

## DRAFT FACT SHEET 11. HOW CIVILISATIONS HAVE DIED

Some civilisations have met challenges and survived. Most have failed. In Asia, Africa, the Middle East and America, ruins of great cities lie in deserts they often helped to make. Remnants cling in places once fertile.



<http://fiveprime.org/hivemind/Tags/civilization>

Some civilisations have been destroyed by invaders, but hundreds were weak already, or ruined themselves, or climate change did for them, as in North Africa. Most collapse through wrecking their environments, as populations outgrew the resources available. Examples range from Easter Island and St. Kilda, to Mayan, Nubian, Benin, the Olmecs in Meso-America, series of civilisations from Sumer, Ur and even earlier, in the garden of the Middle-East now desert, and the now Gobi desert of central Asia.

WE CAN DO BETTER, because we can learn to avoid calamities by seeing how other civilisations self-destructed or survived. Some people are not worried about the crises ahead of us. They say that Science or God will save us. They say, humans are clever enough, they will think of a way out. Or we are doomed anyway.

The ancient Greeks thought that civilisations rose and fell on a wheel of fortune, and decline was marked by their own stupidity. *'Whom the gods destroy they first drive mad'*. There are signs of that today.

The dynasties of Chinese history rose and fell in cycles, as low population pressures grew until overpopulation caused population crises with huge famines and wars, as the people multiplied beyond the resources available. Then the series of spikes and collapses began again. The current up-rising spike is the greatest and most serious yet.

History may be a series of challenges. Civilisations fail or succeed according to how they respond. (Arnold Toynbee's survey). It can be seen as a series of population cycles and crises, as civilizations fail or stagger through crises when populations outgrow or destroy their resources (Claire & WMS Russell, 1990.) Climate changes may have assisted, and even been instigated by humans deforesting.

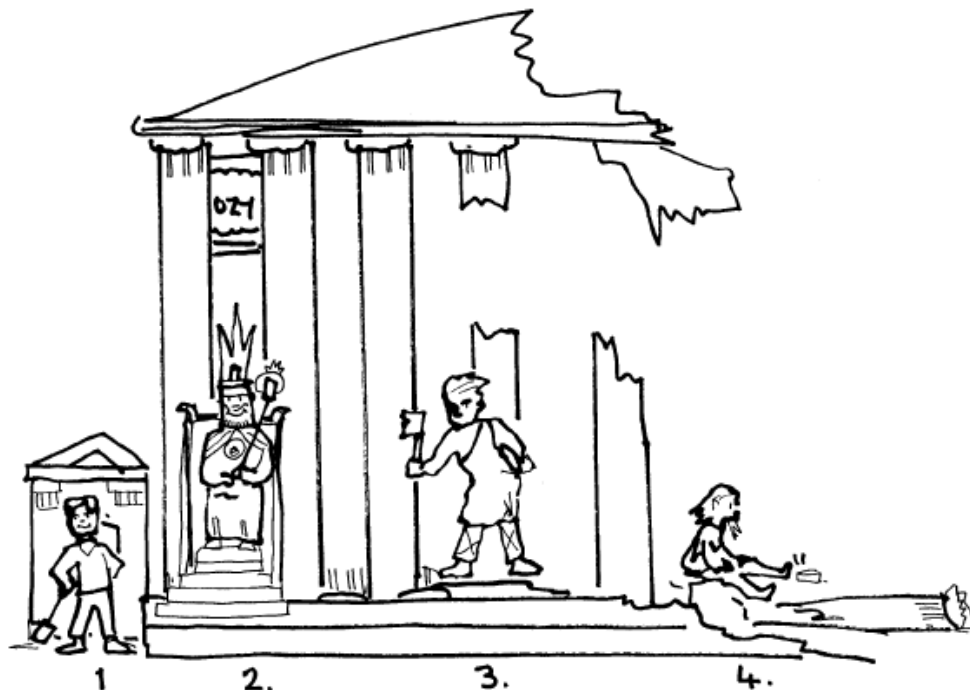
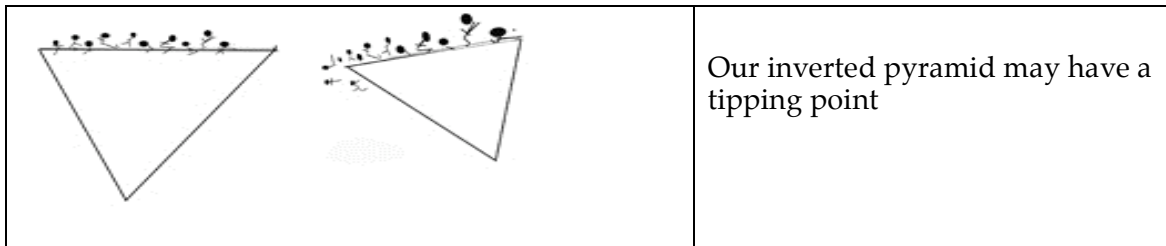
- HUNTER-GATHERERS could kill off the animals they relied on. The Clovis People of North America, around 10,000 years ago abruptly vanish from the archaeological record. No one knows why, but their disappearance coincides with the mass extinction of Ice Age big-game animals. Did the Clovis people over-hunt these mammals into extinction or did over-hunting eliminate a "keystone species" such as the mammoths or mastodon, leading to environmental collapse and a more general extinction? Did Australian aboriginals kill off their mega fauna, or Eurasian hunters kill off the mammoths?
- SWIDDEN FARMERS make and farm a clearing in forests or plains, and move on to make another when that soil is exhausted. They can survive as long as they do

not become too populous so that the forests have no chance to revive. Farmers like the Mayans appear to have exhausted their soils, and the population withered away.

- IRRIGATION has enabled populations to increase dramatically, but then salination and increasing drought may leave them high and dry, as in civilisations of the Euphrates basin, and the Hohokam of North America.

- GLOBAL CRISIS. In the past, a civilisation could collapse in one area, and the rest of the world was unaffected. But today billions of population survive by globalising – importing resources when we run short. Many countries cannot grow their own food. As global resources run short, extreme and even suicidal measures may be resorted to – such as biofuels to make up for oil shortages that deplete both food resources and the soils needed to grow them. Even a society reinvigorated by cheap new energy sources will eventually face the problem of diminishing returns once more (Joseph Tainter on the *Collapse of Complex Societies*, 1988.) And wars over resources now destroy everything, not just soldiers.

See <http://www.newscientist.com/article/mg19826501.500-why-the-demise-of-civilisation-may-be-inevitable.htm>



From riches to rags – Rise and fall of civilisations