## 1NC Meadows R1

### 1 – Util NC

#### Ethics begin a posteriori.

#### 1. Knowledge is based on experience – I wouldn’t know 2+2=4 without experience of objects nor the color red without some experience of color. We can’t obtain evidence of goodness without experience.

#### 2. Indifference – Even if there are apriori moral truths, I can choose to ignore them. Cognition is binding – if I put my hand on a hot stove, I can’t turn off my natural aversion to it.

#### The standard is act hedonistic util. Prefer –

#### 1 – Pleasure and pain *are* intrinsic value and disvalue – everything else *regresses* – robust neuroscience.

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**Pleasure** is not only one of the three primary reward functions but it also **defines reward.** As homeostasis explains the functions of only a limited number of rewards, the principal reason why particular stimuli, objects, events, situations, and activities are rewarding may be due to pleasure. This applies first of all to sex and to the primary homeostatic rewards of food and liquid and extends to money, taste, beauty, social encounters and nonmaterial, internally set, and intrinsic rewards. Pleasure, as the primary effect of rewards, drives the prime reward functions of learning, approach behavior, and decision making and provides the **basis for hedonic theories** of reward function. We are attracted by most rewards and exert intense efforts to obtain them, just because they are enjoyable [10].

Pleasure is a passive reaction that derives from the experience or prediction of reward and may lead to a long-lasting state of happiness. The word happiness is difficult to define. In fact, just obtaining physical pleasure may not be enough. One key to happiness involves a network of good friends. However, it is not obvious how the higher forms of satisfaction and pleasure are related to an ice cream cone, or to your team winning a sporting event. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure [14].

Pleasure as a hallmark of reward is sufficient for defining a reward, but it may not be necessary. A reward may generate positive learning and approach behavior simply because it contains substances that are essential for body function. When we are hungry, we may eat bad and unpleasant meals. A monkey who receives hundreds of small drops of water every morning in the laboratory is unlikely to feel a rush of pleasure every time it gets the 0.1 ml. Nevertheless, with these precautions in mind, we may define any stimulus, object, event, activity, or situation that has the potential to produce pleasure as a reward. In the context of reward deficiency or for disorders of addiction, homeostasis pursues pharmacological treatments: drugs to treat drug addiction, obesity, and other compulsive behaviors. The theory of allostasis suggests broader approaches - such as re-expanding the range of possible pleasures and providing opportunities to expend effort in their pursuit. [15]. It is noteworthy, the first animal studies eliciting approach behavior by electrical brain stimulation interpreted their findings as a discovery of the brain’s pleasure centers [16] which were later partly associated with midbrain dopamine neurons [17–19] despite the notorious difficulties of identifying emotions in animals.

Evolutionary theories of pleasure: The love connection BO:D

Charles Darwin and other biological scientists that have examined the biological evolution and its basic principles found various mechanisms that steer behavior and biological development. Besides their theory on natural selection, it was particularly the sexual selection process that gained significance in the latter context over the last century, especially when it comes to the question of what makes us “what we are,” i.e., human. However, the capacity to sexually select and evolve is not at all a human accomplishment alone or a sign of our uniqueness; yet, we humans, as it seems, are ingenious in fooling ourselves and others–when we are in love or desperately search for it.

It is well established that modern biological theory conjectures that **organisms are** the **result of evolutionary competition.** In fact, Richard Dawkins stresses gene survival and propagation as the basic mechanism of life [20]. Only genes that lead to the fittest phenotype will make it. It is noteworthy that the phenotype is selected based on behavior that maximizes gene propagation. To do so, the phenotype must survive and generate offspring, and be better at it than its competitors. Thus, the ultimate, distal function of rewards is to increase evolutionary fitness by ensuring the survival of the organism and reproduction. It is agreed that learning, approach, economic decisions, and positive emotions are the proximal functions through which phenotypes obtain other necessary nutrients for survival, mating, and care for offspring.

Behavioral reward functions have evolved to help individuals to survive and propagate their genes. Apparently, people need to live well and long enough to reproduce. Most would agree that homo-sapiens do so by ingesting the substances that make their bodies function properly. For this reason, foods and drinks are rewards. Additional rewards, including those used for economic exchanges, ensure sufficient palatable food and drink supply. Mating and gene propagation is supported by powerful sexual attraction. Additional properties, like body form, augment the chance to mate and nourish and defend offspring and are therefore also rewards. Care for offspring until they can reproduce themselves helps gene propagation and is rewarding; otherwise, many believe mating is useless. According to David E Comings, as any small edge will ultimately result in evolutionary advantage [21], additional reward mechanisms like novelty seeking and exploration widen the spectrum of available rewards and thus enhance the chance for survival, reproduction, and ultimate gene propagation. These functions may help us to obtain the benefits of distant rewards that are determined by our own interests and not immediately available in the environment. Thus the distal reward function in gene propagation and evolutionary fitness defines the proximal reward functions that we see in everyday behavior. That is why foods, drinks, mates, and offspring are rewarding.

There have been theories linking pleasure as a required component of health benefits salutogenesis, (salugenesis). In essence, under these terms, pleasure is described as a state or feeling of happiness and satisfaction resulting from an experience that one enjoys. Regarding pleasure, it is a double-edged sword, on the one hand, it promotes positive feelings (like mindfulness) and even better cognition, possibly through the release of dopamine [22]. But on the other hand, pleasure simultaneously encourages addiction and other negative behaviors, i.e., motivational toxicity. It is a complex neurobiological phenomenon, relying on reward circuitry or limbic activity. It is important to realize that through the “Brain Reward Cascade” (BRC) endorphin and endogenous morphinergic mechanisms may play a role [23]. While natural rewards are essential for survival and appetitive motivation leading to beneficial biological behaviors like eating, sex, and reproduction, crucial social interactions seem to further facilitate the positive effects exerted by pleasurable experiences. Indeed, experimentation with addictive drugs is capable of directly acting on reward pathways and causing deterioration of these systems promoting hypodopaminergia [24]. Most would agree that pleasurable activities can stimulate personal growth and may help to induce healthy behavioral changes, including stress management [25]. The work of Esch and Stefano [26] concerning the link between compassion and love implicate the brain reward system, and pleasure induction suggests that social contact in general, i.e., love, attachment, and compassion, can be highly effective in stress reduction, survival, and overall health.

Understanding the role of neurotransmission and pleasurable states both positive and negative have been adequately studied over many decades [26–37], but comparative anatomical and neurobiological function between animals and homo sapiens appear to be required and seem to be in an infancy stage.

Finding happiness is different between apes and humans

As stated earlier in this expert opinion one key to happiness involves a network of good friends [38]. However, it is not entirely clear exactly how the higher forms of satisfaction and pleasure are related to a sugar rush, winning a sports event or even sky diving, all of which augment dopamine release at the reward brain site. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure.

Remarkably, there are pathways for ordinary liking and pleasure, which are limited in scope as described above in this commentary. However, there are **many brain regions**, often termed hot and cold spots, that significantly **modulate** (increase or decrease) our **pleasure or** even produce **the opposite** of pleasure— that is disgust and fear [39]. One specific region of the nucleus accumbens is organized like a computer keyboard, with particular stimulus triggers in rows— producing an increase and decrease of pleasure and disgust. Moreover, the cortex has unique roles in the cognitive evaluation of our feelings of pleasure [40]. Importantly, the interplay of these multiple triggers and the higher brain centers in the prefrontal cortex are very intricate and are just being uncovered.

Desire and reward centers

It is surprising that many different sources of pleasure activate the same circuits between the mesocorticolimbic regions (Figure 1). Reward and desire are two aspects pleasure induction and have a very widespread, large circuit. Some part of this circuit distinguishes between desire and dread. The so-called pleasure circuitry called “REWARD” involves a well-known dopamine pathway in the mesolimbic system that can influence both pleasure and motivation.

In simplest terms, the well-established mesolimbic system is a dopamine circuit for reward. It starts in the ventral tegmental area (VTA) of the midbrain and travels to the nucleus accumbens (Figure 2). It is the cornerstone target to all addictions. The VTA is encompassed with neurons using glutamate, GABA, and dopamine. The nucleus accumbens (NAc) is located within the ventral striatum and is divided into two sub-regions—the motor and limbic regions associated with its core and shell, respectively. The NAc has spiny neurons that receive dopamine from the VTA and glutamate (a dopamine driver) from the hippocampus, amygdala and medial prefrontal cortex. Subsequently, the NAc projects GABA signals to an area termed the ventral pallidum (VP). The region is a relay station in the limbic loop of the basal ganglia, critical for motivation, behavior, emotions and the “Feel Good” response. This defined system of the brain is involved in all addictions –substance, and non –substance related. In 1995, our laboratory coined the term “Reward Deficiency Syndrome” (RDS) to describe genetic and epigenetic induced hypodopaminergia in the “Brain Reward Cascade” that contribute to addiction and compulsive behaviors [3,6,41].

Furthermore, ordinary “liking” of something, or pure pleasure, is represented by small regions mainly in the limbic system (old reptilian part of the brain). These may be part of larger neural circuits. In Latin, hedus is the term for “sweet”; and in Greek, hodone is the term for “pleasure.” Thus, the word Hedonic is now referring to various subcomponents of pleasure: some associated with purely sensory and others with more complex emotions involving morals, aesthetics, and social interactions. The capacity to have pleasure is part of being healthy and may even extend life, especially if linked to optimism as a dopaminergic response [42].

Psychiatric illness often includes symptoms of an abnormal inability to experience pleasure, referred to as anhedonia. A negative feeling state is called dysphoria, which can consist of many emotions such as pain, depression, anxiety, fear, and disgust. Previously many scientists used animal research to uncover the complex mechanisms of pleasure, liking, motivation and even emotions like panic and fear, as discussed above [43]. However, as a significant amount of related research about the specific brain regions of pleasure/reward circuitry has been derived from invasive studies of animals, these cannot be directly compared with subjective states experienced by humans.

In an attempt to resolve the controversy regarding the causal contributions of mesolimbic dopamine systems to reward, we have previously evaluated the three-main competing explanatory categories: “liking,” “learning,” and “wanting” [3]. That is, dopamine may mediate (a) liking: the hedonic impact of reward, (b) learning: learned predictions about rewarding effects, or (c) wanting: the pursuit of rewards by attributing incentive salience to reward-related stimuli [44]. We have evaluated these hypotheses, especially as they relate to the RDS, and we find that the incentive salience or “wanting” hypothesis of dopaminergic functioning is supported by a majority of the scientific evidence. Various neuroimaging studies have shown that anticipated behaviors such as sex and gaming, delicious foods and drugs of abuse all affect brain regions associated with reward networks, and may not be unidirectional. Drugs of abuse enhance dopamine signaling which sensitizes mesolimbic brain mechanisms that apparently evolved explicitly to attribute incentive salience to various rewards [45].

Addictive substances are voluntarily self-administered, and they enhance (directly or indirectly) dopaminergic synaptic function in the NAc. This activation of the brain reward networks (producing the ecstatic “high” that users seek). Although these circuits were initially thought to encode a set point of hedonic tone, it is now being considered to be far more complicated in function, also encoding attention, reward expectancy, disconfirmation of reward expectancy, and incentive motivation [46]. The argument about addiction as a disease may be confused with a predisposition to substance and nonsubstance rewards relative to the extreme effect of drugs of abuse on brain neurochemistry. The former sets up an individual to be at high risk through both genetic polymorphisms in reward genes as well as harmful epigenetic insult. Some Psychologists, even with all the data, still infer that addiction is not a disease [47]. Elevated stress levels, together with polymorphisms (genetic variations) of various dopaminergic genes and the genes related to other neurotransmitters (and their genetic variants), and may have an additive effect on vulnerability to various addictions [48]. In this regard, Vanyukov, et al. [48] suggested based on review that whereas the gateway hypothesis does not specify mechanistic connections between “stages,” and does not extend to the risks for addictions the concept of common liability to addictions may be more parsimonious. The latter theory is grounded in genetic theory and supported by data identifying common sources of variation in the risk for specific addictions (e.g., RDS). This commonality has identifiable neurobiological substrate and plausible evolutionary explanations.

Over many years the controversy of dopamine involvement in especially “pleasure” has led to confusion concerning separating motivation from actual pleasure (wanting versus liking) [49]. We take the position that animal studies cannot provide real clinical information as described by self-reports in humans. As mentioned earlier and in the abstract, on November 23rd, 2017, evidence for our concerns was discovered [50]

In essence, although nonhuman primate brains are similar to our own, the disparity between other primates and those of human cognitive abilities tells us that surface similarity is not the whole story. Sousa et al. [50] small case found various differentially expressed genes, to associate with pleasure related systems. Furthermore, the dopaminergic interneurons located in the human neocortex were absent from the neocortex of nonhuman African apes. Such differences in neuronal transcriptional programs may underlie a variety of neurodevelopmental disorders.

In simpler terms, the system controls the production of dopamine, a chemical messenger that plays a significant role in pleasure and rewards. The senior author, Dr. Nenad Sestan from Yale, stated: “Humans have evolved a dopamine system that is different than the one in chimpanzees.” This may explain why the behavior of humans is so unique from that of non-human primates, even though our brains are so surprisingly similar, Sestan said: “It might also shed light on why people are vulnerable to mental disorders such as autism (possibly even addiction).” Remarkably, this research finding emerged from an extensive, multicenter collaboration to compare the brains across several species. These researchers examined 247 specimens of neural tissue from six humans, five chimpanzees, and five macaque monkeys. Moreover, these investigators analyzed which genes were turned on or off in 16 regions of the brain. While the differences among species were subtle, **there was** a **remarkable contrast in** the **neocortices**, specifically in an area of the brain that is much more developed in humans than in chimpanzees. In fact, these researchers found that a gene called tyrosine hydroxylase (TH) for the enzyme, responsible for the production of dopamine, was expressed in the neocortex of humans, but not chimpanzees. As discussed earlier, dopamine is best known for its essential role within the brain’s reward system; the very system that responds to everything from sex, to gambling, to food, and to addictive drugs. However, dopamine also assists in regulating emotional responses, memory, and movement. Notably, abnormal dopamine levels have been linked to disorders including Parkinson’s, schizophrenia and spectrum disorders such as autism and addiction or RDS.

Nora Volkow, the director of NIDA, pointed out that one alluring possibility is that the neurotransmitter dopamine plays a substantial role in humans’ ability to pursue various rewards that are perhaps months or even years away in the future. This same idea has been suggested by Dr. Robert Sapolsky, a professor of biology and neurology at Stanford University. Dr. Sapolsky cited evidence that dopamine levels rise dramatically in humans when we anticipate potential rewards that are uncertain and even far off in our futures, such as retirement or even the possible alterlife. This may explain what often motivates people to work for things that have no apparent short-term benefit [51]. In similar work, Volkow and Bale [52] proposed a model in which dopamine can favor NOW processes through phasic signaling in reward circuits or LATER processes through tonic signaling in control circuits. Specifically, they suggest that through its modulation of the orbitofrontal cortex, which processes salience attribution, dopamine also enables shilting from NOW to LATER, while its modulation of the insula, which processes interoceptive information, influences the probability of selecting NOW versus LATER actions based on an individual’s physiological state. This hypothesis further supports the concept that disruptions along these circuits contribute to diverse pathologies, including obesity and addiction or RDS.

#### 2 – No intent-foresight distinction – if I foresee a consequence, then it becomes part of my deliberation since its intrinsic to my action

#### 3 – Actor spec – governments lack wills or intentions and inevitably deals with tradeoffs – outweighs because agents have differing obligations.

#### 4 – No act omission distinction – choosing not to act is an action in of itself since you had to make an active decision to omit. Walking past a drowning baby and choosing not to save it is a cognitive decision you were faced with and you actively decided to keep walking b) warranting a distinction gives agents the permissible choice of omitting from any ethical action since omissions lack culpability.

#### No calc indicts – a) no philosophy actually says that consequences don’t matter at all since otherwise it would indict every theory since they use causal events to understand how their ethics have worked in the past and through the justification of premises b) we don’t need consequences – winning hedonism proves we’re the only one with impacts to it which means risk of offense framing is sufficient c) they’re blippy nibs that set the aff at an unfair advantage since they only have to win one while we have to beat them all – voting issue for fairness

#### Extinction first –

#### 1 – Forecloses future improvement – we can never improve society because our impact is irreversible which proves moral uncertainty

#### 2 – Turns suffering – mass death causes suffering because people can’t get access to resources and basic necessities

#### 3 – Objectivity – body count is the most objective way to calculate impacts because comparing suffering is unethical

#### 4 – Prior question since people would attempt to steal the small amount of resources that exist before they die so it turns virtue, also you need to be alive to be virtuous which means it’s a prerequisite

### 2 – Climate Patents DA

#### Climate Patents and Innovation high now and solving Warming but COVID waiver sets a dangerous precedent for appropriations - the mere threat is sufficient is enough to kill investment.

Brand 5-26, Melissa. “Trips Ip Waiver Could Establish Dangerous Precedent for Climate Change and Other Biotech Sectors.” IPWatchdog.com | Patents & Patent Law, 26 May 2021, www.ipwatchdog.com/2021/05/26/trips-ip-waiver-establish-dangerous-precedent-climate-change-biotech-sectors/id=133964/. //sid

The biotech industry is making remarkable advancestowards climate change solutions, and it is precisely for this reason that it can expect to be in the crosshairs of potential IP waiver discussions. President Biden is correct to refer to climate change as an existential crisis. Yet it does not take too much effort to connect the dots between President Biden’s focus on climate change and his Administration’s recent commitment to waive global IP rights for Covid vaccines (TRIPS IP Waiver). “This is a global health crisis, and the extraordinary circumstances of the COVID-19 pandemic call for extraordinary measures.” If an IP waiver is purportedly necessary to solve the COVID-19 global health crisis (and of course [we dispute this notion](https://www.ipwatchdog.com/2021/04/19/waiving-ip-rights-during-times-of-covid-a-false-good-idea/id=132399/)), can we really feel confident that this or some future Administration will not apply the same logic to the climate crisis? And, without the confidence in the underlying IP for such solutions, what does this mean for U.S. innovation and economic growth? United States Trade Representative (USTR) [Katherine Tai](https://www.ipwatchdog.com/2021/05/05/tai-says-united-states-will-back-india-southafrica-proposal-waive-ip-rights-trips/id=133224/) was subject to questioning along this very line during a recent Senate Finance Committee hearing. And while Ambassador Tai did not affirmatively state that an IP waiver would be in the future for climate change technology, she surely did not assuage the concerns of interested parties. The United States has historically supported robust IP protection. This support is one reason the United States is the center of biotechnology innovation and leading the fight against COVID-19. However, a brief review of the domestic legislation arguably most relevant to this discussion shows just how far the international campaign against IP rights has eroded our normative position. The Clean Air Act, for example, contains a provision allowing for the mandatory licensing of patents covering certain devices for reducing air pollution. Importantly, however, the patent owner is accorded due process and the statute lays out a detailed process regulating the manner in which any such license can be issued, including findings of necessity and that no reasonable alternative method to accomplish the legislated goal exists. Also of critical importance is that the statute requires compensation to the patent holder. Similarly, the Atomic Energy Act contemplates mandatory licensing of patents covering inventions of primary importance in producing or utilizing atomic energy. This statute, too, requires due process, findings of importance to the statutory goals and compensation to the rights holder. A TRIPS IP waiver would operate outside of these types of frameworks. There would be no due process, no particularized findings, no compensationand no recourse. Indeed, the fact that the World Trade Organization (WTO) already has a process under the TRIPS agreement to address public health crises, including the compulsory licensing provisions, with necessary guardrails and compensation, makes quite clear that the waiver would operate as a free for all. Forced Tech Transfer Could Be on The Table When being questioned about the scope of a potential TRIPS IP waiver, Ambassador Tai invoked the proverb “Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.” While this answer suggests primarily that, in times of famine, the Administration would rather give away other people’s fishing rods than share its own plentiful supply of fish (here: actual COVID-19 vaccine stocks), it is apparent that in Ambassador Tai’s view waiving patent rights alone would not help lower- and middle-income countries produce their own vaccines. Rather, they would need to be taught how to make the vaccines and given the biotech industry’s manufacturing know-how, sensitive cell lines, and proprietary cell culture media in order to do so. In other words, Ambassador Tai acknowledged that the scope of the current TRIPS IP waiver discussions includes the concept of forced tech transfer. In the context of climate change, the idea would be that companies who develop successful methods for producing new seed technologies and sustainable biomass**,** reducing greenhouse gases in manufacturing and transportation, capturing and sequestering carbon in soil and products, and more, would be required to turn over their proprietaryknow-how to global competitors. While it is unclear how this concept would work in practice and under the constitutions of certain countries, the suggestion alone could be devastating to voluntary internationalcollaborations. Even if one could assume that the United States could not implement forced tech transfer on its own soil, what about the governments of our international development partners? It is not hard to understand that a U.S.-based company developing climate change technologies would be unenthusiastic about partnering with a company abroad knowing that the foreign country’s government is on track – with the assent of the U.S. government – to change its laws and seize proprietary materials and know-how that had been voluntarily transferred to the local company. Necessary Investment Could Diminish Developing climate change solutions is not an easy endeavor and bad policy positions threaten the likelihood that they will materialize. These products have long lead times from research and development to market introduction, owing not only to a high rate of failure but also rigorous regulatory oversight. Significant investment is required to sustain and drive these challenging and long-enduring endeavors. For example, synthetic biology companies critical to this area of innovation [raised over $1 billion in investment in the second quarter of 2019 alone](https://www.bio.org/sites/default/files/2021-04/Climate%20Report_FINAL.pdf). If investors cannot be confident that IP will be in place to protect important climate change technologies after their long road from bench to market, it is unlikely they will continue to investat the current and required levels**.**

#### Climate Patents are critical to solving Warming – only way to stimulate Renewable Energy Technology Investment.

Aberdeen 20 Arielle Aberdeen October 2020 "Patents to climate rescue: how intellectual property rights are fundamental to the development of renewable energy" <https://www.4ipcouncil.com/application/files/4516/0399/1622/Intellectual_Property_and_Renewable_Energy.pdf> (Caribbean Attorney-at-Law with extensive experience in legal research and writing.)//Elmer

**Climate change is** the **most pressing** global **challenge** and with the international commitment to reduce greenhouse gas emissions under the Paris Agreement,1 there **needs to be a global energy revolution** and transition.2 This is where **innovative technology can help** meet the challenge of reducing our dependency on finite natural capital resources. The development and deployment of innovative technology play a pivotal role in enabling us to replace fossil fuel use with more sustainable energy solutions. **Patents** have **facilitated** the **development of such innovative technologies** thus far **and** will **continue to be the catalyst for this transition**. Patents are among a group of intellectual property rights (‘IPRs’). 3 These are private and exclusive rights given for the protection of different types of intellectual creations. IPRs are the cornerstone of developed and knowledge-based economies, as they encourage innovation, drive the investment into new areas and allow for the successful commercialisation of intellectual creations. IPRs are the cornerstone of developed and knowledge-based economies. Empirical evidence has shown that a **strong IPRs** system **influences** both the **development and diffusion of technology**. Alternatively, **weak IPRs** protection has been shown to **reduce** **innovation**, **reduce investment** and prevent firms from entering certain markets.4 Once patent protection has been sought and granted, it gives a time-limited and exclusive rights to the creator of an invention. This allows the inventor or patentor the ability to restrict others from using, selling, or making the new invented product or process. Thereby allowing a timelimited monopoly on the exploitation of the invention in the geographical area where it is protected. During the patent application procedure, the patentor must make sufficient public disclosure of the invention. This will allow others to see, understand and improve upon it, thereby spurring continuous innovation. Therefore, the patent system through providing this economic incentive is a successful tool which has encouraged the development and the dissemination of technology. Patents like all IPRs are key instruments in the global innovation ecosystem.5 When developing innovative technology, patents play a role throughout the “technological life cycle”,6 as shown in Figure 1. This lifecycle involves the invention, research and development (‘R&D’), market development and commercial diffusion. Patents are most effective when sought at the R&D stage. Once a patent has been granted, it becomes an asset which can then be used to7: Gain Market Access: Patents can create market advantages; to develop and secure market position; to gain more freedom to operate within a sector and reduce risks of infringing on other patents; protect inventions from being copied, and removes delaying by innovative firms to release new or improved technology and encourage the expansion of their markets. Negotiation leverage: Patents can build a strong brand or company reputation which can enhance the company’s negotiation power and allow for the creation of equal partnerships. Funding: Patents can generate funding and revenue streams for companies. Having a strong patent portfolio especially in small businesses or start-ups can be used to leverage investor funding; while also be a source of revenue for companies through licensing fees, sales, tax incentives, collateral for loans and access to grants and subsidies. Strategic value: Patents can be used to build “synergistic partnerships”8 through which collaboration on R&D and other partnerships; be used to improve in-house R&D and build and/ or develop more products. As such, obtaining and managing patent as part of a patent and broader IPRs strategy are key tools for business success, especially within highly innovative and technology-driven industries.9 Renewable Energy: The Basics Renewable energy is derived from natural unlimited sources which produce little to no harmful greenhouse gases and other pollutants. 10 Innovative renewable energy technologies (‘RETs’) have created the ability to tap into these sources and convert them to energy which can then be stored, distributed, and consumed at a competitive cost. RETs have developed into a technology ecosystem which consists of alternative energy production, energy conservation and green transportation.11 For energy production, RETs have been developed to generate energy from six main sources. These are: Wind energy: Technology, via off-shore and/or on-shore wind turbines, harnesses the energy produced by the wind. Solar energy: Technology either through concentrated solar power (‘CSP’)and solar photovoltaic (‘PV’) harnesses the energy produced by the sun. Hydropower: Technology either through large-scale or small-scale hydropower plants, captures energy from flowing water. Bioenergy: Technology is used to convert organic material into energy either through burning to produce heat or power or through converting it to a liquid biofuel. Geothermal: Technology is used to capture the energy from the heat produced in the earth’s core. Ocean/Tidal energy: Technology is used to capture the energy produced from waves, tides, salinity gradient energy and ocean thermal energy conversion. Out of these six sources, the wind, solar and hydropower energy sectors are the biggest, the most developed and the most widely used. While geothermal and ocean energy sources are used in a more limited capacity. In particular, the RETs in ocean energy is still at its infancy and thus presents an opportunity for future innovation and commercialisation. Renewable energy is the fastest-growing energy source, with the electricity sector showing the fastest energy transition. 12 In 2016, renewable energy accounted for 12% of final global energy consumption and in 2018, a milestone was reached with renewables being used to generate 26% of global electricity. The source of this energy has been driven by renewable hydropower, as shown in Figure 2, with wind and solar energy trailing behind in energy production. However, the International Energy Agency (‘IRENA’) forecasts that Solar PV will lead RETs to increase capacity in the upcoming years. 13 This rise in renewable energy is due to the increased investment into the sector and the development, diffusion and deployment of innovative RETs. For the period between 2010 and 2019, there were 2.6 trillion US dollars invested in renewable energy. 14 The majority of which being focused on solar energy. 15 This investment has surpassed the investment made into the traditional fossil fuel energy 16 and has been heavily driven by the private sector. 17 The International Energy Agency recent report showed that its members increased the public budgets for energy technology R&D, with the biggest increase in the low-carbon sectors.18 The geographic sources of this investment shown in Figure 3, reveals that the European Union, the United States and Japan are part of the largest investors. This reflects the historic involvement these countries have had in the renewable energy arena and the development of RETs. However, there is now the emergence of China, India and Brazil as large investors in this field. This trend in investment has also coincided with the increase in patenting technology in renewable energy compared to fossil fuels.19 Reports from the World Intellectual Property Office (WIPO), have shown that there has been a **steady increase in patent filing rates in RETs since the mid-1990s**.20 This increase has occurred in the four major renewable sectors, 21 where RETs patents applications were growing steadily from 2005 until reaching a peak in 2013.22 Post-2013, there has been a slight decline in patent filings, which can indicate a maturing of sectors and deployment of technologies.23 Each renewable energy sector is at a different stage of maturity and thus there is a variation of patent ownership. The wind sector is the most mature and consequently has the highest intellectual property ownership and patent grants compared to that of the biofuel sector. 24 IRENA also provides a comprehensive and interactive database for RETs patents. As seen in Figure 4 below, they have collected patent data from the major patent filing jurisdiction25 which shows the breakdown of the patents per type. This information reveals that there is a dominance of patent filings focused on solar technology. This data corresponds to the focus of the investment in renewable energy into solar energy. Upon closer look at the data, the geographic source of these patents shows that RETs patents have been concentrated in a few developed OECD countries and China. This also corresponds to the source of investment shown in Figure 3 and reflects the historical concentration of RETs innovation within these countries. 26 The latest WIPO report for 2019, which looks at the data for PCT patent applications, shows that 76 % of all PCT patent application came from the United States, Germany, Japan, the Republic of Korea and China.27 China is the newest entry into the top ten list and has made one of the largest jumps to become one of the biggest RETs patent filers at the PCT. This geographic data is also mirrored by IRENA’s statistics, as shown in Figure 5 below. This data also reflects China’s emerging renewable dominance. China is heavily **investing in solar energy** **technology** and has filed numerous patents in this area and the underlying technologies.28 The successful flow of investment in this sector can only **occur in** the **presence of a strong IPRs system** and protection. Government policies and initiatives to improve the **patent system** can be used to promote the development of RETs and drive private capital and investment into this area.29 This direct **effect on RETs** through policies was **shown in** the United States with the ‘**Green Tech Pilot Program’**.30 This was a special accelerated patent application procedure developed by the United States Patent and Trademark Office for inventions falling under the green technology category. This program ran from 2009-2011 and led to a boost in RETs patent applications, with the office issuing 1062 RETs patents from the programme. Other jurisdictions, such as the European Union and China have used policy and incentives to promote the development of RETs and the advancement of their renewable energy sector. In particular, the European Union and China began the renewable energy path at different starting points but are now both dominant players in this area.

#### Warming causes Extinction

Kareiva 18, Peter, and Valerie Carranza. "Existential risk due to ecosystem collapse: Nature strikes back." Futures 102 (2018): 39-50. (Ph.D. in ecology and applied mathematics from Cornell University, director of the Institute of the Environment and Sustainability at UCLA, Pritzker Distinguished Professor in Environment & Sustainability at UCLA)//Re-cut by Elmer

In summary, six of the nine proposed planetary boundaries (phosphorous, nitrogen, biodiversity, land use, atmospheric aerosol loading, and chemical pollution) are unlikely to be associated with existential risks. They all correspond to a degraded environment, but in our assessment do not represent existential risks. However, the three remaining boundaries (**climate change**, global **freshwater** cycle, **and** ocean **acidification**) do **pose existential risks**. This is **because of** intrinsic **positive feedback loops**, substantial lag times between system change and experiencing the consequences of that change, and the fact these different boundaries interact with one another in ways that yield surprises. In addition, climate, freshwater, and ocean acidification are all **directly connected to** the provision of **food and water**, and **shortages** of food and water can **create conflict** and social unrest. Climate change has a long history of disrupting civilizations and sometimes precipitating the collapse of cultures or mass emigrations (McMichael, 2017). For example, the 12th century drought in the North American Southwest is held responsible for the collapse of the Anasazi pueblo culture. More recently, the infamous potato famine of 1846–1849 and the large migration of Irish to the U.S. can be traced to a combination of factors, one of which was climate. Specifically, 1846 was an unusually warm and moist year in Ireland, providing the climatic conditions favorable to the fungus that caused the potato blight. As is so often the case, poor government had a role as well—as the British government forbade the import of grains from outside Britain (imports that could have helped to redress the ravaged potato yields). Climate change intersects with freshwater resources because it is expected to exacerbate drought and water scarcity, as well as flooding. Climate change can even impair water quality because it is associated with heavy rains that overwhelm sewage treatment facilities, or because it results in higher concentrations of pollutants in groundwater as a result of enhanced evaporation and reduced groundwater recharge. **Ample clean water** is not a luxury—it **is essential for human survival**. Consequently, cities, regions and nations that lack clean freshwater are vulnerable to social disruption and disease. Finally, ocean acidification is linked to climate change because it is driven by CO2 emissions just as global warming is. With close to 20% of the world’s protein coming from oceans (FAO, 2016), the potential for severe impacts due to acidification is obvious. Less obvious, but perhaps more insidious, is the interaction between climate change and the loss of oyster and coral reefs due to acidification. Acidification is known to interfere with oyster reef building and coral reefs. Climate change also increases storm frequency and severity. Coral reefs and oyster reefs provide protection from storm surge because they reduce wave energy (Spalding et al., 2014). If these reefs are lost due to acidification at the same time as storms become more severe and sea level rises, coastal communities will be exposed to unprecedented storm surge—and may be ravaged by recurrent storms. A key feature of the risk associated with climate change is that mean annual temperature and mean annual rainfall are not the variables of interest. Rather it is extreme episodic events that place nations and entire regions of the world at risk. These extreme events are by definition “rare” (once every hundred years), and changes in their likelihood are challenging to detect because of their rarity, but are exactly the manifestations of climate change that we must get better at anticipating (Diffenbaugh et al., 2017). Society will have a hard time responding to shorter intervals between rare extreme events because in the lifespan of an individual human, a person might experience as few as two or three extreme events. How likely is it that you would notice a change in the interval between events that are separated by decades, especially given that the interval is not regular but varies stochastically? A concrete example of this dilemma can be found in the past and expected future changes in storm-related flooding of New York City. The highly disruptive flooding of New York City associated with Hurricane Sandy represented a flood height that occurred once every 500 years in the 18th century, and that occurs now once every 25 years, but is expected to occur once every 5 years by 2050 (Garner et al., 2017). This change in frequency of extreme floods has profound implications for the measures New York City should take to protect its infrastructure and its population, yet because of the stochastic nature of such events, this shift in flood frequency is an elevated risk that will go unnoticed by most people. 4. The combination of positive feedback loops and societal inertia is fertile ground for global environmental catastrophes **Humans** are remarkably ingenious, and **have adapted** to crises **throughout** their **history**. Our doom has been repeatedly predicted, only to be averted by innovation (Ridley, 2011). **However**, the many **stories** **of** human ingenuity **successfully** **addressing** **existential risks** such as global famine or extreme air pollution **represent** environmental c**hallenges that are** largely **linear**, have immediate consequences, **and operate without positive feedbacks**. For example, the fact that food is in short supply does not increase the rate at which humans consume food—thereby increasing the shortage. Similarly, massive air pollution episodes such as the London fog of 1952 that killed 12,000 people did not make future air pollution events more likely. In fact it was just the opposite—the London fog sent such a clear message that Britain quickly enacted pollution control measures (Stradling, 2016). Food shortages, air pollution, water pollution, etc. send immediate signals to society of harm, which then trigger a negative feedback of society seeking to reduce the harm. In contrast, today’s great environmental crisis of climate change may cause some harm but there are generally long time delays between rising CO2 concentrations and damage to humans. The consequence of these delays are an absence of urgency; thus although 70% of Americans believe global warming is happening, only 40% think it will harm them (http://climatecommunication.yale.edu/visualizations-data/ycom-us-2016/). Secondly, unlike past environmental challenges, **the Earth’s climate system is rife with positive feedback loops**. In particular, as CO2 increases and the climate warms, that **very warming can cause more CO2 release** which further increases global warming, and then more CO2, and so on. Table 2 summarizes the best documented positive feedback loops for the Earth’s climate system. These feedbacks can be neatly categorized into carbon cycle, biogeochemical, biogeophysical, cloud, ice-albedo, and water vapor feedbacks. As important as it is to understand these feedbacks individually, it is even more essential to study the interactive nature of these feedbacks. Modeling studies show that when interactions among feedback loops are included, uncertainty increases dramatically and there is a heightened potential for perturbations to be magnified (e.g., Cox, Betts, Jones, Spall, & Totterdell, 2000; Hajima, Tachiiri, Ito, & Kawamiya, 2014; Knutti & Rugenstein, 2015; Rosenfeld, Sherwood, Wood, & Donner, 2014). This produces a wide range of future scenarios. Positive feedbacks in the carbon cycle involves the enhancement of future carbon contributions to the atmosphere due to some initial increase in atmospheric CO2. This happens because as CO2 accumulates, it reduces the efficiency in which oceans and terrestrial ecosystems sequester carbon, which in return feeds back to exacerbate climate change (Friedlingstein et al., 2001). Warming can also increase the rate at which organic matter decays and carbon is released into the atmosphere, thereby causing more warming (Melillo et al., 2017). Increases in food shortages and lack of water is also of major concern when biogeophysical feedback mechanisms perpetuate drought conditions. The underlying mechanism here is that losses in vegetation increases the surface albedo, which suppresses rainfall, and thus enhances future vegetation loss and more suppression of rainfall—thereby initiating or prolonging a drought (Chamey, Stone, & Quirk, 1975). To top it off, overgrazing depletes the soil, leading to augmented vegetation loss (Anderies, Janssen, & Walker, 2002). Climate change often also increases the risk of forest fires, as a result of higher temperatures and persistent drought conditions. The expectation is that **forest fires will become more frequent** and severe with climate warming and drought (Scholze, Knorr, Arnell, & Prentice, 2006), a trend for which we have already seen evidence (Allen et al., 2010). Tragically, the increased severity and risk of Southern California wildfires recently predicted by climate scientists (Jin et al., 2015), was realized in December 2017, with the largest fire in the history of California (the “Thomas fire” that burned 282,000 acres, https://www.vox.com/2017/12/27/16822180/thomas-fire-california-largest-wildfire). This **catastrophic fire** embodies the sorts of positive feedbacks and interacting factors that **could catch humanity off-guard and produce a** true **apocalyptic event.** Record-breaking rains produced an extraordinary flush of new vegetation, that then dried out as record heat waves and dry conditions took hold, coupled with stronger than normal winds, and ignition. Of course the record-fire released CO2 into the atmosphere, thereby contributing to future warming. Out of all types of feedbacks, water vapor and the ice-albedo feedbacks are the most clearly understood mechanisms. Losses in reflective snow and ice cover drive up surface temperatures, leading to even more melting of snow and ice cover—this is known as the ice-albedo feedback (Curry, Schramm, & Ebert, 1995). As snow and ice continue to melt at a more rapid pace, millions of people may be displaced by flooding risks as a consequence of sea level rise near coastal communities (Biermann & Boas, 2010; Myers, 2002; Nicholls et al., 2011). The water vapor feedback operates when warmer atmospheric conditions strengthen the saturation vapor pressure, which creates a warming effect given water vapor’s strong greenhouse gas properties (Manabe & Wetherald, 1967). Global warming tends to increase cloud formation because warmer temperatures lead to more evaporation of water into the atmosphere, and warmer temperature also allows the atmosphere to hold more water. The key question is whether this increase in clouds associated with global warming will result in a positive feedback loop (more warming) or a negative feedback loop (less warming). For decades, scientists have sought to answer this question and understand the net role clouds play in future climate projections (Schneider et al., 2017). Clouds are complex because they both have a cooling (reflecting incoming solar radiation) and warming (absorbing incoming solar radiation) effect (Lashof, DeAngelo, Saleska, & Harte, 1997). The type of cloud, altitude, and optical properties combine to determine how these countervailing effects balance out. Although still under debate, it appears that in most circumstances the cloud feedback is likely positive (Boucher et al., 2013). For example, models and observations show that increasing greenhouse gas concentrations reduces the low-level cloud fraction in the Northeast Pacific at decadal time scales. This then has a positive feedback effect and enhances climate warming since less solar radiation is reflected by the atmosphere (Clement, Burgman, & Norris, 2009). The key lesson from the long list of potentially positive feedbacks and their interactions is that **runaway climate change,** and runaway perturbations have to be taken as a serious possibility. Table 2 is just a snapshot of the type of feedbacks that have been identified (see Supplementary material for a more thorough explanation of positive feedback loops). However, this list is not exhaustive and the possibility of undiscovered positive feedbacks **portends** even greater **existential risks**. The many environmental crises humankind has previously averted (famine, ozone depletion, London fog, water pollution, etc.) were averted because of political will based on solid scientific understanding. We cannot count on complete scientific understanding when it comes to positive feedback loops and climate change.

### 3 – Deleuze K

#### Subjectivity is based on the power to be affected. Hardt 15

Hardt, Michael, “Michael Hardt is an American political philosopher and literary theorist.” “The Power to Be Affected.” International Journal of Politics, Culture & Society, vol. 28, no. 3, Sept. 2015 // northview sd

Here, I find it useful to introduce the concept of the power to be affected because it illuminates most brightly the paths available to nonsovereign subjects to strive for the good life and flourish. Gilles Deleuze, more than any other Spinoza scholar, is the one who individuates the power to be affected as a concept and explores how it constitutes a rich field for an ethical and political project. The touchstone for his interpretation, to which he frequently returns, is Spinoza’s claim that no one has yet determined “what a body can do [quid corpus possit]” and “what is the structure of the body [corporis fabricam]” (1985 Ethics III P2S). For Deleuze, this unknown field exerts an irresistible call: just like Conrad’s Marlowe is drawn to the dark empty space in themiddle of his map of Africa, so too Deleuze is compelled by the mystery of what a body can do. And this journey is not merely driven by a desire for knowledge. As Berlant says, “It’s a political problem, of course, the body” (2011, p. 267). Deleuze and Spinoza agree completely. Spinoza’s route, though, which Deleuze follows carefully, is indirect: to investigate what a body can do, we have to look first at how it can be affected because, Deleuze explains, “a body must be defined by the ensemble of relations which compose it, or, what amounts to exactly the same thing, by its power to be affected [pouvoir d’être affecté]” (1978 “L’affect et l’idée”). You cannot understand the structure of the body if you do not know all the ways in which it can be affected, the nature of its power to be affected.3 Deleuze demonstrates two levels, so to speak, of the power to be affected: first, its correspondence to the power to act and, second, the qualities of the affections that compose or fill it, and how they can be transformed. The argument on the first level serves to dignify or elevate the power to be affected. Whereas the sovereign subject is (or imagines itself to be) impervious to and unmoved by external forces, and whereas projects aimed at sovereignty strive to minimize the influence of others, we should conceive being affected by others as a virtue. The most powerful is not the one least affected but, on the contrary, the one affected the most and in the most ways. The more you are affected in many ways, the more alive you are, and to the extent you cease to be affected, to the extent you close off from the world, that much you die.4 Deleuze thus reads in Spinoza a correspondence or equivalence between our power to act and our power to be affected. For all limited subjects, that is, in Spinoza’s terms, for all existing modes, Deleuze claims that “essence is the same as [ne fait qu’un avec] the power of action, and the power of action the same as the power to be affected” (1992, p. 225, translation modified5). Deleuze aims to recognize here not really an identity but an equivalence between the two powers: to affect and to be affected. Deleuze’s claim of this equivalence, I should point out, is not immediately evident to the casual reader of the Ethics nor widely recognized by scholars in the field. Deleuze substantiates his interpretation in part on the following proposition in which Spinoza, although primarily aimed at configuring a parallel relation between mind and body, asserts the equivalence between the two powers, to act and to be affected.6 “I say this in general, that in proportion as a Body is more capable than others of doing many things at once or [vel] being acted on in many ways at once, so its Mind is more capable than others of perceiving many things at once” (1985 Ethics, II P13 S). To recognize the correspondence in this statement, one must read the “or” [vel] to signify equivalence: a body with the power to do a great many things is also one with the power to be affected in many ways. Deleuze also cites a second passage in which “or” similarly marks equivalence. “Whatever so disposes the human Body that it can be affected in a great many ways, is useful to man; the more it renders the Body capable of being affected in a great many ways, or [vel] of affecting other bodies, the more useful it is; on the other hand, what renders the Body less capable of these things is harmful” (1985 Ethics IV P38). Here, Spinoza asserts that our power to affect and our corresponding power to be affected are useful, and he quickly adds in the subsequent proposition that “good” is what we judge to be useful to us and “evil” what is harmful.

#### The thought experiment of the 1AC is an operation of capture that retroactively justifies the state after its existence keeping it away from criticism- in this way the state guarantees its existence while escaping culpability. Toscano Alberto Toscano. “Capture”. The Deleuze Dictionary. https://www.researchgate.net/publication/333406141\_Creating\_Lines\_of\_Flight\_and\_Activating\_Resistance\_Deleuze\_and\_Guattari's\_War\_Machine

The concept of capture is used by Deleuze and Guattari to deal with two problems of relationality: (1) how to conceive of the connection between￼the state, the war machine and capitalism within a universal history of political life; (2) how to formulate a non-representational account of the interaction between different beings and their territories adequate to a thinking of becoming. In the first instance, **Capture defines the operation whereby the state** (or Urstaat) **binds** or ‘encasts’ **the war machine**, thereby turning it **into an object** that can be **made to work for the state, bolstering** it **and expanding its sovereignty.** Apparatuses of capture constitute the machinic processes specific to state societies. They can be conceived as primarily a matter of signs. Whence the figure of **The One-Eyed emperor** who **binds and fixes signs, complemented by a One-Armed priest** or jurist **who codifies these signs in** treaties, **contracts and laws.** Capture constitutes a control of signs, accompanying the other paradigmatic dimension of the state, the control of tools. The principal ontological and methodological issue related to this conception of capture has to do with the type of relation between capture and the captured (namely in the case of the war machine as the privileged correlate of the apparatus). Deleuze and Guattari’s notion of universal history evades any explanation in terms of strict causality or chronological sequence. It turns instead to notions drawn from catastrophe theory and the sciences of complexity to revive The Hegelian intuition that the state has always been there – not as an idea or a concept, but as a threshold endowed with a kind of virtual efficacy, even when the state as a complex of institutions and as a system of control is not yet actual.¶ The logic of capture is such that **What is captured** is both **presupposed and generated by the act of capture, at once appropriated and produced.** Deleuze and Guattari return to many of the key notions in the Marxian critique of political economy to affirm the thesis of a constructive character of capture, arguing, for instance, that surplus labour can be understood to engender labour proper (though it can also be understood as the attempt to block or manipulate a constitutive flight from labour). **Capture is** thus **a**nintrojection and **determination of an outside as well as the engendering of the outside qua outside of the apparatus.** It is in this regard that capture is made to correspond to the Marxian concept of primitive accumulation, interpreted as a kind of originary violence imposed by the state to prepare for the functioning of capital. Deleuze and Guattari are very sensitive here to the juridical aspects of the question, such that **State capture defines a domain of ‘legitimate’ violence, inasmuch as it always involves the affirmation of a right to capture**. In its intimate link with the notion of machinic enslavement, the apparatus of capture belongs both to the initial imperial figure of the state and to full-blown global or axiomatic capitalism, rather than to the intermediary stage represented by the bourgeois nation-state and its forms of disciplinary subjectivation.¶ **The notion of capture can also be accorded a different inflection, associated with the privileging of ethological models of intelligibility within a philosophy of immanence. Here the emphasis is no longer on the expropriation and appropriation of an outside by an instance of control, but on the process of convergence and assemblage between heterogeneous series**, on the emergence of blocs of becoming, as in the case of the wasp and the orchid. What we have here is properly speaking a double capture or intercapture, an encounter that transforms the disparate entities that enter into a joint becoming. In Deleuze and Guattari’s Kafka, such a process is related to a renewal of the theory of relation, and specifically to a recon- sideration of the status of mimesis, now reframed as a type of symbiosis.¶ Under the heading of capture we thus encounter two opposite but entangled actions, both of which can be regarded as schemata alternative to a dominant hylemorphic mode of explaining relation: the first, under- stood as the political control of signs, translates a coexistence of becomings (as manifested by the war machine) into a historical succession**, making the state pass from an attractor which** virtually **impinges upon non-state actors to an institutional and temporal reality**; the second defines a coexist- ence and articulation of becomings in terms of the assemblage of heteroge- neous entities and the formation of territories**.** What is paramount in both instances is the affirmation of the event-bound and transformative charac- ter of relationality (or interaction), such that capture, whether understood as control or assemblage, is always an ontologically constructive operation and can never be reduced to models of unilateral causation.

#### Freedom isn’t a result of us but exists outside of us and is an effect of the becoming of the world. Colebrook: Claire Colebrooke. Understanding Deleuze.

We have tended to think of freedom as something that we have in relation to the beings outside us. But for Deleuze, follow- ing Bergson, **freedom is not a feature of human beings;** freedom **is what** happenswhenwe do not respond a**utomatically and immediately; it is a question of speed and slowness.** There is a delay between stimulus and responsebecauseofthe **intervention of the** virtual **(memory or sense)—and it is this delay that** leadsustobelieve **that ‘**we’were **the** authors of this freedom**. Really, however, it is more accurate to say that there is a flow of time or imaging which is slowed down or disrupted by the virtual. It is only from this disruption that we then distinguish between the human perceiver and the world perceived, between human freedom and organised matter. We imagine that the free human being was there all along, as some actual point that then perceived the world.** Deleuze, however, insists that the virtual is an inhuman power. ‘Our’ freedom is given to us when memory, sense or the virtual intervene or do violence to the sequence of the present. Freedom or thinking is what happens to us; it disengages us from present perception precisely because the virtual is positive: always transforming, open and as productive of the actual as the actual is of the virtual. **Freedom is not, then, a human power set over and against a world. It is not a separate judgement of the world; freedom is the very becoming of the world.**

#### Ressentiment outweighs- repudiation of life denies the possibility of anything and paves the way for nihilism. Deleuze Gilles Deleuze[French Philosopher] Nietzsche and Philosophy.1962

From the speculative position to the moral opposition, from the moral opposition to the ascetic contradiction . . . But the ascetic contradiction is, in turn, a symptom which must be interpreted. What does the man of the ascetic ideal want? **The one who repudiates life is also the one who wants a diminished life**, the conservation of his type and moreover its power and triumph, the triumph and contagion of reactive forces. At this point **reactive forces discover the disturbing ally that leads them to victory: nihilism**, the will to nothingness (GM III 13). The will to nothingness which can only bear life in its reactive form. **The will to nothingness is the one that used reactive forces as a way of ensuring that life must contradict, deny and annihilate itself**. The will to nothingness from the beginning, inspires all the values that are called "superior" to life. This is Schopenhauer's greatest error: he believed that the will is denied in all values superior to life. In fact, it is not the will which is denied in superior values, it is the superior values that are related to a will to deny, to annihilate life. **This willto deny defines "the value" of superior values. Its weapon is to hand life over to the domination of reactive forces in such a way that the whole of life slips further and further away, separated from what it can do, getting smaller and smaller, towards nothingness, towards the poignant feeling of his nothingness"** (GM III 25). The will to nothingness and reactive forces, these are the two constituent elements of the ascetic ideal.

#### The alternative is vitalist jurisprudence. Calling into question the way that speech relates to the production of legal subjects is something only the 1NC can access – this is key to producing advocates who will challenge the norms of liberal biopolitical subject formations Colebrook et al. Claire Colebrook, professor of English at Penn State, Rosi Braidotti, distinguished professor in the humanities at Utrecht University (Netherlands), and Patrick Hanafin, professor of law at Birbeck University (London, UK). Rights of passage: law and the biopolitics of dying. In: Braidotti, R. and Colebrook, C. and Hanafin, Patrick (eds.) Deleuze and Law: Forensic Futures. Basingstoke, UK: Macmillan Publishers Limited, pg. 5

This collection calls for another thinking of the relation of law and politics to the bodies of individual citizens and to the environment in which they are located. In our role as either citizens or rights-claiming subjects in contemporary liberal democracies the efficacy of our speech is limited because, to paraphrase Foucault, we as speaking subjects are also the subject matter of legal and political discourse. The interlocutor (in this case the political elite or the judiciary) is always in the position of authority.What the essays in this collection perform is a rethinking of the manner in which the subject of law and politics is defined. In this other jurisprudence, a renewed emphasis on the shifting boundaries between living and dying, surviving and becoming extinct, can be distinguished. As is demonstrated in several of the essays, the resurgence of vitalism can be seen as profoundly regressive, with the invocation of “life” in pro-life politics operating as a way of silencing political debate. On the other hand, an attention to the vital forces that are the very basis of politics; the living bodies that are the basis of terror, rights and exclusions requires a thinking that goes beyond the notion of the subject as a speaking/knowing being. In this thinking one can detect the instantiation of a thinking of legal subjectivity as embodied existence, which subsists beyond the biopolitical traps of territory, nation state and identity. This relational encounter of the individual with the law, as Deleuze reminds us “threatens to bring what’s been established back into question” (Deleuze, 1995, p. 153). What is at stake here is a politics beyond the bureaucratic rights-giving or rights-depriving state, which remains after the word has been said. This is the self declaring itself not in response to the call of the state or as the subject matter of rights, but as an active participant in political affairs. It is a self which exceeds fixing.

### 4 – Info Sharing CP

#### The World Trade Organization ought to increase intellectual property protections for medicines. The United States ought to designate intellectual property protections on medicines as adversely affecting the international transfer of technology.

#### Member states can waive IP rights if they hamper the international flow of medical technology.

WTO ’21 (World Trade Organization; 2021; “Obligations and exceptions”; World Trade Organization; Accessed: 8-30-2021; exact date not provided, but copyright was updated in 2021)

Article 8 Principles […] 2. Appropriate measures, provided that they are consistent with the provisions of this Agreement, **may be needed** to prevent the abuse of intellectual property rights by right holders or the resort to practices which unreasonably restrain trade or **adversely affect** the **international transfer of technology**. SECTION 8: CONTROL OF ANTI-COMPETITIVE PRACTICES IN CONTRACTUAL LICENCES Article 40 1. Members agree that some licensing practices or conditions pertaining to intellectual property rights which restrain competition may have **adverse effects on trade** and **may impede** the **transfer and dissemination** of technology. 2. Nothing in this Agreement **shall prevent** Members from specifying in their legislation licensing practices or conditions that may in particular cases constitute an abuse of intellectual property rights having an adverse effect on competition in the relevant market. As provided above, a Member **may adopt**, consistently with the other provisions of this Agreement, **appropriate measures** to **prevent or control** such practices, which may include for example exclusive grantback conditions, conditions preventing challenges to validity and coercive package licensing, in the light of the relevant laws and regulations of that Member. […]

#### Designating IP protections as antithetical to the global health system revitalizes info-sharing.

Youde ’16 (Jeremy; writer for World Politics Review; 4-29-2016; “Technology **Transfer** Is a **Weak Link** in the Global Health System”; World Politics Review; <https://www.worldpoliticsreview.com/articles/18639/technology-transfer-is-a-weak-link-in-the-global-health-system>; Accessed: 8-30-2021)

In mid-April, a spokesperson for the Ugandan government admitted that the country’s only functioning cancer treatment machine had broken earlier that month. The radiotherapy machine, donated by China to Uganda in 1995 and housed at Mulago Hospital in Kampala, is now considered beyond repair. While the government did acquire a second radiotherapy machine in 2013, it has not been operational because of delays in allocating 30 billion shillings—just shy of $9 million—to construct a new building to house it. The funding delay has lifted, but the machine won’t be up and running for at least six months. The government has announced plans to airlift some cancer patients to Nairobi for treatment, but that plan will only accommodate 400 of the estimated 17,000 to 33,000 cancer patients who need treatment annually in Uganda. This breakdown of technology is a human tragedy for the cancer patients from Uganda as well as elsewhere in East Africa that the radiotherapy machine helped treat. Beyond the personal level, though, the episode illustrates a larger shortcoming in global health. Total annual development assistance for health is approximately $36 billion, but that funding is overwhelmingly concentrated on specific infectious diseases. Noncommunicable diseases like cancer receive relatively little international funding—only 1.3 percent in 2015, and the dollar amount has declined since 2013. Funds to strengthen health systems, geared toward building and supporting a resilient health care system, are similarly low, making up only 7.3 percent of development assistance in 2015. Noncommunicable diseases kill more people every year than infectious diseases and accidents do, but this balance is not reflected in global health spending. ... These shortcomings also speak to larger problems in global health around issues of **technology transfers** and long-term **commitments** to keep that technology working. It’s one thing to provide necessary medical technologies in the first place; it’s another to ensure that those technologies are accessible and operational going forward. Despite the **importance** of technology transfers, questions of **long-term support** for them have received relatively little attention from the global health regime. As noncommunicable diseases like cancer cause an even-higher proportion of deaths each year, it will become all the more **imperative** that the international community address this gap in **sharing** and funding **crucial health care** technology. This does not mean that there are no efforts to facilitate technology transfers around the world. The Fogarty International Center, a part of the U.S. National Institutes of Health, has had an [Office of Technology Transfer](http://www.fic.nih.gov/News/GlobalHealthMatters/march-april-2014/Pages/technology-transfer-nih-ott.aspx) since 1989 to make medical innovations developed in the United States more widely available. The World Health Organization (WHO) also has a [Technology Transfer Initiative](http://www.who.int/phi/programme_technology_transfer/en/) to improve access to health care technologies in developing countries. These efforts are laudable, but their interpretation of technology transfer is almost entirely rooted in access to pharmaceuticals and vaccines. To be sure, that is a very important issue—but it only deals with one narrow element of technology transfer. The problems of global health technology transfers illustrated in Uganda underscore a larger issue: the need for a so-called fourth industrial revolution, what has been described as “blurring the real world with the technological world.” This idea gained prominence earlier this year when it served as the theme for the World Economic Forum in Davos. For global health, this means embracing technology to find low-cost ways to promote health, spread education, and reach communities whose access to the health care infrastructure is weak. It expands on the notion of telemedicine and eHealth to make it more encompassing. According to health care entrepreneur Jonathan Jackson, the fourth industrial revolution could change global health by encouraging a shift in focus “from healthcare to health promotion.” Moving from high-cost treatment to low-cost prevention, he has argued, will have significant and far-reaching positive economic implications for developing countries around the world. Its inspiring sense of technological optimism notwithstanding, this sort of approach cannot be the sole focus of technology transfers in global health. Prevention is indeed important, but the fact of the matter remains that people will get sick—and those sick people will need treatment. Mobile applications and electronic access to health care providers can be useful, but they cannot replace a radiotherapy machine. Understanding the root causes of noncommunicable diseases goes far beyond individual choices and intersects with the larger political, economic and social context, so we cannot assume that cybertechnology alone can stop cancer. It is also important to remember that the results of greater technological innovation and integration won’t be free. Sub-Saharan African states, on average, spend $200 per person per year on health care. Even if technology allows costs to decline, they are still likely to be out of reach for many people in most of these countries—in the same way that the purchase and maintenance of medical technologies are prohibitively expensive in these same states today. Technology in and of itself is not useful unless it can be maintained over the long term. This, then, is a weak link in the larger global health system: How do we ensure access to life-prolonging medical technologies beyond pharmaceuticals and vaccines in a sustainable way? Consider two ideas. First, development assistance for health must orient more of its resources toward treating noncommunicable diseases and strengthening health systems. These are the areas in which these technologies are likely to be used, but are not currently supported by the international system. The changing nature of health and disease will only make them even more important in the years to come. Second, longer-term funding commitments would provide a greater opportunity to incorporate medical technologies into health care systems sustainably. Machines will break down, and technologies will fail. That is inevitable. But the global health regime, from the WHO and its regional organizations like the Regional Office for Africa to major donors like the **U**nited **S**tates government and the Bill and Melinda Gates Foundation, needs to figure out how to ensure that these problems do not put **lives in peril**. Technology alone will not improve global health unless it is properly supported and funded.

#### International collaboration’s key to check future pandemics – otherwise, extinction.

Dulaney ’20 [Michael; digital journalist with the ABC June 2020; "'A question of when, not if': Another pandemic is coming – and sooner than we think", No Publication; https://www.abc.net.au/news/science/2020-06-07/a-matter-of-when-not-if-the-next-pandemic-is-around-the-corner/12313372, accessed 4-12-2021]

And as recently as September last year — just a few months before COVID-19 was detected in China — an independent watchdog set up by the WHO warned the world was "grossly" unprepared for the "very real threat" of a pandemic. But even more alarming is what the new coronavirus indicates about the future. Researchers say human impacts on the natural world are causing new infectious diseases to emerge more frequently than ever before, meaning the next pandemic — one perhaps even worse than COVID-19 — is only a matter of time. "We know that it's a probability, not a possibility," Dr Reid says. "The roulette wheel will start to spin again. "If you don't resolve the conditions that generated the problem, then we sit waiting for the next probability equation to come through. "And it will, and sadly it's possible that it's in our lifetime." The growing threat to human health Nearly all emerging pathogens like COVID-19 come from "zoonotic transfer" — essentially, when a virus present in animals jumps to infect humans. The US Centers for Disease Control and Prevention estimates three out of every four new infectious diseases, and nearly all pandemics, emerge this way. Researchers have counted around 200 infectious diseases that have broken out more than 12,000 times over the past three decades. On average, one new infectious disease jumps to humans every four months. Animal species like civet cats (SARS), camels (MERS), horses (Hendra), pigs (Nipah) and chimpanzees (HIV) have all been implicated in the spread of new viruses at different times.

#### CPs and PICs don’t affirm, “general thesis” is arbitrary either the aff defends implementation in which case we get to test the desirability of a counterplan under an “intents model”

#### OR they don’t which is a voting issue for negative ground because it makes 1NC construction impossible since we cant predict infinite shifts outside the resolution and allows them to get out of disads and any consequentalist debate which makes phil ed impossible

## Case

### Hedge

#### NC theory first - 1] They started the chain of abuse and forced me down this strategy 2] We have more speeches to norm over it 3] It was introduced first so it comes lexically prior.

#### Abuse against the neg outweighs anything else – 1] Infinite prep time before round to frontline 2] 2AR judge psychology outweighs lets you persuade tehm however you want which you’re socially biased to believing 3] 1st and last speech outweighs gives them plan text choice and 2ar framing and recourse 4] Infinite perms and uplayering in the 1AR makes negating impossible and solves skew since smart 1ars can uplayer and read offense against offs

#### Reasonability on 1AR shells – 1AR theory is very aff-biased because the 2AR gets to line-by-line every 2NR standard with new answers that never get responded to

#### DTA on 1AR shells - They can blow up blippy 20 second shells in the 2AR but I have to split my time and can’t preempt 2AR spin which necessitates judge intervention

#### RVIs on 1AR theory – 1AR being able to spend 20 seconds on a shell and still win forces the 2N to allocate at least 2:30 on the shell which means RVIs check back time skew

#### No new 1ar theory paradigm issues- A] New 1ar paradigms moot any 1NC theoretical offense B] introducing them in the aff allows for them to be more rigorously tested

### AFC

#### 1] Negative testing- we should get to test the affirmative from multiple angles and sides that o/w’s since it’s the constitutive and inescapable role of the negative

#### 2] Phil Ed- Reading an alternative framework is key to clashing over core philosophical issues and learning the nuances of them. That outweighs A] Uniqueness- it’s the only thing unique to LD debate B] Time frame- philosophical knowledge helps us make ethical decisions in the future outside debate.

#### 3] Strategic Case Writing- Contesting your framework forces the aff to write the most strategic framework that they can leverage. Turns fairness offense since it means aff teams are able to win framing debates more efficiently

#### We get RVI’s

#### [1] Not having an RVI incentivizes you to read a bunch of blippy underdeveloped spikes in the 1AC as well as a short 1ar shell solely as a time suck scewing my strategy. Strat skew key to equal access to the ballot.

#### [2] Infinite abuse: absent an RVI, the aff can read game over arguments like evaluate the theory debate after the 1ar putting the NC in a doublebind: either I answer them and waste time or concede them and auto lose.

#### [3] Forcing them to go for their interp ensures debaters wont just spam spikes, but instead only preempt genuine abuse, which means A) we spend more rounds on substance and B) people read shorter underviews and more substance.

#### [4] I have already invested a large amount of the 1NC on theory instead of substance, and not having an RVI allows them to completely ignore this flow of the debate and dump on case, making negating impossible.

#### [5] Abuse story is uniquely true when they read 2 shells in the 1AC both of which were overly generic and forced

### Defend Status Quo

#### Counterinterp: We don’t need to defend the status quo.

#### 1] neg ground:

#### 2] topic ed:

### Framework

#### Top Level:

**This isn’t internally motivated, they presume a societally accepted obligation that those who enter the contract will not break it. If internalism is true, contracts would never break because they were formed in the agents self-interest- this is empirically denied.**

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