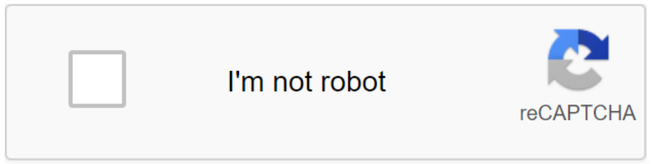

Continue

Archaeology as human ecology pdf

We like to believe that the problems we face - climate destabilization, depletion of natural resources, waste accumulation - are unique to the human race. But nature was here first, providing a catalog of non-toxic materials, playbook clean production methods, and the ultimate model for sustainable systems from its 3.8 billion-year-old NIOKA. Here are some inspiring solutions to our thorniest technological and systemic sustainability problems through the idea of business ecology, the idea that businesses are part of the ecosystem and can only be sustainable by acting as a functioning part of nature.Dr. Kaichang Lee was exploring the Oregon coast when he noticed how blue mussels stick to rocks in harsh conditions, using strong natural glue that is obviously non-toxic. Back in the lab, Dr. Lee discovered that he could synthesize a strong, waterproof, biodegradable glue made of soy protein that mimics this natural glue. Columbia Forest Products intended to replace the traditional urea formaldehyde (UF) based on adhesives using Dr. Lee's new glue, and thus PureBond was born. PureBond helped Columbia use its hardwood plywood panels to compete with substandard foreign imports and lead the industry in adopting UF-free standards championed by the California Air Resources Board (CARB) shortly after the release of PureBond. Columbia employees prefer to work with PureBond than with UF glue. Our mills went from taking your eyes lit to making you hungry because it smelled like a bakery, said Elizabeth Whalen, who served as Columbia's director of corporate sustainability during the project. The development and commercialization of PureBond has changed the way the industry is run for the benefit of human health, she added. The development and commercialization of PureBond has changed the course of the entire industry for the benefit of human health. The history of PureBond is one of the biomietic success of the product, but also highlights the future of biomimicry. Columbia has redesigned the product system, from their regional-sourced soy protein to the compostability of PureBond cabinets. Taking natural inspiration for a product or technology is a great start, but mimicking the body's role in its ecosystem is the ultimate path to industrial sustainability. Saving our future. Conservation depends on the supply of recycled materials, so it works with its business ecosystem to encourage recycling. One is the mailback program for its iconic toothbrush. While the industry applauded the 3% to 5% interest rate for the toothbrush, Save saw that only the first step. Its designers have developed which doubled as a postal envelope, increasing the yield to more than 20%. Save regrinds returned brush in plastic lumber and rain rain and experimentes with the cradle to the cradle (i.e., toothbrush to toothbrush) process. Save also partners with Whole Foods and RecycleBank under a program called Gimme 5, which encourages consumers to recycle #5 plastic. EMD Millipore, the life sciences department of Merck KGaA, recently launched a back mail program for its water purification cartridges, called Ech2o. To further achieve their own sustainability goals and help its customers meet them, EMD Millipore is piloting an ambitious program to close the loop on other products, helping to train its customers to clean, sort and send back disposable products for reuse or recycling. The first-of-its-kind EMD Millipore program will revolutionize the biopharmaceutical industry, just as Columbia Forest Products has revolutionized its own. Johanna Jobin, Sustainability Manager at EMD Millipore, agrees that this is an extremely difficult goal, but added that it would be irresponsible of us not to manage the end of our products, given the increasingly one-off nature of biopharmaceuticals. Driving Ecosystem ProfitsSprint has been managing its ecosystem for more than a decade, implementing cycle-closing technologies to restore products, reuse components, and restore materials. Their buyback program rewards customers with Sprint credit for about 800 specific models of wireless devices, many of which Sprint will repair; this reduces their impact on the environment and financial costs and increases customer loyalty. Phones assembled by Sprint that are not needed for its operation are resold either to mobile virtual network operators such as Credo or on the secondary market. If they do not have market value, they are recycled for plastics and precious metals. For this to be sustainable, it must serve environmental, social and financial needs. Sprint has set a goal of returning nine phones for reuse or recycling for every 10 they sell, by 2017; to increase their recycling rates (about 40% in 2011), they are taking the phones of competitors as well, reducing the footprint of the entire industry. It's not green for green's sake, Sprint Corporate Responsibility Manager Darren Beck told me. For this to be sustainable, it must serve environmental, social and financial needs. By the new business ecology there are three classes of nutrients and energy collectors found in nature: manufacturers, consumers and decomposers. In business ecosystems, materials manufacturers and energy suppliers fill the niches of producers, and companies that convert this energy and material into products fill different consumer niches. But our linear value chains Unredated energy to process materials uni-directionally-There are several decomposers.Companies like Columbia Forest Products, Reserve, EMD Millipore and Sprint are playing in new niches in the business ecosystem, from sustainable manufacturer to what Greg Unruh terms is a value cycle in his business ecology handbook, Earth, Inc. If we don't create this new business ecology, the Earth will bring to an end this disturbing human experiment. A new trove of 1,400 tablets from a lost city in Iraq, new clues to the massive void in the Great Pyramid and the discovery of an ornate Easter egg belonging to the Russian royal family are just some of the cool archaeological discoveries we could see in 2019. The Great Pyramid of voidResearchers who analyzed the density of particles called muons found an empty space (shown in this illustration) more than 98 feet (30 meters) long just above the great gallery of the Great Pyramid - a passage that leads to what could be pharaoh Hufu's camera. (Image credit: ScanPyramids Mission) In 2019, we can expect more information about the large void found above the so-called large gallery inside the Great Pyramid of Giza, the corridor that leads to the sarcophagus of Pharaoh Khufu, for which the pyramid was built. The void is more than 98 feet (30 meters) long. Archaeologists spotted the empty space in 2017, publishing details of their study in November 2017 in the journal Nature. But it is unclear whether this space is a closed ancient building corridor, a hidden burial chamber or a series of small chambers. They found the void using cosmic particles known as muons. These particles, which are formed by the interaction of cosmic rays with the upper atmospheres of the Earth, can pass through the stone, but they lose energy and decay. By measuring the number of muons flowing through an object from a certain direction, the researchers were able to find out the density of this object (or void). Additional muon tests that are taking place right now can reveal more information about what exactly is a void. Preliminary results of the new series of tests are likely to be published sometime in 2019. A new cave near the caves of KumranKumran at an archaeological site in the Judean Desert of the West Bank, Israel (Image credit: EcoPrint / Shutterstock.com) In 2019 we can see the discovery of a new cave, possibly containing scrolls, near Kumran, the place where the Dead Sea Scrolls were buried in nearby caves. The Dead Sea Scrolls consist of fragments of 900 texts found in 12 caves. Scientists believe that a sect called Essen wrote many scrolls in Kumran. Both 2017 and 2018 saw the discovery of looted caves that have evidence that they have held Dead Sea Scrolls in the past, and another cave is likely to be discovered in 2019.Archaeologists have been working in the area for several years as part of a project that aims to discover and excavate any caves in the Judean Desert that may contain The program began after a spate of looting that saw some scrolls appear on the antiquities market. In addition to excavations, excavations, Use different remote sensing techniques to look under the surface before deciding where the excavation is. A huge treasure trove of pills from a lost city in Iraq is a cuneiform plaque seized by the U.S. Immigration and Customs Enforcement (ICE) from hobby lobby. The new treasure, if it appears, will be from another owner. (Image credit: U.S. Attorney's Office for the Eastern District of New York) In 2019, a huge treasure trove of 1,400 tablets from the lost city of Irisarig in Iraq may be discovered in the United States. They will be found in the private collection of the owner, who wants to remain anonymous. In 2018, it became clear that looted artifacts seized from the Hobby Lobby retail chain (whose owners also founded the new Bible Museum in Washington, D.C.) included about 200 cuneiform tablets that came from the lost city of Irisarig in Iraq. This new hoard will not belong to the Hobby Lobby, but will have another owner. Irisagrig tablets have been appearing on the antiquities market for the past two decades. While looters know the location of the city, archaeologists do not say so. The tablets, which appeared on the antiquities market, tell the story of a city that flourished 4,000 years ago and contained palaces with well-fed dogs. It is possible that some of the new tablets will contain clues that may allow archaeologists to find this lost city. The lost Easter eggs of the royal egg Faberge in memory of Alexander III disappeared after the Russian Revolution. Between 1885 and 1916, Faberge jewellery produced about 50 ornate Easter eggs for the Russian royal family. After the Russian Revolution of 1917, some of these eggs went missing. In 2017, Live Science revealed the existence of documents that show that two massive treasures of art and antiques were shipped to New Orleans from the Soviet Union and Turkey in 1991 and 1992. The total value of the two shipments was $164 million, or $285 million. There have been rumors over the years that some of the eggs have made their way to private collections in the United States, and, in 2019, we may see one of the missing eggs come out of hiding. Khufu Papiri's Great Pyramid in Giza is the largest pyramid in the world. (Photo: Vladimir Korostyshevsky/Shutterstock) In 2013, archaeologists working at the site of Wadi al-Jarf, near the Red Sea, announced the discovery of a papyrus dating back about 4,500 years from the reign of Khufu, the pharaoh who built the Great Pyramid. A study of papyrus revealed that it contained the journal of an inspector named Mehrer, who led the team that carried out the tasks that helped in the construction of the Great and other construction projects in Egypt.So Egypt.So only part of this journal has been deciphered and analyzed, which provides information about the ancient harbor near the Great Pyramid and the movement of limestone from the site of the Tour to the Great Pyramid. In 2019, we can learn more about other sections of the magazine that are currently being deciphered and analyzed. Originally published on Live Science. Science. archaeology as human ecology pdf