DOWNLOAD PDF THE VERY BASICS OF HUMANS AND THE WORLD WE INHABIT

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The Very Basics of Humans and the World We Inhabit. View abstract. chapter 2 The Very Basics of Humans and the World We Inhabit. View abstract. chapter 2 |

Everything from industry, to medicine, to how we work has been fundamentally reshaped by the technologies which emerged in the second half of the 20th century. Technology can also change the human in terms of his or her characteristics and abilities. Want to be smarter? You can take a Nootropic. Want to perceive the world with more detail and more information? Put on Google Glasses. Want to get stronger or more physically agile? There are medicines or robotic exoskeletons 4 Technologies That Could Change the World 4 Technologies That Could Change the World Right now is such an exciting time to be alive, as science and technology hurtles humanity forward at such incredible rates. Technology has moved away from merely making our lives more convenient, and now it has the potential to change every aspect of what we are as humans. We are becoming transhuman. But what does that mean? Transhumanism is a movement that aims to understand what makes one human, and how we can surpass our natural limitations. More importantly, it believes that technology and science are the keys to overcoming them. But what are those limitations? They could be life expectancy. They could be mental acumen and intelligence. Technologies and medicines that address these limitations are constantly being released, developed, and improved upon. More and more enhancement supplements or drugs are hitting the shelves of stores, and are being prescribed by doctors. But what does this mean for our society- are we all heading towards becoming more than human? For millennia, humans lived within their biological boundaries, never overcoming them. Despite that, humans have always found an urge to become more than what we are, as history and anthropology shows. Indeed, one can look back as far as the ancient Greeks for stories of people looking to enhance their physical capabilities. Perhaps the most famous of these is the tale of Icarus and Daedalus, who constructed wings so that they might take to the skies like a bird, and escape from imprisonment in Crete. One should also note that Greek mythology is replete with tales of quests for mythical Fountains of Youth which would eternally stave off death and allow one to become immortal. The desire to become more than human is certainly not new. One individual who has done significant research in the field of transhumanism is Prof. This Harvard and Yale educated neuroscientist, philosopher and author has written prolifically on the subject of transhumanism and its role in society, and is widely regarded as one of the foremost authorities in his field. Al-Rodhan believes that humans have an innate nature that compels us to enhance our physical and mental abilities. These consist of power, profit, pleasure, pride and permanency. This will then push us further and further to a transhumanist outcome, where the human experience is artificially enhanced or changed. Firstly, what will that look like? Secondly, what is our capacity to become transhuman? Finally â€” and perhaps the most pertinent question â€” what will the cost of doing so be? These do not refer to technologies and tools that treat illness and disabilities, but rather enhance our physical and cognitive abilities past what is realistically biologically possible. This hydraulic-powered exoskeleton was developed at the University of California, and aims to enhance the endurance, strength and speed of soldiers on the battlefield. It allows soldiers to carry weights of up to 90 kilograms pounds whilst running at a top-speed of 16 kilometers 10 miles per hour for extended durations. Although the HULC is still in an early stage of its development, it seems almost certain that this endurance, strength and speed enhancing technology could eventually find itself onto the battlefield, not only transforming the capacities of soldiers wearing it, but also potentially giving the US military a real, tactical edge. Technologies such as human genetic engineering, may be used in the near future to enhance our capabilities beyond what is biologically tenable. Animal testing has already shown that subtle tweaks to a genetic makeup can result in increased physical performance. Despite that, it remains a probability that one day we could adapt gene therapy and genetic engineering in order to make one live longer, become more intelligent, or able to perform significantly demanding physical tasks. And as one might expect, public enthusiasm and interest for these transhumanist

technologies is huge, and looks set to become a significant part of the world in which we live. Transhumanism truly does seem to be inevitable, and has a capacity to change our lives and our potentials. But what does this mean for the evolution of our species? Transhumanism, Evolution And You Darwinian evolution by means of natural selection is by far the most convincing explanation for the origin of our species. It can be concisely explained as descent with modification. The genetic changes which are best suited to an environment are retained, as they contribute to the survivability of the carrier. It seems that our natural, biological evolution simply cannot keep pace with the dizzying array of human enhancing technologies that emerged, and have shaped how we think, and our physical capacities. It could be argued â€" as it was in Smithsonian magazine â€" that we have become the engineers of our own evolution. Citing developments in nootropics, genetic manipulation and nanomedicine, the case was made that we are approaching the precipice of being able to effectively shape our own species through artificial means, effectively supplanting our biological processes. Despite its promise, there are a number of concerns about transhumanism, and what it means for the human experience, and the future of the human race. Concerns About Transhumanism The Transhumanist movement is not without its share of detractors. The concerns about it are diverse, as are the detractors themselves. Take Francis Fukuyama , a well-known American political scientist. Its main argument is that Western liberal democracy and free-market economics is the most perfect system to rule by, and has regularly and historically demonstrated to be a better system than anything else, including communism and authoritarianism. The success of countries that have adopted a liberal democratic system of governance are so successful, and so developed they have effectively signaled the final form of human government, as there is nothing else that could possibly surpass it in terms of its economic success, and its ability to ensure political representation for the masses and social cohesion. Fukuyama has a number of concerns about the move towards human enhancement. The first is that it could fundamentally reshape human nature, the outcome of which could be impossible to predict. Another concern is that it threatens one of the fundamental tenants of liberal democracy: In the same piece, he asked: Al-Rodhan insists that moral, ethical and legal global guidelines are urgently needed to make sure that these technologies are used correctly. Therefore, any technological advancements that would result in the improvement of the cognitive and physical abilities of some would not result in the marginalization of others, as it would eventually result in the disastrous unraveling of society. I am instead calling for urgent global action at the UN level to define international moral and bioethical guidelines on what potential enhancements are acceptable to our global societies and on what terms. Are these choices determined by economics, politics or ethnic and ideological persuasions? These are all very serious considerations that must be addressed before humanity goes along that inevitable path to make sure that the dignity of all is maintained in this brave new world. This argument has been made by the Californian environmentalist and ethicist Bill McKibben, a noted and fierce critic of transhumanism. He believes that to remove them would result in making human life meaningless, and that removing our biological limitations would also remove the necessary context in which we make meaningful choices about our life. This argument is a convincing one, albeit one that makes a significant number of assumptions about what a technologically enhanced life would look like. Firstly, it assumes that such a life could not possibly have meaning. I find that hard to swallow. Surely a person with an artificially enhanced life-span would still be able to find meaning in doing the activities that person enjoys, and in spending time with loved ones? There are countless other arguments surrounding transhumanism. These stretch from the belief that one should not play God, to the prediction that a transhumanist future would result in such enhancements only being available to the wealthy, whilst the poor would be left behind. These arguments are hard to respond to. Perhaps the only real answer is to wait and see what happens when our technological capacity catches up with our ambition to rebuild the human. Excited About Your Transhumanist Future? This future seems inevitable, as our human nature pushes us towards self-improvement by any means possible. With that said, many are concerned about the transformative effect transhumanism would have on human society, and its implications for human rights and governance. The debate surrounding transhumanism will rage on. But what do you think? Leave your comments in the box

below.

Chapter 2 : Why is communication important to human life? - Hope Speak

The challenge with this Human Need is that once we connect the power of being in genuine service in the world, we can quite quickly become overwhelmed with all of the places, people and animals that are in need of support.

Scientific evidence shows that the physical and behavioral traits shared by all people originated from apelike ancestors and evolved over a period of approximately six million years. One of the earliest defining human traits, bipedalism -- the ability to walk on two legs -- evolved over 4 million years ago. Other important human characteristics -- such as a large and complex brain, the ability to make and use tools, and the capacity for language -- developed more recently. Many advanced traits -- including complex symbolic expression, art, and elaborate cultural diversity -- emerged mainly during the past , years. Physical and genetic similarities show that the modern human species , Homo sapiens, has a very close relationship to another group of primate species, the apes. Humans first evolved in Africa, and much of human evolution occurred on that continent. The fossils of early humans who lived between 6 and 2 million years ago come entirely from Africa. Most scientists currently recognize some 15 to 20 different species of early humans. Scientists do not all agree, however, about how these species are related or which ones simply died out. Many early human species -- certainly the majority of them â€" left no living descendants. Scientists also debate over how to identify and classify particular species of early humans, and about what factors influenced the evolution and extinction of each species. Early humans first migrated out of Africa into Asia probably between 2 million and 1. They entered Europe somewhat later, between 1. Species of modern humans populated many parts of the world much later. For instance, people first came to Australia probably within the past 60, years and to the Americas within the past 30, years or so. The beginnings of agriculture and the rise of the first civilizations occurred within the past 12, years. Paleoanthropology Paleoanthropology is the scientific study of human evolution. Paleoanthropology is a subfield of anthropology, the study of human culture, society, and biology. The field involves an understanding of the similarities and differences between humans and other species in their genes, body form, physiology, and behavior. Paleoanthropologists search for the roots of human physical traits and behavior. They seek to discover how evolution has shaped the potentials, tendencies, and limitations of all people. For many people, paleoanthropology is an exciting scientific field because it investigates the origin, over millions of years, of the universal and defining traits of our species. However, some people find the concept of human evolution troubling because it can seem not to fit with religious and other traditional beliefs about how people, other living things, and the world came to be. Nevertheless, many people have come to reconcile their beliefs with the scientific evidence. Early human fossils and archeological remains offer the most important clues about this ancient past. These remains include bones, tools and any other evidence such as footprints, evidence of hearths, or butchery marks on animal bones left by earlier people. Usually, the remains were buried and preserved naturally. They are then found either on the surface exposed by rain, rivers, and wind erosion or by digging in the ground. By studying fossilized bones, scientists learn about the physical appearance of earlier humans and how it changed. Bone size, shape, and markings left by muscles tell us how those predecessors moved around, held tools, and how the size of their brains changed over a long time. Archeological evidence refers to the things earlier people made and the places where scientists find them. By studying this type of evidence, archeologists can understand how early humans made and used tools and lived in their environments. The process of evolution The process of evolution involves a series of natural changes that cause species populations of different organisms to arise, adapt to the environment, and become extinct. All species or organisms have originated through the process of biological evolution. In animals that reproduce sexually, including humans, the term species refers to a group whose adult members regularly interbreed, resulting in fertile offspring -- that is, offspring themselves capable of reproducing. Scientists classify each species with a unique, two-part scientific name. In this system, modern humans are classified as Homo sapiens. Evolution occurs when there is change in the genetic material -- the chemical molecule, DNA

-- which is inherited from the parents, and especially in the proportions of different genes in a population. Genes represent the segments of DNA that provide the chemical code for producing proteins. Information contained in the DNA can change by a process known as mutation. The way particular genes are expressed â€" that is, how they influence the body or behavior of an organism -- can also change. Evolution does not change any single individual. Instead, it changes the inherited means of growth and development that typify a population a group of individuals of the same species living in a particular habitat. Parents pass adaptive genetic changes to their offspring, and ultimately these changes become common throughout a population. As a result, the offspring inherit those genetic characteristics that enhance their chances of survival and ability to give birth, which may work well until the environment changes. Human evolution took place as new genetic variations in early ancestor populations favored new abilities to adapt to environmental change and so altered the human way of life. Rick Potts provides a video short introduction to some of the evidence for human evolution , in the form of fossils and artifacts.

Chapter 3 : Top 10 Strong Human Fears - Listverse

Humans are the most common and prolific race of Forcelia. They inhabit every continent and split the land into their nations and cities. They are a young race, and unlike the fae races and dwarves, evolved naturally.

Edit Humans are the most common and prolific race of Forcelia. They inhabit every continent and split the land into their nations and cities. They are a young race, and unlike the fae races and dwarves, evolved naturally. They were once nomadic hunter-gatherers, but now they attempt to control the land, instead of being controlled by it. Most modern cultures live in towns and cities within nations and cultivate the land to sustain themselves. However, there are still a few tribes that live with nature and hunt and gather. Humans are a diverse race, culturally and physically. Much shorter lived than the other races, humans breed fast and are constantly expanding. Yet unlike all the others, they are set apart by such a great chaotic streak that they have potential for so much. Good and bad, each human being is completely individual and constantly changing. The average human rarely lives beyond sixty-five, but with the right conditions, they can live into their early hundreds. Five hundred years ago, human culture reached a pinnacle of knowledge and power. They learned how to tap the natural flows of mana, the energy of magic. The sorcerers of Kastuul learned how to draw even more mana than humans were capable of naturally. The civilized human world was united under the power of Kastuul, until their search for power led to their destruction. Humans are very diverse physically, compared to other race. Their skin can range from porcelain fair to the deepest, darkest browns; their hair has a broad range of texture and colors; and their eyes are just as varied in color. Thanks to the far-reaching Kastuulian empire, there was quite a bit of inter-cultural breeding which leads to the diverse appearances in just about any population center, though more secluded cultures are less diverse. Most Lodoss and Alecrastian natives are fair skinned, and often tan well. Brown hair and eyes are the most common coloration, but there is plenty of variety to be found. Human hair comes in many shades of brown and blonde, as well as red and black Characters can have anime hair colors, but you must state a natural alternative. A character with blue or purple hair would have a natural alternative of black. Green hair could equal blonde or brown hair. Red or pink hair could equate to natural red hair. Eye color comes in shades of brown, blue, green, hazel, gray, purple, and yellow. Red eyes are quite rare in humans, but not undocumentedâ€”sometimes it can be attributed to dark elven ancestry. Magic Edit slain, laylia, and etoh Humans, for the most part, have no inherent magic powers, though they are responsible for wielding two thirds of the magic on Forcelia. The power of Kastuul has been lost, but humans still use sorcery, though it is far weaker since it is in the process of rediscovery. Very few humans study sorcery, and those that do, tend to devote their lives to it. Only recently has the Academy been re-opened, in the year The other form of magic used by humans is clerical, or Holy magic Unholy in some cases. Clerical magic is granted to the priests and priestesses who have devoted themselves to a god or goddess and trained in the temple for a set number of years. Shamanism is readily used by fae racesâ€”elves, grassrunners, and centaursâ€”but very rarely by humans. It is most likely to manifest in humans in more spiritual tribal cultures, or in lands where the spirits cannot find their fae cousins to speak with. Shamanism requires a profound spiritual awareness that most humans do not cultivate. Race Relations parn and deedlit Humans to High and Common ElvesHuman reaction to elves varies, depending on location and education. Since most elves prefer to seclude themselves in their forests, most humans never see them. Uneducated humans from small villages, far from elven forests, may confuse light elves with dark elves, purely for the fact that dark elves are so infamous after the invasion of Kanon. Elves are beautiful to human standards, and may be the object of adoration and jealousy for their good looks among humans. Some humans may initially distrust elves due to their differences and magical abilities. The average human is unaware of many traits of elvesâ€”their long lifespans, their magic ability, and physical abilities. The average human of Lodoss would have never known there were two kinds of elf. After the Marmo invaded Kanon, the evil and malice of dark elves became known. Humans across the whole of Lodoss now fear dark elves. However, acceptance for a

half-elf depends on many factors. Some half-elves live peaceful lives among humans while others suffer greatly at the hands of humans. Humans to Dwarves Humans and dwarves are usually quite friendly with each other. Despite their good relations, there is little to no interracial relationships because of the vast difference in opinions of beauty. Humans to Grassrunners Grassrunners are not native to Lodoss, therefore, not many humans even know of their existence. The average human will likely confuse tiny grassrunners with elven children. Humans to Centaurs Humans are even less aware of the existence of centaurs than they are of the above races. The average human will be very confused and likely terrified of a centaur. Alania was hit hard by the Marmo wars, and was invaded for a time, but has since recovered. Alanian natives are mostly fair skinned with any number of hair and eye colors. FlaimThe Desert Kingdom, founded by Kashue, the mercenary king. The lands Flaim now occupies once belonged to Valis, but were eagerly handed over to Kashue when he ceased the warring between the Wind and Fire tribes. The people of the two tribes are dark complected, often with straight black hair and dark eyes think Arabic. See Marmo below for more information. They were originally one tribe, protected by a covenant made by the summoner Azhard with the king spirits, Djinn of Air and Efreet of Fire. Fearing this power, Kastuulian sorcerers sealed the spirits, and pitted the two factions against each other. They warred for over five-hundred years, with periods of peace sprinkled throughout. After the final war in NRC , the Flame tribe led by Naldia and Azumo, and the Wind tribe led by Kashue, learned the truth of their history and accepted peace. Kanon The nation of Kanon was the most heavily affected nation during the Marmo wars. Being so close to the island of Marmo, they were the first invaded. Kanon was occupied for fifteen years by the Marmo. Marmo Once known as the Dark Island, Marmo was a chaotic nation in itself. The first humans on the island were a hardy barbarian tribe that were ignored by the Kastuulians. In the first century after the fall of Kastuul, King Kadamos sent an expedition to Marmo and found the island inhospitable. Due to the eternally overcast sky, the Alanian deportees who came to call Marmo home were commonly of very fair complexions from the lack of sunshine. In NRC , Marmo was cleansed of the malevolent presence of the goddess Kardis, who was responsible for the darkness of the island. The island had changed and is no longer covered in darkness. Most Marmos left Lodoss to follow their king. Now, the new settlers are mostly of Flaim, Kanon, Alania, or Valis nationality. Barbarian Tribe of Marmo In the Dark Forest lives a tribe of barbarians, who have existed there for as long as their culture remembers. They are a strong people, forged by generations of hardship in an harsh environment. The progenitors of the tribe are as old as Kastuul, though fresh blood has come in from Alania deportees who were either taken as wives by force, or were accepted into the tribe. Being closely in tuned to nature, shamans are more prolific in this culture and are highly honored. Moss The kingdom of Moss was unified under the ancient Golden Dragon, and a king named Mycen the dragon took the name Mycen to honor the king. Moss is a lush mountain land and has a diverse population, in appearance. Mossians hold dragons in high regard and nearly worship Mycen, the dragon. Businesses often have dragonic themed names as well. This ancient city state has no laws, and has existed this way since the time of Kastuul. The city was originally set up as a place to deport Kastuulian criminals, but today it is a thriving port city where trade flourishes and home to many races and cultures. Valis The Holy Kingdom. Valis is the religious center of Lodoss. There are a few separate clans throughout the lands, but they share the same culture. They have shunned the modern mythologies of Falis, Falaris, Marfa and Kardis, and instead teach their people to believe in the spirits. They believe that the elves are spirits incarnate, and highly respect them when they meet them. These tribes are ruled by shamans and cut themselves off from the rest of the world. Very few tribesmen leave these lands. They are of darker features, with black hair and usually brown eyes think Native American. Alecrast Alecrast is the large continent to the north of Lodoss. We allow characters from Alecrast, but we have been apprehensive about creating nations for these characters. Azarn Islands The Azarns are a large archipelago to the east of Lodoss. The islands are mainly inhabited by the native tribal peoples, who are exotic and dark in their coloration. The larger islands have an assembled government, but the smaller ones are more tied to their traditions. Many Azarnians have found their way into Alecrastian navies and piracy. In Lodoss, you can be sure to find many people of Azarnian decent, or

immigrants, in Raiden. We do not accept characters from these lands for this reason.

Chapter 4 : How Technology May Be Influencing Human Evolution

Species of modern humans populated many parts of the world much later. For instance, people first came to Australia probably within the past 60, years and to the Americas within the past 30, years or so.

Governments must not deprive people of a right or interfere with persons exercising their rights. For example, governments can: Create constitutional guarantees of human rights. Provide ways for people who have suffered human rights violations by the government to seek legal remedies from domestic and international courts. Sign international human rights treaties. Governments must prevent private actors from violating the human rights of others. Prosecute perpetrators of human rights abuses, such as crimes of domestic violence. Educate people about human rights and the importance of respecting the human rights of others. Cooperate with the international community in preventing and prosecuting crimes against humanity and other violations. Governments must take positive action to facilitate the enjoyment of basic human rights. Provide free, high-quality public education. Create a public defender system so that everyone has access to a lawyer. Ensure everyone has access to food by funding public assistance programs. Fund a public education campaign on the right to vote. In , the U. The signing of the UN Charter, Depression era breadline, Q: How do Rights Become Law? International human rights law provides an important framework for guaranteeing the rights of all people, regardless of where they live. International human rights law is contained in many different types of documents, including treaties, charters, conventions, and covenants. Despite the different official names, these documents are all considered treaties and have the same effect under international law: The human rights treaty process usually begins at the United Nations or a similar international body. Legal and subject matter experts might first create a draft of the treaty. After the draft is written, the UN or other body will arrange a meeting between representatives of interested countries to negotiate the final terms, or content, of the treaty. This can be a lengthy process if large numbers of countries want to participate in the drafting process. Non-governmental organizations are sometimes allowed to offer recommendations during some of the stages of the drafting process. After the negotiating countries agree on a final text of the treaty, the treaty is opened for ratification by countries that want to become parties to it. Countries have different methods for acceding to or ratifying treaties. For the United States to become a party to a treaty, the president must first sign it, and then present it to the Senate, where two-thirds of the senators must vote to ratify it. Through ratification, a country agrees to be legally bound by the terms of the treaty. Countries that ratify treaties are allowed to enter reservations to those instruments. Many countries have entered reservations to the major human rights treaties, which can limit the effectiveness of the treaties in protecting people against abuses committed by their governments. Sources Declaration of Independence. The Universal Declaration of Human Rights. United Nations Cyber School Bus. Vienna Convention on the Law of Treaties.

Chapter 5 : Maslow's Hierarchy of Basic Needs

Morphology Humans can be distinguished from other living apes by a strikingly enlarged brain, reduced hair coverage on most parts of the body, and by a suite of skeletal and muscular adaptations associated with habitual bipedal locomotion, including the loss of the grasping ability of the foot.

Learn more about this article Human beings, humans, or Homo sapiens sapiens Homo sapiens is latin and refers to the wise or knowing human are bipedal primates in the family Hominidae. DNA evidence indicates that modern humans originated in Africa about , years ago. Humans have a highly developed brain, capable of abstract reasoning, language, introspection, and emotion. This mental capability, combined with an erect body carriage that frees the forelimbs arms for manipulating objects, has allowed humans to make far greater use of tools than any other species. Humans currently inhabit every continent on Earth, except Antarctica although several governments maintain seasonally-staffed research stations there. Humans also now have a continuous presence in low Earth orbit, occupying the International Space Station. The human population on Earth is greater than 6. Like most primates, humans are social by nature. However, they are particularly adept at utilizing systems of communication for self-expression, exchanging of ideas, and organization. Humans create complex social structures composed of many cooperating and competing groups, from families to nations. Social interactions between humans have established an extremely wide variety of traditions, rituals, ethics, values, social norms, and laws, which together form the basis of human society. Humans have a marked appreciation for beauty and aesthetics, which, combined with the desire for self-expression, has led to innovations such as culture, art, literature and music. Humans are notable for their desire to understand and influence the world around them, seeking to explain and manipulate natural phenomena through science, philosophy, mythology and religion. This natural curiosity has led to the development of advanced tools and skills; humans are the only currently known species known to build fires, cook their food, clothe themselves, and manipulate and develop numerous other technologies. Humans pass down their skills and knowledge to the next generations through education. The scientific study of human evolution encompasses the development of the genus Homo, but usually involves studying other hominids and hominines as well, such as Australopithecus. Modern humans are defined as the Homo sapiens species, of which the only extant subspecies - our own - is known as Homo sapiens sapiens. Homo sapiens idaltu roughly translated as elder wise human , the other known subspecies, is now extinct. Anatomically modern humans first appear in the fossil record in Africa about , years ago, although studies of molecular biology give evidence that the approximate time of divergence from the common ancestor of all modern human populations was , years ago. The closest living relatives of Homo sapiens are the two chimpanzee species: Full genome sequencing has resulted in the conclusion that after 6. It has been estimated that the human lineage diverged from that of chimpanzees about five million years ago, and from that of gorillas about eight million years ago. However, a hominid skull discovered in Chad in , classified as Sahelanthropus tchadensis, is approximately seven million years old, which may indicate an earlier divergence. The Recent African Origin RAO , or the - out-of-Africa-, hypothesis proposes that modern humans evolved in Africa before later migrating outwards to replace hominids in other parts of the world. Evidence from archaeogenetics accumulating since the s has lent strong support to RAO, and has marginalized the competing multiregional hypothesis, which proposed that modern humans evolved, at least in part, from independent hominid populations. They also propose that during the Late Pleistocene, the human population was reduced to a small number of breeding pairs, no more than 10,, and possibly as few as 1,, resulting in a very small residual gene pool. Various reasons for this hypothetical bottleneck have been postulated, one being the Toba catastrophe theory. Human evolution is characterized by a number of important morphological, developmental, physiological and behavioural changes, which have taken place since the split between the last common ancestor of humans and chimpanzees. The first major morphological change was the evolution of a bipedal locomotor adaptation from an arboreal or semi-arboreal

one, with all its attendant adaptations, such as a valgus knee, low intermembral index long legs relative to the arms , and reduced upper-body strength. The pattern of human postnatal brain growth differs from that of other apes heterochrony , and allows for extended periods of social learning and language acquisition in juvenile humans. Physical anthropologists argue that the differences between the structure of human brains and those of other apes are even more significant than their differences in size. Other significant morphological changes included: An important physiological change in humans was the evolution of hidden oestrus, or concealed ovulation, which may have coincided with the evolution of important behavioural changes, such as pair bonding. Another significant behavioural change was the development of material culture, with human-made objects becoming increasingly common and diversified over time. The relationship between all these changes is the subject of ongoing debate. The forces of natural selection continue to operate on human populations, with evidence that certain regions of the genome display directional selection in the past 15, years. This description from WikiPedia, 3rd August

Chapter 6 : Human evolution - Wikipedia

Plague, famine, heat no human can survive. What scientists, when they're not being cautious, fear climate change could do to our future. Plague, famine, heat no human can survive. This is not.

Anthropology , Human evolution , and Timeline of human evolution The genus Homo evolved and diverged from other hominins in Africa, after the human clade split from the chimpanzee lineage of the hominids great apes branch of the primates. Modern humans, defined as the species Homo sapiens or specifically to the single extant subspecies Homo sapiens sapiens, proceeded to colonize all the continents and larger islands, arriving in Eurasia ,â€"60, years ago, [19] [20] Australia around 40, years ago, the Americas around 15, years ago, and remote islands such as Hawaii, Easter Island , Madagascar , and New Zealand between the years and The gibbons family Hylobatidae and orangutans genus Pongo were the first groups to split from the line leading to the humans, then gorillas genus Gorilla followed by the chimpanzees genus Pan. The splitting date between human and chimpanzee lineages is placed around 4â€"8 million years ago during the late Miocene epoch. Each of these species has been argued to be a bipedal ancestor of later hominins, but all such claims are contested. It is also possible that any one of the three is an ancestor of another branch of African apes, or is an ancestor shared between hominins and other African Hominoidea apes. The question of the relation between these early fossil species and the hominin lineage is still to be resolved. More recently, however, in , stone tools , perhaps predating Homo habilis, have been discovered in northwestern Kenya that have been dated to 3. During the next million years a process of encephalization began, and with the arrival of Homo erectus in the fossil record, cranial capacity had doubled. Homo erectus were the first of the hominina to leave Africa, and these species spread through Africa, Asia, and Europe between 1. One population of H. It is believed that these species were the first to use fire and complex tools. The earliest transitional fossils between H. These descendants of African H. The earliest fossils of anatomically modern humans are from the Middle Paleolithic , about , years ago such as the Omo remains of Ethiopia and the fossils of Herto sometimes classified as Homo sapiens idaltu. The most significant of these adaptations are 1. The relationship between all these changes is the subject of ongoing debate. The earliest bipedal hominin is considered to be either Sahelanthropus [39] or Orrorin , with Ardipithecus , a full bipedal, [40] coming somewhat later. It is possible that bipedalism was favored because it freed up the hands for reaching and carrying food, because it saved energy during locomotion, because it enabled long distance running and hunting, or as a strategy for avoiding hyperthermia by reducing the surface exposed to direct sun. However, the differences between the structure of human brains and those of other apes may be even more significant than differences in size. The reduced degree of sexual dimorphism is primarily visible in the reduction of the male canine tooth relative to other ape species except gibbons. Another important physiological change related to sexuality in humans was the evolution of hidden estrus. Humans are the only ape in which the female is fertile year round, and in which no special signals of fertility are produced by the body such as genital swelling during estrus. These changes taken together have been interpreted as a result of an increased emphasis on pair bonding as a possible solution to the requirement for increased parental investment due to the prolonged infancy of offspring. Archaic human admixture with modern humans , Early human migrations , Multiregional origin of modern humans , Prehistoric autopsy , and Recent African origin of modern humans By the beginning of the Upper Paleolithic period 50, BP , full behavioral modernity , including language , music and other cultural universals had developed. Since , evidence for gene flow between archaic and modern humans during the period of roughly , to 30, years ago has been discovered. This includes modern human admixture in Neanderthals, Neanderthal admixture in modern humans, [53] [54] Denisova hominin admixture in Melanesians [55] as well as repeated admixture from unnamed archaic humans to Sub-Saharan African populations. They inhabited Eurasia and Oceania by 40, years ago, and the Americas at least 14, years ago.

Chapter 7 : The Biological Basis of Human Behavior

"The one thing all humans share is that we all inhabit the same limited amount of real estate, which is planet earth." Celebrated Danish architect Bjarke Ingels discusses an ultra local approach to architecture in a global world.

Before Darwin[edit] The word homo, the name of the biological genus to which humans belong, is Latin for "human". It was chosen originally by Carl Linnaeus in his classification system. The word "human" is from the Latin humanus, the adjectival form of homo. Darwin applied the theory of evolution and sexual selection to humans when he published The Descent of Man in Neanderthal remains were discovered in a limestone quarry in , three years before the publication of On the Origin of Species, and Neanderthal fossils had been discovered in Gibraltar even earlier, but it was originally claimed that these were human remains of a creature suffering some kind of illness. Also, the specimen showed short canine teeth , and the position of the foramen magnum the hole in the skull where the spine enters was evidence of bipedal locomotion. All of these traits convinced Dart that the Taung Child was a bipedal human ancestor, a transitional form between apes and humans. During the s and s, hundreds of fossils were found in East Africa in the regions of the Olduvai Gorge and Lake Turkana. The driving force of these searches was the Leakey family, with Louis Leakey and his wife Mary Leakey , and later their son Richard and daughter-in-law Meave â€”all successful and world-renowned fossil hunters and paleoanthropologists. From the fossil beds of Olduvai and Lake Turkana they amassed specimens of the early hominins: These finds cemented Africa as the cradle of humankind. In the late s and the s, Ethiopia emerged as the new hot spot of paleoanthropology after "Lucy" , the most complete fossil member of the species Australopithecus afarensis , was found in by Donald Johanson near Hadar in the desertic Afar Triangle region of northern Ethiopia. Although the specimen had a small brain, the pelvis and leg bones were almost identical in function to those of modern humans, showing with certainty that these hominins had walked erect. White in the s, including Ardipithecus ramidus and Ardipithecus kadabba. The skeletal anatomy combines primitive features known from australopithecines with features known from early hominins. The individuals show signs of having been deliberately disposed of within the cave near the time of death. The fossils were dated close to , years ago, [65] and thus are not a direct ancestor but a contemporary with the first appearance of larger-brained anatomically modern humans. In their seminal paper in Science , Sarich and Wilson estimated the divergence time of humans and apes as four to five million years ago, [67] at a time when standard interpretations of the fossil record gave this divergence as at least 10 to as much as 30 million years. Subsequent fossil discoveries, notably "Lucy", and reinterpretation of older fossil materials, notably Ramapithecus , showed the younger estimates to be correct and validated the albumin method. On the basis of a separation from the orangutan between 10 and 20 million years ago, earlier studies of the molecular clock suggested that there were about 76 mutations per generation that were not inherited by human children from their parents; this evidence supported the divergence time between hominins and chimps noted above. However, a study in Iceland of 78 children and their parents suggests a mutation rate of only 36 mutations per generation; this datum extends the separation between humans and chimps to an earlier period greater than 7 million years ago Ma. Additional research with offspring of wild chimp populations in 8 locations suggests that chimps reproduce at age And these data suggest that Ardipithecus 4. A new comparison of the human and chimp genomes suggests that after the two lineages separated, they may have begun interbreeding A principal finding is that the X chromosomes of humans and chimps appear to have diverged about 1. There were in fact two splits between the human and chimp lineages, with the first being followed by interbreeding between the two populations and then a second split. The suggestion of a hybridization has startled paleoanthropologists , who nonetheless are treating the new genetic data seriously. In , Meave Leakey discovered Australopithecus anamensis. The find was overshadowed by Tim D. In , Martin Pickford and Brigitte Senut discovered, in the Tugen Hills of Kenya , a 6-million-year-old bipedal hominin which they named Orrorin tugenensis. And in , a team led by Michel Brunet discovered the skull of Sahelanthropus tchadensis which was dated as 7.

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Quiz Module 1, 2, & 5. (from "above" or outside the observable world in which we live) then that is known as immanent truth. are composed of the five basic.

Biological Evolution Human beings are animals. This is not a reference to our behavior although, of course, some people do act like animals. It is a reference to the fact that humans are biological creatures, as much as crocodiles, cougars, and capybara. We are the product of millions of years of evolution, our physical make-up changing to make us fitter to survive and reproduce. However, although humans are animals, we also have something that no other animal has: We gather in families, tribes, clans, nations. We have an incredibly sophisticated method of interacting -- speech. We can communicate over time and distance through printing and broadcasting. Our memories are the longest, our interactions the most intricate, our perception of the world simultaneously the broadest and most detailed. The combination of biology and society is what makes us what we are and do what we do. Biology guides our responses to stimuli, based on thousands of generations of ancestors surviving because of their responses. Our social structures dictate restrictions on and alterations in how we carry out our biological responses. Neither biology nor society stands without the other. For some people, this is a contradiction -- either nature biology controls people, or nurture society does. But in fact we filter everything through both to determine how we react to stimuli. The following is a discussion of the two sides of human nature: I will discuss each in turn. The latter includes mentally or economically healthy. Since human beings are very social creatures, we may also apply self-preservation to other people, such as our families. However, I will discuss that in the next chapter. A doe, unaware of the danger lurking in the grass, separates slightly from the herd. With a rush, the lioness bursts into a run to take down the doe. The startled doe bounds away, running and swerving, trying to escape. The lioness, unable to keep up the pace, gives up, and the doe escapes back into the herd. A zebra is not so lucky, and the pride feasts. The Donner Party was a group of settlers trekking to California in Trapped by snow in the Sierra Nevada Mountains , they survived as best they could. This included resorting to cannibalism when they ran out of food, eating the bodies of those who had died. To be successful as a species, the members of that species must have a desire to survive long enough to pass on their genes to offspring. A species with a death-wish dies out rather quickly. It is from those individuals and therefore species that all living things are descended. The desire to stay alive is an instinctive one, built into the psyche of the organism. The organism will seek those elements of its environment that will enhance its chances for survival. These include food, water, oxygen, and periods of rest to allow the body to repair any wear and tear on the tissues. Alternately, it will avoid or evade those elements that might reduce its chances for survival. Such dangers include predators, starvation, dehydration, asphyxiation, and situations that can cause damage to the body. These seek or avoid drives influence the behavior of organisms: The desire to stay alive is also a selfish instinct, since it is personal survival that the organism is seeking. Survival Through Evolution A phrase that has often been misquoted, "Survival of the Fittest," actually means survival of the fit. By fit, I mean an organism has those attributes that allow it to get the most out of its environment: The better it is at doing this, the more fit it is. At this point I should discuss the niche. A niche is a position within an environment that calls for certain attributes to exploit that environment. An environment can contain any of a variety of elements: It can also contain animal life, from the tiniest insects to blue whales and everything in between. It is the combination and degree of each of these elements that create niches. Say there are many small animals, like mice, in an area. A small carnivore like a wildcat could find a lot of food. Thus, it would fit into this niche and thrive. However, when the number of mice decreases, the wildcat can find less food, and has a lesser chance of survival. If the wildcat has competition from other small carnivores, like foxes, the one that is particularly good as a predator, through cunning or speed or some other attribute, will catch more food. This lessens the amount of food available for the competition, and thus drives the competition out. If the fox is better at catching mice that is, more fit than the wildcat, the wildcat will either die or have to move to another

niche in which it will be the better predator. On the other hand, if there are no small animals but many big animals, like antelope, neither a fox nor a wildcat would have much success preying on them. However, large carnivores such as lions would. Of course, nothing stays the same forever. Niches alter through geologic, climatic and, in the present day, man-made changes in land, water and air. A volcano can create a new island. An ice age can lock up huge quantities of water in ice caps and glaciers, creating areas of land where oceans once rolled. Continental drift can push seabeds to the tops of mountains. Humans can chop down forests and build cities. All these changes alter the niches, the environmental conditions under which the life in those niches live. Of course, this means the life has to change as well, to match the new conditions. An example is a moth in England. It was originally a mottled white, which allowed it to blend into the light bark of the trees in its area. However, in the 19th century factories in this area began to belch out soot from their chimneys that settled on the trees, changing the tree bark from mottled white to mottled black. The moth could no longer blend in and thus was easy prey to birds. However, some of the moths were darker and thus less noticeable. After a few generations of these darker moths surviving and passing on their genes, the standard color changed to mottled black, and the moth, now blending into the dark bark, survives. Note that such changes are not conscious decisions made by the organism: Some of those variations are detrimental: However, as the conditions in a niche change, those same variations can become advantageous, enhancing rather than weakening chances for survival. If no variations exist in a species that contribute to survival when conditions change, or if conditions change too quickly for advantageous variations to be passed on to enough descendants, 1 the species can die out. Survival Through Strategy Other changes in an organism can develop over time. For example, some animals have perfected the technique of hibernating during periods when the food supply is low. Marmots have developed a social structure that provides lookouts who watch for predators and sound a warning when one appears. Prairie dogs dig their burrows with multiple entrances and exits so if a predator comes in one door, the dogs can leave through another. These survival strategies are adaptations to niche conditions, but unlike physical changes are not necessarily genetic changes. However, some survival strategies are learned behaviors. That is, the young learn them from older animals that learned them from their ancestors. For example, most predators teach their young the techniques of successful hunting. In general, it appears the higher the complexity of the nervous system of the animal, the more likely strategies are learned rather than instinctive. Sharks, with a relatively simple nervous system, hunt by instinct and need no instruction on how to go about it. Lions, with a complex system, must learn the techniques of stealth, stalk, and attack. Again, in most animals, the strategies are not conscious decisions, but responses to stimuli such as hunger, thirst, asphyxiation, fear, or exhaustion. If conditions change so the instinctive strategy is dangerous rather than beneficial, the animal can die. The musk ox strategy is to form a stationary circle with the young in the center and the older members facing outward, rather than running away. This is excellent against wolves, but deadly when faced with spears and guns perfect, however, for the human survival strategy of group hunting with weapons. For example, the genetically dictated instinctive reaction to a threat to self-preservation is the "fight or flight" syndrome. The changes include an increased rate of respiration to provide more oxygen to the muscles, an accelerated heart beat to speed up the blood flow, a lessening in sensitivity to pain, and changes in the blood stream, including an injection of adrenalin and diversion away from the organs to the muscles. These physiological changes prepare the animal to either fight for survival or run away from danger. For example, an amoeba will avoid an electric field automatically -- an instinctive reaction unmitigated by a survival strategy. A starving rat, however, will run across an electrified grid that gives it painful shocks if there is food on the other side. Humans are subject to the same stimuli and reactions as any other animal. Hunger, thirst, asphyxiation, fear, and exhaustion are physical sensations that cause instinctive physical reactions. Thus you eat when hungry, drink when thirsty, fight for air, run from dangerous situations, sleep. These responses are instinctive, and we have no more control over them than we do over our eye color. Actually, we do have control over our eye color. The reason we do is why our approach to self-preservation is different from all other creatures.

Chapter 9 : Human - Homo sapiens - Details - Encyclopedia of Life

The idea that trillions of bacteria are swarming over your skin and through your body is enough to give anyone the creepy crawlies. But as long as humans can't live without carbon, nitrogen.

Humans communicate with others not only by face-to-face communication, but also by giving information via the Internet and printed products such as books and newspapers. Many people believe that the significance of communication is like the importance of breathing. Indeed, communication facilitates the spread of knowledge and forms relationships between people. First of all, communication helps to spread knowledge and information among people. For example, authors write books to impart knowledge to the World, and teachers share their experience with their students. Also, friends or co-workers discuss their ideas with each other, and companies exchange information with their subsidiaries and customers. Besides, the advent of the Internet not only allows people to have better access to knowledge and information in all fields, but also makes it easier and faster to contact with people around the World. Undoubtedly, the sharing knowledge and information process cannot function without communication. As a result, companies cannot operate, and humanity will be drowned in the abyss of ignorance. Communication helps to spread knowledge and information among people. Moreover, communication is the foundation of all human relationship. At first, strangers start talking and getting to know each other, and then the relationships are formed when they have more interaction and communication. Communicating helps people to express their ideas and feelings, and it, at the same time, helps us to understand emotion and thoughts of the others. As a result, we will develop affection or hatred toward other people, and positive or negative relationships will be created. It is no doubt that communication plays a vital role in human life. It not only helps to facilitate the process of sharing information and knowledge, but also helps people to develop relationships with others. Therefore, the importance of communication cannot be underestimated. Every day, we communicate with a lot of people including our families, our friends, our colleagues, or even strangers. We should learn how to communicate effectively to make our lives better. You want to create something that lasts generations; that is remembered for hundreds of years. You desire to inspire someone to see life as it really is, a gift and a pleasure, being to be grateful for. When you write for us means you write to change the world.