

I affirm

Single standard: Ecocentrism

Ecocentrism helps solve environmental crisis and pushes us away from human first thinking

Kopnina et Al 2017 [Cryer, Paul, Kopnina, Helen, Piccolo, John J., Taylor, Bron, Washington, Haydn](https://mahb.stanford.edu/blog/statement-ecocentrism/) July 4, 2017
<https://mahb.stanford.edu/blog/statement-ecocentrism/> [Wrench]

"We believe that **ecocentrism, through its recognition of humanity's duties towards nature, is central to solving our unprecedented environmental crisis. Its important for multiple reasons:** In ethical terms: **ecocentrism expands the moral community (and ethics) from being just about ourselves. It means we are not concerned *only* with humanity; we extend respect and care to all life, and indeed to terrestrial and aquatic ecosystems themselves.** In evolutionary terms: **ecocentrism reflects the fact *Homo sapiens* evolved out of the rich web of life on Earth** – a legacy stretching back an almost unimaginable 3.5 billion years. **Other species literally are our cousins and relatives (close and distant), recognition of a biological kinship that many have recognized confers moral responsibilities toward all species.** In spiritual terms: **Many people and some societies have developed ecocentric moral sentiments. There is increasing evidence that ecocentric values are being fused into nature-based, ecocentric spiritualities, many of which are innovative and new.** With such spiritualities, even people who are entirely naturalistic in their worldviews, often speak of the Earth and its ecosystems as 'sacred' and thus worthy of reverent care and defense. In ecological terms: **ecocentrism reminds us that all life is interdependent and that *both humans and nonhumans are absolutely dependent on the ecosystem processes that nature provides.***"

A human first or anthropocentric worldview abdicates us of our moral responsibility to prevent ecocide and species extinction

Kopnina, 16 (Helen, PhD, researcher and lecturer at The Hague University of Applied Science, "Nobody Likes Dichotomies (But Sometimes You Need Them)," Anthropological Forum, 2016) <http://dx.doi.org/10.1080/00664677.2016.1243515> //cb
Anthropocentric Bias An anthropocentric bias extends to poaching and to dislocation, since critics of conservation do not discuss non-human displacements or indeed colonisation in a broader sense. **The defining characteristic of 'colonisation' in general, along with the increase of social inequalities, is the ever-greater instrumentalism in human engagements with non- human inhabitants** (Strang 2016). This entails the self-proclaimed right to undermine another species' very existence and the evolutionary unfolding in the noble quest for social justice (Kopnina 2012a, 2012b, 2014a; Cafaro and Primack 2014), in effect **condoning 'nonhuman genocide'** (Crist 2012, 140). **Accusations that conservationists are 'out of control' to save the near-extinct species (Büscher 2015) testifies to a robust anthropocentric bias, and a refusal to acknowledge the legal repercussions of ecocide (Higgins 2010). The perpetuation of social inequality and the increasing extinctions of non-human species fundamentally alter the ethics of anthropological practice. These ethics are subject to value judgements – of what or who is accorded rights, and in what proportion.** Caplan (2003) has argued that **extreme cultural relativity** (in which it is possible, for example, to ignore major abuses of human rights) **is an abdication of moral responsibility.** By the same token, **presenting even the concern over loss of biodiversity as a social construction of sentimental elites, or by profit-seeking neo-colonial regimes, abdicates moral responsibility to non-humans.** The proponents of social justice keep perpetuating the dichotomies between the indigenous communities and the Western elites (e.g. Chapin 2004), or between poor rural peasants and neoliberal conservationists (e.g. Holmes 2013). However, historically, protected areas were rarely created to benefit particular groups of people (such as tourists), because most national parks have been established for the people, everywhere in the world, and not just in post-colonial nations (e.g. Doak et al. 2015). **In fact, national parks can be seen as protecting cultural identity against severe changes to the local environment, such as logging.** As Brosius (1999, 39) has noted in the case of Penan in Malaysia, 'logging not only undermines the basis of Penan subsistence but, by transforming sites with biographical, social, and historical significance, also destroys those things that are iconic of their existence

as a society'. Conservation does not threaten people's liberty, as Fletcher (2009) would have it – rather it enables one to live in a world of natural richness. In the words of Wakild (2015, 44):

Onto the Contention Level

The sole contention is Enviromental Degradation

There are two ways Space Travel causes enviromental degradation

1. Economic growth

A: Space is the final economic frontier- opens up new lanes of commerce and exploitation

US Government Publishing Office 2021 [Us Government Publishing Office January 2021 con. Rept.

2021 - Chapter 8: Exploring New Frontiers in Space Policy and Property Rights Accessed 1/8/2021

<https://www.govinfo.gov/content/pkg/ERP-2021/pdf/ERP-2021-chapter8.pdf> Wrench

The United States has been on the cutting edge of space exploration since the dawn of the space age and has become the world leader in commercial activity in space. In the 20th century, the United States became the first and only nation to send individuals to the Moon. After the end of the Apollo Program, the United States pioneered the Space Shuttle, the world's first reusable spacecraft. Now American engineers have become the first to demonstrate and operationalize the capabilities of commercial spacecraft for orbital cargo delivery, first-stage reusability, and human spaceflight.

In the 21st century, the United States has ushered in a new era of space exploration based on public-private partnerships and the success of private sector investment in space technologies. The Trump Administration recognizes the opportunities and benefits afforded by this new era and has advanced policies that encourage private sector innovation, collaboration with commercial companies, and a regulatory environment more conducive to investment in space. In doing so, this Administration is not only accelerating the development of the today's space industry; it is also laying the foundation for a viable space economy that can continue to develop and expand in the coming decades.

This past year has seen historic advances in spaceflight and space policy, even in the midst of the global COVID-19 pandemic. After the reestablishment of USSPACECOM as a combatant command for the space domain on August 19, 2019, President Trump established the U.S. Space Force (USSF), the sixth branch of the U.S. military, on December 20, 2019. The mission of USSF is to organize, train, and equip space forces to "protect U.S. and allied interests in space and to provide space capabilities to the joint force" (USSF n.d.). In addition, on May 30, 2020, and November 15, 2020, in major milestones for the partnership between the National Aeronautics and Space Administration (NASA) and the private sector, SpaceX launched a total of six astronauts from Cape Canaveral to the International Space Station (ISS). These missions, which represent the first commercial human spaceflights in history, are an important step for the private sector's role in the space economy.

This space economy fosters increases in the earths economy

Ludwig 2021 [Sean Ludwig December 20th, 2021 "Space Economy: 4 trends to Watch for in 2022" US Chamber of Commerce

<https://www.uschamber.com/space/space-economy-4-trends-to-watch-in-2022> Wrench

One trillion dollars. That's the economic potential of space commerce for businesses by 2040, according to estimates from investment bank Morgan Stanley. **Working together, private sector business leaders and government agencies have transformed what was once merely a dream of travel among the stars into a fully functioning global market** – forming private aerospace companies, launching rockets and satellites, and even creating opportunities for space

travel. In fact, this year there have been 64 commercial space flights, more than double the number in recent years, with everyone from famed actor William Shatner and NFL Hall of Famer Michael Strahan among those taking the trip.

B:Economic Growth and its effects is the root of environmental disaster

Phys, 16 - citing a study by Roberto Cazzolla Gatti, associate professor in ecology and biodiversity at Tomsk State University ("Western lifestyle spells the end of biodiversity," *Phys.org*, 4-5-2016, <https://phys.org/news/2016-04-western-lifestyle-biodiversity.html>)

Contrary to what many economists suggest, development is not always good for nature, a biologist at Tomsk State University argues. It is broadly accepted that biodiversity and the ecosystem are both fundamental to sustaining humanity and life on Earth, but in recent centuries, they have been subject to heavy pressures due to overexploitation. Environmental protection is also raising concerns because of our improved understanding of the interconnections between human wellness and ecosystem health. "The problem is that, even if the will to follow a sustainable lifestyle in Western countries is increasing, many developing countries are experiencing economic growth, which threatens to subject their environments to overexploitation," writes Roberto Cazzolla Gatti, associate professor in ecology and biodiversity at Tomsk State University in "Trends in human development and environmental protection," a paper published in the International Journal of Environmental Studies. This could be a catastrophe for the planet. This study compares the trends seen in the Living Planet Index (LPI) and the Human Development Index (HDI) and applies an economic-ecologic historical analysis. The TSU ecologist suggests that societies follow common development patterns as they move from an indigenous lifestyle to an undeveloped society before entering a transitional phase as they move toward a developed state. As they go through this process, each society exploits local, regional and sometimes global natural resources to nourish its economic growth. "Today, we can see that higher-latitude countries populated by 2 billion people consume their entire environmental capital in one year, while lower-latitude countries that are home to more than 5 billion people are depleting resources at a growing rate that will in a few years catch up with Western levels," Cazzolla Gatti says. "If developing countries do not implement strategies to skip this 'intermediate' stage of natural resource overuse during the intense growth phase, the Earth's systems will not be able to support the global biodiversity and ecosystems that sustain humanity." The planet is facing a series of challenges that could lead to a significant loss of ecosystem integrity. These challenges are caused by human demand, natural resource and space use. The recent agreement signed at the United Nations climate summit in Paris (December 2015) has been hailed as historic, ground-breaking and unprecedented. However, the targets it sets seem so ambitious that many climate analysts do not believe they will have any impact on the current climatic situation. This agreement aims to limit temperature increases to a level below 2° C, above pre-industrial levels, and recognizes that avoiding 1.5° C of warming "would significantly reduce the risks and impacts of climate change." Unfortunately, participating countries' emissions reduction commitments are not sufficient to achieve these targets and it seems impossible to avoid the 1.5°C limit without development of "negative emissions," such as absorbing carbon dioxide out of the air using technologies that are still at worst unavailable and at best ineffective. "In addition to climate change, the major cause of the reduction in biodiversity we have seen in recent times is the associated rates of habitat destruction and degradation. Over half of the estimated original extent of temperate broadleaf forests had already been converted to agriculture, forest plantations and urban areas by 1950," Cazzolla Gatti writes. "In contrast, deforestation and land-use change accelerated in the tropics after 1950. Freshwater ecosystem exploitation has moved well beyond levels that can be sustained, even at current demand. Moreover, forecasts suggest that demand for water will continue to rise globally. Add to this the impact of the increasing global demand for palm oil products, which continues to be a key factor behind the recent dramatic decline in forest cover in Southeast Asia," Gatti says. "Data suggests that two orangutan species have already undergone a tenfold decrease in population size over the 20th century and many populations are now at very low numbers. Looking at the marine environment, the high demand for fish and fish products combined with overcapacity in the global fishing fleet and inefficient fishing techniques have led to massive overfishing." This alarming study suggests that societies seem to follow common development patterns and few countries are currently living sustainably, with the majority overexploiting natural resources and ecosystems. This is fundamentally unsustainable and there is no end in sight. Moving away from this will be anything but painless. In coming years, 5 to 7 billion people will follow the global patterns described in this study, and ecosystems and biodiversity will continue to be subjected to a high level of stress with no assurance of resilience.

Loss of biodiversity outweighs; its damage is to the environment is irreparable

Tobin, '00 (Richard, professor of political science at SUNY-Buffalo, The Expendable Future, p. 22

Norman Meyers observes, **no other form of environmental degradation “is anywhere so significant as the fallout of species.”** Harvard biologist Edward O. Wilson is less modest in assessing the relative consequences of human-caused extinctions. To Wilson, **the worst thing that will happen to earth is not economic collapse, the depletion of energy supplies, or even nuclear war.** As frightful as these events might be, Wilson reasons that **they can “be repaired within a few generations. The one process ongoing...that will take millions of years to correct is the loss of genetic and species diversity by destruction of natural habitats.**

Extinction of one species leads to a domino effect destroying ecosystems

Noseworthy 14 – forester and conservation biologist working in the Atlantic Region for the Nature Conservancy of Canada (Josh, “The Jenga theory of biodiversity: The tipping point of ecosystems and the diversity of species” <http://www.natureconservancy.ca/en/blog/the-jenga-theory-of.html>)–

With only 20 seconds left of a roughly seven-minute interview, I ended up using a metaphor of Jenga – that surprisingly simple game that gives you just enough anxiety to make it fun. I described how **each species can be seen as a block in the tower.** If you take a block out (representing species extinction) it might not make the tower fall, but **it does make it weaker.** **Every block removed increases the chances** of the tower **collapsing** by taking away the support of the blocks that remain, and also by shifting the balance of the tower as a whole. After a while **it doesn’t take much to knock the whole thing down.** The final blow might be the removal of that all-important block, or it might be caused by outside forces – a wobbly table, a heavy breather, or maybe just a fault in one of the blocks that went unnoticed. The **resilience**

Of the Jenga tower **becomes increasingly compromised,** and everyone sitting around the table knows that someone will eventually be responsible for a disorderly pile of blocks (amidst squeals of delighted laughter by those that aren’t responsible, of course). Sea otter, Vancouver Aquarium (Photo by Wikimedia Commons, Stan Shebs) Sleeping sea otter at the Vancouver Aquarium (Photo by Wikimedia Commons, Stan Shebs) Probably the most well known “block” relevant to the topic of biodiversity is the sea otter. The “tower” that the Sea otter supported was the kelp forest ecosystem of Pacific North America. After being driven close to extinction by early European explorers, the lack of sea otters allowed sea urchins, their favourite food, to explode in numbers, which in turn caused the disappearance of the kelp forests. Sea urchins munched these kelp beds into oblivion since the otters weren’t around to control the urchin population, which then resulted in the disappearance of all the other marine life that depended on the kelp beds as habitat, from shrimp to whales. We know this because fortunately, remnant populations of sea otters were discovered before it was too late, and the impacts of their reintroduction to their natural habitat were recorded. After putting the otters back, the rich kelp forest ecosystem with all its diversity of creatures began to return (albeit slowly), including those that are commercially important for people (we’re just another block, after all). On the island of Mauritius in the Indian Ocean, previously home to the infamous dodo bird, there was once a species of 600-pound tortoise. The story goes that when Dutch sailors first arrived on the island in 1638 there were so many tortoises that they could walk exclusively on the turtles’ backs without touching the ground (a bit of a stretch most likely, but you get the idea). Then they ate them all – every last one. The extinction did not seem to have any obvious impacts on the surrounding ecosystem, until in the 1970s researchers began to notice that the native tree species (which can live for centuries) were not reproducing and were becoming threatened by extinction. If the trees were lost, so would be the insect pollinators, the birds that fed on their foliage, the bats that roosted in their branches and the orchids that grew in their canopies. After some frantic research, it turned out those trees needed their fruit to pass through the gut of a tortoise in order to germinate. No tortoise, no trees. In a desperate and controversial attempt to reverse the decline, a similar species of tortoise was relocated from a nearby island with some promising results. Although there are still no guarantees of success due to the unknowns surrounding the ecology of both the tortoise and the tree species, it goes to show how **the removal of a seemingly unnecessary block could have huge repercussions down the road. Whether the impacts of** **extinction** **happen right away or centuries later they will undoubtedly happen.**

No species stands alone, and **the loss of one will always have** some form of **impact** on others, often **in a chain reaction.** We’ve only scratched the surface of discovering the interconnectedness within ecosystems; in many cases we know nothing at all. What we do know however, is that at the end of the day **resilient ecosystems** – those that are best suited to remain stable and continuously provide us with goods and services – are the ones that **maintain** their **full diversity.**

2. Climate Change

A: A single rocket launch produces significant carbon emissions

Gammon 21, Katherine Gammon, “How the Billionaire space race could be one giant leap for pollution,” July 19, 2021 <https://www.theguardian.com/science/2021/jul/19/billionaires-space-tourism-environment-emissions>

The carbon emissions from rockets are small compared with the aircraft industry, she says. But they are **increasing at nearly 5.6% a year,** and Marais has been running a simulation for a decade, to figure out at what point

will they compete with traditional sources we are familiar with. For one rocket launch 200-300 tonnes of carbon dioxide are split between 4 or so passengers, according to Marais. But emissions from rockets are emitted right into the upper atmosphere, which means they stay there for a long time: two to three years. Even water injected into the upper atmosphere – where it can form clouds – can have warming impacts, says Marais. “Even something as seemingly innocuous as water can have an impact.” Closer to the ground, all fuels emit huge amounts of heat, which can add ozone to the troposphere, where it acts like a greenhouse gas and retains heat. In addition to carbon dioxide, fuels like kerosene and methane also produce soot. And in the upper atmosphere, the ozone layer can be destroyed by the combination of elements from burning fuels.

Increased Carbon Emissions only increases Global Warming and Climate Change

EPA No Date [Environmental Protection Agency “Causes of Climate Change” No date accessed 23-12-2021]

<https://www.epa.gov/climatechange-science/causes-climate-change> | Wrench

Since the Industrial Revolution, human activities have released large amounts of carbon dioxide and other greenhouse gases into the atmosphere, which has changed the earth's climate. Natural processes, such as changes in the sun's energy and volcanic eruptions, also affect the earth's climate. However, they do not explain the warming that we have observed over the last century. Scientists have pieced together a record of the earth's climate by analyzing a number of indirect measures of climate, such as ice cores, tree rings, glacier lengths, pollen remains, and ocean sediments, and by studying changes in the earth's orbit around the sun.² This record shows that the climate varies naturally over a wide range of time scales, but this variability does not explain the observed warming since the 1950s. Rather, it is extremely likely (> 95%) that human activities have been the dominant cause of that warming.³ Human activities have contributed substantially to climate change through: Greenhouse Gas Emissions, Reflectivity or Absorption of the Sun's Energy. Concentrations of the key greenhouse gases have all increased since the Industrial Revolution due to human activities. Carbon dioxide, methane, and nitrous oxide concentrations are now more abundant in the earth's atmosphere than any time in the last 800,000 years.⁴ These greenhouse gas emissions have increased the greenhouse effect and caused the earth's surface temperature to rise. Burning fossil fuels changes the climate more than any other human activity. Carbon dioxide: Human activities currently release over 30 billion tons of carbon dioxide into the atmosphere every year.⁵ Atmospheric carbon dioxide concentrations have increased by more than 40 percent since pre-industrial times from approximately 280 parts per million (ppm) in the 18th century⁶ to 414 ppm in 2020.⁷

B: Warming is an existential threat of high probability – feedback loops begin at increases as low as 2 degrees – only emissions reductions solve

(Spratt and Dunlop 19) Research Director for Breakthrough National Centre for Climate Restoration, Melbourne and international oil, gas and coal industry executive, chairman of the Australian Coal Association, chief executive of the Australian Institute of Company Directors, and chair of the Australian Greenhouse Office Experts Group on Emissions Trading May 2019 David and Ian, “Existential climate-related security risk: A scenario approach,” Breakthrough - National Centre for Climate Restoration, https://docs.wixstatic.com/ugd/148cb0_b2c0c79dc4344b279bcbf2365336ff23b.pdf ZachDiesel

An existential risk to civilisation is one posing permanent large negative consequences to humanity which may never be undone, either annihilating intelligent life or permanently and drastically curtailing its potential. With the commitments by nations to the

2015 Paris Agreement, the current path of warming is 3°C or more by 2100. But this figure does not include “long-term” carbon-cycle feedbacks, which are materially relevant now and in the near future due to the unprecedented rate at which human activity is perturbing the climate system. Taking these into account, the Paris path would lead to around 5°C of

warming by 2100. Scientists warn that warming of 4°C is incompatible with an organised global community, is devastating to the majority of ecosystems, and has a high probability of not being stable. The World Bank says it may be "beyond adaptation". But an existential threat may also exist for many peoples and regions at a significantly lower level of warming. In 2017, 3°C of warming was categorised as "catastrophic" with a warning that, on a path of unchecked emissions, low-probability, high-impact warming could be catastrophic by 2050. The Emeritus Director of the Potsdam Institute, Prof. Hans Joachim Schellnhuber, warns that "climate change is now reaching the end-game, where very soon humanity must choose between taking unprecedented action, or accepting that it has been left too late and bear the consequences." He says that if we continue down the present path "there is a very big risk that we will just end our civilisation". The human species will survive somehow but we will destroy almost everything we have built up over the last two thousand years. Unfortunately, conventional risk and probability analysis becomes useless in these circumstances because it excludes the full implications of outlier events and possibilities lurking at the fringes. Prudent risk-management means a tough, objective look at the real risks to which we are exposed, especially at those "fat-tail" events which may have consequences that are damaging beyond quantification, and threaten the survival of human civilisation. Global warming projections display a "fat-tailed" distribution with a greater likelihood of warming that is well in excess of the average amount of warming predicted by climate models, and are of a higher probability than would be expected under typical statistical assumptions. More importantly, the risk lies disproportionately in the "fat-tail" outcomes, as illustrated in Figure 1. This is a particular concern with potential climate tipping-points – passing critical thresholds which result in step changes in the climate system that will be irreversible on human timescales – such as the polar ice sheets (and hence sea levels), permafrost and other carbon stores, where the impacts of global warming are non-linear and difficult to model with current scientific knowledge. Recently, attention has been given to a "hothouse Earth" scenario, in which system feedbacks and their mutual interaction could drive the Earth System climate to a point of no return, whereby further warming would become self-sustaining. This "hothouse Earth" planetary threshold could exist at a temperature rise as low as 2°C, possibly even lower.

Attacks on the neg