# 1AC – Enviro

### 1AC – T/L

I affirm Resolved: The appropriation of outer space by private entities is unjust.

My value is justice, which provides objectivity and gives people their proper due. My value criterion is ethics. We must think about how certain things are ethical before we act upon them. Ethics are the best criterion since they’re the basis for justice

First, I’ll define some words:

#### Appropriation is taking property for one’s exclusive use.

**Gorove 1969** [Stephen Gorove, Chairman of the Graduate Program of the School of Law and Professor of Law University of Mississippi School of Law , 1969, “Interpreting Article II of the Outer Space Treat”, Fordham Lw Review Volume 37 Issue 3, <https://ir.lawnet.fordham.edu/cgi/viewcontent.cgi?article=1966&context=flr> ] // Triumph Debate

With respect to the concept of appropriation **the** basic **question is what constitutes "appropriation,"** **as used in the Treaty, especially in contradistinction to casual or temporary use.** **The term "appropriation" is used most frequently to denote the taking of property for one's own or exclusive use with a sense of permanence.** **Under such interpretation the establishment of a permanent settlement or the carrying out of commercial activities** by nationals of a country on a celestial body may **constitute** national **appropriation** if the activities take place under the supreme authority (sovereignty) of the state. Short of this, if the state wields no exclusive authority or jurisdiction in relation to the area in question, the answer would seem to be in the negative, unless, the nationals also use their individual appropriations as cover-ups for their state's activities.5 In this connection, it should be emphasized that **the word "appropriation" indicates a taking which involves something more than just a casual use.** Thus a temporary occupation of a landing site or other area, just like the temporary or nonexclusive use of property, would not constitute appropriation. By the same token, **any use involving consumption or taking with intention of keeping for one's own exclusive use would amount to appropriation.**

#### Private entities are corporations, companies, or groups not affiliated with the government.

UpCounsel 22, Private Entity: Everything You Need to Know, https://www.upcounsel.com/private-entity, Accessed: 1-7-2022, Hari

A private entity can be a partnership, corporation, individual, nonprofit organization, company, or any other organized group that is not government-affiliated. Indian tribes and foreign public entities are not considered private entities.

#### My contention is that appropriation of space by private entities is unethical to the environment and must be rejected.

#### Space appropriation is on the rise now – it causes massive structural violence and is the new era of American nationalism.

---SpaceX lacking – was behind in time, technology is incomplete

---Col is unethical – proponents openly endorse Trumpian logics & neglect majority of the population – Musk proves

---UQ – space col is coming now; new landings mean Musk is accelerating

Paris Marx an expert on technology and space writes in, ‘20, Paris Marx has previously written for NBC news and CBC news; they are well read and have experience writing and discussing tech and capitalism, Yes to Space Exploration. No to Space Capitalism., Jacobin Magazine, 6-8-2020, https://www.jacobinmag.com/2020/06/spacex-elon-musk-jeff-bezos-capitalism, Accessed: 12-8-2021, Hari \*edited for ableist language, struck through & modified in brackets

On May 30, SpaceX finally launched astronauts into space more than two years behind schedule. President Donald Trump was on hand for the launch. After pushing for the militarization of space with the formation of the US Space Force, Trump fused his own vision with that of SpaceX founder Elon Musk, declaring, “We’ll soon be landing on Mars and we’ll soon have the greatest weapons ever imagined in history.”

Early in Trump’s presidency, Musk faced criticism for being part of the administration’s advisory council and refusing to step down even as Trump signed his signature Muslim ban. It was believed Musk was hoping to benefit from greater public subsidies, on top of the billions NASA gave to SpaceX, and he’s set to do so as part of Trump’s plan to get astronauts back on the moon by 2024. More recently, the two have found themselves of the same mind on the pandemic as they shared misleading health information and Musk echoed Trump’s calls to “open the economy” and give people their “freedom” back.

The May 30 launch symbolized both Trump’s desire to project an image of revived American greatness and Musk’s need not only to bolster the myth that makes his wealth possible, but to set the foundations for a privatized space industry.

The space billionaires — Musk and Amazon CEO Jeff Bezos foremost among them — have little stake in the well-being of the majority of the population. Their space visions [plans] are designed for wealthy people like themselves, with little mention of where the working class would fit in. They’ve built their wealth on exploitation, and their ~~visions of~~ [plans for] the future are little more than an extension of their present actions.

A History of Violence

The business practices of Musk and Bezos are increasingly well known and have been on clear display during the pandemic. Musk tried to claim Tesla’s Fremont, California factory was “essential” until authorities forced him to close it; then he reopened it in defiance of health orders. As Tesla CEO, Musk has a long history of opposing the unionization of workers, presiding over a high rate of worker injuries (which the company tried to cover up), and even having a former worker hacked and harassed after he became a whistleblower.

Meanwhile, Bezos has a similar history of abusing Amazon workers. Amazon’s warehouses are known for having higher injury rates than the industry average, the company has fought unionization, and the stories of the terrible conditions experienced by workers are legendary. During the pandemic, that has continued, with the company failing to enforce social distancing or provide adequate protective equipment until workers began walking out, refusing to be open about infection information, and firing workers who dared criticize the company, all while Bezos’s wealth has increased by more than $30 billion.

But it goes beyond that, because the worldviews of these billionaires began to be formed long before they started the empires they currently lord over.

Musk did not have a regular childhood, but rather a wealthy upbringing in apartheid South Africa. His father was an engineer and owned part of an emerald mine in Zambia, telling Business Insider, “We were very wealthy. We had so much money at times we couldn’t even close our safe.” In Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future, Ashlee Vance describes how Musk got money from his father when he was starting one of his original ventures. He also had a particular admiration for his grandfather, who moved to apartheid South Africa from Canada after rallying “against government interference in the lives of individuals.”

Bezos has a not dissimilar story. His father was a well-off oil engineer in Cuba while Fulgencio Batista was in power. In Bit Tyrants, Rob Larson explains that Bezos’s father left the island after the Cuban Revolution and passed his libertarian views down to his son. Bezos’s parents invested nearly $250,000 in Amazon in 1995 as it was getting started.

These space barons made their billions through the exploitation of their workers and came from well-off backgrounds made possible from resource extraction. When digging into their ~~visions~~ [plans] for a future in space, it’s clear that they seek to extend these conditions into the cosmos, not challenge them in favor of space exploration for the benefit of all.

The Future They Want

Musk and Bezos are the leading drivers of the modern push to privatize and colonize space through their respective companies, SpaceX and Blue Origin. Their ~~visions~~ [goals] differ slightly, with Musk preferring to colonize Mars, while Bezos has more interest in building space colonies in orbit.

In 2016, Musk claimed he would begin sending rockets to Mars in 2018. That never happened, but it hasn’t ended his obsession. Musk is determined to make humans a multi-planetary species, framing our choice as either space colonization or the risk of extinction. Bezos says that Earth is the best planet in our solar system, but if we don’t colonize space we doom ourselves to “stasis and rationing.”

These framings serve the interests of these billionaires, and make it seem like colonizing space is an obvious and necessary choice when it isn’t. It ignores their personal culpability and the role of the capitalist system they seek to reproduce in causing the problems they say we need to flee in the first place.

Billionaires have a much greater carbon footprint than ordinary people, with Musk flying his private jet all around the world as he claims to be an environmental champion. Amazon, meanwhile, is courting oil and gas companies with cloud services to make their business more efficient, and Tesla is selling a false ~~vision~~ [notion] of sustainability that purposely serves people like Musk, all while capitalism continues to drive the climate system toward the cliff edge. Colonizing space will not save us from billionaire-fueled climate dystopia.

But these billionaires do not hide who would be served by their futures. Musk has given many figures for the cost of a ticket to Mars, but they’re never cheap. He told Vance the tickets would cost $500,000 to $1 million, a price at which he thinks “it’s highly likely that there will be a self-sustaining Martian colony.” However, the workers for such a colony clearly won’t be able to buy their own way. Rather, Musk tweeted a plan for Martian indentured servitude where workers would take on loans to pay for their tickets and pay them off later because “There will be a lot of jobs on Mars!”

Bezos is even more open about how the workforce will have to expand to serve his ~~vision~~ [goal] , but has little to say about what they’ll be doing. His plan to maintain economic “growth and dynamism” requires the human population to grow to a trillion people. He claims this would create “a thousand Mozarts and a thousand Einsteins” who would live in space colonies that are supposed to house a million people each, with the surface of Earth being mainly for tourism. Meanwhile, industrial and mining work would move into orbit so as not to pollute the planet, and while he doesn’t explicitly acknowledge it, it’s likely that’s where you’ll find many of those trillion workers toiling for their space overlord and his descendants.

Space Shouldn’t Serve Capitalists

In 1978, Murray Bookchin skewered a certain brand of futurism that sought to “extend the present into the future” and desired “multinational corporations to become multi-cosmic corporations.” Much of this future thinking obsesses about possible changes to technology, but seeks to preserve the existing social and economic relations — “the present as it exists today, projected, one hundred years from now,” as Bookchin put it. That’s at the core of the space billionaires’ ~~vision~~ [plans] for the future.

Space has been used by past US presidents to bolster American power and influence, but it was largely accepted that capitalism ended at the edge of the atmosphere. That’s no longer the case, and just as past capitalist expansions have come at the expense of poor and working people to enrich a small elite, so too will this one. Bezos and Trump may have a public feud, but that doesn’t mean that their mutual interest isn’t served by a renewed US push into space that funnels massive public funds into private pockets and seeks to open celestial bodies to capitalist resource extraction.

This is not to say that we need to halt space exploration. The collective interest of humanity is served by learning more about the solar system and the universe beyond, but the goal of such missions must be driven by gaining scientific knowledge and enhancing global cooperation, not nationalism and profit-making.

Yet that’s exactly what the space billionaires and American authoritarians have found common cause in, with Trump declaring that “a new age of American ambition has now begun” at a NASA press briefing just hours before cities across the country were placed under curfew last week. Before space can be explored in a way that benefits all of humankind, existing social relations must be transformed, not extended into the stars as part of a new colonial project.

#### Rocket launches and space travel are horrible for the environment – they’re the biggest killer of the ozone layer since they happen in the stratosphere & emit Black carbon, our studies are best.

Miraux a member of the space generation advisory council 21 [Loïs Miraux, Project Lead for Environmental Impact @ The Space Generation Advisory Council, “Environmental limits to the space sector's growth,” Science of the Total Environment, <https://www.sciencedirect.com/science/article/abs/pii/S0048969721059404>] /Triumph Debate

**The amount of material emitted by the ≈100 rockets launched every year is** about 40,000 tons, only **0.01% of the fuel burned by the global aviation sector** (Ross and Sheaffer, 2014). **However**, during their ascent from ground to orbit, **they release gases and particles in all the layers of the atmosphere**. **This is** a **unique** characteristic because **rockets are the only anthropogenic source of pollution** in the middle and upper atmosphere, that is, **above 15 km where airlines emissions stop** (Ross and Sheaffer, 2014). **Emissions into the troposphere**, the lower layer of the atmosphere, **are not important** besides transient, local pollution. However, **emissions in the stratosphere**, the layer above the troposphere, **are more concerning for two main reasons. First**, **the stratosphere being dynamically isolated** from the troposphere, **emissions components** of hundreds of launches **accumulate** for several years (Ross and Vedda, 2018). **Then, the stratosphere is the home of the ozone layer**, a region of high concentration of ozone at 15–35 km altitudes, absorbing most of the Sun's harmful ultraviolet radiation and thereby **protecting living organisms on the ground** (Fig. 4). In addition to these particularities, the magnitude of the effects of rocket emissions on the atmosphere varies significantly depending on the type of propellant combination used. Liquid Rocket Engines (LREs) use propellants in the liquid form, such as liquid oxygen combined with liquid hydrogen as a fuel (e.g. Ariane 5) or kerosene (e.g. SpaceX's Falcon 9). This allows thrust variability, but LREs are often coupled with Solid RocketMotors (SRMs) (e.g. Ariane 5 boosters) because they grant higher energy density for lift-off. SRMs typically use a combination of solid aluminium fuel with ammonium perchlorate as an oxidizer. A third type of rocket is being used more recently: Hybrid Rocket Engines (HREs), using a liquid oxidizer and a solid fuel, often a hydrocarbon. They grant high safety, making them popular for space tourism applications (e.g. Virgin Galactic's SpaceShipTwo). Although there are still many uncertainties and serious knowledge gaps on the effect of launch emissions on the atmosphere (Ross and Vedda, 2018), estimates of orders of magnitude are available in the literature. 3.2. Stratospheric ozone depletion **During the lifecycle of complete space missions, the launch event has been reported to contribute to almost 100% of the ozone depletion potential** (Chanoine, 2017).**Ozone is destructed mostly by highly reactive radicals** (oxides of chlorine, nitrogen, bromine, and hydrogen), **with a single molecule able to destroy up to 100,000 ozone molecules** (Ross et al., 2009). Ozone depletion from SRMs particles has historically been the main concern with the first studies carried out by Cicerone (Cicerone, 1974). LREs exhausts contain less reactive chemicals and particles and are, therefore, responsible for ozone loss one order of magnitude smaller than SRMs (Ross et al., 2009). **The ozone loss caused by the global launch fleet has been estimated to be greater than 0.01% and less than 0.1%**, with regional effects reaching several percent and with complete destruction in the surroundings of exhaust plumes (Voigt et al., 2013). This is **to be compared to the** ozone loss caused by **ozone-depleting substances (**ODSs) **banned by the Montreal Protocol of about 3%** (Ross and Vedda, 2018) (of the total amount of ozone). As a consequence, the present-day contribution of rockets to ozone loss is small. It represents a few percent of the total anthropogenic contribution to ozone depletion, about the same relative impact that global aviation has on climate radiative forcing (Ross et al., 2009**). However, the trends discussed in the introduction make an increase of launch emissions by a factor of 10 credible**, which would make the contribution of rockets comparable to that of banned ODSs, as Ross and Vedda warn (Ross and Vedda, 2018). A 2009 study highlighted the limitations to the growth of the space sector due to ozone depletion. It showed that, **considering launch rates required by proposed space systems** at that time (i.e. to be implemented in the future), **global ozone loss could become significant**, even using only LREs (Ross et al., 2009). Moreover, a 2010 study found **that a fleet of 1000 launches per year** of hydrocarbonbased HREs typically used for space tourism **would cause ozone loss up to 6% in polar regions** (Ross et al., 2010). **With the anticipated growth of the space sector, the contribution of rockets to ozone depletion will inevitably increase** in the future. As the study warns, there will be a growing risk of regulation of rocket exhaust compounds in the name of ozone protection. **Important data uncertainties combined with the fact that the Montreal Protocol lacks adapted metrics to tackle rocket emissions effectively make this risk even more important** (Ross and Vedda, 2018). **If left unregulated, by 2050 rocket emissions could deplete ozone more than ODSs ever did** (Ross et al., 2009; ScienceDaily, 2009). 3.3. Contribution to climate change While the effect of rocket emissions on the ozone layer has been studied for several decades, the concern about their impact on climate is more recent. **Available life cycle assessment studies** of space missions are scarce and **often do not account for emissions occurring during the launch event**, or only partially, due to lack of data availability and modeling complexity (Maury et al., 2020a; Chanoine, 2017; Harris and Landis, 2019; Gallice andMaury, 2018). **Yet, launch emissions are likely to be the most important contributor to the impact on climate change** of the global space sector. **Rocket exhausts contain** greenhouse gases (e.g. CO2, H2O) but also particles (e.g. alumina, black carbon). The amount of greenhouse gases emitted by rockets is dwarfed by that of other industrial sectors, making their contribution to the problem insignificant. However, the effect of particles is much more concerning. **Black carbon particles accumulate in the stratosphere and absorb a fraction of sunlight, resulting in a warming** of the stratosphere. **Because some rockets can emit about 10,000 times more black carbon than modern turbine engines** (Ross and Sheaffer, 2014), **the amount of black carbon emitted by rockets in the stratosphere in 2018 was comparable to that emitted by global aviation** (Ross and Toohey, 2019). On the other hand, alumina features amore complex behavior by both reflecting incoming radiation into space and absorbing upwelling radiation from the Earth. This also results in a warming of the stratosphere (Ross and Sheaffer, 2014). At the same time, the reduction in solar flux caused by this accumulation of particles in the stratosphere leads to a cooling of the lower atmosphere (the troposphere) and the ground (Fig. 4). **In 2014, Ross and Sheaffer estimated that rocket emissions globally contributed to warm the stratosphere by about 16** ± 8 **mW/m2,** with relative contributions of 70% for black carbon, 28% for alumina, 2% for H2O, and ≈0% for CO2 (Ross and Sheaffer, 2014). This means that hydrocarbon-based rockets emitting black carbon (e.g. kerosene-fueled LREs, or most HREs) and SRMs emitting alumina are responsible for most of rockets' climate impact. As a consequence, **studies considering only CO2 emissions to assess the contribution of rockets to climate change underestimate it by several orders of magnitude**. Although this value is only an approximation subjected to uncertainties and requiring further confirmation, the study makes an interesting comparison with the contribution of global aviation to radiative forcing,which in 2014 was bigger only by a factor of 4, in absolute values (Ross and Sheaffer, 2014). This means that the magnitude of cooling of the troposphere from rockets could be comparable to the magnitude of warming from aviation. However, this should not be interpreted too quickly as something “positive”. Stratospheric injection of particles has long been discussed by climate scientists as a method of solar geoengineering to counteract the warming of greenhouse gases. But this has always been very controversial and encountered strong opposition. Rocket emissions compounds act as geoengineering agents and, therefore, launchers are already beginning this process in an uncontrolled manner, while black carbon geoengineering — on a much larger scale — has been found to present potentially catastrophic side effects (Kravitz et al., 2012). In addition, since rocket emissions are not distributed homogeneously around the globe, they can cool the troposphere in certain regions but still warm it in other regions because of the complex response of the global climate (Ross et al., 2010). Consequently, Ross and Vedda warn that it is uncertain how policymakers would respond to significant growth in launch activities in a context of growing concerns on climate intervention. Once again, this risk is further increased by the lack of confidence in current radiative forcing estimations (Ross and Vedda, 2018). **The projects mentioned in the introduction could fuel such an important growth. For instance, after a decade of launches at a rate of 1000 per year, the fleet** of hydrocarbon-based HREs (typical for space tourism applications) **would create the same radiative forcing as global aviation** (Ross et al., 2010), **and could rise polar surface temperatures as much as 1 °C**. Interestingly, Ross and Sheaffer estimated that the carbon footprint of a passenger in a typical sub-orbital space tourism flight is comparable to that of a passenger travelling thousands of times in aircraft between Los Angeles and London (Ross and Sheaffer, 2014). This illustrates that, in addition to possible future policy implications, the potential climate impact of space tourism raises important issues related to climate justice in the age of “flygskam”. **But space tourism is not the only emerging market** with high launch rate potential. **The Chinese solar power plant is planned to require more than 100 launches** of Long March 9, a heavy rocket fueled by kerosene (SpaceNews, 2021). Current plans of SpaceX for Earth-to-Earth travel and Mars colonization will be based on its Starship that relies on a liquid oxygen/liquid methane combination expected to be less harmful than kerosene, but this maybe largely offset by the significant associated increase in launch rate.

#### We must extend our ethics past humanity, thus I urge an ecological view. Anything else is nonsensical and denies ecological life.

Callicott 80 [J. Baird Callicott, Philosophy and Applied Sciences @ University of North Texas, “Animal Liberation: A Triangular Affair,” Environmental Ethics, <https://www.pdcnet.org/enviroethics/content/enviroethics_1980_0002_0004_0311_0338>] /Triumph Debate

The philosophical context of the land ethic and its conceptual foundation is clearly the body of empirical experience and theory which is summed up in the term ecology 0 The specter of the naturalistic faIlacy hovers around any claim to discover values in facts (and/or, probably, in scientific theories as weIl), but notwithstanding the naturalistic faIlacy (or the fact/value lacuna), which is essentially a logical problem for formal ethics, there appears very often to be at least a strongly compelling psychological connection between the way the world is imagined or conceived and what state of things is held to be good or bad, what ways of behaving are right or wrong, and what responsibilities and obligations we, as moral agents, acknowledge. 24 **Since ecology focuses upon the relationships between** and among **things, it inclines its students toward a more holistic vision of the world**. Before the rather recent emergence of ecology as a science the landscape appeared to be, one might say, a collection of objects, some of them alive, some conscious, but all the same, an aggregate, a plurality of separate individuals. With this "atomistic" representation of things it is no wonder that moral issues might be understood as competing and mutually contradictory clashes of the "rights" of separate individuals, each separately pursuing its "interests." **Ecology has made it possible to apprehend the** same **landscape as an articulate unity** (without the least hint of mysticism or ineffability). Ordinary organic **bodies have** articulated and **discernible parts** (limbs, various **organs**, myriad **ceIls**); **yet, because of the** character of the **network of relations among those parts, they form** in a perfect familiar sense **a second-order whole**. 'Ecology makes it possible to see land, similarly, as a unified system of integrally related parts, as, so to speak, a third-order organic whole. 25 **Another analogy** that has helped ecologists to convey the particular holism which their science brings to reflective attention is that **land is integrated as a human community is integrated**. The various parts of **the "biotic community**" (individual animals and plants) **depend upon one another** economically so that the system as such acquires distinct characteristics of its own. Just as it is possible to characterize and define collectively peasant societies, agrarian communities, industrial complexes, capitalist, communist, and socialist economic systems, and so on, ecology characterizes and defines various biomes as desert, savanna, wetland, tundra, wood land, etc., communities, each with its particular "professions," "roles," or "niches." Now w**e may think that among the duties we as moral agents have** toward ourselves **is the duty of self-preservation**, which may be interpreted as a duty to maintain our own organic integrity. **It is not uncommon** in historical moral theory, further, **to find that in addition to those peculiar responsibilities we have** in relation both to ourselves and to other persons severally, we also have **a duty to behave in ways that do not harm the fabric of society per se. The land ethic**, in similar fashion, **calls our attention to the recently discovered integrity-**in other words, the unity-**of the biota and posits duties binding upon moral agents in relation to that whole**. Whatever the strictly formal logical connections between the concept of a social community and moral responsibility, there appears to be a strong psychological bond between that idea and conscience. Hence, the representation of the natural environment as, in Leopold's terms, "one humming community" (or, less consistently in his discussion, a third-order organic being) brings into play, whether rationally or not, those stirrings of conscience which we feel in relation to delicately complex, functioning social and organic systems. 26 The **neo-Benthamite humane moralists** have, to be sure, digested one of the metaphysical implications of modern biology. They **insist that human beings must be understood continuously with the rest of organic nature. People are** (and are **only) animals**, and much of the rhetorical energy of the animal liberation movement is spent in fighting a rear guard action for this aspect of Darwinism against those philosophers who still cling to the dream of a special metaphysical status for people in the order of "creation." To this extent the animal liberation movement is biologically enlightened and argues from the taxonomical and evolutionary continuity of man and beast to moral standing for some nonhuman animals. Indeed, pain, in their view the very substance of evil, is something that is conspicuously common to people and other sensitive animals, something that we as people experience not in virtue of our metasimian cerebral capabilities, but because of our participation in a more generally animal, limbic-based consciousness. **If it is pain and suffering that is the ultimate evil besetting human life, and this not in virtue of our humanity but in virtue of our animality, then it seems only fair to promote freedom from pain** **for those animals** who share with us in this mode of experience and to grant them rights similar to ours as a means to this end. Recent ethological **studies** of other primates, ceteceans, and so on, **are not infrequently cited to drive the point home**, **but the biological information of the animal liberation movement seems to extend no further than this**-the continuity of human with other animal life forms. **The more recent ecological perspective especially seems to be ignored** by humane moralists. The holistic outlook of **ecology** and the associated value premium conferred upon the biotic community, its beauty, integrity, and stability may simply not have penetrated the thinking of the animal liberationists, or it could be that to include it w**ould involve an intolerable contradiction with the Benthamite foundations of their ethical theory. Bentham's view of the "interests of the community" was bluntly reductive.** With his characteristic bluster, Bentham wrote, "The community is a fictitious body composed of the individual persons who are considered as constituting as it were its members.” The interest of the community then is, what?-the sum of the interests of the several members who compose it.,,27 **Bentham's very simile-the community is like a body composed of members gives the lie to his reduction of its interests to the sum of its parts** taken severally. **The interests of a person are not those of** his or **her cells summed up and averaged out. Our organic health and well-being**, for example, **requires** vigorous exercise and metabolic **stimulation which cause stress and often pain to various parts of the body and a more rapid turnover in the life cycle of our individual cells**. For the sake of the person taken as whole, some parts may be, as it were, unfairly sacrificed. On the level of social organization, the interests of society may not always coincide with the sum of the interests of its parts. Discipline, sacrifice, and individual restraint are often necessary in the social sphere to maintain social integrity as within the bodily organism. A society, indeed, is particularly vulnerable to disintegration when its members become preoccupied totally with their own particular interest, and ignore those strict and independent interests of the community as a whole. One example, unfortunately, our own society, is altogether too close at hand to be examined with strict academic detachment. The United States seems to pursue uncritically a social policy of reductive utilitarianism, aimed at promoting the happiness of all its members severally. Each special interest accordingly clamors more loudly to be satisfied while the community as a whole becomes noticeably more and more infirm economically, environmentally, and politically. **The humane moralists**, whether or not they are consciously and deliberately following Bentham on this particular, nevertheless, in point of fact, **are committed to the welfare of certain kinds of animals** distributively or **reductively** in applying their moral concern for nonhuman beings. 28 They lament the treatment of animals, most frequently farm and laboratory animals, and plead the special interests of these beings. **We might ask**, from the perspective of the land ethic, **what the effect upon the natural environment taken as whole would be if domestic animals were actually liberated**? There is, almost certainly, very little real danger that this might actually happen, but it would be instructive to speculate on the ecological consequences.

#### An environmental ethic takes the stability of the environment as its source of value on its own terms—this is neither anthropocentric nor instrumental.

Callicott 80 [J. Baird Callicott, Philosophy and Applied Sciences @ University of North Texas, “Animal Liberation: A Triangular Affair,” Environmental Ethics, <https://www.pdcnet.org/enviroethics/content/enviroethics_1980_0002_0004_0311_0338>] /Triumph Debate

Before we take up this question, however, some points of interest remain to be considered on the matter of a holistic versus a reductive environmental ethic. To pit the one against the other as I have done without further qualification would be mistaken. **A society is constituted by its members**, an organic body by its cells, **and the ecosystem by the plants, animals, minerals, fluids, and gases which compose it. One cannot affect a system** as a whoIe **without affecting** at least **some of its components**. **An environmental ethic** which takes as its summum bonum the integrity, stability, and beauty of the biotic **community is not conferring moral standing on something else besides plants, animals, soils, and waters. Rather**, the former, **the good of the community as a whole, serves as a standard for the assessment of the** relative value and **relative ordering of its constitutive parts** and therefore provides a means of adjudicating the often mutually contradictory demands of the parts considered separately for equal consideration. **If diversity does indeed contribute to stability (a classical "law" of ecology), then specimens of rare and endangered species**, for example, **have a prima facie claim to preferential consideration** from the perspective of the land ethic. **Animals of those species**, **which,** like the honey bee, **function in ways critically important to the economy of nature**, moreover, **would be granted a greater claim to moral attention than psychologically more complex and sensitive ones**, say, rabbits and moles, **which seem to be plentiful**, globally distributed, reproductively efficient, **and only routinely integrated into the natural economy**. Animals and plants, mountains, rivers, seas, the atmosphere are the immediate practical beneficiaries of the land ethic. The well-being of the biotic community, the biosphere as a whole, cannot be logically separated from their survival and welfare. **Some suspicion may arise at this point that the land ethic is ultimately grounded in human interests**, not in those of nonhuman natural entities. Just as we might prefer a sound and attractive house to one in the opposite condition so the "goodness" of a whole, stable, and beautiful environment seems rather to be of the instrumental, not the autochthonous, variety. The question of ultimate value is a very sticky one for environmental as well as for all ethics and cannot be fully addressed here. It is my view that **there can be no value apart from an evaluator,** that all value is as it were in the eye of the beholder. **The value that is attributed to the ecosystem, therefore, is** humanly dependent or (allowing that other living things may take a certain delight in the well-being of the whole of things, or that the gods may) at least **dependent upon some variety of morally** and aesthetically **sensitive consciousness**. Granting this, however, there is a further, very crucial distinction to be drawn. It is possible that while things may only have value because we (or someone) values them, they may nonetheless be valued for themselves as well as for the contribution they might make to the realization of our (or someone's) interests. Children are valued for themselves by most parents. Money, on the other hand, has only an instrumental or indirect value. Which sort of value has the health of the biotic community and its members severally for Leopold and the land ethic? It is especially difficult to separate these two general sorts of value, the one of moral significance, the other merely selfish, when something that may be valued in both ways at once is the subject of consideration. Are pets, for example, well-treated, like children, for the sake of themselves, or, like mechanical appliances, because of the sort of services they provide their owners? **Is a healthy biotic community something we value because we are so utterly and** (to the biologically well-informed) so **obviously dependent upon it not only for our happiness but for our very survival, or may we also perceive it disinterestedly as having an independent worth**? Leopold insists upon a noninstrumental value for the biotic community and mutatis mutandis for its constituents. According to Leopold, **collective enlightened self-interest on the part of human beings does not go far enough; the land ethic** in his opinion (and no doubt this reflects his own moral intuitions) requires "love, respect, and admiration for land, and a high regard for its value." The land ethic, in Leopold's view, **creates "obligations over and above self-interest**." And, "obligations have no meaning without conscience, and the problem we face is the extension of the social . conscience from people to land.,,29 **If, in other words, any genuine ethic is possible, if it is possible to value people for the sake of themselves, then it is equally possible to value land in the same way.**

#### Ecosystems reveal and control the complexity of connections that produce all other values. Only valuing them allows us to ensure the context in which those values can exist

Rolston 2000 [Holmes Rolston III, Philosophy @ Colorado State University, “The land ethic at the turn of the millennium,” Biodiversity and Conservation, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.494.1350&rep=rep1&type=pdf>] /Triumph Debate

**Ecosystems can seem little more than** stochastic **processes**. A seashore, a tundra is a loose collection of externally related parts, Much of the environment is not organic at all (rain, groundwater, rocks, nonbiotic soil particles, air). Some is dead and decaying debris (fallen trees, scat, humus). **An ecosystem has no brain**, no genome, no skin, no self-identification, no telos, no unified program. It does not defend itself against injury or death. It is not irritable. The parts (foxes, sedges) are more centrally integrated than the wholes (forests, grasslands). So it can seem as if an ecosystem is too low a level of organization to be the direct focus of moral concern. **Ecosystems** do not and cannot care; they **have no interests about which they or we can care**. There is really not enough centered process to call community. But **this is to misunderstand ecosystems, to make a category mistake**. **To doubt communities because they are not organismic individuals is to look at one level for what is appropriate at another**. **One should look for a matrix of interconnections** between centers, for creative stimulus and open-ended potential. **Everything will be connected to many other things**, sometimes by obligate associations, more often **by** partial and **pliable dependencies**; and, among other components, there will be no significant interactions. There will be shunts and criss-crossing pathways, cybernetic subsystems and feedback loops. **One looks for** selection pressures and adaptive fit, not for irritability or repair of injury, for **speciation and life support, not** for **resisting death. We must think more systemically**, and less organismically. An ecosystem generates a spontaneous order that envelopes the richness, beauty, integrity, and dynamic stability of the component parts. One should not in an undiscriminating way extrapolate criteria of significance from organism to biotic community, any more than from person to animal or from animal to plant. Rather, one should discriminate the criteria appropriate to this level**. The selective forces in ecosystems at once transcend and produce the lives of individual plants and animals**. In evolutionary ecosystems **over geological time the numbers of species on Earth have increased from zero to five million** or more. Whittaker (1972) found that on continental scales and for most groups "increase of species diversity... is a self-augmenting evolutionary process without any evident limit". There is a tendency toward what he called 'species packing Organisms defend only their own selves or kinds, but the system spins a bigger story. Organisms defend their continuing survival; ecosystems promote new arrivals. Species increase their kinds, but **ecosystems increase kinds, and increase the integration of kinds.**

**-The system is a** kind of **field with characteristics as vital for life as any property contained within particular organisms**.

The organismic kind of creativity (regenerating a species, pushing to increase to a world-encompassing maximum) is used to produce, and is checked by, another kind of creativity (speciating that produces new kinds, interlocking kinds with adaptive fit, plus individuality and openness to future development). The collective order can be more complex than the behaviors of any of the individual parts. Ecosystemic order is a comprehensive, complex, fertile order just because it integrates (with some openness) the know-how of many diverse organisms and species; it is not an order built on the achievements of any one kind of thing. **In result there are** diversity, unity, **dynamic stability**, novelty, spontaneity, **a life-support system, the wonderland of natural history. Ethicists**, sometimes encouraged by biologists, **may think ecosystems are just** epiphenomenal **aggregations. This is a confusion. Any level is real if there is significant downward causation**. Thus **the atom is real because that pattern shapes the behavior of electrons**; the cell because that pattern shapes the behavior of ammo acids; the organism because that pattern coordinates the behavior of hearts and lungs; **the community because the niche shapes the morphology and behavior of the foxes within it.** Being real requires an organization that shapes the existence and the behavior of member/parts. A complex system, such as an ecosystem, is one whose properties are not fully explained by an understanding of its components. **If we are concerned about what is** value-able, **able to sustain value** on our landscapes, **why not say that it is the productivity of such ecosystems? The products are** valuable, **able to be valued by** the **humans** who come late in the process; **but why not say that the process is what is really valuable**, that is, able to produce these values in biodiversity**? It would be foolish to value golden eggs and disvalue the goose that lays them**. I**t would be a mistake to value the goose only instrumentally, and not for what it is in itself. How much more so an ecosystem that generates myriads of species,** or even an Earth that produces billions of species, ourselves included. **Evolutionary history is past**; we are not responsible for that. But **the resulting life communities continue, and they have become our responsibility**. Viewed in depth, **these ecosystems remain today the source and support of individual and species alike**. Such a perspective begins to naturalize ethics, an ethic for what Leopold called 'the land'.