# **Civilization & Agriculture: Mixed Blessings on Our Way Here**

By Ellen LaConte

re are accustomed to touting the accomplishments of civilizations. Particularly are we in the West accustomed to touting, even revering, the accomplishments of our 2500 year-old civilization. We have good reason. Much that is good, brilliant, beautiful, noble, and true has been produced by descendants of the Greco-Roman/Judeo-Christian/European way of looking at how the world works. But much that is none of these things also has been produced by Western as well as non-Western civilizations. In general, civilization has been a mixed blessing, particularly for the majority who in any age were looking at an advancing civilization from the near end of a defensive weapon or underneath a boot heel. We civilized humans got to come indoors and improve ourselves, but we also got enslaved and plagued; we got Beethoven and sometimes our daily ration of bread, but we also got battleaxes and bombs; we became fabulously creative but also capable of destroying creation.

Among the most serious of the negative accomplishments of each civilization in its turn has been its tendency to live beyond Earth's means. To this we will give our attention because in our time this feature of civilization threatens to undo or cancel nearly all the good civilization has otherwise done.

# The Cities on All the Hills

Civilization as we know it has been more often a bane than a blessing to Earth and most living things because, while the word for it is cognate with terms like "civil" and "civilized," it is also cognate with "civilian," "citizen," and "city." It is this second set of meanings that help us understand why those of us who have lived in civilizations have often behaved *un*civilly and as if we were *un*civilized. In fact, where Earth is concerned, *citifization* may be a more accurate name for what we've been engaged in for the past 5,000 years. For the foun-

dational feature of civilization, the characteristic that all civilizations have had in common, is cities.<sup>1</sup> More precisely, all civilizations have had in common Earthaverse, often people-averse, increasingly large, densely populated, uneconomical—and entirely un-*eco*-logical—cities. Cities are not an inevitable social development, but from Earth's and even our perspective, they are a peculiarly self-punishing, even pathological, one. But before we explore why this is so and since we have not yet arrived at what might lie beyond civilization, let's look at how we got from the Earth-honoring, almost-Edenic Neolithic societies (the loosely settled, relatively sustainable groups of hunter-gatherer-gardeners and the small villages of southeastern Europe and the Mid-East) to civilization in the first place.<sup>2</sup> Let's also, parenthetically, consider the similarities between the end of Eden in that far-away time and the pending end of

ours. We'll begin with the most famous transition.

## The Flood

Some of the earliest and best-known Neolithic subsistence societies set up housekeeping and took up gardening 11,000 or 12,000 years ago when a cold snap-a mini-ice age named the "Younger Dryas" after a species of alpine flower that flourished while other plants froze—had lowered sea level and caused widespread drought but simultaneously had opened up lots of new territory, particularly around the Black Sea, the eastern Mediterranean, Nile River, Red Sea, and on the floodplains of the Tigris and Euphrates and the Persian Gulf. A couple of thousand years into what later writers would call the Golden and Silver Ages, the weather began to warm up again, but for a while the change was so gradual that it was imperceptible from generation to generation of dwellers in Paradise's gardens. Life was relatively easy, and increasing numbers of us got our livings by whatever means we chose: hunting, foraging, gardening, fishing, and nomading. We were not pressed to change how we lived, but got good at what we already knew how to do and went forth and multiplied.

For thousands of years, our numbers had stayed relatively stable, below four million, but by around 7,000 B.C.E., thanks to the good weather and the locations, we'd fallen into alongside life-rich rivers and sea shores,

And then there was the Flood. Noah's flood, the very one that preoccupied the minds of nearly every early civilization, took up the first pages in their sacred texts, and shaped their thinking about divine interventions and the laws of supply and demand. our numbers began slowly but perceptibly to increase. By 5500 B.C.E., there were already five million of us with the largest concentrations in the Mid-East, southeastern Europe, and southwestern Asia where we'd arrived first on our journey out of Africa.

And then there was the Flood. Noah's flood, the very one that preoccupied the minds of nearly every early civilization, took up the first pages in their sacred texts, and shaped their thinking about divine interventions and the laws of supply and demand. Its official name is the "Flandrian Transgression," and it did transgress in both senses of the word: the waters came back over the land, trespassing on it and everything that lived on it; and it did feel like a sin to those who had lived on that land. And on account of it, overwhelmed by critical mass, they began to trespass to an unprecedented degree on each other.

In fact, in a period of only a few years, the Persian Gulf, Red Sea, and Nile began to fill with water and continued to fill steadily for a thousand years, drowning suddenly, and then relentlessly, landscapes and settlements and everything that didn't move inland before it. The Gulf transgressed the length of the lower Tigris and Euphrates, north and west, into present-day Iran, Iraq, Qatar, Kuwait, and Saudi Arabia, driving both village folk and hunter-gatherers hundred of miles inland, into nomads' land. Over the next several thousand years, it retreated to its present location, deserting the villages and small cities that had by then grown up at the edges of its furthest encroachments.

Meanwhile, the Mediterranean Sea crept up over all its low-lying coasts and burst through the narrow Straights of Bosporus dumping a wall of water into the swampy Black Sea, raising its level 500 feet, inundating river valleys deep into the interior, and pushing all those who had populated its game-, fish-, and bird-rich basin back up against the mountains that surround it. Sixty thousand square miles were covered in a matter of days and submerged in a matter of weeks!

Simultaneously, everyone and every creature that had walked over dry land from the European mainland to Britain, from Australia to New Guinea, from China to Japan, or Malaysia to Indonesia, from Turkey to Greece and Italy, from Spain to northern Africa, and from Asia to Alaska were stranded and, in the case of island peoples and animals, isolated. A land mass the size of Africa that had been exposed when the waters fell was under water again.

We need a visual here. Picture in your mind's eye a familiar coastal city, many of which, because they are port cities, lie by a major river: New York, New Orleans, Miami, Galveston, Los Angeles, London, Copenhagen, Lisbon, Amsterdam, Venice, Athens, Tel Aviv, Calcutta, Singapore, Shanghai, Manila, Lagos, Dubai, Kuwait City. Now raise sea level, and along with it the rivers' level, ten feet. Not all at once. Not a tsunami that would quickly retreat. Just a creeping rise over, say, twenty years. Though one or two feet of water, which is more likely in this century, would be sufficient to change everything, in honor of the Flandrian let's imagine a rise in sea level of ten feet occurring over the next twenty years that *wouldn't* retreat again: no more streets, no more walking or driving anywhere; no dry first levels in any of the buildings; rotting, inaccessible pilings and infrastructure; drowned sewer and water mains and subways; floating sewage, no fresh water, all the circuits blown; fish in bedrooms and corporate lobbies as well as all the restaurants. Some low-lying nations would be almost entirely under water. Leave aside the closed ports and airports, the complete collapse of imports and exporting, forget the ensuing economic chaos—*where would everyone go?* Since there are already people living and consuming resources everywhere that the ground is high, *how would the ones who had to evacuate live? How would what was left get divvied up?* 

This is exactly the point. Where *did* everyone go when the flood waters rose? Survivors headed inland, upland, and overland: as was customary, they tried to spread out. But how could they live their traditional bigterritory hunter-gatherer, village-gardener, and nomadic lives when there was so much less suitable territory to get a living on and their ways of getting a living were utterly incompatible? They couldn't, but we'll get to that in a moment. And how *did* the land and resources get divvied up? Inequitably and often unpleasantly, survival of the fittest and fastest. It was a squeeze play of enormous proportions and what it squeezed us gradually into was? Exactly—cities: concentrations of people and verticality. When you can't spread out, you build close and you build up and even on top of.

#### Eden's Other Endings

But before we assess citifization and its consequences from an ecological point of view, we'll take a quick look at the other contributors to Eden's end. With the possible exception of the first, they have parallel movements in our time that signal the end of our Edenic dreams of perpetual material growth and progress.

(1) Meteorology and molten lava: Literally, in the two or three millennia after the Flood, the recently challenged occupants of a newly reduced Middle-Eastern landscape were challenged yet again and their landscapes reduced yet again, by a variety of geological and meteorological catastrophes: a series of violent volcanic eruptions alternately raised and sank whole islands, buried lush landscapes under lava, and scalded marine life; lingering, often toxic, clouds of volcanic dust caused crop and plant loss and dispiritingly long winters; post-traumatic tsunamis 700 feet high traveled at speeds up to 350 miles per hour over the Mediterranean and wiped out islands and towns along the Levantine coast; earthquakes, some of which resulted from the retreat of tons of glacial ice from European and northern Asian soils, raised mountains and rerouted rivers; and persistent seasons of meteor showers in the present-day Persian Gulf

region and Egypt flattened some of those first cities like Ur and left craters where villages had stood. Paradise ended with a bang, not a whimper, and early sacred texts adjudged that Earth, or their god, was not thrilled with the thought of more of us living beyond our means in concentrated numbers, thinking we were in charge. (Today, we have climate change resulting in melting sheets and glaciers, sea levels living, and landscapes reforming and Earth-quaking as heavy ice masses retreat, permafrost melts and aquifers drain.)

(2) Mass migrations: As groups and communities of us took over the portions of land on which tradition or catastrophe had left us, there was ever less land in the Middle East that could produce enough food, water, and space for our incompatible lifeways: you can't farm, hunt and gather, and push sheep or goats over the same land. The tribe of Abraham, generally supposed to have been driven out of Ur by a combination of meteor showers and retreating seas full of fish, became nomads again in their quest for a homeland without competitors.

For their part farmers had in some cases become too successful and begun to overrun their territories. Population worldwide, but especially in the Middle East, doubled in the post-Edenic period in only a thousand years. This forced rising generations of farmers to look for land elsewhere. Prodded and led by the boldest among them, they pushed out of the cradle of civilization into India, northern Africa, and Europe, anywhere that the weather, waters, and land could sustain grazing animals and succession crops of grain, pulses (peas and beans), and fiber crops like flax.

Every wave of us out of the original homelands made strangers of us and also conquerors; every wave of us had to pass through or over every previous wave, creating a temporary local or regional critical mass; and every new wave of us had a leading edge that crept as surely over the land as the rising seas had done. (Every prosperous, northern hemisphere nation is facing, not very gracefully, the influx of waves of unemployed, hungry migrants; every so-called Third World nation where labor is cheap is facing, not very gracefully, the influx of waves of outsourced jobs and hungry money.)

(3) Marauding hordes: Those waves of farmers often met with an unpleasant fate when they intruded on the grazing lands of pastoral nomads. But bad weather and their own increasing numbers had already put pressure on nomad societies, too. In the two millennia after the flood, several waves of hungry, angry tribes descended on the lands where farmers had squatted and small cities arisen. The clashes between the two lifeways typically were violent. Occasionally, the marauders moved on elsewhere after they'd taken what they'd wanted;



often they stayed, took over the villages and peoples they'd conquered, intermarried with farmers and domesticators, and became farmers and domestic in their turn. And—this is important—often the head men among them and their sons, accustomed to taking over, leading and commanding their mobile tribes, took over and commanded the communities they settled into, becoming chiefs, petty kings, or overlords.

To be fair, ultimately most of those pastoral nomads were marauded in their turn by those relentless waves of migrating farmers.

(4) Monocropping: The secret to sustaining increasing numbers of sedentary humans through all four seasons on limited amounts of land with limited local stocks of meat, fish, and forage was to maximize the availability of those local wild, fat-seeded, prolific, relatively nutritious, easily harvested and stored carbohydrate-rich grains and protein-rich pulses. While the growing of one or two crops, and one or two strains of each in any location, did sustain us, it also contributed in a variety of ways to the end of the rather Edenic period we'd experienced.

Farmers worked much harder for more hours than hunter-gatherers, and the nature of the work, involving lots of high-impact, repetitive motion and stoop labor, was hard on farmers' bodies. More people were needed to farm on a scale sufficient to produce enough food for villages that were becoming cities, so children and women went into the fields along with the men. Because its cycles and types of activity were also repetitive, largescale farming was a less mentally stimulating and culturally rewarding activity than hunting, gathering, and horticulture; it turned skilled, independent, adaptively graceful providers in possession of Earthy expertise into mere laborers and collaboration into drudgery. Since a singlecrop diet is far less nutritious than a mixed one, farmers were less healthy and, over time, smaller and more prone than their predecessors to both degenerative

diseases and the contagious diseases that followed us out of Africa, loved to find us in crowds, and often were transmitted by the domestic animals with which we lived intimately.

Plant diversity gives way to plant dominance in a monoculture; whenever there are too many of any one plant in a place, as whenever there are too many of us, that plant is increasingly susceptible to disease, pests, and the ravages of poor or changing weather: famine dogged farmers from the start. Harvested monocrops need to be stored for both seed and lean periods: stored crops attract pests like rats and weevils and have to be distributed from storage by someone and guarded until they are distributed. Farmers were often less able to guarantee their subsistence than hunter-gatherer-gardeners because they got their food from a distributor who typically worked for the chief, petty king, or overlord, any or each of whom skimmed a portion, rather than producing directly for themselves and their community. Heavy producers like grains and beans are gluttons for space and water; without regular interventions like investments in soil health, they bankrupt soils and deplete fresh water accounts in a hurry.

(5) Metallurgy: Copper, tin, bronze, and iron, discovered in the last of the Edenic millennia, put an end to the Stone Age. They made better tools and weapons than stone did. Improvements in these enabled us to take more from the earth and each other than we had been able to do. Mining abused the land and waters in ways we had not been able to abuse them before and demanded the creation of a literal "underclass" of hard laborers: those who worked in and under the ground. Villages and communities rose on the wealth produced from their mines and fell when the mines were played out. Mining communities were not sustainable and could hit critical mass-too much demand, too little metal-within one or two generations, sending further waves of the dispossessed on the search for new places to live and mine. Metalworkers, mongers, and smiths became the first specialists, and the rest of us became dependent upon them for what they could make that we could not. Metals, things made of metal, gems and things set with gems joined or replaced shells, beads, ochre, and feathers as decorative items. Since they were in shorter supply, widely scattered, and harder to get and thus had to be traded for or bought, they were considered to have a higher value and were among the first status items. Things being used to distinguish those who had them from those who did not signaled the end of equitability of the ascendance of greed. (Today, having information, biological, extraction, and materials technologies divides rich from poor, strong from weak in a similar though with more rapid, far-reaching and long-lasting consequences.)

(6) Male dominance: About those chieftains, headmen, and overlords. A combination of at least three forces—the intense competition for living space and livelihood that followed regional critical mass in the Middle East and southeastern Europe; the need for someone or some collection of someones to organize and lead populations of us that had become too large, intermixed, and unfamiliar to each other to organize themselves; and the influx in the last millennia B.C.E. of nomadic peoples that were led and their assets held by men and their sons, the patriarchs—laid the ground for increased violence and, therefore, for the strongest, most aggressive and forceful to fare better than the less strong, aggressive, and forceful.

Typically men, whether village farmers or tribal nomads, were the strongest, most aggressive, and forceful. Consequently, equitable, co-operative, egalitarian communities rapidly yielded to or evolved into maledominated aggregations of competitive communities. The strongest, ablest, most independently-minded men, some of those to whom the awareness of self and capacity to abuse the privilege came first, became headmen, occasionally by consensus, but more often by default, determination, or defeating the opposition. And so the first cities, and most of them thereafter, were run much the way primate bands had been run rather than the way our earliest human clans and communities had been. In cities as in jungles, the most determined, testosterone-driven, and dynamic chest-thumpers called the shots. (Today, the patriarchs sit in corporate board rooms, global economic councils and scientific laboratories, governmental laboratories and executive mansions "managing" the world.)

(7) Mobility and markets: The adaptation to and familiarity with a particular place and everything that lived there, and the relatively sustainable, local lifeway that had characterized the hunting, gathering, horticultural societies yielded of necessity to the forced mobility and dislocation of both humans and materials. Whole cities couldn't pick up and go where the water, timber, marble, iron, and salt were when those became scarce. Rather the water, timber, marble, iron, and salt had to be brought to where the city was. Larger villages and the first cities became markets for what they had in excess and importers of what they hadn't enough of. Goods and materials became as mobile as hunter-gatherers had been. The difference was that hunter-gatherer-gardeners who were up close and personal with their territories instinctively stewarded the things they moved amongst and depended on; they kept track of their accounts of natural capital and income. On the other hand, markets chock full of resources taken from distant territories are not inclined to steward anything, but only to move it rapidly for the best price: their capital may be natural,

but their income is cash. Market towns that rose at the crossroads of trade routes and ports rapidly became major cities.

Additionally, when the first cities hadn't enough people to do the work of sustaining themselves, they brought in more people, often against their will. Slavery was a means by which the dominant members of an urban society could get done the work that needed doing. And so, whether we're speaking of the mobility of farmers in floodtides of migration into new territories or the mobility of gangs of slaves moved to the site of construction projects, "by and large, farming" and the systems that supported it "spread by genocide,"<sup>3</sup> as Richard Manning writes in Against the Grain. (Today, hyper-cities, export free-zones, preemptive wars for control of resources and trade routes, privatization of public resources, enclosure of abstract commons-like patents for common agricultural seeds, "free up" the global market and create the new "Global Economic Order.")

# Why Citifization and What's Agriculture Got to Do With It?

The logic of cities and citifization, the reason they happened instead of something else, is that, while as hunters, gatherers, and horticulturalists we'd had to live in the landscape with the plants and creatures from which we drew our sustenance, as farmers we couldn't. We couldn't live on land that we were tilling and plowing, grazing, timbering, and mining on a large scale. We could only live, both literally and figuratively, off the land, on what we could wrest from it. Ever-increasing acreages were needed to supply the necessary resources to populations that were growing by both births and inmigrations (whether by choice or capture) and to replace acreages that had been farmed or mined out, overgrazed, or clear-cut. Consequently, we had to keep the space in which we actually lived to a minimum. Huddled masses, along with their less huddled overlords and headmen, crowded into small quarters and stacked up to the extent architectural technologies would allow were the almost inevitable solution.

Those huddled masses, if they were fed even just barely enough, continued to reproduce like milkweed bugs. At the establishment of the first true cities in Mesopotamia around 4500 B.C.E., there were about five million of us worldwide; by 200 C.E., at the height of the Roman Empire, when there were also cities in Asia, India, and Mesoamerica, that number had expanded to 200 million, most of whom were influenced by or lived

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in agricultural citifizations. The amount of space we needed to actually *live* in expanded accordingly. Cities, along with their dependent satellite villages, sprawled over the land, knocking down forests and pushing their agricultural and grazing lands before them, the way a bulldozer does, until they hit an obstacle like an ocean or mountain or desert, an insufficiency of a necessary resource like water, fertile soil, wood, or another city or citifization. From a God's-eye view, cities reaching critical mass look the way foaming yeast looks as it rises in a bowl and then expands furiously—until it runs up against the bowl's sides.

When an expanded city's ring of farm and rangeland, forests, water, and mines weren't sufficient to support the continuously growing population, or when the requirements of persisting in the face of perpetual growth and perpetually impending critical mass became too complicated, beyond the scope of the finest minds, the city and its accreted citifization declined. Its population died back or emigrated, and it fell into ruin, lost power, got taken over by uncitified "barbarians" or another citifization. Or it learned to rely on new kinds of imported phantom carrying capacity: it got what it needed from someone or someplace else, by taking it in

trade, simply taking it as barbarians might have done, or amalgamating—conquering and colonizing the place that had it and adding that place's resources and peoples to its own, also as barbarians might have done and been condemned for it. Or it devised or was gifted with new techniques and technologies that allowed it to get at and appropriate what it needed. And sometimes, in a slowly unfolding, unpredictable, often overlapping sequence, as was the case for Athens and Rome, it did all or most of these things.

By this means, nearly everyone within reach of a city's grasp eventually became, whether they liked it or not, to one degree or another citified. By this expansive means, nearly the whole earth has become citified, either living in or supplying cities. Did agriculture or citifization come first? It's a chicken and egg question: they evolved together. The spread of fields full of grain were necessary to support growing concentrations of us, and those growing concentrations of us, whether willingly or not, were necessary to keep the fields as full of grain as possible.

#### The Way It Is

This is the only way cities as we know them can work: they rely utterly on the possibility of ceaseless growth and consumption, both requiring greater numbers of humans to facilitate them. And that is why they cannot help but live beyond Earth's means. Sooner or later a city—and its various exploded versions: citystates, empires, nations, citifizations—will always need something it finally cannot get enough of using the techniques and technologies available to it.

Throughout history, when one city or citifization has declined, another has risen to prominence on its ruins or somewhere else in the world. Each citifization has been unique, each has demanded new capabilities from us as a species, and in each we—some of us—have risen to the occasion. We have ridden the crest of this remarkable wave pattern of rising and falling citifizations, the simultaneously thrilling and terrible evolution of methods of survival against the odds that are built into the citified lifeway.

This is the only way cities as we know them can work: they rely utterly on the possibility of ceaseless growth and consumption, both requiring greater numbers of humans to facilitate them. And that is why they cannot help but live beyond Earth's means. All the way up until now—now there's no place left *on* which, and insufficient fresh water, fertile soils, rangelands, fisheries, and cheap-easy energy left *with* which, to establish another citifization when this one fails, as it must since it's still growing like yeast in a bowl. Citifization fed by agri-culture is *by its very nature* neither eco-nomical nor eco-logical.

### Citifization is Uncivilized

Citifization as we have known it is uncivilized. Its people-unfriendliness has contributed to rather than mitigated critical mass. I offer nine reasons here why this is so.

(1) **Complication.** Both large-scale agriculture and cities *elaborate and complicate* the efficient, direct, simple methods by which hunter-gatherer-gardeners had provided handily for themselves. They do it on our backs: Untold masses of broken-spirited, stupefied, stoop laborers were needed to farm on a grand scale and build irrigation systems, roads, housing, walls, and fortresses. Huge enslaved numbers of us were needed to grow cotton. Today, millions of us, underpaid, are needed to make what fills Wal-Mart's shelves.

(2) Systemization. The tendency of agri-cultures\* to complicate matters requires that elaborate but routinized, teachable, universal systems be put in place so that each of the steps in a construction or production process meets up with each of the other steps in the right sequence, at the right time and place, over and over again. You can't build a road or irrigation system, a palace, apartment building, economy, food distribution system, or fleet of ships without being organized. Though we humans are not naturally systematic, such complicated processes had to be, and so we learned to be. Systems of measurement; numerical and accounting systems; mutually agreed upon ways of telling time and annual, linear-time calendars; grammars, languages, writing, flow charts, blueprints, diagrams; and legal and contractual systems are examples of the ingenious methods by which agri-cultures were organized and systematized. Unlike natural systems, however, the organizational systems we've invented have often had big appetites and have not typically been self-limiting.

<sup>\*</sup>*Editor's Note:* The author uses "agri-culture" in much the same way that we often talk of industrial culture or industrialization in this *Reader*. The author's point is that it was agriculture that began civilization. It did this by creating the surpluses that allowed people to leave the daily work of gathering food to produce more, better and greater surpluses of goods of all kinds. This led to people gathering in larger and larger groups, that is cities, and becoming more and more specialized with control being more and more centralized and systematized. This process seemed forgivable from an Earth perspective until the industrial revolution of the late eighteenth century and beyond discussed elsewhere in this issue. Another of the author's points is that industrial culture is a logical outgrowth of larger and larger agriculture-fed city growth.

(3) **Pyramidization.** But neither have they been selfstarters or self-organizing, as living systems like forests are. Synonyms for "systematize"—"organize, arrange, regulate, regularize, methodize, coordinate, and standardize"—assume that a human agent is involved. Someone had to conceive the order, do the arranging, standardizing, and coordinating, and *initiate* the systems that sustained agri-cultures. Someone had to create them. The need for creator-initiators, and for supervisors, managers, and bosses, caused agricultural citifizations to take a very different shape than prehistoric societies had taken, and caused the rest of us to form very different relationships with each other.

If prehistoric societies could be envisioned as having been organized, in the case of hunter-gatherer-gardeners, as circles of us bound together by instinctive and intuitive commitment to place and to collaboration, or, in the case of pastoral nomads, as lines of us following the sun and seasons and our flocks and tribal chiefs across grasslands and steppes, then history's citifizations can be envisioned as *pyramids*. This analogy is not new, of course. The structures of both ancient societies and modern bureaucracies and transnational corporations have been compared to pyramids for a long time. So long a time, in fact, that we tend to forget how ponderous and bottom heavy, how consumptive of materials, energy, and lives, how firmly planted in place and immovable, how thoroughly inequitable in their distribution of powers, rights, resources, and rewards-how profoundly undemocratic and people-unfriendly-pyramidal social organizations are.

They cannot be otherwise. If you look at a pyramid from the side, it's not only tall in the middle and spread wide at the base like the profiles of cities; it's also stratified. It is made in layers. The breadth and strength of it are in the two lower strata: the bottom layer-comprised of the slaving, laboring, and underemployed poor-and, for the last 400 years, a middle layer, comprised of the alternately expanding and shrinking middle classes. Ninety-five percent of us in any given age have occupied those two sturdy, stalwart strata. Whereas in the past our task and tendency had been to work together to support ourselves, in pyramidal societies the sole purpose (sometimes the soul purpose) of that ninety-five percent of us at the bottom of the pyramid has been to support the system—agricultural citifization—as it has been organized over the past 5,000 years by the fortunate five percent at the top.

If citifization *had* been intentional, this would have represented a "pyramid plot" because what it means practically is that nearly all the labor, earthy resources, assets, and wealth that have been generated at the bottom of history's pyramid have supported that tiny percentage of us in any citifization who have been at the top and who have had the power to decide what got done with them and who got the benefit from them. Proportionally, very little has ever trickled down from the top once it arrived there; very little of the grain that was stored in the granaries was ever delivered into the hands that grew it. The famine, disease, and violence that have dogged every citifization resulted from this disparity: the flow of power from the top down, of resources, goods, and services from the bottom up. It does not speak well of an ostensibly civilized social system that it has perpetually denied to the majority of us precisely the necessities we might have thought it had evolved to supply us. It speaks volumes that this state of affairs has not been permanently adjusted even by ostensibly democratic citifizations.

(4) Centralization. Looked at from the top, that small pyramid of the powerful few, which from the side is seen to stand atop the larger pyramid of us like a penthouse on an apartment building, represents the seats of power at the center of every citifization. For that is another common characteristic of urban agri-cultures: authority and power, command and control are *centralized*. Decisions, directions, and demands flow from both the top down and the center out. This tends to leave a lot of us in any such culture out of the loops of power and decision-making, which means many of the decisions have not been and are not now made with a real understanding of the natures and needs of those of us at the periphery, or for our benefit.

(5) Colonization. As we've seen, in order to get what they've needed when they've used up what's local, citifizations have had to take over and *colonize* other territories, peoples, resources, and species. Colonies are those peoples and territories that supply the dominant city with what it needs, usually at their own expense. Colonialism has never been very good for the colonials.

(6) Militarization. Before new methods were devised by the Global Economic Order, take over and colonization was accomplished *militarily*. Along with artisans, smiths, and other craftsmen, soldiers comprised the first middle layer of citifizations' pyramids. Armies, police, and over-bosses guaranteed that the will of those at the top was done and that the necessary phantom carrying capacities were routinely expropriated.

(7) **Subjugation.** Because citifizations have no choice but to grow and expand, whether they have accomplished colonization economically or militarily, they have accomplished it by subduing, suppressing, and *subjugating* those who were needed as laborers and those who resisted a new or victorious citifization's methods, or rejected its advances. (8) Homogenization. Captive and oppressed peoples—pressed into work gangs, packed into cities—have also suffered the resulting compulsory integration. The tendency of citifizations is to forcibly *homogenize* diverse ethnic and linguistic populations. That's not a bad thing when its purpose is to lead or when it actually does lead to mutual understanding, cooperation, and reciprocity. Citifization's integrative processes, however, have most often been coercive rather than cohesive. Their ad hoc, indifferent rearrangements of people and peoples have led most often to fear, suspicion, misunderstanding, chauvin-ism, mutual loathing, conflict, and violence. Ghettos, barrios, and slums are consequences of citifization's predispositions to both stratify and homogenize.

(9) Commodification. Wrenched away from our wild worlds and relatively Edenic communities and villages, we lost touch with Earthy places, Earth spirits, and Earth's life. Entities and living systems that we had alternately feared and revered but that we always had recognized as vital, throbbing with life and significance and in league with us, now were converted into "things" we used or needed, things the fortunate few wanted, things that came from *outside the city*. They became *commodities* in regard to which their *quantity* meant more than their quality, as corn does when it is not eaten out of the garden but is processed, put in a box and sold as cereal, or converted into a pork chop or steak; as steak does when it does not come from the family's beef critter but from Sam's Club or Costco.

Given these characteristics of citifization, it is not difficult to see what happened to the possibility of realizing civil-ization. It's also not difficult to see how dense, growing populations of restive strangers, left to their own devices in de-natured and unfamiliar surroundings, separated from the earthy sources of their survival, following orders from a distant "command central," and competing for whatever might trickle down from the tales of the fortunate few at the top, would contribute unwittingly to citifization's consumption of more resources than any place could permanently provide.

Famine, disease, pestilence, vicious competition, slavery and oppression, crowding, forced integrations, poverty, ghettoization, patriarchy, aggression, conflict, conquest, exile, forced (or woefully underpaid) labor, genocide, and repeated migrations: it is a harsh view of civilization. But keep in mind that we could retain its good and honorable qualities without retaining the package they currently come in. In the next issue of *The Ecozoic Reader*, we will contemplate how we might actually try out the kind of civilization in which "civil" would mean not "citified" but "well-mannered" and "Earth-friendly."

<sup>1</sup> The word "city" comes from the Latin, civis. From the beginning, those were civilized who lived in cities, or, more specifically, who were *citizens* of cities. As well, "polite" derives from the Greek, *polis*, which means "city." Like being civil or civilized, being polite originally meant nothing more than that you were an accepted resident of a city. Everyone else occupied a lower station in society.

<sup>2</sup> I expand on these causes and their counterparts in our time in two works-in-progress: *Critical Mass: Living Beyond Earth's Means, Finding New Ways of Living Within Them*; and *The End of Eden: Paradises Lost, Now and Then.* 

<sup>3</sup> Against the Grain: How Agriculture Has Hijacked Civilization (New York: North Point Press/Farrar, Straus and Giroux, 2004), 45.