

A Brief History of the World: Origins of today's cultural landscapes

Welcome to the world of cultural geography. Below you will find your first introduction to the role geography has played, and continues to play, in shaping the societies of the modern world. Don't be alarmed if this is all shocking to you at first or a little confusing; this paper introduces cultural geography, societal evolution and many of the core concepts we will be expanding upon throughout the course. It is important that you read it carefully and try to truly understand it because it will create a base on which the rest of the course will build upon. Enjoy...

IN THE BEGINNING

Let us begin in the beginning. The world was formed 4.5 BILLION years ago. Some time after that enough water vapor producing volcanic eruption caused it to begin raining and the ocean basins filled with water and eventually salts. Life evolved from simple bacteria and algae into the more recognizable forms of today over the next 4 billion plus years.

The human component of the story we're concerned with began extremely late in the history of the earth; all of human history is less than a blink of an eye relative to the history of the earth, but it is this blink of the eye we'll be concentrating on. Apes, the predecessors to humans in our story, began to walk upright about 4 million years ago, and began increasing in body size and relative brain size about 2.5 million years ago. A weak model of us, *Homo Erectus*-apparently beginning to use stone tools, had evolved by about 1.7 million years ago. This first 4 million years of human history was unimpressive and mostly confined to Africa. Humans began

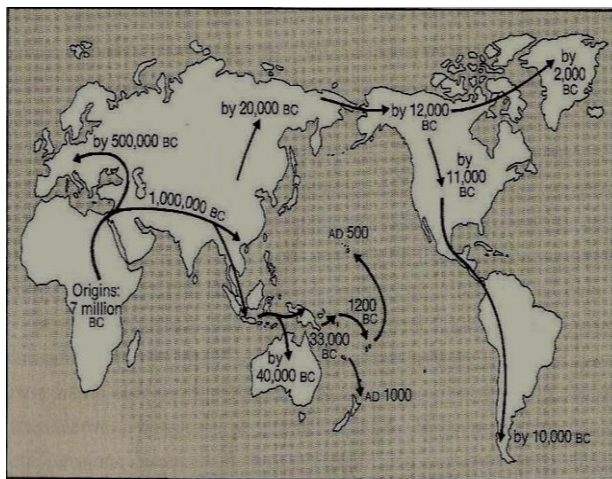


Figure 1.1. The spread of humans around the world.

expanding out of Africa only 2-400,000 years ago and began to resemble humans as we know them only after the "great leap forward" about 50,000 years ago. At this time tools, and other signs of advancement, began to get much more sophisticated (bow and arrows, needles, spears, fishing lines, paintings, statues, etc.).

Whether this great leap forward came about thanks to the perfection of the voice box or because of an improvement in language developed thanks to a change in brain size is inconsequential. Whatever the reason, these

new humans (Cro-Magnons) wiped out the older version (Neanderthals) within a few thousand years of their arrival (because they developed better technology, language and ability to kill and out compete older versions). Around this time humans were also expanding their domain around the world. They started populating the islands of the South Pacific (Indonesia, Australia, etc) which were all connected to the Asian continent at this time thanks to the reduced sea level and new land bridges brought about by an Ice Age. As these areas were populated the



large mammals, which once thrived in almost all areas of the world, were most likely hunted and out competed until extinction (this fact would have major consequences in the future.) Of the five habitable continents North and South America were the last to become populated.

Around this time (20,000 years ago) humans developed the capability to survive in colder climates (thanks to sewing, etc.) which led to the human populating of Siberia, which eventually made it possible for the first

humans to stumble, following animals or searching for something, across the Bering land bridge to discover the Americas. Arriving first in Alaska about 12,000 BC and very soon after making their way down into the Great Plains of the Americas, which at that time more closely resembled modern Africa with an abundance of large mammals (elephants, cheetahs, lion, camels, etc.) roaming the land. However, within a few thousand years these large mammals also were hunted to extinction. Following these animals the hunter-gatherers explored and populated all the way to the tip of South America within possibly as short of time as 1,000 years. With the populating of the Americas all the major continents were discovered and the other areas of the world (islands, colder climates, etc.) soon followed. Thus this is where the real story begins, only about 10,000 years ago when people were living in all regions of the world.

So the real question for us to begin this course with is why did each world culture, coming from similar origins, take such drastically different paths leading to the diverse cultures we see around the world today???? (Of course the answer, as we'll soon discover, must be GEOGRAPHY)

HUNTER GATHERERS TO AGRICULTURALISTS

There are many reasons why the similar people, who expanded to occupy all regions of the world by 10,000 years ago, turned out so differently. As an example of these influences let's examine two islands in the South Pacific that were colonized by the same group of people but soon after followed completely different development paths. **(1) Climate:** the island closer to the equator had a warmer wetter climate and was thus initially more suitable for crop growth and the development of agriculture. Also influential in the development of agriculture was **(2) Geology.** Geology, good soil vs rocks, influenced the islands in terms of areas available for growth. **(3) Animal resources:** the animals which were available for domestication were similar on both islands (mostly marine animals) the eventual difference was that one island completely killed off the terrestrial population so that none were available for domestication while the other maintained small animals available to domesticate. **(4) Area:** the smaller island quickly became overpopulated and different groups began to clash, thus they began to develop more military technology compared to larger islands where different groups were free to develop in peaceful isolation. **(5) Isolation:** the more isolated island didn't have the opportunity to share knowledge with other peoples or the necessity to develop militarily. And last, **(6) Terrain:** mountains, rivers, and oceanic distance influenced contact with outsiders.

The geographic differences between the two islands influenced one civilization to more quickly shift from the hunter-gather lifestyle, standard at the time, to a sedentary agricultural one. Once this civilization switched to farming the population grew rapidly and the island became densely populated. Since farming only required a small portion of the population others were free to occupy positions, nonexistent until now, such as chiefs, priests, bureaucrats, craftsman, warriors etc. With the free time this civilization also developed complex political and social organizations and technologies. Thus, these two islands populated by the very same ancestors soon differed greatly in their economic specialization, political organization, social complexity and material products as a direct result of differences in geography. This example is extremely important because the differences that developed between these two related islands are analogous to what happened to societies across the entire Earth. The difference is that the range of variations in cultures which have developed over the globe is much greater because of the larger range of geographic circumstances throughout the earth.

ADVANTAGES OF FARMING

The geographic factors mentioned above led to one very important societal transition. The change from a hunter-gatherer lifestyle to agriculture was the first, and possibly most important, step leading to the differences in cultures we see across the world today. As certain

peoples developed into agricultural society before others they gained certain advantages and began along a different developmental path than others.

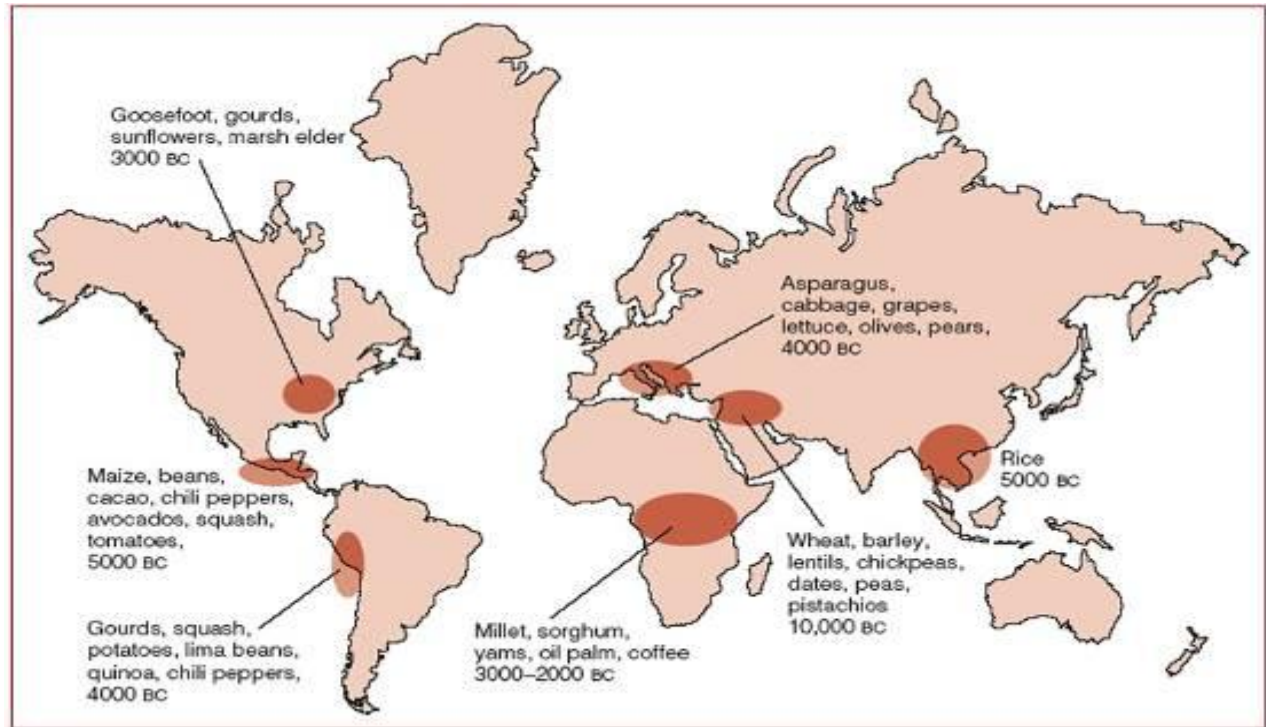
Lets examine how transitioning to an agricultural society effected civilizations. One advantage that came from the development of food production is that it can support large numbers of peoples. Many more people can live and flourish in a single location when farming is adapted over hunting and gathering. This simple advantage of force in numbers meant that agricultural societies had a first dominant advantage over hunter-gatherers. Agricultural societies were also the first to domesticate animals which led to a steadier source of protein, and more importantly these animals were important sources of power and fertilizer. Because people now could stay in one place and rely on a steady source of food they were able to grow and produce denser populations. With farming these societies also gained the ability to store food for use during hard times.

Food storage created the necessity for the creation of a new job: the food guards. Even cultivating excess food did not require the work of everyone. Unlike hunter-gatherers, who all participated in collecting food and surviving, agricultural societies had the possibility of much free time spent in more location. Hence full-time specialists in other areas (like the food guards) were created. Two specific types of specialists that first developed were Kings and Bureaucrats. Hunter-gatherer societies were essentially egalitarian because everyone had to work to secure food and the survival of the whole group. On the other hand, in agricultural societies once food is secured and stockpiled political elite can gain control of this food, assert a right to taxation and engage in full time political activities (not least important of which was planning wars). These more complex political units are also able to develop and feed full time soldiers and organize more successful wars against other peoples. The stored food can also be used to feed people freed to become priests (who come up with the religious justification for the wars), artisans (who makes the swords, guns and other technologies), and scribes (who can preserve much more knowledge than any collective memory can).

Other advantages of an agricultural lifestyle include other uses for crops (making rope, clothes, blankets, gourds, etc.). Animals first domesticated in military societies also served other purposes (ex. horses used for military purposes, sheep for wool, etc.). This domestication of animals, was extremely important for another reason, as we will see later, it is ultimately what led to the development and transmittal of the extremely important germs which decimated and helped to conquer entire civilizations. The advantages gained from the transition to a sedentary agricultural society allowed some societies to flourish and dominate others thus geographic variation in when, whether, or even if peoples of different continents

became farmers and herders can explain to a large extent the subsequent differences and contrasting cultural fates.

WHO WERE THE FIRST FARMERS?



Why didn't all people become farmers simultaneously? The simple answer is that not everywhere is well equipped for agriculture; it's hard to grow crops in the middle of a desert. However, even some places well suited for agriculture did not develop it, so why didn't these places take the advantages farming route? Let's examine where, when and how food production developed in different locations? Food production only arose independently only in five parts of the world (all others learned from these source regions). The five areas include: the Fertile Crescent, China, MesoAmerica, the Andes, and the Eastern United States (there are other disputed areas of independent origin but these are the accepted locations). In other locations across the globe crops and agricultural knowledge was introduced to the regions by neighboring people. In some circumstances the exchange was gradual and peaceful where the native people simply incorporated the new crops into their lifestyle. In other circumstances the invading population forced agriculture upon a population or was able to defeat native hunter-gatherers thanks to their knowledge and use of agriculture. In both circumstances farming was introduced before native people had the opportunity domesticate their own plants/animals and thus the invading species became dominant.

The people from these first five regions who first domesticated plants thus had a head start towards developing the other aspects of modern civilization (technologies, ideologies, etc.) and these people became the haves and they were bound for future confrontations with the have-nots who had not begun farming yet. This earlier switch to farming ultimately led to advantages in military technology, literacy, population expansion, exploration and even the germs which allowed civilizations (like the Europeans) maintain a successful advantage when they confronted others still in the hunter-gatherer society stage (like the native Americans).

How did the first civilizations begin to shift from the hunter-gatherer lifestyle to the farmer one? The first people had no model, no other farmers, to imitate so how did they end up with what we term an agriculture lifestyle? In most cases an agricultural life sort of evolved gradually over time. Many of the earliest farmers simultaneously collected wild foods and raised cultivated ones. Over time out of preference and necessity certain crops gained an advantage and became more popular domestically than others.

As agricultural lifestyles became more common other societal differences began to evolve. Perhaps most important of these may have been the growth of germs. Many diseases are linked to animals and thus to the domestication of animals (which is linked to farming). Most of the human diseases we are familiar with originated in animals, some of the most deadly and recognized include: smallpox, tuberculosis, malaria, plague, measles, cholera and the common flu. In fact most past wars were won by the side that possessed the worst diseases (thus able to pass these on to unprepared enemy hosts). These diseases developed in places where farming had become the way of life (able to sustain higher populations) and close contact with animals was common (sleeping with cows, etc.) and they spread and flourished in areas with high population densities where lack of sanitation was common. Cities could only sustain their numbers early on because many people were moving in from the countryside to replace the vast numbers who died from disease daily. This meant that Europeans and other early agriculturalists had a much higher chance of developing bad diseases to pass on because of their long farming history and filthy cities.

TABLE II.I Deadly Gifts from Our Animal Friends

| <i>Human Disease</i> | <i>Animal with Most Closely Related Pathogen</i> |
|----------------------|---|
| Measles | cattle (rinderpest) |
| Tuberculosis | cattle |
| Smallpox | cattle (cowpox) or other livestock with related pox viruses |
| Flu | pigs and ducks |
| Pertussis | pigs, dogs |
| Falciparum malaria | birds (chickens and ducks?) |

How did Agriculture develop?

The first farmers discovered farming by accident. This occurred simply because the hunter-gatherers (who grew into farmers) learned to pick food from only the most productive plants (i.e. the biggest berries, the most lush, etc.) and decided to choose the best tasting and most nutritious of foods available. Thus, the seeds of these plants were spread through picking, eating and digestion, while the seeds of less desirable plants were not spread as efficiently and eventually died out. Thus, the first plants were domesticated through simple choices by hunter-gatherers along the lines

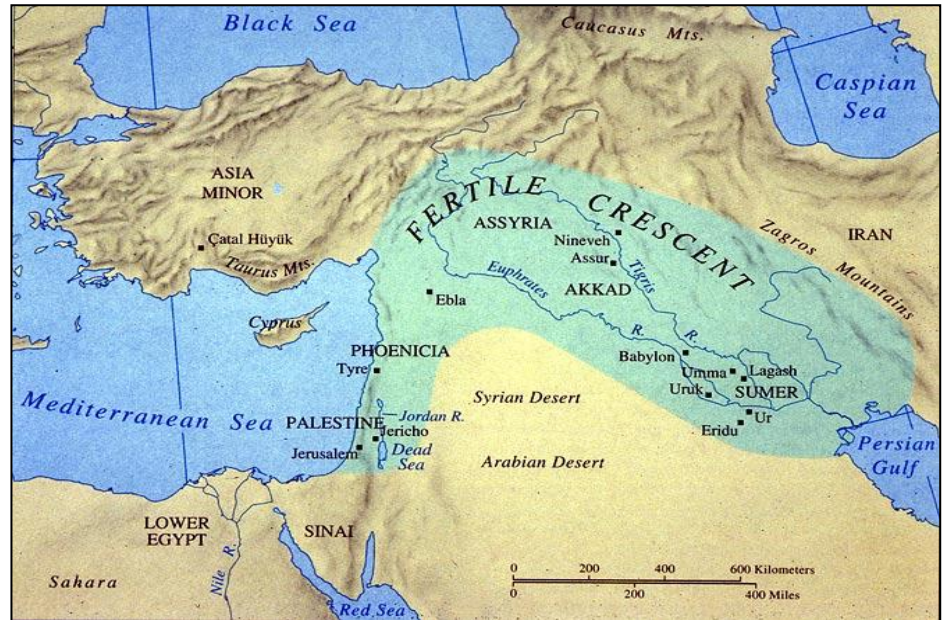
Darwin recognized as “natural selection.” So then why did some crops become domesticated much earlier than others?

The Importance of the Fertile Crescent

As Jared Diamond explained, the Fertile Crescent, area between the

Tigris and Euphrates river in the Middle East, “appears to have been the earliest site for a whole string of developments, including cities, writing, empires and what we term (for better or worse) “civilization”. All those developments sprang, in turn, from the dense human populations, stored food surpluses, and feeding of nonfarming specialists made possible by the rise of food production in the form of crop cultivation and animal husbandry. Food production was the first of those major innovations to appear in the Fertile Crescent. This area had many advantages that allowed it to lead the way in farming and thus all other areas.”

The first advantage the Fertile Crescent is, of course, its geographic location. Lying within the Mediterranean climactic zone, a climate characterized by mild, wet winters and long, dry, hot summers led to the growth of plants that evolved a special adaptation growing large reproductive seeds and berries, concentrating on these edible parts and wasting little precious energy on growing tall or growing bark, leaves or other non edible vegetation parts. 6 of the 12 world crops grow in this manner. The second advantage is that these crops were already abundant and highly productive; early farmers had little work to do to domesticate these crops. The third advantage was that many of those crops are self-pollinated so they flourished and



were domesticated much easier than others. Compared to other Mediterranean climate zones the Fertile Crescent also had other geographical advantages including a larger size (leading to a greater variety of plants), a greater climatic variation (also leading to a greater variety), a greater range of altitudes and topographies within a short distance (leading to many different environments and staggered harvest seasons), greater availability of domesticable animals and lastly surrounded by desert people of the Fertile Crescent had less competition from the surrounding hunter-gatherer lifestyles than other areas.

As a result of these factors the complete change from a hunter-gathering lifestyle to a sedentary agricultural society occurred relatively quickly (from one type to another in 3,000 years: 9,000-6,000 B.C.). Conversely, in MesoAmerica there were only two possible domesticable animals (dog and turkey) and many less and more difficult to harvest, longer growing plants. Thus, in Mesoamerica domestication didn't arise until around 3500 BC (?) and a complete change was not seen until around 1500 B.C. Thus, right away the Fertile Crescent had a huge head start in the evolution of society (2,500 to 4,500 years). It should be mentioned that this head start is a direct result of geographical difference not biological. The differences between the beginning of domestication in certain places resulted entirely from differing availabilities of wild plants and animals and when new more productive crops arrived from the outside they were immediately adopted in most of these less fortunate places. Much like the adoption of writing, the societies that never developed agriculture independently may simply not have had ample time to.

A necessary accompaniment to agriculture is animal domestication (an animal selectively bred in captivity, modified from its modern ancestors for human purposes) and in this arena the Fertile Crescent also had advantages. Part of the reason that Eurasia was the main area of animal domestication is simply the fact that, as a result of a diverse ecology, it was the continent with the most wild candidates to begin with. Animals in other regions failed to be domesticated as a result of one of six reasons. 1. Diet: some animals require far too much food to be domesticated or eat too much meat. 2. Growth rate: some animals simply grow too slowly to make efficient sense. 3. Captive breeding problems: some animals won't breed in captivity. 4. Poor attitudes: some animals are angry or naturally attack humans. 5. Tendency to panic: some animals behave erratically in captivity. 6. Social structures: successfully domesticated animals

TABLE 9.2 Mammalian Candidates for Domestication

| | <i>Continent</i> | | | |
|---------------------------------------|------------------|--------------------|--------------|-----------|
| | Eurasia | Sub-Saharan Africa | The Americas | Australia |
| Candidates | 72 | 51 | 24 | 1 |
| Domesticated species | 13 | 0 | 1 | 0 |
| Percentage of candidates domesticated | 18% | 0% | 4% | 0% |

A "candidate" is defined as a species of terrestrial, herbivorous or omnivorous, wild mammal weighing on the average over 100 pounds.

lived in herds with a social hierarchy and overlapping range areas-rather than exclusive territories. Thus, in conclusion, most species don't make good candidates for domestication. Eurasians happened by chance to live near many more species of domesticable large mammalian herbivores than did people of other continents. (Incidentally, The five major species that did become domesticated and important include the cow, sheep, goat, pig and horse.)

Jared Diamond wraps up the initial development of these civilizations well, "In short, plant and animal domestication meant much more food and hence much denser human populations. The resulting food surpluses, and (in some areas) the animal based means of transporting those surpluses were a prerequisite for the development of settled politically centralized, socially stratified, economically complex, technologically innovative societies. Hence the availability of domestic plants and animals ultimately explains why empires, literacy, and steel weapons developed earliest in Eurasia and later, or not at all, on other continents. The military uses of horse and camels, and the killing power of animal derived germs, complete the list of major links between food production and conquest"

DIFFUSION AND GEOGRAPHY

Let's take a brief break now from our examination of origins to the one of the diffusion of agriculture, culture and other technology and ideas that were to be developed. One simple geographical fact helps to explain the diffusion, or lack of diffusion, of agriculture and ideas: axial orientation. The axial orientation for Eurasia allowed for much easier diffusion of everything than other continents. The major axis of Eurasia is East-West as compare to the North-South orientation of the Americas and Africa

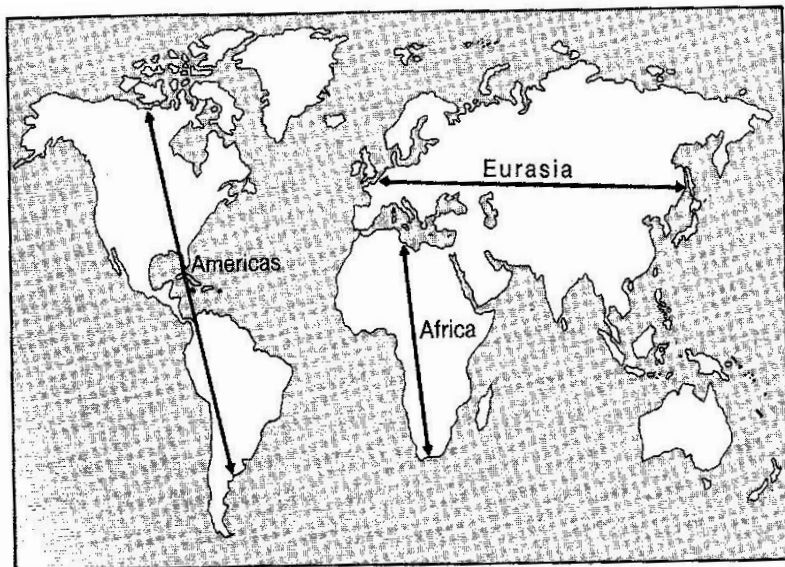


Figure 10.1. Major axes of the continents.

The rates and dates that food production spread at vary considerably. Again Jared Diamond summarizes first the rapid East-West spread of agriculture "from southwest Asia both west to Europe and Egypt and East to the Indus valley (at an average rate of about .7 miles per

year); and from the Philippines east to Polynesia (at 3.2 miles per year.) At the opposite extreme was its slow spread along north-south axis: at less than .5 miles per year from Mexico northward to the U.S. Southwest” and “at .2 miles per year for llama from Peru north to Ecuador.” East-west spread is much easier because plants and animals are being diffused within climates very similar to that of their native homes. As opposed to North-South axis in which diffusion across latitudes requires plants to cross different climatic barriers thus adopting to try to live in very different climates. This along with other physical barriers (large deserts, high mountains, large oceans, impenetrable forests, etc) helps to explain these diffusion rates.

WRITING

Another hugely important cultural development that facilitated the diffusion of goods and ideas and created a competitive advantage: writing. The development of writing systems made it possible to transmit knowledge in far greater quantity and detail from more distant lands over longer periods of time than ever before. Even more recently writing has been an integral part of any recent colonial conquest: commands of kings were conveyed in writing, maps and written sailing directions were transmitted, explorers were motivated by the written accounts of earlier adventurers and they learned what to expect as a result, entire empires were administered through written documents.

The writing systems that did develop and diffuse were found only in agricultural societies. No writing system was ever adapted by a hunter-gatherer society because they lacked the free time created thanks to the stored supply of food, which could be used to feed full time scribes and they also lacked the need to create writing systems (sedentary agricultural societies needed writing for purposes related to the institutions that developed as a result of that lifestyle). Thus, food production, and the years of societal evolution that followed, was an absolute necessity for the development of writing. This is supported by the fact that the only places to independently develop writing systems (Fertile Crescent, Mexico and China) were also the locations where food production first arose. Other places that acquired writing systems borrowed from or were inspired by the travelers sharing the knowledge of writing from these first places.

SOCIETAL TRANSITIONS

Before we move on to our individual examinations of regional civilizations let's pause to examine the transitional stages societies progress through. The idea of the modern state that we are all familiar with is an incredibly recent invention. As recently as 1500 A.D. less than 20% of the world was marked off by boundaries and organized into states governed by laws and run

by bureaucrats. So how is it that these societies progressed from small groups known as bands to tribes to chiefdoms and finally ended up in today's large states?

After millions of years of human evolutionary history we ended up living in societal groups that anthropologist's label "bands." Bands differ from states in a number of ways. Bands have no permanent place of residence, they are not sedentary. The land they use is shared by the entire group, not distributed individually. There is no economic specialization and there are no formal institutions to resolve conflicts (police, courts, etc.). And within bands there is no formal social stratification, they are more egalitarian. This is the way that humans have lived for most of our history; the developments that ultimately led to the creation of states only took place in the last tens of thousands of years. The next progression of society is the tribe, however, have a much larger population (thus have more than a single family living in any community) and live in fixed food producing settlements. In order to organize into larger settlements and feed everyone it was actually necessary first to become food producers, thus the first places to grow into tribes were the first places to adapt farming (Fertile Crescent).

The next progression was the chiefdom. These arose first in the Fertile Crescent (thanks to a head start in farming) around 5500 B.C. and later in Mesoamerica around 1000 B.C. Chiefdoms were even larger in size than tribes. This basic fact required an entire change in social organization. For the first time the group of people living together was so large that there were people living in the same community who did not know each other; the concept of a "stranger" was developed. And with this development people had to learn how to encounter strangers regularly without attempting to kill them. A solution to this problem was the idea of a chief. A chief was the one person in the chiefdom who could exercise a monopoly on the right to use force. A chief settled disputes and made major decisions. Eventually, the post of chief became one that was handed down hereditarily. Chiefs eventually developed the conclusion that they were above others and thus began a social hierarchy where chiefs were at the top, with priests and craftsman below all the way down to food producing peasants and slaves. Another important shift within chiefdoms was a shift from the common reciprocal exchanges (A gives to B something, B gives back to A something), to a redistributive economy. In a redistributive economy there were still reciprocal exchanges but now the chief also collected excess goods which he could redistribute throughout the community. Eventually chiefs realized they needed not redistribute everything and they began collecting things and keeping them instead of redistributing, this idea became known as paying a tribute to your chief and it was the precursor to our taxes.

The next societal progression resulted in the development of the type of society we are familiar with, the state. These arose in Mesopotamia around 3700 B.C., and around

Mesoamerica around 300 B.C. States differed from chiefdoms in a number of ways. Early states still had a single, usually hereditary, leader (King) who exercised a great monopoly over all decision making. And even today, although most leaders do not gain the post by lineage (However, the possible Bush, Clinton, Bush, Clinton presidencies is interesting) it is still a very few select individuals who make the decisions in any country, a very few who know all the secrets and rule the world. The central control of states and the redistribution of tribute, or taxes, is much greater in states than it was in chiefdoms. Economic specialization is far more extreme today than it has ever been. The levels and details of administration and the number of bureaucrats are far greater in states than it was in chiefdoms. Formalized institutions to deal with internal conflict are much more developed within states (police, courts, judges, laws, etc.). The most important difference is that today's states are organized on political and territorial lines as opposed to the usual kinship lines that defined all other previous forms of society. This is an important distinction because it affects all other aspects of life. For example, family could no longer be the basis for fighting or protection and thus ideas of patriotism and religion had to be developed. Also, decisions about which fights to pursue are no longer decided on by a society, instead now these decisions are in the hands of a single individual or a select few.

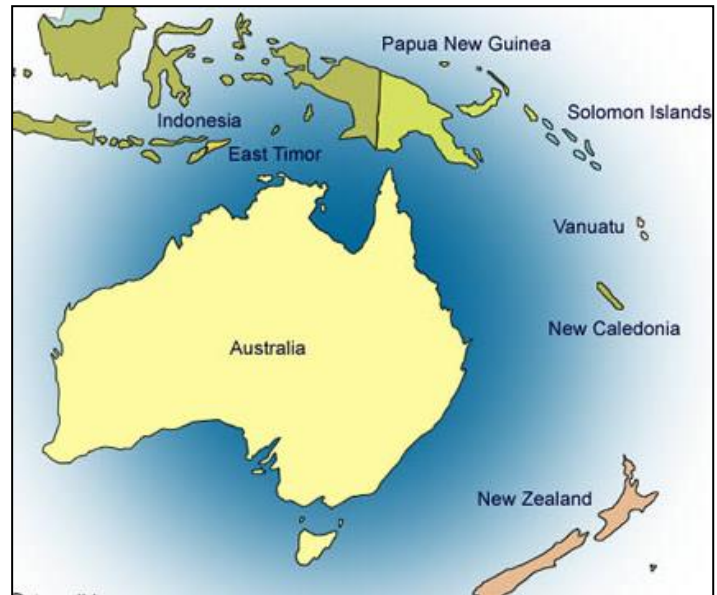
Smaller societies thus develop into larger more complex societies and eventually states in one of two ways. First, surrounding groups may decide voluntarily to merge as a result of a threat from an outside source (ex. American colonies banding together to create a state to counter the force of British). Or second, smaller societies may be combined by force (ex. The Incan empire that conquered others and incorporated them into their larger state). So, it is ultimately conflict that leads to the combination of small societies and the creation of states. However, fighting and war has been a fact of life throughout human history so why are states a recent development? The answer comes back to the size of the population. In the past when population densities were low defeated societies could simply move to occupy a new space. Recently, in densely populated areas, defeated societies have nowhere to flee to and thus victors use the defeated in two ways. Thus, the defeated may be taken and used as slaves or the defeated may simply be incorporated into the victors society forced to pay tribute to the rulers. The states and cultures that exist around the world today passed through the stages outlined above.

| | <i>Band</i> | <i>Tribe</i> | <i>Chiefdom</i> | <i>State</i> |
|-----------------------------------|---------------|--------------------------|----------------------------|---------------------------------|
| Membership | | | | |
| Number of people | dozens | hundreds | thousands | over 50,000 |
| Settlement pattern | nomadic | fixed: 1 village | fixed: 1 or more villages | fixed: many villages and cities |
| Basis of relationships | kin | kin-based clans | class and residence | class and residence |
| Ethnicities and languages | 1 | 1 | 1 | 1 or more |
| Government | | | | |
| Decision making, leadership | “egalitarian” | “egalitarian” or big-man | centralized, hereditary | centralized |
| Bureaucracy | none | none | none, or 1 or 2 levels | many levels |
| Monopoly of force and information | no | no | yes | yes |
| Conflict resolution | informal | informal | centralized | laws, judges |
| Hierarchy of settlement | no | no | no → paramount village | capital |
| Religion | | | | |
| Justifies kleptocracy? | no | no | yes | yes → no |
| Economy | | | | |
| Food production | no | no → yes | yes → intensive | intensive |
| Division of labor | no | no | no → yes | yes |
| Exchanges | reciprocal | reciprocal | redistributive (“tribute”) | redistributive (“taxes”) |
| Control of land | band | clan | chief | various |
| Society | | | | |
| Stratified | no | no | yes, by kin | yes, not by kin |
| Slavery | no | no | small-scale | large-scale |
| Luxury goods for elite | no | no | yes | yes |
| Public architecture | no | no | no → yes | yes |
| Indigenous literacy | no | no | no | often |

THEORY APPLIED

Greater Australia

We'll switch now from our hypothesized conclusions regarding the reasons cultures evolved along such different lines to see if these concepts prove true in actual situations. We start our examination with the continent of Australia because it may have the best controlled variables. During the last ice age sea level dropped to a point that Australia was connected by land with the surrounding islands, including New Guinea. The Australian continent was settled around 40,000 years ago by Asians when the sea distance between the continents was least. During this time the same societies wandered Australia and New Guinea. When the ice melted Australian oceans isolated Australia from Asia and from New Guinea. 10,000 years later the people and cultures of Australia and New Guinea differ greatly. This offers a perfect example to prove these differences resulted from geographical differences not biological because we begin our examination with the same populations on each island.



The people of Australia and New Guinea are so different now as a result of lengthy isolation from each and the extremely different environments their societies developed in (the same reasons most of the worlds differences exist). The geographic differences that existed between the two places are as follows. New Guinea lies almost on the equator, is mountainous and extremely rugged, and is covered with young fertile soil. On the other hand, Australia extends into temperate zones as far as 40° from the equator, is extremely flat, and is covered in by far the worst soil of any continent on earth. As a result of their geographic locations and features their climates are also very different, New Guinea is one of the wettest places on earth and varies climatically very little throughout the year, while Australia is one of the driest places on earth and stretching farther from the equator means that its climate can have large seasonal variations. In general, Australia is essentially a desert and New Guinea a rainforest. The environmental differences are the reasons that the cultures progressed in two distinctly different directions.

As a direct result of its environment New Guinea initially became more successful. Farming began in the highlands, while lowland people found rich hunting and gathering

environments on the coast and in the swamps. These societies grew and became the largest in Greater Australia (Australia and the surrounding islands, including New Guinea). As a result of these larger and denser populations New Guinea became the location with the most advanced technology and political and social organization. However, New Guinea never grew large enough to progress because the area of agriculture in the highlands was not large enough to support a very large population, they had no mammals to domesticate and they were isolated.

Australia had, like New Guinea, also hunted all its suitable domesticable animals to extinction and thus had none available. People of Australia found it impossible to develop agriculture because it is so extremely dry, the variations in climate from year to year are so great and very few native candidate plants for domestication even existed. Thus, nomadism made sense, moving from place to place wherever the environment was rich at the moment. As a result the population of Australia never came close to that of other continents and thus the advances that took place elsewhere (writing, metal tools, political organization) never occurred there. Other societies surrounding Australia that did develop these things did so as a result of their climactic advantages; thus when they did come to explore Australia they did not settle it and diffuse their advances because the climate was so unattractive they quickly moved on.

The climactic advantages that New Guinea enjoyed also helped when European explorers came conquering. Europeans never colonized New Guinea to the same extent that they did Australia for three reasons. First, Europeans were not familiar with or immune to the diseases that developed within New Guinea's tropical environment and were thus killed by them as they tried to conquer. The mountainous and differing terrain also made expansion here more difficult. Last, and most important, the climate of New Guinea did not allow Europeans to install the same type of crops as they had at home. This climate supported a completely different staple of crops than Europeans were used to. Exasperated, European conquerors moved on to Australia where they found much greater success. Coming from a similar latitudinal geographic location, explorers were used to the diseases aborigines had to offer and actually brought them new ones which acted to wipe out large portions of the native populations. The similar climate also meant Europeans could bring and introduce their own crops and domesticated animals. As a result Europeans took over the continent, using their guns to kill those in their way or forcing the surviving aborigines to the parts of the continent that they found too undesirable to live on (deserts). Thus, European Australians did not create their lifestyle and culture on the Australia continent; instead they imported it from home where it had been evolving for thousands of years. Meanwhile, the aborigines and native New Guineans developed a completely different culture adapted to suit the geography of the region (these "natural" cultures still exist across greater Australia today).

China

Let us now turn our exploration to the region surrounding Australia. How did the islands of Indonesia and the Chinese mainland come to be populated with the people and societies we see thriving today? Today China appears to many to be culturally, linguistically and politically homogenous, however this was certainly not always the case. Differences in Chinese climates caused differences in culture across Southeast Asia as civilizations developed over the past thousands of years. However, much like the diversity of all Native Americans has been subsumed into one culturally, linguistically, and politically homogenous people state, originally devastated and conquered by Europeans (The United States), Chinese history has shown a progressive conquering and spread of one culture over others. The repopulation of China can also explain the existing cultures of most of the rest of current East Asia.

Chinese ancient history reads like much of the more recent colonialism escapades. Similar to what happened to Native Americans and Africans once their respective continents were “discovered” by Europeans, in China one invading group came to dominate and control groups who had previously inhabited certain areas for thousands of years. The reasons for the dominance of one group over another are the same as we have seen throughout this paper. The dominant group happened, by luck of geographic location, to be the one to develop food production earlier and along with it larger societies and the accompanying political organization and technological advantages. This early farming group then spread across land occupied by others with the help of guns, germs and other technology. In China the group that came to dominate all the others evolved in Northern China and then expanded south.

The North Chinese became more dominant simply because they were the first to develop a sedentary food producing lifestyle. They were in fact one of the first civilizations in the world to develop this way of living. Thus, the size of their population grew exponentially and these people had a huge head start in developing technology (including: paper, the compass, wheelbarrow, and gunpowder). As this society expanded it came into contact with many other diverse cultures living in the different climactic regions throughout China and this exchange of ideas and technology increased the rate at which the inequality between different cultures grew. The geographic advantages of large navigable rivers (Yellow and Yangtze) running along its advantageous east-west axis aided in diffusion.

As a result of favorable geography China became unified politically early in its history and has remained relatively stable much of the time since (at least since 221 B.C.), as opposed to geographically difficult Europe which has yet to fully unify. The societies of China also had influences elsewhere as the people of Southern China set out to colonize all of the surrounding regions including the Southeast Asian archipelagos.

The Americas!

The most salient population, or more accurately, repopulation, of a continent to us is that which took place in the Americas. We've learned throughout our history that Europeans "discovered" America and rescued the few heathens living there, teaching them how to be civilized. However, this view is not exactly accurate. The Americas were populated by a great number of diverse and advanced cultures long before Europeans ever arrived. Why was it that when Europeans did arrive they took over the continent quickly and easily? To understand let us examine the differences in European and American societies at the time of discover (circa 1492).

As we've seen the most important factor in societal progression has been food production. The major difference in this regard was the availability of large domesticable mammals. Europe had them, the Americas didn't (due to possible earlier extinctions from overhunting). Domestic animals are important for many reasons including: creating a reliable source for protein, clothing, land transportation, powering plows, and fertilizing crop fields with manure. American societies did have small domestic animals (chicken, dogs, rabbits, etc.) but these paled in comparison. Societies that did become farmers were also much more widely spread in Eurasia, while they did exist in the Americas they were much fewer in number and more dispersed. As we have seen, this was a result of less possible domesticable crops to begin with and the difficulty of diffusion of these crops because of axial orientation and ecological barriers. This initial difference in the number, density and types of food producing societies led to exasperated disparities in germs, technology, political organization and writing.

Germs are the most obviously linked difference. As we saw earlier the major killing germs of the world are directly linked to, and transmitted, from animals. Europeans, having close contact with domesticated animals for hundreds of years, encountered these diseases early on and eventually built up immunities to them. However, since the American societies never domesticated large animals they built up no immunities and when Europeans brought these diseases they absolutely wiped out American societies (see: smallpox blankets). This was such an important factor that often Europeans found they had few left to conquer when they arrived at a settlement because their diseases had been spread ahead of them destroying entire regions of people before they even arrived.

When they encountered the Native American population that had been flourishing the diseases that they spread to them were far more influential in eventually supplanting them than military power. For example, with the help of disease the Mexican Native American population declined from around 20 million to about 1.6 million just under 100 year after meeting their first Spaniard. (This trend is not limited to the Americas and evidence of it can be found throughout the entire world colonized by Europeans.)

Differences in technology were the next important advantage leading to Europeans conquest of the Americas. These differences were a result of Europe's longer history, earlier food production, dense populations and competing societies. These factors led to the development of metal tools, military technology (weapons, strategies, horses, etc.), animal power, wheels, and sea faring technology. By this time most of Europe had also been transformed into states. States had the organizational capability to order and oversee conquest and the propaganda machines necessary to encourage it. Lastly, the fact that more people were literate in European societies was important because it facilitated political administration, guided economic exchanges, encouraged military conquest, and most importantly writing allowed for the transmittal of more knowledge over longer time than was possible in American societies.

These things all were in the process of developing in the Americas or possibly would have in the future but they never had a chance to independently after the arrival of Europeans. Thus, as we've seen time and again, Europe simply had a head start. And when they did discover some useful plants or animals or invent some new technology it was much harder to transmit this new technology to other societies. In the Americas to contact and exchange with other societies people had to cross vast distances and latitudes, meaning they had to cross through extremely different climate zones. Along their journeys they also found more ecological barriers to deal with (ex. Amazon rainforest, Dorian Jungle, Andes Mountains, Mexican deserts, etc.). The ultimate result was that few people and even fewer crops, animals, ideas or technologies survived these diffusion journeys.

When the drastically different American and European societies did collide the consequences were catastrophic. Columbus landed in the West Indies in 1492 and the murder, warfare, enslavement and extermination began. Extremely quickly, within 40 years, the two most advanced societies of the Americas (the Aztecs and Incas) had been conquered. Other smaller societies were destroyed more gradually as new colonizers saw some economic advantage to be gained and this continues into the present (see Amazonian societies). In North America the result was either a complete extermination of most indigenous people or a forced migration onto only the worst possible type of land that new "Americans" could currently find no use for. In other places, originally more indigenously populated, many of the indigenous genes live on however, the original cultures are still being decimated. This repopulating of the Americas has been the biggest population shift in human history and it all has all resulted from 10,000 year old inequalities growing out of differences in geography (mainly location, crops, animals, axial orientation, topography, etc.).

Africa

By now you are probably beginning to think about Africa and wonder how culture and life evolved there. Rethinking what we have already learned we could conclude that Africa should have been the first to develop and gain the advantages we have spoken of. The continent was the first to evolve anatomically modern humans, so it has had the longest time to evolve societally. It covers a wide range of climactic and topographic areas, so there would have been many distinct cultures to exchange ideas and encourage progression. However, as we know from history Africa was not the continent to gain the advantages and explore/conquer Europe; it was in fact exactly opposite. To figure out why Europeans conquered Africa and not vice versa we need to start at the beginning.



First, we must dispel the common rumor that all people living now or who have ever lived in Africa look similar to the black Africans we have come to regard as the only people of Africa. Africa has long been a genetically and phenotypically diverse continent, home at one point to five of the world's six major divisions of humanity. Africa was at one point divided into races loosely referred to as Blacks, Whites, African Pygmies, Khoisans, and Asians (the only other racial division of humans is Aboriginal Australians). *(I should remind everyone of all the problems associated with classifying people by "race," for instance, that there are no clearly defined races, race is an arbitrary term, etc. however, for our purposes it will be useful to briefly think in these outdated terms.)* Although all were once widespread among different parts of the continent, Black Africans today make up by far the largest portion of people living in Africa. This is the result of the expansion of Bantu speakers into the areas of all the other races over the past thousands of years. The reason that Bantu speakers (Black Africans) were able to thrive should come as no surprise.

A quick examination of the crops suitable for domestication in Africa shows us that they all existed natively only in the areas occupied by Bantus. Thus, by accident of their geography, the Bantus were the first to domesticate crops, become sedentary farmers and develop all the advantages that came along with this lifestyle. Thus, this group of Bantu Africans came to dominate all other African groups for the same exact reasons that Europeans came to dominate American groups. Today other groups survive near their ancient homeland only if there happened to be land undesirable to the expanding Bantu.

When Europeans arrived in Africa the Bantu culture was widespread. In Africa Europe encountered some problems with the colonization model they had used in the new world. First, the majority of Africa is extremely climatically different than Europe. This meant that Europeans could not grow their crops and also that Europeans, now encountering tropical climates were the ones dying of new tropical diseases they had not developed immunities too. Thus, as a result of the dissimilar climates Europeans were unable to colonize Africa in large numbers, instead they primarily extracted resources from the majority of the continent without settling. The exception to this lies in the country of South Africa. Here European culture displaced indigenous culture precisely because this is the only area of the continent which has a climate similar to that of Europe. Here Europeans could live without fear of disease and grow their crops; examining the continent of Africa today is a great illustration of the importance of physical geography throughout human history.

CONCLUSIONS

Why did the Fertile Crescent not continue its initial advantage, or China? Why was Europe more successful in the long term? As the advanced societies of the Fertile Crescent grew and grew they eventually depleted their natural resources. As a result of the environment of the region they were forced to move west looking for new land and resources. Then those were depleted and so on, until right now the center lies in Western Europe where resources are naturally replaced faster. China lost its initial lead because it was so easily connected (for reasons of topography, coastline, etc.). China has been united under single rule for most of its history, unlike politically fragmented Europe. This led to much competition between states in Europe with no single ruler to stifle innovations. In China there has been one ruler deciding on what inventions to expand and what to disregard and not as much competition forcing progress.

Thus, though the initial advantages did not continue unhindered forever the theory outline above is useful in starting our examination of the varied cultures that inhabit the world. Differences in world cultures today can ultimately be traced, in part, back to differences in environmental and geographical factors.

Disclaimer: although this geographic determinism theory is true in the long run in the large view there certainly are cultural idiosyncrasies throughout that effect development all the time and these should not be wholly disregarded. This paper has simply offered a view as to why some started quicker, leading to why some are ahead of others now by examining the macro factors, it is certainly important to also remember and analyze the micro scale factors. However, even the most important people or trends have not proven as important in determining the cultural history of the world as geographic factors have. Moving on throughout this course we will now examine the cultural landscape of the world in terms of the individual variables outlined above.

QUESTIONS:

*** According to this paper what single event caused the culturally similar people occupying the world 10,000 years ago to turn out so culturally different?**

1. What are the six determinants of the switch to agriculture? (*explain the significance of each*)
2. What advantages do sedentary agricultural societies have over hunter-gatherer societies?
3. Which areas of the world were the first to independently begin farming? What was special about these areas?
4. Explain the historical significance of the Fertile Crescent.
5. What important advantages come along with the domestication of animals?
6. How does the axial orientation of continents influence the rate at which ideas spread?
7. Where did writing originate and how did it influence the success of societies?
8. What factors influence the rate at which technology spreads?
9. Briefly explain the progression of societies from small bands to large states (mention changes in size, settlement type, leadership, hierarchy,
10. Why does the continent of Australia have a culture similar to that of Europe while the island of New Guinea, nearby and settled by the same ancestors, has a culture unique to the island; what happened when Europeans encountered the area **AND WHY?**
11. Why does the culture of the Americas share many similarities with that of Europe? What happened when Europeans encountered the people of the Americas and **WHY** was one group more successful than the other?
12. What was so different about Africa? **Why** was European culture not able to take root in that continent?
13. Overall, how did the agricultural revolution change the world? Why does the cultural world we have today look the way it does?