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The Early Foundations of Western Civilization and Culture

西洋文明と文化の初期の基盤

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Hunting may have made us human,
but farming forever altered what being human meant.[1]

The function of a myth is not to explain how things are,
but why things are the way they are.[2]

I. Introduction

The 19th century journalist and newspaper editor, Horace Greeley, once exhorted young American men to "Go West."[3] It is perhaps due to much of human migrations' relentless movement toward the setting sun that the world thinks of Western civilization and culture as being centered on the "Western Hemisphere," the combined continents of North America and South America, or the western peninsula of the Eurasian landmass we now call Europe. Nonetheless, the early foundations of Western civilization and culture are not to be found in the western extremities of the New World or the Old World, but closer to the center of the Eurasian continental island best geographically categorized now as Southwest Asia.

Southwestern Asia has been referred to by many names over the millenniums depending on the perspective and location of the mapmaker. The most common recent term has become the Middle East, the center of the Eurasian landmass between Europe in the west and Asia in the east. In the 19th century this same region in Southwest Asia was much more likely to be called the Near East, as opposed to the Far East along the Indian and Pa-

cific Oceans, where Eastern civilizations based on separate sets of geographical conditions and much wetter climates developed in South Asia, Southeastern Asia, and East Asia. It was also in the 19th century that the term Fertile Crescent[4] was coined to describe the part of Southwest Asia that spawned Western civilization and culture.

However, to properly discuss the early foundation of Western civilization and culture one must recognize these words are constructs of the 19th century too. The modern use of 'culture' with its multiple meanings related to artistic and intellectual achievement, as well as customs and beliefs, is a 19th century idea expanding on the early understanding of culture meaning simply to grow or cultivate plants. Likewise, the modern use of 'civilization' with its connotations of being "civilized," i.e., enlightened and well-mannered is also just a 19th century expansion upon the concept of cities, and all the cultural, economic, and social diversity that gathers within them.[5]

To really explore the early foundation of any civilization or culture, one must look at what existed before cities and agriculture even appeared. To do so, one must rely on archeology, a field that also developed in the 19th century, to see the true context behind written history. Consequently, this paper will start out with an overview that focuses on the pre-historical era from roughly 10,000BC to 4000BC as some human tribes of hunter-gathers in Southwestern Asia began their slow transition from a largely nomadic lifestyle to one that was essentially settled and based on the food production of the founder domesticates native to the Fertile Crescent. This domesticated food package will be diffused across the East-West continental axes around the Mediterranean Sea into both Northern Africa and Southern Europe. The diffusion of this essential food production package will progress northwards across Europe to eventually become the basis of the Western diet as we know it.

In the following sections, we will look at some of the key conceptual and social developments in the Fertile Crescent leading up to the establishment of cities. Cities are complex political and economic systems that evolved with increased food production, which enabled the development of labor special-

ization to support economic diversification within early cities and hence the concept of civilization itself. Of course, key to this as history begins to unfold was the invention of written records of human interactions and trade between settled peoples.

II. Setting the Stage — Material Foundations: We Are What We Eat

Although the average person would be right to imagine that the Fertile Crescent Civilizations begin in the flood plains with the irrigation farming of the Mesopotamian Tigris and Euphrates River basin and the Egyptian Nile River basin, the founder food package actually comes from a limited number of annual plants found at various elevations in southwest Asia well above those flood plains.[6] The semicircle arc of the Fertile Crescent first described by the American archaeologist Henry Breasted is based on what geographers call the 200 millimeter isohyet of annual rainfall that runs along the foothills of the Mediterranean Sea coast to the West, the Taurus Mountains to the North and the Zagros Mountains to the East.[7] These are regions that had enough precipitation to allow for the initial food package to flourish in a wild state without human intervention.

As Jared Diamond skillfully argues in his book *Guns, Germs, and Steel*, geography, climate, and the types of flora and fauna available were key factors in promoting the transition from the hunter-gather lifestyle to one based on "food production" involving the domestication of wild plants and animals. Moreover, it was the geographic variation across continents that would help determine whether, or when, people in different areas around the world would become herders and/or farmers. Consequently, it was the development of food production starting about 11,000 years ago in the Fertile Crescent upland with sufficient annual rainfall that led to contrasting historical fates across the world. In other words, it was food production that indirectly led to the development of guns, germs and steel, and the eventual conquest and domination by "Western Civilization" of much of the less populated world, e.g., the continents of North America, South America, and Australia[8]

from the 16th century onward.

The transition from hunter-gather to a more sedentary lifestyle is an interesting one and deserves more time to be considered in depth. The ending of the Earth's geological epoch known as the Pleistocene Era that ended with the last Ice Age, occurred roughly 13,500 years ago around 11,500BC with the gradual warming of the Earth and the melting of the Arctic glacial sheets. The ending of the last Ice Age corresponds to the approximate end of the human archeological epoch called the Paleolithic Era, also known as the Old Stone Age. The domestication of plants and animals in some parts of the world would have begun within a few thousand years after the end of the last Ice Age.[9]

By the end of the Pleistocene Era, humankind would have already gone through the significant evolutionary changes known as the "Great Leap Forward" that are supposed to have happened around 50,000 years ago. The actual trigger of the leap is still unresolved, but the two physiological components are: 1) the development of the voice box, the anatomical basis for human language, culture, and creativity, and 2) the changes in the organization of the brain, which made the former possible, that supposedly happened around the same time.[10] These changes would have complemented earlier changes in the size of the brain that are often associated with the control of fire and the ability to cook food, an innovation that enhances digestion and increases the energy humans can get from food allowing for larger brains and perhaps more communal living in the sharing of meals.[11] In any case, the ability of humans to organize themselves into cooperative communal groups for hunting game, as well as to invent and utilize stone and bone tools were all made possible by the leap. Tools such as hooks and nets to catch fish, as well as spears, ropes, and snares to catch smaller land game, and weapons like harpoons, spear-throwers, and bows and arrows to hunt larger prey at a safe distance were all part of the human tool kit as they started expanding their geographical range from their origins in Africa and the Eurasia landmass to Australia and North and South America in the latter years of the Pleistocene Era. Moreover, these people had technology such as needles and

line to sew skins into clothes to survive cold climates and to obtain and process all the necessities of life: food, clothing, and shelter wherever they wandered.[12]

The current epoch after the last Ice Age we are living in now has traditionally been called the Holocene Era, which was coined in French in the 19th century and is derived from the Greek root of 'holos' meaning "whole" and 'kainos' meaning "new".[13] However, in recent years there has been a debate concerning the impact of humankind on the Earth and its environment. Some have argued that the Holocene Era effectively ended with the recently recognized impact of human induced global warming and climate change, while others have reasoned that Holocene Era should simply be renamed the Anthropocene Era in recognition of the continuing impact humankind has had on the Earth's environment over the last 13,500 years or so.[14]

Two of the early major impacts of human activity are considered by many to be the mass extinction of most large land animal species that evolved in Australia and the Americas respectively, isolated from human contact. As the argument goes, the reason large land animals of Africa and Eurasia survived into modern times is because they had coevolved with humans. In other words, those animals had had time to acquire fear of human hunters as they developed their hunting skills. In contrast, the large animals of Australia and the Americas were essentially taken by surprise by the well-organized human hunting parties with their tool kit of weapons and were effectively exterminated as humans expanded into these previously isolated continents. Other, though, have argued that climate changes were responsible for the extinction of most large animals in Australia and the Americas. In any case, these extinctions would have limited the number of large animals available for domestication.[15]

Although the domestication of plants, the invention of farming, and the development of large excess surpluses of food that allowed for labor specialization has long been considered the main impetus for the sedentary lifestyle and what would eventually be called 'civilization' or the civilized life in villages, towns, and cities, the domestication of one animal predates all these in-

novations by over one thousand years. The domestication of wolfs, i.e., wild dogs into "man's best friend" would set the precedent of how human culture would change as humans began to cohabitate and have symbiotic relationships with certain animals.

The domestication of wolfs into dogs is exceptional in that dogs are the only domesticated animal that are carnivores except for cats, and almost everyone realizes that cats are never fully domesticated to the same degree as dogs.[16] The wolf ancestors of modern dogs were most likely strategic competitors to humans. Both species not only hunted the same large game such as moose or bison in cooperative groups, i.e., wolf packs versus human hunting parties as cursorial predators. Wolves can also hunt alone employing ambushing tactics for smaller prey like beaver just as humans can.[17] It is these similarities as well as the fact that dogs like humans are, in fact, omnivores rather than strict carnivores, which probably led to their initial interspecies alliance, with dogs serving as sentinels and hunting companions[18] as well as pets, just as they do today.

The domestication of dogs undoubtedly made humans more successful hunters, but the consequence of this success may have been what forced humans to look for new sources of food. Large herds of gazelle roamed the area we call the Fertile Crescent at the start of the Holocene Era and were an important source of wild meat for human consumption until overexploitation significantly reduced their numbers. In a relative short span of time between 9000BC and 6000BC, human populations in the area moved from relying completely on wild food sources to becoming almost totally dependent on domesticated plants and animals.[19]

The process would not have been a straight line and undoubtedly involved lots of trial and error. However, humans depending on wild sources for their food supply would have been very familiar with the plants and animals at their disposal, and thus expert in selecting what to spend their time on. Archeological evidence gathered from the site known as Tell Abu Hureyra in modern Syria near the Euphrates Valley, shows that hunter-gathers living in the area between 10,000BC and 9,000BC were collecting

seeds from a wide variety of annual plant species. In general, these seeds fall into three categories: seeds that are nontoxic and readily edible, others that had toxins that were easily removed and subsequently edible, and a small number of seeds that are traditional sources of dyes and medicines.[20]

The major cultural shift from hunting-gathering to food production would not have happened in a vacuum and must be considered alternative survival strategies[21] just as sedentary farming as opposed to nomadic herding would become in later times. The forces behind cultural change whether they be viewed as invention, diffusion, and calamity[22] or innovation, diffusion, and acculturation[23] as outlined by Samovar & Porter in their *first and fourth editions of Communication Between Cultures* respectively were undoubtedly part of the process.

The exact causal determinants pushing humans to adopt food production probably vary a bit over time and locale, but Diamond pointed out five factors that greatly influence the cultural transition around the Fertile Crescent. First, the decline in wild game either due to climate change or depletion of wild game caused by improved hunting skills, what amounts to a natural or manmade calamity making the hunting-gathering lifestyle less rewarding and promoting a cultural change, i.e., the loss of gazelle herds mentioned earlier causing what is called a substitution effect in economics making either herding domesticated animals or cultivating domesticated plant sources of calories more profitable. Second, climate change and the warming of the Fertile Crescent area greatly expanded the habitat of wild cereal plants that would become the precursors of our most common domesticated crops. Acculturation or acclimation was at work here, making hunting-gathering less rewarding over time and promoting a substitution effect. Third, inventions, technologies, and techniques such as sickles, baskets, mortars, pestles, and roasting techniques originally used in the collection, processing and storage of wild foods that appeared after 9,000BC around the Fertile Crescent served as the innovations leading populations steadily and most likely unconsciously toward plant domestication. Fourth, there is the interactive link between a more sedentary lifestyle, the rise in food produc-

tion and the growth of human population density. In general, hunting-gathering lifestyles require more land to obtain the same number of calories as lifestyles based in domesticated food production, although the hunting-gathering diet is often healthier in many respects. Therefore, in terms of edible calories per acre, food production can support higher population densities. The more sedentary lifestyle also has a feedback loop with regards to shorter time periods between births, increasing populations more and quickly and forcing the expansion of and greater potential dependence on food production. Finally, the larger populations of food producers lead to the outbreeding and geographic displacement or extinction of hunter-gathers in the same area due to the positive and negative consequences associated with food production such as better technology, germs, and diseases unknown to more naturally less dense populations with lower levels of labor specialization.[24]

The link between most domesticated plant crops from the Fertile Crescent area and their wild ancestors is well documented. The Mediterranean climate of Southwestern Asia with its relatively mild wet winters, and long dry summers provided some distinct advantages for the local cereals such as wheat and barley, and pulses like peas and lentils that that would become the founder domesticated crops of the Western diet. The climate promotes species of annual plants that dry up and die during the long dry seasons yet produce seeds that easily survive the long dry season and then grow rapidly once the rainy season returns. This makes them ideal for storage and eventually transport. Another advantage was that the wild cereal ancestors were widely abundant in the Fertile Crescent and easily collectible in large quantities over a relatively short period of time, thus providing a supply of storable food throughout the year as hunter-gathers start to settle down in more permanent villages.[25]

The range of elevations around the Fertile Crescent within a short distance also allowed for staggered harvest seasons with wild plants at lower elevations being harvested earlier than other plants growing at higher elevations spreading out the work of collection and the food supply availability.[26] However, this is an advantage that would disappear as large-scale farming at

a similar elevation became common.

The template for what makes an animal domesticable was dubbed by Jared Diamond as the *Anna Karenina* principle, and was summarized as: "the animal's diet, growth rate, mating habits, disposition, tendency to panic, and several distinctive features of social organization."[27] Since large carnivores tend to view humans as potential prey, the most useful large, domesticated animals are herbivores. However, of the 148-candidate large wild terrestrial mammalian herbivores only 14 species have been successful domesticated.[28] Growth rate means that a species needs to grow quickly to be worth keeping around and, like dogs, most of these mammals reach breeding maturity in about one year. Mating habits become important since many animals have very particular breeding habits and will not procreate in captivity. Although animals, like humans, have varying characters and dispositions, some species have nastier dispositions than others that make them perpetually dangerous to humans and other animal species.[29] This is related to the tendency to panic in reaction to humans and other animals in the proverbial "fight or flight" scenario, where nasty dispositions lead to the fight reaction and panic responses lead to flight reactions. Flight reactions can be the easier of the two to manage depending on the intensity of the tendency to panic. Most animals will bolt in fear, but some wild animals have social structures that limit supposed self-destructive lemming like responses, which is actually just a popular myth according to recent research.[30]

The wild ancestors of most modern domesticated mammals have three common social traits: "they live in herds; they maintain a well-developed dominance hierarchy among herd members; and the herds occupy overlapping home ranges rather than mutually exclusive territories."[31] Herd hierarchies promote natural leadership roles due to rank within subgroups and between subgroups among herd members that allow more adults to coexist without constantly fighting because members know their rank. The social organization faciliates both herding, i.e., keeping the groups together as a group going in the same direction following dominant leaders, and tolerance of being in crowded conditions. The instinctive following of dominate leaders

of their own species under wild conditions can be transferred, “imprinted” to humans once the animals are in captivity and domesticated. The imprinted dominant leadership role of humans and their helpers like sheepdogs and eventually horses, can be used to drive domesticated animals into pens or corrals and domesticated herd animals can handle being in close quarters well because they were naturally bred to living in tightly packed groups in the wild.[32]

Consequently, due to the availability of suitable wild plants and animals found within the Fertile Crescent, by roughly 8000BC the early settlers of the region had assembled the basic food and fiber production source package that would establish permanent agriculture settlements in the area and beyond. The eight founder crops included 3 cereals (grains): emmer wheat, einkorn wheat, and barley as the main source of carbohydrates, 4 pulses (beans): peas, lentils, chickpeas, and bitter vetch as a key source of vegetable protein, and flax plants and their seeds that are used as a source of both fiber for making clothing and edible oil.[33] In addition, three of the four herd mammals used for food and clothing production, sheep from the central Fertile Crescent, goats from either the mountainous eastern Zagros Mountains or southwestern Levant areas of the Fertile Crescent, and pigs from the northern central Fertile Crescent were all part of the early Fertile Crescent agricultural resource package by 8000BC. The fourth, cows from the western Fertile Crescent including Anatolia would have been added no later than 6000BC.[34] It is interesting to note that only flax and barley are commonly found in the wild outside Fertile Crescent.[35]

The founder food package of domesticated plants and animals from the Fertile Crescent uplands would spread out in centrifugal waves like ripples on a pond after a stone is thrown in. The rapid diffusion of founder crops along an east-west axis across Asia, Europe, and northern Africa was due to similar climates and seasonal variations within the temperate latitudes.[36] The ripples of the founder crops and food production would have reached Cyprus and Greece in the west and the Indian subcontinent in the east by 6500BC. However, climatic and temperature difference within the temperate latitudes

did constrain how much of the food package could be adopted. For example, it was too warm in Egypt for einkorn wheat to be adopted, but emmer wheat, barley and consequently the production of beer made the migration to the irrigated lowlands of the Tigris and Euphrates River basin and the Nile River basin by around 6000BC. The diffusion of the food production package would continue to ripple westward reaching central Europe by 5400BC, the western Mediterranean, central Italy, southern France, and southern Spain by around 5200BC,[37] northwestern areas of Europe like Germany by around 5000BC,[38] southern England and western France by roughly 4000BC and the extremities of Europe, southern Norway, and Portugal by 2500BC.[39]

As more groups of people became entrenched in sedentary life in villages, a second stage of crop development focusing on fruit and nut trees that take as long as a decade to reach maturity and production began to be domesticated around 4000BC. Olives, grapes, figs, dates, and pomegranates were among the earliest fruit trees domesticated in the eastern Mediterranean.[40] Almonds would have been added to the list of domesticates by 3000BC and were one of the foods placed in the tomb of the Egyptian Pharaoh Tutankhamen in 1325BC after his death to sustain him in the afterlife.[41]

Although more people were becoming settled, trade and better transportation would be required to reap greater benefits from excess farm production and economic specialization. Two animals, key to the future of land transport, were domesticated just outside the Fertile Crescent around 4000BC, the donkey in Egypt and the horse in the grassy Eurasian Steppes of the Ukraine.[42] The horse would go on to be key to military conquest across the Eurasian landmass from the Atlantic Ocean to the Pacific Ocean and back for the next 5000 plus years. Even in their early stages of domesticated use when horses were still ridden bareback, there is some evidence that the expansion of Indo-European languages westward and the replacement of other earlier western European languages can be attributed to the military power of the horse.[43]

The invention of the wheel around 3000BC would spread rapidly east

and west from its origins somewhere in southwest Asia.[44] The ox and donkey would have been the first domesticated animals to pull wheeled carts, but it was the horse-drawn battle chariot invented around 1800BC that would revolutionize warfare from the Mediterranean Near East to China. The donkey-drawn cart would be no match for the horse-drawn war chariot as the horseless Egyptian would learn in 1674BC when the Hyksos invaded Egypt and made themselves pharaohs for a while.[45] Such technology, however, is easily diffused and that is why the Hyksos reign in the Nile Delta was so short, and Egypt's native 18th Dynasty of God-kings retook their rightful place over a unified Egypt within a century or so.[46]

III. Human Perception — Spiritual Foundations: We Are What We Think

Long before humans became sedentary and tied to their domesticated plants and animals that required their care and defense, humans had some sort of conception of themselves as not just bodily entities, but also spiritual ones. It is perhaps self-evident that the mind and the body, though locked together while one is alive, do seem to part ways at death. *Homo Sapiens*, "the wise humans"[47] like their predecessors *Homo erectus* and *Homo neanderthalensis* all practiced some form of ritual burial, which seems to imply some concept of the soul.[48] If what the Greeks called 'psyche' (breath, life, soul) and the Romans called 'animus' (spirit, mind)[49] can separate from the body, it can survive beyond the body, and disembodied spirits can exist in countless things: animals, trees, rocks, mountains, lakes, rivers, oceans, sun, moon and stars.[50] This belief that all things in creation have an interconnected spirit is known as *Animism*, "the belief in a supernatural power that organizes and animates the material universe."[51]

Due to the evolutionary changes known as the "Great Leap Forward"[52] mentioned earlier, our early ancestors were capable of abstract thought and analogical reasoning, making theories about their surrounding and sharing their thoughts, ideas, and beliefs with others, as well as passing them down to their progeny in oral traditions.[53] Although we can only imagine the con-

tent of their oral traditions, they did leave behind art work in the form of cave drawings and paintings that imply they had some notion of the cosmos as layered with the sky, as a dome only reachable in dreams, the earth, as a middle ground between the sky and a shallow underworld. It is this underworld of caves and grottos where they left their paintings and sculptures that seemed to be connecting them spiritually to their world and beyond.[54] Images depicting animals in these ancient cave paintings were commonly assumed to be some sort of "hunting magic" to assist the painter on future hunts. However, the lack of resemblance to actual species in the local diet led the French anthropologist Claude Levi-Strauss to wonder if these early artists created their images of animals "not because they were 'good to eat' but because they were 'good to think.'"[55] Moreover, the cramped environments of these undergrounded spaces could only be shared by just a few people at a time. The caves and the images projected on their walls, or perhaps released and emanated from the walls, seems to point to being part of broader spiritual experiences and rituals. This leaves the impression that these paintings and sculptures might be mythograms to be read like later religious texts.[56]

The nineteenth century English anthropologist Edward Burnett Taylor was among the first to hypothesize that the human concept of the soul separated from the physical body must have come from the dreams and visions that occur while humans are asleep.[57] Only within one's dreams can one think, imagine, be, do, or see things; one cannot physically be, do or see outside one's dreams, especially experiences like talking to relatives after they die, asking for help in the hunt or the healing of a sick child.[58] Eventually, this type of thinking would lead to the worship of one's divine ancestors at the family hearth or altar, thus providing the focus of sedentary life and a fixed relationship to the soil.[59]

However, before humans can become fixed in and fixated on the land of their fathers, they must decide to stop their perpetual foraging for new sources of food, especial game, that has led them to wander to the ends of the earth scavenging to survive. In this process of wandering though, hu-

mans develop a couple of cognitive attributes that are perhaps the flipside of the imprinting of human hierarchical leadership on some herd animals mentioned earlier.[60] Humans have similar fight or flight instincts to many other animals that keeps them safe, but along with adrenal reactions and panic, humans also have what is called HADD. A Hypersensitive Agency Detection Device that leads people "to detect human agency, and hence human cause, behind any unexplained event: a distance sound in the woods, a flash of light in the sky, a tendril of fog slithering along the ground. HADD explains why we assume every bump in the night is caused by someone doing the bumping."[61] This hypersensitivity is useful in that it is better to prepare to fight off a predatory that turns out to be just a tree than to get it wrong and be the predator's meal. A related cognitive process is what is known as the Theory of Mind that allows us to view and understand other people in the same way we understand ourselves. In effect, allowing us to imprint "ourselves as the primary model for how we conceive of everyone else."[62] This is sort of the opposite of "putting yourself in someone else's shoes," or perhaps the true meaning of the idiom. The Theory of Mind not only allows for the transfer of believes such as having a soul separate from the body onto other people, but also imparting agency onto nonhumans and objects we can relate to in some way. Everything from toys to sacred trees can have a soul and agency, and eventually idols that humans can build or sculpt can hold a spirit and such agency too. All that is required is belief.[63]

IV. Göbekli Tepe — Eden and Its Aftermath: We Were Modeled from Clay

Determining what ancient humans believed exactly in prehistory before written records is basically an impossibility, but that does not stop archeologists or religious scholars from trying. It is generally believed that the ancient myths that were eventually written down after writing was invented were part of earlier oral traditions, known as "folk memories". The numerous tales of devastating floods, or gods dying and coming back to life are part of that oral collective memory passed down through generation.[64] Stories of

earthly paradises where humans lived with the gods and did not have to work, e.g., the Garden of Eden, or *Mekone*, where the Greek gods and mortals met,[65] are folk memories. Prior to living in Paradise with the immortals, mortal humans were formed by God or the gods from the earth or mud and had the breath of life put into them by deities.[66] The area around Göbekli Tepe has been held up as a possible birthplace for the Garden of Eden story for several reasons, including its location in the vicinity of the headwaters of the Tigris and Euphrates Rivers.[67]

Göbekli Tepe has probably done more than any other archeological dig in the ancient Fertile Crescent to disrupt scholars' commonly held belief about the causality between farming, the sedentary life, and the building of religious monuments, requiring significant numbers of labors. Before the discovery of Göbekli Tepe, it was always assumed that farming was a prerequisite for the latter two.[68] Nonetheless, archeological discoveries in and around Göbekli Tepe have shown it was built before the advent of farming not after.[69] There is also somewhat mixed evidence that the hunter-gathers that took on the carving and moving of limestone pillars with flint and wood tools to build the large ritual sites at Göbekli Tepe were largely sedentary in the area, if not all-year-around, at least during construction periods.[70] Its exact use following its construction is somewhat undetermined other than it would have been used as a gathering and feasting place. In addition to whatever rituals were performed, large quantities of wild game, as well as starchy cooked gruels, baked breads and beer prepared with stone utensils and containers using stone-ground wild grains harvested in the area were consumed there.[71]

The main reason agriculture developed earliest in the upland areas of the Fertile Crescent around Göbekli Tepe was that wild resources were truly plentiful there.[72] This led Klaus Schmidt, the archeologist who started the Göbekli Tepe dig in the early 1990s to compare the area with the Paradise described in the Garden of Eden myth found in the Book of Genesis (2:5-25) in the Old Testament of the Bible. The area would have had herds of various wild animals, rivers full of fish, trees with fruits and nuts, and fields of wild

cereals[73] all available for the taking. Göbekli Tepe, the potbellied hill where hunter-gathers chose to meet and build their cathedral on the hill became a UNESCO World Heritage Site in 2018. The site is often described as the world's first temple and would have overlooked an amazing natural bounty 11,000 years ago.[74] The site's carved pillars with human features that sit in the center of each of its enclosures are perhaps the first symbols of humanized gods, or gods that humans made in their own image to commune with.[75] It is uncertain whether the limestone statues at Göbekli Tepe "represent a pantheon of individual, personalized gods or are merely an expression of anonymous deities."[76] Perhaps, the answer will be found one day in the carved glyphs of lions, scorpions, spiders, and snakes that apparently look quite frightening.[77] However, if Reza Aslan, the author of *God: A Human History*, is correct, the construction of Göbekli Tepe was just the beginning of a "tectonic shift from primitive animism to organized religion."[78] A process that would lead humans away from praying for success in the hunt and start praying for success with the harvest. A process that would make humans the masters of both of their domesticated plants and animals but also indebted to the gods to ensure their well-being. A process that over centuries would have humans project all their values and traits on various individual, personalized deities until the pantheon of the gods would embody every good and bad quality that humans possessed.[79]

By 7000BC villages almost completely dependent on agriculture would have existed throughout the Fertile Crescent with sufficient rainfall for farming. However, shortly thereafter two cultural shifts seem to have occurred. (An exit from the garden and journey to the world of toil induced by climatic change or environment degradation, perhaps.) The abandonment or contraction of some earlier settlements initially occurred in Anatolia and the Levant in favor of less complex societies, most likely by adopting more nomadic shepherding lifestyles. In addition, there was a shift of farming villages to northern Mesopotamia at lower altitudes along the Tigris River to the east both within and just outside the dry-farming (rainfall dependent) regions. Newly developed farming communities with insufficient rainfall would

rely on irrigation.[80] However, irrigation systems did not need to be too complex at this point and could be handled by small communities.[81] Pottery dating from around 6900BC discovered in both the rainfed agricultural areas of Hassuna and the irrigated agricultural zone of Samarra of northeastern Mesopotamia have lent their names to two early archeological periods and cultures determined by pottery styles.[82] These early ceramic dated cultures were followed by the Halaf Period (6500-5550BC) where rainfed farming societies emerged across northern Mesopotamia from modern Iraq through Syria and into the Levant. The Halaf potters used different types of clay than other areas and were able to produce superior quality ceramics with elegant and elaborate designs. In addition to earthenware containers, Halaf culture is also known for its production of amulets, geometric style stamp seals, and female terracotta figurines as well as its distinctive round domed buildings known as *tholoi*.[83] Halaf culture was absorbed and replaced by the Ubaid Period (5500-4000BC) culture that originated on the flat alluvial plains of southern Mesopotamia. During this period villages developed along the southern flood plain using irrigation channels to farm the rich river silt deposits. The river delta and adjoining Persian Gulf Sea were also fished and Ubaid pottery has been discovery along the west coast of Persian Gulf. A variety of ceramic pendants, seals with human and animal designs and clay token with symbols believed to represent commodities from this period have been found. Moreover, early evidence of villages expanding into towns and monument building at sites such as Uruk and Eridu have been discovered. The Ubaid culture was succeeded by Uruk culture with significant continuity, but on a much grander scale as fully enclosed walled cities were developed.[84]

V. Cities & Gods — Ziggurats & Pyramids: Beer, Bread, & Cults

The Ancient Sumerian/Babylonian and Egyptian Civilizations were both built on irrigated river agriculture. However, the Tigris and Euphrates River Basin and Nile River Basins are quite different geographically, and their respective geographical environments led to different historical experiences.

The flat open Mesopotamian plains promoted almost constant military invasions and political upheavals from all directions. In contrast, the desert plateaus on both banks of the Nile Basin tended to foster political unification along the Nile River and isolation from the outside world, except in the lowlands along the Mediterranean coast and directly along the Nile River itself. Nonetheless, both early civilizations were erected on argicultural surpluses of grain collected as taxation by the state/religious authorities. It was these surpluses that would pay for canals, temples, and pyramids. Grain as the main staple for both civilizations became the medium of exchange, i.e., a sort of edible money that was consumed in solid and liquid forms as bread and beer.[85]

The Nile flows over 6000 kilometers to the Mediterranean Sea starting from an elevation of around 2400 meters; whereas the Euphrates starts at an elevation of around 3500 meters and reaches the Persian Gulf after just 2800 kilometers.[86] Consequently, the Nile has milder, more predictable flows inundating the relatively narrow deep valley basin with water and rich silt in late summer, preparing the ground for planting of winter wheat and barley. In contrast, the Euphrates rushes down off the Anatolian heights to a flat mostly arid plain more unpredictably in the spring, breaching its banks erratically and potentially drowning crops or anything in its path under floodwaters. Moreover, the dispersion of mountain runoff over those arid plains means that more than half the river's flow could evaporate in the hot desert sun before it reaches the Persian Gulf. As a result, much more skill was needed to build canals and tame the Euphrates,[87] where the world's first city of Uruk was build.

According to the numerous versions of the Sumerian flood legend including that in the *Epic of Gilgamesh*, originally the gods did the work of digging the canals, clearing the channels, dredging the swaps, and plowing the fields. However, the labor was too heavy and misery too great, so they stopped working, burned their tools, and went to the gates of the great god *Enlil* to demand change. *Enlil*, the decider of fates, consulted with *Mami*, the midwife of the gods, and asked her to create mortals to bear the yoke and

carry the burden of the gods. Together with the god *Enki*, the wise, *Mami* mixed clay with blood to make seven male and seven female humans. Then *Mami* led the mortals down to earth two by two, gave them spades and picks and thereafter humans took on the labor for the gods.[88]

The city of Uruk, considered to be the world's first city, was located slightly inland from the marshes of Euphrates, where the Persian Gulf and the Euphrates River meet; however, due to millenniums of flooding and silting the site is much farther from the sea now. The site was apparently chosen because various ecological niches in the surrounding area enabled the villages in the urban area around the city to specialize and produce different parts of the founder food package. Irrigation water provided by branches of the Euphrates and canals enabled large-scale cultivation of grains and date fruit orchards. The hill country, above cultivated areas, was suitable for the grazing of sheep and goats in addition to the hunting of some wild game. The nearby marshes also offered a bountiful natural supply of fish and fowl.[89] It is estimated that by 3000BC Uruk had a population of around fifty thousand and was surrounded by cultivated fields spreading out up to 15 kilometers from the center.[90] Labor specialization tends to support social stratification with professional occupation dictating one's status and the rank of one's family in the social hierarchy in early societies. Uruk was no exception to this type of hierarchy. In fact, Uruk is probably the earliest example of it. Among the earliest Sumerian cuneiform written texts is a document known as the "Standard List of Professions." The list comprises expressions of status such as "leader of the plow," and "great one of the lambs," as well terms for professional categories: cooks, gardeners, jewelers, potters, smiths, etc. At the bottom of the Uruk hierarchy would have been common producers like farmers, fishermen and herdsmen, while at the top of the ladder would have been priests, with what scholars have called a "priest-king" at its pinnacle.[91]

The major city-states that developed in Mesopotamia were all connected to major gods in the Mesopotamian pantheon.[92] Located near the center of the city would be the god's or goddess's temple. Apparently, Uruk had two temple complexes: the Anu-ziggurat (temple tower) and the Eanna complex

with several very large buildings surrounded by a perimeter wall.[93] The specific purpose of Mesopotamian ziggurats has been debated. It has been suggested that they may have represented sacred mountains in the Sumerians' original homeland. Ziggurats were certainly a way to keep the god's home high above possible flood waters and possibly a means to keep the room at the top for an idol image of the god far away from the masses.[94] The external staircases of the solid square pyramid made of baked mud bricks were also thought to be a way for the god to move between heaven and earth.[95]

Uruk belonged to the goddess *Inanna*, later known as *Ishtar* in the Akkadian pantheon. *Inanna* was originally the sky goddess married to *Dumuzi*, the god of irrigation, cultivation, and the rebirth of fields. In Sumerian literature *Inanna* was imprisoned in the underworld and *Dumuzi* goes there to save her. Although *Dumuzi* managed to save her and release *Inanna* back to the heavens, *Dumuzi* is caught by demons and sacrificed. Consequently, *Dumuzi* also becomes the god of the underworld who is reborn every year during the New Year Festival in spring to reunite with *Inanna*, now also the goddess of love and war, to fertilize the fields with their coupling and assure rich harvests. Consequently, *Inanna* and *Dumuzi* are associated with the cycle of life and the Cult of Fertility.[96] It is interesting to note that "cult" is derived from the Latin word *cultus*, 'to worship or homage paid to a deity,[97] which is ultimately related to cultivate and culture one would suppose, since much of early worship was the gifting of agricultural surpluses to the gods.

The central role of collecting and redistributing goods thus became the domain of the temple and led to the development of writing and the rise of the professional administrator[98] often referred to as the scribe, the writer and keeper of records.[99] The complexity of an expanding diversified economy required skilled people capable of the handling and recording of what came into and went out of the central organ of the temple. Accounting mechanisms and standard measures of amounts for everything from liquid and dry goods, land, labor, and even time were required. Writing was the technology to record the transfer of goods between the people and the temple for future use and reallocation, and the scribes were the foundation of

what would become known as bureaucracy.[100] Early religions were not about doctrine and even the recording of myths comes later as writing develops and becomes standardized. The earliest examples of proto-cuneiform writing from the Eanna precinct of the goddess *Inanna* temple in Uruk show that writing was invented to facilitate the management of the goddess's estate, and early written texts were basically the equivalent of tax records with lists of incomes and expenditures tallied in amounts of goats, sheep, measures of grain, loaves of bread and jugs of beer.[101]

As mentioned earlier in the second section the founder package of domesticated plants and animals reached southern Mesopotamia and the Nile Delta about the same time, around 6000BC. It was also noted earlier in this section that the geographical difference would promote slightly different evolutionary paths although both civilizations were built on the production, storage, and reallocation of grain. Egyptian civilization was totally reliant on the waters of the Nile. Egypt only had two neighbors the Mediterranean Sea to the north and the desert although it was not completely isolated and would have visitors from central Africa through Nubia in the south and the main part of the Fertile Crescent via the Nile Delta and the Levant.[102] Egyptians of the Nile Basin called the land they lived on close to the Nile, the "Black Land" referring to the black mud the annual inundation would bring. They named the desert the "Red Land" for the rocks and sand stretching to the horizon in the blazing sun. These two lands would become symbols of life and death and help form the basis of their religious beliefs.[103]

This natural contrast would be reflected in the Egyptian pantheon and their mythology. *Osiris*, the god of vegetation and fertility that gave humans the bounty of the earth and laws of heaven, was murdered and cut to pieces by his evil bother *Seth*, the god of the desert, before *Osiris* could become king.[104] *Osiris*, with the help of his wife-sister *Isis* and the Jackal-headed god, *Anubis*, embalmed *Osiris*' dead body to bring him back to life,[105] and in some version of the story *Thoth*, the god of writing and magic assists as well. Thus, *Osiris* becomes the god of the afterlife by virtue of his own resurrection[106] as well as the god of vegetation, fertility, and the cycle of life, much

like *Dumuzi* in the Mesopotamian pantheon.

Part of the myth tells of seeds sprouting from *Osiris*' dead body, so the god could continue to provide life to Egypt and the people. Apparently, one common tradition of the people was to spout seeds in mud figurines of *Osiris*, and the sprouting seeds were symbolic of the reawakening of life after death. The Egyptian soil would die in the summer sun to be renewed with the water of life from the Nile inundation, just like the god.[107] In their early calendars, the Egyptian would divide the year into three seasons of four 30-day months each. Seasons were determined by the rise and fall of the Nile and the agricultural cycle that followed it: Inundation, *Aket*, germination and growth, *Peret*, and the time of harvest, *Shemmu*. The New Year was set from the first flooding of the Nile as it was observed at Memphis the center of united Egypt, which fell around July 19th on the Julian Calendar or around the summer solstice on the Gregorian Calender.[108]

The Egyptians believed that the kingdom of the dead laid to the west of the Nile. This belief was based on two observations, the setting sun, a symbol of death, died in the west. Moreover, the desert, west of the Nile, was a place where all life perished without the waters of the Nile. Consequently, the major burial sites including the pyramids of Giza, Abusir, Dahshur, etc., the Valley of the Kings, and the necropolis of the nobles at Thebes were all located on desert plateaus above the Nile's west bank.[109] Even the less well-to-do were buried in graves in the western desert with provisions for the afterlife. Part of the symbolism of the Jackal-headed *Anubis*, the god of mumification and protector of the dead, was due to what jackals are in nature. They are scavengers, animals known to dig up and devour corpses in shallow graves in the desert,[110] so who could be a better protector in the afterlife than an alpha male like *Anubis*.

There were some racial differences and variations in myths among the peoples of the Nile River Basin. For example, along the coast and outer delta, the sky was seen as a sea with the sun god *Ra* traveling across in a boat. From the inner delta heading upstream where the basin becomes a shallow canyon, the sky goddess, *Hathor*, was conceptualized as an enormous cow

with pillared legs standing on the corners of the earth exposing her belly to humans. Farther to the south, the sky goddess, *Nut* was imagined arched on her hands and feet over the Nile in position to give birth to the sun in the east each morning.[111]

In many ways, it is easier to deal with archeological estimates than written "historical records" when discussing the early foundations of civilizations since so many ancient records have disappeared and the ones we have were often written well after the events they document. Manetho, who lived in the late third century BC, was the first to divide the history of Egypt into thirty dynasties from the unification of the "Two Lands" of Egypt by King Menes around 3150BC. This history was built on a continuation of myths to justify what was by working from a Golden Age and borrowing from Greek mythology to syncretize a whole to make the transition from gods to men more palatable.[112]

After the devoted wife *Isis* collects up the pieces of her dismembered husband *Osiris* and uses her magic to reassemble his limbs, she posthumously conceives *Osiris*' son, *Horus*. *Isis* raises *Horus* in the delta without the evil king *Seth's* knowledge. Once *Horus* reaches adulthood, he tries to avenge his father and a vicious and bloody conflict ensues. The results were inconclusive, so their dispute was brought before a panel of divine judges. The gods ruled in favor of *Osiris* and *Horus*. *Osiris* was judged blameless and resurrected as a god and king, but only of the dead in the underworld. Seth was exiled presumably to the desert once again while *Horus* became king of the living. Every living Egyptian king was regarded as an incarnation of *Horus*, and later after death assumed to become *Osiris*.[113] Apparently, all the Egyptian kings would take on *Horus* names and that has led to some confusion in verifying Manetho's list against other records found on stone inscriptions.[114]

Upper and Lower Egypt apparently were separated along the classic dividing lines of agricultural producers in the north and pastoral herdsmen in the south. King Menes, the unifier of the rival lands of Upper and Lower Egypt, wore two crowns: a White Crown symbolizing Upper Egypt and a Red Crown symbolizing Lower Egypt. The duplication of the hieroglyph for

"land" together meant Egypt, the "Two Lands." Papyrus was the symbol of the north and a Lily reed symbolized the south. The united "Two Lands" were divided into administrative sections moving up the Nile, called *nomes* in Greek by the time of Manetho. Apparently, there were originally thirty-eight sections, but the *nomes* were later expanded to forty-two, which matched the number of judges that assisted *Osiris* in processing the dead in their passage to the underworld. The leader administrating each *nome* was known as "he who excavates canals," reflecting the importance of irrigation in administering the State and producing agricultural surpluses.[115]

The degree of urbanization within each *nome* must have varied considerably due to how much land would have been covered under flood waters every year, and consequently how much land was available for towns on relatively safe ground. The deployment of the labor force made up of conscripted peasants paid in kind would have been dictated by the season. During the inundation, the peasants could be gainfully employed in the construction of tombs, and temples. But during the early germination periods they would have been involved in canal excavation, and harvest season would have been a busy time before the next inundation. Various skilled craftsmen working in gangs were also employed and these crews could be redeployed to different tomb sites as needed. No one working on the pyramids were slaves in the strictest sense, as all were paid in food rations.[116] It is interesting to note that the combined hieroglyphs for "beer" and "bread" together became the symbol for "food" in general.[117] It is believed that the building of the pyramids proved to be strong unifying forces which enabled Egypt to establish powerful centralized governments. Every pyramid project would have been a focus of political, social, and economic power in the construction area. Moreover, there would have been a significant religious impetus since it was widely believed, at the time, personal eternity was dependent on the king's ascent into the heavens of afterlife. The laborers and craftsmen involved may well have been seeking to attain their own place in the eternal through their participation in the building of the royal tomb.[118] So, these major public works projects would have had a wide range of cultural, economic, and spiri-

tual implications for the workers and their families paid in kind with bread, beer, and other foodstuffs. Incidentally, there is another *Osiris* myth that has him accidently discovering beer while trying to sprout grain in water. *Osiris* left the mixture in the sun and forgot about it. Later he noticed the fizzy liquid, drank the liquid, and found it pleasing and subsequently passed it onto humans.[119] Perhaps, old Jimmy was right: "Warm beer and bread could raise the dead."[120]

VI. Conclusion

The achievements of the early Sumerian/Babylonian and Egyptian Civilizations would grow in influence over the Greeks and Romans in classical antiquity. The Hellenes (Greeks) and eventually the Romans would continue to look east for power and wealth, as well as models of governance and religion. The Hellenes would have called this same part of Southwest Asia, the *Oikumene*, "the inhabited zone of the known world.[121]" This was a very important area to the Greek-speaking world, indeed, even before the earliest Hellenistic city-state established colonies on the eastern shore of the Aegean Sea, i.e., western Anatolia (modern Turkey). It was the Hellenes who first decided the dividing lines between Europe and Asia were the Aegean Sea, the Dardanelles, the Sea of Marmara, the Bosporus, and the Black Sea,[122] and their first cultural narrative the *Iliad* was based on a struggle between Troy in Asia and the Hellenes from Europe. Later, Greek freedom would be defined in juxtaposition to the Asian tyranny of the Persian Empire.[123] In this light, it is perhaps more obvious why the Roman Emperor Constantine would choose Byzantium on the Bosporus for the site of the new "Christian Capital" of the Roman Empire. It was, after all, the center of the empire where the West (Europe) and East (Asia) met. Moreover, the East was far wealthier and more prosperous than the West, and closer to the origins of Christianity in the *Oikumene* than the old Roman capital on the Italian Peninsula. Finally, it should not be forgotten that Egypt had been the breadbasket of the Roman Empire since the time of Augustus.

Note

1 Reza Aslan, *God: A Human History*, (London: Bantum Press, Transworld Publishers, 2017), 59.
2 Aslan (2017), 52.
3 It is debated whether Greeley coined the phrase, but it is certain he did promote Manifest Destiny and westward expansion of the United States. Richard Pallardy, Research Editor, *Horace Greeley*, (London: Encyclopedia Britannica), accessed 1 August 1, 2021<https://www.britannica.com/biography/Horace-Greeley>.
4 Paul Kriwaczek, *Babylon: Mesopotamia and the Birth of Civilization*, (New York, NY: Thomas Dunne Books, St. Martin's Press, 2010), 20.
5 *New Oxford American Dictionary*
6 Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*. (New York, NY: Norton & Company Inc., 2005), 140.
7 Paul Kriwaczek, *Babylon: Mesopotamia and the Birth of Civilization*, (New York, NY: Thomas Dunne Books, St. Martin's Press, 2010), 20.
8 Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*. (New York, NY: Norton & Company Inc., 2005), 86-92.
9 Diamond, (2005), 35.
10 Diamond, (2005), 40.
11 Alexandra Rosanti, "Food for Thought: Was Cooking a Pivotal Step in Human Evolution?" *Scientific American*, February 26, 2018, accessed 14 August 2021, <https://www.scientificamerican.com/article/food-for-thought-was cooking-a-pivotal-step-in-human-evolution/>.
12 Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*. (New York, NY: Norton & Company Inc., 2005), 39-40.
13 *New Oxford American Dictionary*
14 Robinson Myers, "Geology' Timekeepers Are Feuding: It is a bit like Monty Python" *The Atlantic*, July 21, 2018, accessed 15 August 2021, <https://www.theatlantic.com/science/archive/2018/07/anthropocene-holocene-geology-drama/565628/>.
15 Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*. (New York, NY: Norton & Company Inc., 2005), 41-47.
16 Ferris Jabr, "Are Cats Domesticated?" *The New Yorker*, October 23, 2015, accessed 23 August 2021, <https://www.newyorker.com/tech/annals-of-technology/are-cats-domesticated>.
17 University of Michigan, "Researchers uncover hidden hunting tactics of wolves in Minnesota's Northwoods," ScienceDaily, accessed 23 August 2021, <https://www.sciencedaily.com/releases/2021/02/210209151819.htm>.
18 Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*. (New York, NY: Norton & Company Inc., 2005), 169.

19 Diamond, (2005), 142.
20 Diamond, (2005), 144-145.
21 Diamond, (2005), 109.
22 Larry A. Samovar & Richard E. Porter, *Communication Between Cultures* (Belmont, CA: Wadsworth Publish Company, 1991),59.
23 Larry A. Samovar & Richard E. Porter, *Communication Between Cultures Fourth Edition* (Belmont, CA: Wadsworth/Thomson Learning, 2001),43-45.
24 Diamond, (2005), 110-112.
25 Diamond, (2005), 136.
26 Diamond, (2005), 140.
27 Diamond, (2005), 174.
28 Diamond, (2005), 168.
29 Diamond, (2005), 169-172.
30 Henry Nicholls, "The truth about Norwegian lemmings" *BBC*, November 21, 2014, accessed 2 September 2021, <http://www.bbc.com/earth/story/20141122-the-truth-about-lemmings>.
31 Diamond, (2005), 172.
32 Diamond, (2005), 173.
33 Diamond, (2005), 142.
34 Diamond, (2005), 167.
35 Diamond, (2005), 141.
36 Diamond, (2005), 183.
37 Diamond, (2005), 181-182.
38 Diamond, (2005), 97.
39 Diamond, (2005), 181.
40 Diamond, (2005), 124.
41 Diamond, (2005), 118.
42 Diamond, (2005), 167.
43 Diamond, (2005), 91.
44 Diamond, (2005), 190.
45 Diamond, (2005), 91.
46 Catharine H. Roehrig, "Egypt in the New Kingdom (ca. 1550–1070 B.C.)." In *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art, October, 2000, accessed October 4, 2021, <http://www.metmuseum.org/toah/hd/nking/hd_nking.htm>.
47 Reza Aslan, *God: A Human History*, (London: Bantum Press, Transworld Publishers, 2017), 4.
48 Aslan, (2017), 5.
49 *New Oxford American Dictionary*
50 Aslan, (2017), 5
51 *New Oxford American Dictionary*
52 Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*. (New York, NY: Norton & Company Inc., 2005), 14.

53 Reza Aslan, *God: A Human History*, (London: Bantum Press, Transworld Publishers, 2017), 7.
54 Aslan, (2017), 8.
55 Aslan, (2017), 14.
56 Aslan, (2017), 14-15.
57 Aslan, (2017), 25.
58 Aslan, (2017), 26.
59 Larry Siedentop, *Inventing the Individual: Origins of Western Liberalism*, (UK: Penguin Random House UK, 2015), 13.
60 Diamond, (2005), 173.
61 Aslan, (2017), 38.
62 Aslan, (2017), 40.
63 Aslan, (2017), 40-47.
64 Aslan, (2017), 52.
65 Carol Dougherty, *Prometheus*, (New York, NY: Routledge, 2006), 30.
66 Old Testament, Genesis, Chapter 2, as well as in Hesiod's *Works and Days*. Prometheus is given the task of forming humans out of mud and Athena breathes life into them.
67 Aslan, (2017), 53.
68 Andrew Curry, "Gobekli Tepe: The World's First Temple?" *Smithsonian Magazine*, <https://www.smithsonianmag.com/history/gobekli-tepe-the-worlds-first-temple-83613665/>.
69 Andrew Curry, "How ancient people fell in love with bread, beer, and other carbs" *Nature*, June 22, 2021, accessed 9 October, 2021, <https://www.nature.com/articles/d41586-021-01681-w>.
70 Andrew Curry, "An immense mystery older than Stonehenge" *BBC Travel*, August 17, 2021, accessed 27 September, 2021, < https://www.bbc.com/travel/article/20210815-an- immense-mystery-older-than-stonehenge>.
71 Andrew Curry, "How ancient people fell in love with bread, beer, and other carbs" *Nature*, June 22, 2021, accessed 9 October, 2021, <https://www.nature.com/articles/d41586-021-01681-w>.
72 Marc Van De Mieroop, *A History of the Ancient Near East, ca 3000-323 BC, Second Edition*, (Malden, MA: Blackwell Publishing, 2007) 12.
73 Andrew Curry, "Gobekli Tepe: The World's First Temple?" *Smithsonian Magazine*, <https://www.smithsonianmag.com/history/gobekli-tepe-the-worlds-first-temple-83613665/>.
74 Andrew Curry, "An immense mystery older than Stonehenge" *BBC Travel*, August 17, 2021, accessed 27 September, 2021, < https://www.bbc.com/travel/article/20210815-an- immense-mystery-older-than-stonehenge>.
75 Aslan, (2017), 55.
76 Aslan, (2017), 56.

77 Andrew Curry, "Gobekli Tepe: The World's First Temple?" *Smithsonian Magazine*, <https://www.smithsonianmag.com/history/gobekli-tepe-the-worlds-first-temple-83613665/>.
78 Aslan, (2017), 65.
79 Aslan, (2017), 59-66.
80 Marc Van De Mieroop, *A History of the Ancient Near East, ca 3000-323 BC, Second Edition*, (Malden, MA: Blackwell Publishing, 2007) 12.
81 Van De Mieroop, (2007), 13.
82 Van De Mieroop, (2007), 14-15.
83 Department of Ancient Near Eastern Art, "The Halaf Period (6500–5500 B.C.)," In *Heilbrunn Timeline of Art History*. (New York: The Metropolitan Museum of Art, October, 2003), accessed October 4, 2021, <http://www.metmuseum.org/toah/hd/half/hd_half.htm>.
84 Department of Ancient Near Eastern Art, "The Ubaid Period (5500–4000 B.C.)," In *Heilbrunn Timeline of Art History*. (New York: The Metropolitan Museum of Art, October, 2003), accessed October 4, 2021, <http://www.metmuseum.org/toah//ubai/hd_ubai.htm>.
85 Tom Standage, *A History of the World in 6 Glasses*, (New York, NY: Bloomsbury Publishing Plc., 2005), 25-26.
86 *New Oxford American Dictionary*
87 Paul Kriwaczek, *Babylon: Mesopotamia and the Birth of Civilization*, (New York, NY: Thomas Dunne Books, St. Martin's Press, 2010), 19.
88 Aslan, (2017), 67.
89 Van De Mieroop, (2007), 23.
90 Tom Standage, *A History of the World in 6 Glasses*, (New York, NY: Bloomsbury Publishing Plc., 2005), 25.
91 Van De Mieroop, (2007), 26-7.
92 Aslan, (2017), 77.
93 Van De Mieroop, (2007), 25.
94 Paul Kriwaczek, *Babylon: Mesopotamia and the Birth of Civilization*, (New York, NY: Thomas Dunne Books, St. Martin's Press, 2010), 155.
95 Aslan, (2017), 77.
96 Enrico Ascalone, Translated by Rosanna M. Giammanco Frongia. *Mesopotamia: Assyrians, Summerians, Babylonians*, (Berkeley, CA: University of California Press, 2007) 142-149.
97 *New Oxford American Dictionary*
98 Van De Mieroop, (2007), 26.
99 *New Oxford American Dictionary*
100 Van De Mieroop, (2007), 26.
101 Aslan, (2017), 237.
102 Manfred Lurker, *The Gods and Symbols of Ancient Egypt: An Illustrated Dictionary*, (London: UK: Thames and Hudson, 1980) 16.
103 A.R. David, *The Pyramid Builders of Ancient Egypt: A Modern Investiga-*

tion of Pharaoh's Workforce, (London, UK: Routledge & Kegan Paul, 1986), 18.

104 Lurker, (1980), 13.

105 Nicholas Grimal, Translated by Ian Shaw, *A History of Ancient Egypt,* (Oxford, UK: Blackwell Publishers, 1994), 42.

106 David, (1986), 20.

107 Lurker, (1980), 13-14.

108 Grimal, (1994), 51.

109 Lurker, (1980), 14.

110 Aslan, (2017), 80.

111 Lurker, (1980), 16.

112 Grimal, (1994), 46.

113 David, (1986), 34.

114 Grimal, (1994), 48-50

115 Lurker, (1980), 16.

116 David, (1986), 58.

117 Tom Standage, *A History of the World in 6 Glasses*, (New York, NY: Bloomsbury Publishing Plc., 2005), 25.

118 David, (1986), 58.

119 Standage, (2005), 19.

120 Jimmy Buffet, "Cheeseburger in Paradise," *Album Son of a Sailor*, March 17, 1978, ABC Dunhill Records. Paraphrase of lyrics: "Warm beer and bread and bread they say could raise the dead."

121 Robert D. Kaplan, *The Revenge of Geography: What the Map Tells Us About Coming Conflicts and the Battle Against Fate*, (New York, NY: Random House, 2012), 50.

122 Martin W. Lewis and Karen E. Wigen, *The Myth of Continents: A Critique of Metageography*, (Berkeley, CA: University of California Press, 1997), 1.

123 Lewis and Wigen, (1997), 1.

Bibliography

Ascalone, Enrico. Translated by Rosanna M. Giammanco Frongia. *Mesopotamia: Assyrians, Sumerian, Babylonians*. Berkeley, CA: University of California Press, 2007.

Aslan, Reza. *God: A Human History*. London: Bantum Press Transworld Publisher, 2017.

Aubet, Maria Eugenia. Translated by Mary Turton. *The Phoenicians and the West: Politics, Colonies and Trade, Second Edition*. New York, NY: Cambridge University Press, 2001.

Bauer, Susan Wise. *The History of the Ancient World: From The Earliest Accounts to the Fall of Rome*. New York, NY: W.W. Norton & Company, 2007.

Baumgarten, Albert I. *The Flourishing of the Jewish Sects in the Maccabean Era: An*

Interpretation. Leiden, The Netherlands: Koninklijke Brill NV, 1997.
Betz, Eric. "Gobekli Tepe: The world's first astronomical observatory?" *Astronomy*, September 4, 2021, accessed 9 October, 2021, <https://astronomy.com/news/2020/09/gobekli-tepe-the-worlds-first-astronomical-observatory>.
Buffet, Jimmy."Cheeseburger in Paradise," *Album Son of a Sailor*, March 17, 1978, ABC Dunhill Records.
Cantor, Norman F. *Antiquity: From the Birth of the Sumerian Civilization to the Fall of the Roman Empire*. New York, NY: HarperCollins Perennial Edition, 2004.
Cline, Eric H. *1177B.C.: The Year Civilization Collapsed*. Princeton, NJ: Princeton University Press, 2014.
Curry, Andrew. "Gobekli Tepe: The World's First Temple?" *Smithsonian Magazine*, November 2008, accessed 27 September, 2021, <https://www.smithsonianmag.com/history/gobekli-tepe-the-worlds-first-temple-83613665/>.
Curry, Andrew. "How ancient people fell in love with bread, beer, and other carbs" Nature, June 22, 2021, accessed 9 October, 2021, <https://www.nature.com/articles/d41586-021-01681-w>.
Curry, Andrew. "An immense mystery older than Stonehenge" *BBC Travel*, August 17, 2021, accessed 27 September, 2021, < https://www.bbc.com/travel/article/20210815-an-immense-mystery-older-than-stonehenge>.
David, A.R. *The Pyramid Builders of Ancient Egypt: A Modern Investigation of Pharaoh's Workforce*. London, UK: Routledge & Kegan Paul, 1986.
Department of Ancient Near Eastern Art. "The Halaf Period (6500–5500 B.C.)." In *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art, October, 2003 accessed October 4, 2021, <http://www.metmuseum.org/toah/hd/half/hd_half.htm>.
Department of Ancient Near Eastern Art. "The Ubaid Period (5500–4000 B.C.)." In *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art, October, 2003 accessed October 4, 2021, <http://www.metmuseum.org/toah/hd/ubai/hd_ubai.htm>.
Diamond, Jared. *Guns, Germs, and Steel: The Fates of Human Societies*. New York, NY: W. W. Norton & Company, Inc., 2005.
Dougherty, Carol. *Prometheus*. New York, NY: Routledge, 2006.
Grimal, Nicholas. Translated by Ian Shaw. *A History of Ancient Egypt*. Oxford, UK: Blackwell Publishers, 1994.
Holland, Tom. *Persian Fire: The First World Empire and the Battle for the West*. London: Abacus, Little, Brown Book Group, 2005.
Jabr, Ferris. "Are Cats Domesticated?" *The New Yorker*, October 23, 2015, accessed 23 August, 2021, <https://www.newyorker.com/tech/annals-of-technology/are-cats-domesticated>.
Kaplan, Robert D. *The Revenge of Geography: What the Map Tells Us About Coming Conflicts and the Battle Against Fate*. New York, NY: Random House, 2012.
Kriwaczek, Paul. *Babylon: Mesopotamia and the Birth of Civilization*. New York, NY: Thomas Dunne Books St. Martin's Press, 2010.

Lurker, Manfred. *The Gods and Symbols of Ancient Egypt: An Illustrated Dictionary*. London, UK: Thames and Hudson, 1980.

Modrzejewski, Joseph Meleze. Translated by Robert Cornman. *The Jews of Egypt: From Rameses II to Emperor Hadrian*. Princeton, NJ: Princeton University Press, 1997.

Myers, Robinson. "Geology' Timekeepers Are Feuding: It is a bit like Monty Python" *The Atlantic*, July 21, 2018, <https://www.theatlantic.com/science/archive/2018/07/anthropocene-holocene-geology- drama/565628/>, accessed August 15, 2021.

Nicholls, Henry. "The truth about Norwegian lemmings" *BBC*, November 21, 2014, accessed 2 September, 2021, < http://www.bbc.com/earth/story/20141122-the-truth-about-lemmings>.

Pallardy, Richard Research Editor. *Horace Greeley*. London: Encyclopedia Britannica, accessed August 1, 2021, <https://www.britannica.com/biography/Horace-Greeley>.

Siendentop, Larry. *Inventing the Individual: Origins of Western Liberalism*. UK: Penguin Random House UK, 2015.

Standage, Tom. *A History of the World in 6 Glasses*. New York, NY: Bloomsbury Publishing Plc., 2005.

Roehrig, Catharine H. "Egypt in the New Kingdom (ca. 1550–1070 B.C.)." In *Heilbrunn Timeline of Art History*. New York: The Metropolitan Museum of Art, October, 2000, accessed October 4, 2021, <http://www.metmuseum.org/toah/hd/nking/hd_nking.htm>.

Rosanti, Alexandra. "Food for Thought: Was Cooking a Pivotal Step in Human Evolution?" *Scientific American*, February 26, 2018, accessed 14 August, 2021, <https://www.scientificamerican.com/article/food-for-thought-was-cooking-a-pivotal-step-in-human-evolution>.

University of Minnesota. "Researchers uncover hidden hunting tactics of wolves in Minnesota's Northwoods", *ScienceDaily*, February 9, 2021, accessed 23 August, 2021, <www.sciencedaily.com/releases/2021/02/210209151819.htm>

Van De Mieroop, Marc. *A History of the Ancient Near East, ca 3000-323 BC, Second Edition*. Malden, MA: Blackwell Publishing, 2007.

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