into debt to the cosmos is fascinating. In my research so far, I have focused more on the financial instruments of debt and how people used debt as a monetary tool rather than a purely social instrument. The Egyptian oath argument that I made early in this paper, I believe, is further supported by the idea from the primordial debt theorists about Veda's concepts of debt at birth. To the Egyptians, the Pharaohs were gods, and their afterlife and religion were the foundations of their society. If I add the concept from the Vedas, in addition to the Egyptian "oath to the lord," the inclusion of death at birth and the need to use the currency to repay one's debt to the god-kings (Pharaohs) blend well together. Because the Pharaohs were gods, the people were indebted at birth. Then using the relationship of their cosmic debt as collateral for the bartering under oath was a severe ordeal that did have vast consequences.

Rome and Political Debt:

As seen with Solon and Athens, the ancient world faced countless debt-related financial waves of panic. The next civilization that faced similar debt-related issues was that of ancient Rome. This portion regarding the Roman debt will focus on political debt. The following work I am drawing on is an evaluation of the late roman republic debt crisis brought about by the

corruption of politics and greed. In *Caesar, Cicero and The Problem with Debt*, M.W. Frederiksen analyzes Rome's debt crisis in the late Republic. The senators of the late Republic era lived very opulent lives and spent more than what they made. Roman politics, very much like politics across democracies today, faced many challenges of corruption and the serving of special interests. I may not be able to speak as much on our politicians' behind-door meetings, but we do know what was going on in Rome several thousand years ago. Being a Roman senator meant you were either rich or heavily indebted (Frederiksen, 1966, p. 128). Usually, the latter became senators, while the former were often the ones pulling the strings.

The political situation in Rome led to a massive amount of debt concentrated in the Roman senate. Debt during the late Republic was used to buy political power. In contrast with the heavy reliance on religious tradition in the Vedas or Egypt, Rome used politics to create a vast debt mechanism where the wealthy funded the senators, indebted for a lifetime to them. Like what had happened in Athens with the massive debts in agriculture and slavery decimating the city-state, Rome in 49 BC faced a "crisis of credibility" that many historians acknowledge (Frederiksen, 1966, p. 132). An interesting thing to note about Frederiksen's paper is that he also mentions Solon's great debt reforms (*seisachtheia).* Like Frederiksen, I also found it strange that out of the many civilizations that rose and fell after the time of Solon, not one of them copied any of Solon's actual debt reforms. Perhaps their credit crisis could have been avoided if Rome had used what Solon had created and successfully implemented.

You might wonder what caused the credit crisis in 49 BC in Rome. Well, it turns out that when the wealthy of a country must pick a side during a civil war, they need money. The money the wealthy needed was tied up in the corrupt Roman senate. The senators were at the epicenter of the civil war and had no money, only irate creditors calling back on their loans. It also turns out that when there is a civil war, many people do not want to work at risk of losing their lives. In sum, the economy of Rome in 49 BC came to a halt, and at the same time, Rome’s wealthy families did not have their money on hand. A common saying at the time was that "legion did not fight legion without powerful inducement," which led to Roman leaders needing to raise cash as fast as possible to keep their armies willing to fight (Frederiksen, 1966, p. 132). This crisis also had the problem of too much debt and insufficient cash on hand. The debt became too concentrated in politics, then when the political situation in Rome collapsed, so too did the Roman economy.

As I have discussed previously, the IOU was a debt mechanism that became the foundation for how many transactions occur in our modern civilization. The Roman system introduces a new concept into the mix. The Roman debt mechanisms in politics had been blowing up into a debt bubble until the civil war came and burst the bubble. It turns out that when there is a major conflict, as in my earlier example in the barter, Spock and Rapunzel no longer use IOUs to trade; they use cold hard cash. To Quote Frederiksen, "in times of insecurity, credit could collapse, and a man's wealth reverted to the sums of money that literally supported the credit relationship" (Frederiksen, 1966, p. 132). People facing a crisis will likely only trade for cash since cash and not the IOU is what people prefer. Cash can be used for food, weapons, and other necessities, while the promise of an IOU has little weight when the promiser could be dead soon. People do not care about IOUs when their lives are at risk; they care about the necessities they need to survive. The use of debt in a political nature led to a major crisis in Rome. Nevertheless, similar to the great recession in 2008, society was open to speculative debt bubbles that would pop and deal massive tolls on the economy.

I would like to believe that humans learn from their mistakes. However, perhaps debt is so ingrained in our civilization that even in the face of economic collapse, humanity is fine with massive debt systems like the political debt bubble that occurred in Rome in 49 BC and the housing bubble in the United States in 2008, which crippled the global economy. History has shown that time and time again; different civilizations rely on a debt too much to cause a massive shockwave. After recovery, civilization returns to the debt system like a moth to a flame.

Rome and The Loan:

The work of Economist Peter Temin is known for his analysis of the Late Roman Republic and, later, the Roman Empire. Temin highlights the fact that Romans loved making loans. As I mentioned, the entire Roman senate had their fortunes loaned to them by the elites of society, so it does follow that loans were prevalent in Roman society. Loans are one of the simple debt mechanisms that can be used effectively. The Roman civilization was financially sophisticated, and we know this from surviving documents from 70 BC. Temin’s recounts the story of Collumela's loan strategy for vineyards: "if the husbandman would enter this amount as a debt against his vineyards just as a moneylender does with a debtor, so that the owner may realize the aforementioned six percent interest on that total as a perpetual annuity, he should take

in 1,950 *sesterces* every year. By this reckoning, the return on seven *iugerum*, even according to the opinion of Graecinus, exceeds the interest on 32,480 sesterces" (Temin, P, 2006. p. 143).

Romans knew how to make money off loans, which is today a foundational aspect of the global banking system. Another use of the classic loan by Rome was to finance large maritime trade. Trade is one of the reasons Rome had such a uniquely high standard of living for the time. Temin highlights that Rome sustained higher living conditions than some European countries in the eighteenth century (Temin, P, 2006, p. 135-136). The loan was a powerful debt mechanism that helped finance the Roman civilization to enjoy the benefits of extensive trade and high living standards. Now I am not saying Rome invented the idea of loans, but I am highlighting that Rome just because very specialized and efficient at the financial uses of loans and interests.

The longer a musician practices, the better they get at their instrument. Just like a musician, Roman financiers had the basic idea of debt and loans, but over time got better and better and used the mechanism to the point where it became second nature for them to make a profit off loans. In the Roman case for loans, I believe that the basic concepts for loans were taken, and then over time, specialization made loans an innate part of the Roman financial system. Unlike barter, where I believe people just have that idea of trading goods for other goods, the loans used in Rome were basic concepts that, over time, became an innate part of society. To go back to the musician, if the musician is successful and has apprentices, then over time, the apprentices become successful and have their own apprentices. The process then repeats over and over to the point where most of society is literate in using loans, which was the case for Roman society. I believe that debt mechanism can become innate through the specialization and gradual diffusion of the mechanism in society, as seen in Rome.

Conclusion:

Throughout this paper, I have analyzed different debt mechanisms across the human civilization timeline. From some 4,500 years ago to 1694 England, debt has been and will continue to be a part of humanity's story. No matter where I looked, I always seemed to find debt mechanisms that, at their foundations, mimic the functions of one another. I believe that debt is just a natural part of being human, where general concept such as barter and IOU is ingrained in us at conception and as our civilizations branch off from one another. The mechanisms adapt to society's needs.

In ancient Sumer, I explored the advanced accounting tools that the vast temples used to track all the various commerce occurring at the temple. I compared the clay tablets to modern-day credit cards as simple financial tracking tools to help financial institutions know where to transfer currency or goods. There was a discussion of the Credit Theory of Money that believed money is a simple accounting tool that institutions utilize to track debt or other financial information. Then I discussed England in 1964 when the first semi-modern bank was established in England, which had roots in the barter system. The barter used IOUs because of the lack of the "double coincidence of wants" and used banknotes to mimic official state-backed IOUs became more tempting when a monarch or government backed them.

From England, I went back to Attica, Greece, during the time of Solon when Athens was facing a national debt crisis. I discussed the buildup of slavery, which ultimately destroyed the Athenian economy and led to the groundbreaking reforms offered by Solon in his *seisachtheia*. In Athens, debt led to a crisis that forced society to change, but debt persisted in Athens long after the time of Solon ended. I then discussed the precedence that Solon drew on from the Neo-Assyrians and Sargon the II's Great Proclamation that forgave debt across the Near East. From that research, I posited that in addition to the debt being a universal constant, so too has the absolving of debts across human civilization.

I then arrived at the Egyptian oath as a religious take on the classic IOU. In Egyptian society, religion was a big part of society's makeup in that "the oath to the lord" evolved into debt mechanisms that replaced IOU in transactions. Egyptian placed their soul on the line for their debts if they could not fulfill their part of the transaction. In Egypt's case, the oath was a branch off from the IOU, whose essential concepts were innate to all human societies, but where Egyptian society changed the IOU into the oath instead to fulfill a unique societal role.

I next discussed the implication of the Hindu Vedas and how humanity is born from a debt to the universe or god(s) that is repaid over one's lifetime until death. I analyzed how the Vedas set the foundation that people are born into debt, and the relationship between sin, guilt, and debt is not unique to any religious tradition. As the Vedas are the oldest known surviving texts that talk about debt and sin, then perhaps it was from the Vedas that the idea that people are born into debt was diffused across the globe over time to the point that many civilizations came to regard debt as an innate part of the existence.

Lastly, I looked at the late Roman Republic into the Early Roman Empire. I discussed the role debt played in politics and how, across history, debt has been used to cash in favors or win over politicians. I also investigated how political debt became so entrenched in Roman politics that when the civil war occurred in 49 BC, none of the politicians had cash. There was a mad dash to secure funds so that the Roman legions would fight each other. I next discussed how successful Roman financiers were at using loans to make money and the financial sophistication that Romans had for their time, which led Rome to have better living standards than most European countries during the Middle Ages. Rome took the fundamental debt mechanism loan and created a vast system that became culturally ingrained in the Roman way of doing business, which was diffused across the whole Empire over time.

It is evident that in each of the various civilizations I discussed, countless debt mechanisms are used in societal and financial situations. I believe it is essential for human civilization today to understand that debt is a concept that transcends the simple financial concepts that people first think of. I implore people to think of debt more from a societal perspective because when people ignore the societal aspect, a crisis ensues, as seen in ancient Greece, Rome, and even the United States in 2008. I looked at how debt can transcend the financial moniker into unique adaptions that I analyzed in Egypt and the Hundi Vedas. Debt is far more encompassing than people tend to think, and I believe debt has been and will continue to be an innate part of human civilization.

References

Cruz-Uribe, E., & Nims, C. F. (1990). Troubles with a Debt: An Egyptian Papyrus Document. *Journal of Near Eastern Studies*, *49*(3), 281–290. http://www.jstor.org/stable/546247

"Discharge in Bankruptcy - Bankruptcy Basics." *United States Courts*, https://www.uscourts.gov/services-forms/bankruptcy/bankruptcy-basics/discharge-bankruptcy-bankruptcy-basics.

Frederiksen, M. W. (1966). Caesar, Cicero and the Problem of Debt. *The Journal of Roman Studies*, *56*, 128–141. https://doi.org/10.2307/300140

Graeber, D. (2012). *Debt: The first 5,000 Years* (Expanded Edition). Melville House.

Josine Blok, & Julia Krul. (2017). Debt and Its Aftermath: The Near Eastern Background to Solon's *Seisachtheia*. *Hesperia: The Journal of the American School of Classical Studies at Athens*, *86*(4), 607–643. https://doi.org/10.2972/hesperia.86.4.0607

Temin, P. (2006). The Economy of the Early Roman Empire. *The Journal of Economic Perspectives*, *20*(1), 133–151. http://www.jstor.org/stable/30033637

Théret, B. (1999). The Socio-Political Dimensions of the Currency: Implications for the Transition to the Euro. In: Vissol, T. (eds) The Euro: Consequences for the Consumer and the Citizen. Springer, Boston, MA. https://doi.org/10.1007/978-1-4615-5213-0_3

Wilson, J. A. (1948). The Oath in Ancient Egypt. *Journal of Near Eastern Studies*, *7*(3), 129–156. http://www.jstor.org/stable/542530