### 1

#### Interp: Debaters must have recordings of their speeches and send them if requested Violation: They didn't record, that was after cx A Cheating – debaters can fake internet drop offs and then steal prep which decks reciprocity. O/Ws since it destroys competitive incentives and educational value since they are structurally ahead B Accidents possible, external conditions like power going out, wifi dropping off, or excessive background noise make it impossible to hear in real time, recordings ensure that a speech isn’t given twice, which allows them to remodify and change their strat or incite judge intervention which is the worst violation of procedural fairness C Key to check clipping cards and make cheaters lose with literal proof No regress, its disclosed on my wiki

### 2

#### 1] Interp – Unjust refers to a negative action – it means contrary.

Black Laws No Date "What is Unjust?" <https://thelawdictionary.org/unjust/> //Elmer

Contrary to right and justice, or to the enjoyment of his rights by another, or to the standards of conduct furnished by the laws.

#### 2] Violation – The Aff is a positive action – they expand the scope of ilaw and implement a governmental action and generate offense off of it. Independenly, they fiat that they use colonial pedagogy – solve war by regulating space

#### 3] Standards –

#### a] Limits – making the topic bi-directional explodes predictability – it means that Aff’s can both increase non-exist property regimes in space AND decrease appropriation by private actors – makes the topic untenable.

#### b] Ground – wrecks Neg Generics – we can’t say appropriation good since the 1AC can create new views on Outer Space Property Rights that circumvent our Links since they can say “Global Commons” approach solves.

#### Independently - the Plan is both Extra-T - since it establishes a new property rights regime AND Effects-T - since the PTD ISNT INTRINSICALLY a reduction on Private Property in Space, it involves actions like creating a governance system AND redistribution/cooperation - both of which are voters for Limits and Predictability

#### 4] TVA – just defend that space appropriation is bad.

### 3

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

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

Blum et al. 18 Kenneth Blum, 1Department of Psychiatry, Boonshoft School of Medicine, Dayton VA Medical Center, Wright State University, Dayton, OH, USA 2Department of Psychiatry, McKnight Brain Institute, University of Florida College of Medicine, Gainesville, FL, USA 3Department of Psychiatry and Behavioral Sciences, Keck Medicine University of Southern California, Los Angeles, CA, USA 4Division of Applied Clinical Research & Education, Dominion Diagnostics, LLC, North Kingstown, RI, USA 5Department of Precision Medicine, Geneus Health LLC, San Antonio, TX, USA 6Department of Addiction Research & Therapy, Nupathways Inc., Innsbrook, MO, USA 7Department of Clinical Neurology, Path Foundation, New York, NY, USA 8Division of Neuroscience-Based Addiction Therapy, The Shores Treatment & Recovery Center, Port Saint Lucie, FL, USA 9Institute of Psychology, Eötvös Loránd University, Budapest, Hungary 10Division of Addiction Research, Dominion Diagnostics, LLC. North Kingston, RI, USA 11Victory Nutrition International, Lederach, PA., USA 12National Human Genome Center at Howard University, Washington, DC., USA, Marjorie Gondré-Lewis, 12National Human Genome Center at Howard University, Washington, DC., USA 13Departments of Anatomy and Psychiatry, Howard University College of Medicine, Washington, DC US, Bruce Steinberg, 4Division of Applied Clinical Research & Education, Dominion Diagnostics, LLC, North Kingstown, RI, USA, Igor Elman, 15Department Psychiatry, Cooper University School of Medicine, Camden, NJ, USA, David Baron, 3Department of Psychiatry and Behavioral Sciences, Keck Medicine University of Southern California, Los Angeles, CA, USA, Edward J Modestino, 14Department of Psychology, Curry College, Milton, MA, USA, Rajendra D Badgaiyan, 15Department Psychiatry, Cooper University School of Medicine, Camden, NJ, USA, Mark S Gold 16Department of Psychiatry, Washington University, St. Louis, MO, USA, “Our evolved unique pleasure circuit makes humans different from apes: Reconsideration of data derived from animal studies”, U.S. Department of Veterans Affairs, 28 February 2018, accessed: 19 August 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6446569/>, R.S.

**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.

#### 3 - Extinction first –

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

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

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

#### 4 – TJFs –

#### A. Most articles about strikes are written through util – means other frameworks can never engage with the core questions of the literature which decks predictability.

### 4

#### Text – Private Appropriation of Outer Space except for Space Elevators is Unjust.

#### Recognizing that the appropriation of outer space by private entities is unjust, states ought to extend the non-appropriation principle of the Outer Space Treaty of 1967 to private entities.

#### Space Elevators constitute Appropriation – they impede orbits.

Matignon 19 Louis de Gouyon Matignon 3-3-2019 "LEGAL ASPECTS OF THE SPACE ELEVATOR TRANSPORTATION SYSTEM" <https://www.spacelegalissues.com/space-law-legal-aspects-of-the-space-elevator-transportation-system/> [PhD in space law (co-supervised by both Philippe Delebecque, from Université Paris 1 Panthéon-Sorbonne, France, and Christopher D. Johnson, from Georgetown University || regularly write articles on the website Space Legal Issues so as to popularise space law and public international law]//Elmer

An Earth-based space elevator would consist of a cable with one end attached to the surface near the equator and the other end in space beyond geostationary orbit. An orbit is the curved path through which objects in space move around a planet or a star. The 1967 Treaty’s regime and customary law enshrine the principle of non-appropriation and freedom of access to orbital positions. Space Law and International Telecommunication Laws combined to protect this use against any interference. The majority of space-launched objects are satellites that are launched in Earth’s orbit (a very small part of space objects – scientific objects for space exploration – are launched into outer space beyond terrestrial orbits). It is important to precise that an orbit does not exist: satellites describe orbits by obeying the general laws of universal attraction. Depending on the launching techniques and parameters, the orbital trajectory of a satellite may vary. Sun-synchronous satellites fly over a given location constantly at the same time in local civil time: they are used for remote sensing, meteorology or the study of the atmosphere. Geostationary satellites are placed in a very high orbit; they give an impression of immobility because they remain permanently at the same vertical point of a terrestrial point (they are mainly used for telecommunications and television broadcasting). A geocentric orbit or Earth orbit involves any object orbiting Planet Earth, such as the Moon or artificial satellites. Geocentric (having the Earth as its centre) orbits are organised as follow: 1) Low Earth orbit (LEO): geocentric orbits with altitudes (the height of an object above the average surface of the Earth’s oceans) from 100 to 2 000 kilometres. Satellites in LEO have a small momentary field of view, only able to observe and communicate with a fraction of the Earth at a time, meaning a network or constellation of satellites is required in order to provide continuous coverage. Satellites in lower regions of LEO also suffer from fast orbital decay (in orbital mechanics, decay is a gradual decrease of the distance between two orbiting bodies at their closest approach, the periapsis, over many orbital periods), requiring either periodic reboosting to maintain a stable orbit, or launching replacement satellites when old ones re-enter. 2) Medium Earth orbit (MEO), also known as an intermediate circular orbit: geocentric orbits ranging in altitude from 2 000 kilometres to just below geosynchronous orbit at 35 786 kilometres. The most common use for satellites in this region is for navigation, communication, and geodetic/space environment science. The most common altitude is approximately 20 000 kilometres which yields an orbital period of twelve hours. 3) Geosynchronous orbit (GSO) and geostationary orbit (GEO) are orbits around Earth at an altitude of 35 786 kilometres matching Earth’s sidereal rotation period. All geosynchronous and geostationary orbits have a semi-major axis of 42 164 kilometres. A geostationary orbit stays exactly above the equator, whereas a geosynchronous orbit may swing north and south to cover more of the Earth’s surface. Communications satellites and weather satellites are often placed in geostationary orbits, so that the satellite antennae (located on Earth) that communicate with them do not have to rotate to track them, but can be pointed permanently at the position in the sky where the satellites are located. 4) High Earth orbit: geocentric orbits above the altitude of 35 786 kilometres. The competing forces of gravity, which is stronger at the lower end, and the outward/upward centrifugal force, which is stronger at the upper end, would result in the cable being held up, under tension, and stationary over a single position on Earth. With the tether deployed, climbers could repeatedly climb the tether to space by mechanical means, releasing their cargo to orbit. Climbers could also descend the tether to return cargo to the surface from orbit.

#### Private Companies are pursuing Space Elevators.

Alfano 15 Andrea Alfano 8-18-2015 “All Of These Companies Are Working On A Space Elevator” <https://www.techtimes.com/articles/77612/20150818/companies-working-space-elevator.htm> (Writer at the Tech Times)//Elmer

Space elevators are solid proof that any mundane object sounds way cooler if you stick the word "space" in front of it. But there's much more than coolness at stake when building a space elevator – this technology has the potential to revolutionize space transportation, and the Canadian private space company Thoth Technology that was recently awarded a patent for its space elevator design isn't the only company in the game. One of the other major players is a U.S.-based company called LiftPort Group, founded by space entrepreneur Michael Laine in 2003. Its plan for a space elevator is vastly different from the one for which Thoth received a patent, however. Whereas Thoth's plans entail tethering a 12-mile-high inflatable space elevator to the Earth, LiftPort is shooting for the moon. Originally, LiftPort had planned to build an Earth elevator, too, but it abandoned the idea in 2007 in favor of building a lunar elevator. The basic design for a lunar elevator is an anchor in the moon that is attached to a cable that extends to a space station situated at a very special point. Known as a Lagrange Point, this is the gravitational tipping point between the Earth and the moon, where their gravitational pulls essentially cancel one another out. A robot could then travel up and down the tether, ferrying cargo between the moon and the station. Out farther in space, a counterweight would balance out the system. Both types of space elevator are intended to increase space access, but in very different ways. Thoth's Earth elevator aims to make launches easier by starting off 12 miles above the Earth's surface. LiftPort's space elevator aims to increase access to the moon in particular, because it is much easier to launch a rocket to the Lagrange Point and dock it at a space station than it is to get to the moon directly. There's a third major company based in Japan called Obayashi Corp. whose plans look like a hybrid of Thoth's and LiftPort's. Obayashi is not a space company, however – it's actually a construction company. Like Thoth, Obayashi plans to build an Earth elevator. But its Earth elevator would consist of a cable tethered to the blue planet, a robotic cargo-carrier, a space station, and a counterweight. It essentially looks like LiftPort's plans, but stuck to the Earth instead of to the moon.

#### Yes Space Elevators – NASA confirms.

Snowden 18 Scott Snowden 10-2-2018 "A colossal elevator to space could be going up sooner than you ever imagined" <https://www.nbcnews.com/mach/science/colossal-elevator-space-could-be-going-sooner-you-ever-imagined-ncna915421> (Scott has written about science and technology for 20 years for publications around the world. He covers environmental technology for Forbes.)//Elmer

For more than half a century, rockets have been the only way to go to space. But in the not-too-distant future, we may have another option for sending up people and payloads: a colossal elevator extending from Earth’s surface up to an altitude of 22,000 miles, where geosynchronous satellites orbit. NASA says the basic concept of a space elevator is sound, and researchers around the world are optimistic that one can be built. The Obayashi Corp., a global construction firm based in Tokyo, has said it will build one by 2050, and China wants to build one as soon as 2045. Now an experiment to be conducted soon aboard the International Space Station will help determine the real-world feasibility of a space elevator. “The space elevator is the Holy Grail of space exploration,” says Michio Kaku, a professor of physics at City College of New York and a noted futurist. “Imagine pushing the ‘up’ button of an elevator and taking a ride into the heavens. It could open up space to the average person.”

#### Regardless of completion, Elevators spur investment in Nanotechnology

Liam O’Brien 16. University of Wollongong. 07/2016. “Nanotechnology in Space.” Young Scientists Journal; Canterbury, no. 19, p. 22.

Nanotechnology is at the forefront of scientific development, continuing to astound and innovate. Likewise, the space industry is rapidly increasing in sophistication and competition, with companies such as SpaceX, Blue Origin and Virgin Galactic becoming increasingly prevalent in what could become a new commercial space race. The various space programs over the past 60 years have led to a multitude of beneficial impacts for everyday society. Nanotechnology, through research and development in space has the potential to do the same. Potential applications of nanotechnology in space are numerous, many of them have the potential to capture and inspire generations to come. One of these applications is the space elevator. By using carbon nanotubes, a super light yet strong material, this concept would be an actual physical structure from the surface of the Earth to an altitude of approximately 36 000 km. The tallest building in the world would fit into this elevator over 42 000 times. The counterweight, used to keep the elevator taught, is proposed to be an asteroid. This would need to be at a distance of 100 000 km, a quarter of the distance to the moon. The benefits of such a structure would be enormous. 95% of a space shuttle's weight at take-off is fuel, costing US$ 20 000 per kilogram to send something into space. However, with a space elevator the cost per kilogram can be reduced to as little as US$ 200. Exploration to other planets can begin at the tower, and travel to and from the moon could become as simple as a morning commute to work. Solar sails provide the means to travel large distances and incredible speeds. Much like sails on a boat use wind, the solar sail uses light as a source of propulsion. Ideally these sails would be kilometres in length and only a few micrometres in thickness. This provides us with the ability to travel at speeds previously unheard of. Using carbon nanotubes once again, a solar sail has the capability to travel at 39 756 km/s which is 13% of the speed of light! This sail could reach Pluto in an astonishing 1.7 days, and Alpha Centauri in just 32 years. Space travel to other planets, other stars, could be possible with solar sails. The Planetary Society is funding for a space sail of itself, and has successfully launched one into orbit. NASA has also sent a sail into orbit, allowing it to burn up in the atmosphere after 240 days. Investing time and resources into nanotechnology for space exploration has benefits for society today. Materials such as graphene are being used in modern manufacturing at an increasing rate as the applications become utilised. Carbon nanotubes will change the way we think about materials and their strength. These nanotubes have a tensile strength one hundred times that of steel, yet are only a sixth of the weight. Imagine light weight vehicles using less petrol and energy as well as being just as strong as regular vehicles. With potentials to revolutionize the way we think about space travel, nanotechnology has a bright future. As a new field of science, it has the capability to push the human race to the outer reaches of our galaxy and hopefully one day to other stars. It will inspire generations of explorers and dreamers to challenge themselves and advance the human race into the next era. As Richard Feynman said in his 1959 talk 'There's Plenty of Room at the Bottom' "A field in which little has been done, but in which an enormous amount can be done. There is still plenty more to achieve.

#### Nano tech solves warming

Bhavya Khullar. September 4, 2017. Nanomaterials Could Combat Climate Change and Reduce Pollution. https://www.scientificamerican.com/article/nanomaterials-could-combat-climate-change-and-reduce-pollution/

The list of environmental problems that the world faces may be huge, but some strategies for solving them are remarkably small. First explored for applications in microscopy and computing, nanomaterials—materials made up of units that are each thousands of times smaller than the thickness of a human hair—are emerging as useful for tackling threats to our planet’s well-being. Scientists across the globe are developing nanomaterials that can efficiently use carbon dioxide from the air, capture toxic pollutants from water and degrade solid waste into useful products. “Nanomaterials could help us mitigate pollution. They are efficient catalysts and mostly recyclable. Now, they have to become economical for commercialization and better to replace present-day technologies completely,” says [Arun Chattopadhyay](http://www.iitg.ac.in/arun/), a member of the chemistry faculty at the Center for Nanotechnology, Indian Institute of Technology Guwahati. To help slow the climate-changing rise in atmospheric CO2levels, researchers have developed nanoCO2 harvesters that can suck atmospheric carbon dioxide and deploy it for industrial purposes. “Nanomaterials can convert carbon dioxide into useful products like alcohol. The materials could be simple chemical catalysts or photochemical in nature that work in the presence of sunlight,” says Chattopadhyay, who has been working with nanomaterials to tackle environmental pollutants for more than a decade. Many research groups are working to address a problem that, if solved, could be a holy grail in combating climate change: how to pull CO2 out of the atmosphere and convert it into useful products. Chattopadhyay isn’t alone. Many research groups are working to address a problem that, if solved, could be a holy grail in combating climate change: how to pull CO2 out of the atmosphere and convert it into useful products. Nanoparticles offer a promising approach to this because they have a large surface-area-to-volume ratio for interacting with CO2 and properties that allow them to facilitate the conversion of CO2into other things. The challenge is to make them economically viable. Researchers have tried everything from metallic to carbon-based nanoparticles to reduce the cost, but so far they haven’t become efficient enough for industrial-scale application. One of the most recent points of progress in this area is work by scientists at the CSIR-Indian Institute of Petroleum and the Lille University of Science and Technology in France. The researchers developed a nanoCO2 harvester that uses water and sunlight to convert atmospheric CO2 into methanol, which can be employed as an engine fuel, a solvent, an antifreeze agent and a diluent of ethanol. Made by wrapping a layer of modified graphene oxide around spheres of copper zinc oxide and magnetite, the material looks like a miniature golf ball, captures CO2 more efficiently than conventional catalysts and can be readily reused, according to Suman Jain, senior scientist of the Indian Institute of Petroleum, Dehradun in India, who developed the nanoCO2harvester. Jain says that the nanoCO2 harvester has a large molecular surface area and captures more CO2 than a conventional catalyst with similar surface area would, which makes the conversion more efficient. But due to their small size, the nanoparticles have a tendency to clump up, making them inactive with prolonged use. Jain adds that synthesizing useful nanoparticle-based materials is also challenging because it’s hard to make the particles a consistent size. Chattopadhyay says the efficiency of such materials can be improved further, providing hope for useful application in the future. CLEANSING WATER Most toxic dyes used in textile and leather industries can be captured with nanoparticles. “Water pollutants such as dyes from human-created waste like those from tanneries could get to natural sources of water like deep tube wells or groundwater if wastewater from these industries is left untreated,” says Chattopadhyay. “This problem is rather difficult to solve.” An international group of researchers led by professor Elzbieta Megiel of the University of Warsaw in Poland reports that nanomaterials have been widely studied for removing heavy metals and dyes from wastewater. According to the research team, adsorption processes using materials containing magnetic nanoparticles are highly effective and can be easily performed because such nanoparticles have a large number of sites on their surface that can capture pollutants and don’t readily degrade in water. Chattopadhyay adds that appropriately designed magnetic nanomaterials can be used to separate pollutants such as arsenic, lead, chromium and mercury from water. However, the nanotech-based approach has to be more efficient than conventional water purification technology to make it worthwhile. In addition to removing dyes and metals, nanomaterials can also be used to clean up oil spills. Researchers led by Pulickel Ajayan at Rice University in Houston, Texas, have developed a reusable nanosponge that can remove oil from contaminated seawater.

#### 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.

### 5

#### CP Text: We endorse the entirety of the affirmative minus their usage and endorsement of government action

“This requires critical and historical questions and not policy recipes.”

#### Your solvency evidence agrees with us – 1AC says attaching decolonizal pedagogy to political implementation are forms of white saviorism that strip ndigenous agency and BAD to their project.

Deloria Jr. 99 – Member of the Standing Rock Sioux Tribe and Professor at University of Colorado Boulder  
(Vine, also Former Executive Director for the National Congress of American Indians and former Professor of Political Science and Law at the University of Arizona, For This Land: Writing on Religion in America, p. 101-7)//Elmer  
If there were any serious concern about liberation, we would see thousands of people simply walk away from the vast economic, political, and intellectual machine we call Western civilization and refuse to be enticed to participate in it any longer. Liberation is not a difficult task when one no longer finds value in a set of institutions or beliefs. We are liberated from the burden of Santa Claus and the moral demand to be "good" when, as maturing adolescents, we reject the concept of Santa Claus. Thereafter we have no sense of guilt in late November that we have not behaved properly during the year, and no fear that a lump of coal rather than a gift will await us Christmas morning. In the same manner, we are freed and liberated once we realize the insanity and fantasy of the present manner of interpreting our experiences in the world. Liberation, in its most fundamental sense, requires a **rejection of everything we have been taught** and its replacement by only those things we have experienced as having values. But this replacement only begins the task of liberation. For the history of Western thinking in the past eight centuries **has been one of replacement of ideas** within a framework that has remained **basically unchanged** for nearly two millenia. Challenging this framework of interpretation means a rearrangement of our **manner of perceiving the world**, and it involves a reexamination of the body of human knowledge and its structural reconstruction into a new format, Such a task appears to be far from the struggles of the present. It seems abstract and meaningless in the face of contemporary suffering. And it suggests that people can be made to change their oppressive activity by intellectual reorientation alone. All these questions arise, however, because of the fundamental orientation of Western peoples toward the world. We assume that we know the structure of reality and must only make certain minor adjustments in the machinery that operates it in order to bring our institutions into line. Immediate suffering is thus placed in juxtaposition with abstract metaphysical conceptions of the world and, because we can see immediate suffering, **we feel impelled to change conditions quickly** to relieve tensions, never coming to **understand how the basic attitude toward life** and its derivative attitudes toward minority groups **continues to dominate** the goals and activities that appear designed to create reforms, Numerous examples can be cited to show that **our efforts to bring justice** into the world **have been short-circuited** by the passage of events, and that those efforts are unsuccessful because we have failed to consider the **basic framework within which we pose questions, analyze alternatives, and suggest solutions**. Consider the examples from our immediate past. In the early sixties college application forms included **a blank line** on which all prospective students were required **to indicate** their **race**. Such information was used to discriminate against those of a minority background, and so **reformers demanded** that the **question be dropped**. By the time all colleges had been forced to eliminate questions concerning the race of applicants, the Civil Rights Movement had so sensitized those involved in higher education that scholarships were made available in great numbers to people of minority races. **There was no way,** however, **to allocate** such **scholarships** **because college officials could no longer determine the racial background** of students on the basis of their applications for admission. Much of the impetus for **low-cost housing** in the cities was based upon the premise that in the twentieth century people should not have to live in hovels but that adequate housing should be constructed for them. Yet in the course of **tearing down** slums and building new housing projects, low-income housing areas were eliminated. The **construction cost** of the new projects **made** it necessary to charge hi**gher rentals**. **Former residents** of the lowincome areas **could not afford to live** in the new housing, so they moved to other parts of the city and created exactly the same conditions that had originally provoked the demand for low-rent housing. Government schools had a very difficult time teaching American Indian children the English language. (One reason was the assumption of teachers that all languages had Latin roots, and their inability to adapt the programs when they discovered that Indian languages were not so derived.) Hence programs in bilingual teaching methods were authorized that would use the native language to teach the children English, an underhanded way of eliminating the native language. Between the time that bilingual programs were conceived and the time that they were finally funded, other programs that concentrated on adequate housing had an unexpected effect on the educational process. Hundreds of new houses were built in agency towns, and Indians moved from remote areas of the different reservations into those towns where they could get good housing. Since they were primarily younger couples with young children, the housing development meant that most Indian children were now growing up in the agency communities and were learning English as a first language. Thus the bilingual programs, which began as a means of teaching English as a second language, became the method designed to preserve the native vernacular by teaching it as a second language to students who had grown up speaking English. Example after example could be cited, each testifying to the devastating effect of a general attitude toward the world that underlies the Western approach to human knowledge. The basis of this attitude is the assumption that the world operates in certain predetermined ways, that it operates continuously under certain natural laws, and that the nature of every species is homogeneous, with few real deviations.

#### The Affrelegates indigenous possibility to reservation, accelerating death-making – only an orientation of refusal as generative can solve. This the ROTB is to reject systems of settler colonialism.

King 17, Tiffany Lethabo. "Humans involved: Lurking in the lines of posthumanist flight." Critical Ethnic Studies 3.1 (2017): 162-185. (Assistant Professor of Women’s, Gender and Sexuality Studies at Georgia State)//GZ but re-cut by Elmer

Within Native feminist theorizing, ethnographic refusal can be traced to Audra Simpson’s 2007 article, “On Ethnographic Refusal.” In this seminal work, Simpson reflects on and gains inspiration from the tradition of refusal practiced by the people of Kahnawake.14 Simpson shares that Kahnawake refusals are at the core and spirit of her own ethnographic and ethical practices of refusal. I was interested in the larger picture, in the discursive, material and moral territory that was simultaneously historical and contemporary (this “national” space) and the ways in which *Kahnawakero:non*, the “people of Kahnawake,” had *refused* the authority of the state at almost every turn. The ways in which their formation of the initial membership code (now replaced by a lineage code and board of elders to implement the code and determine cases) was refused; the ways in which their interactions with border guards at the international boundary line were predicated upon a refusal; how refusal worked in everyday encounters to enunciate repeatedly to ourselves and to outsiders that “this is who we are, this is who you are, these are my rights.”15 Because Simpson was concerned with applying the political and everyday modes of Kahnawake refusal, she attended to the “collective limit” established by her and her Kahnawake participants.16 The collective limit was relationally and ethically determined by what was shared but more importantly by what was not shared. Simpson’s ability to discern the collective limit could only be achieved through a form of relational knowledge production that regards and cares for the other. Simpson recounts how one of her participants forced her to recognize a collective limit. Approaching and then arriving at the limit, Simpson experiences the following: And although I pushed him, hoping that there might be something explicit said from the space of his exclusion— or more explicit than he gave me— it was enough that he said what he said. “Enough” is certainly enough. “Enough,” I realised, was when I reached the limit of my own return and our collective arrival. Can I do this and still come home; what am I revealing here and why? Where will this get us? Who benefits from this and why? And “enough” was when they shut down (or told me to turn off the recorder), or told me outright funny things like “nobody seems to know”— when everybody *does* know and talks about it *all the time*. Dominion then has to be exercised over these representations, and that was determined when enough was said. The ethnographic limit then, was reached not just when it would cause harm (or extreme discomfort)—the limit was arrived at when the representation would bite all of us and compromise the *representational* territory that we have gained for ourselves in the past 100 years.17 Extending her discussion of ethnographic refusal beyond the bounds of ethnographic concerns, Simpson also ponders whether this enactment of refusal can be applied to theoretical work. Simpson outright poses a question: “What is theoretically generative about these refusals?”18 The question that Simpson asks in 2007 is clarified by Eve Tuck and K. Wayne Yang in the 2014 essay “R- Words: Refusing Research.” Arguing that modes of refusal extended into the theoretical and methodological terrains of knowledge production are productive and necessary, Tuck and Yang state: For the purposes of our discussion, the most important insight to draw from Simpson’s article is her emphasis that refusals are not subtractive, but are theoretically generative, expansive. Refusal is not just a “no,” but a redirection to ideas otherwise unacknowledged or unquestioned. Unlike a settler colonial configuration of knowledge that is petulantly exasperated and resentful of limits, a methodology of refusal regards limits on knowledge as productive, as indeed a good thing.19 In line with Simpson’s intervention, Tuck and Yang posit that “refusal itself could be developed into both method and theory.”20 For Tuck and Yang, a generative practice of refusal and a decolonial and abolitionist tradition is making Western thought “turn back upon itself as settler colonial knowledge, as opposed to universal, liberal, or neutral knowledge without horizon.”21 In fact, the coauthors suggest “making the settler colonial metanarrative the object of . . . research.”22 What this move effectively does is question the uninterrogated assumptions and exposes the violent particularities of the metanarrative. Scrutiny as a practice of refusal also slows down or perhaps halts the momentum of the machinery that allows, as Tuck and Yang argue, “knowledge to facilitate interdictions on Indigenous and Black life.”23

Biswas 7 (Shampa Biswas Politics @ Whitman, 2007, “Empire and Global Public Intellectuals: Reading Edward Said as an International Relations Theorist” *Millennium* 36 (1) p. 117-125

The recent resuscitation of the project of Empire should give International Relations scholars particular pause.1 For a discipline long premised on a triumphant Westphalian sovereignty, there should be something remarkable about the ease with which the case for brute force, regime change and empire-building is being formulated in widespread commentary spanning the political spectrum. Writing after the 1991 Gulf War, Edward Said notes the US hesitance to use the word ‘empire’ despite its long imperial history.2 This hesitance too is increasingly under attack as even self-designated liberal commentators such as Michael Ignatieff urge the US to overcome its unease with the ‘e-word’ and selfconsciously don the mantle of imperial power, contravening the limits of sovereign authority and remaking the world in its universalist image of ‘democracy’ and ‘freedom’.3 Rashid Khalidi has argued that the US invasion and occupation of Iraq does indeed mark a new stage in American world hegemony, replacing the indirect and proxy forms of Cold War domination with a regime much more reminiscent of European colonial empires in the Middle East.4 The ease with which a defence of empire has been mounted and a colonial project so unabashedly resurrected makes this a particularly opportune, if not necessary, moment, as scholars of ‘the global’, to take stock of our disciplinary complicities with power, to account for colonialist imaginaries that are lodged at the heart of a discipline ostensibly interested in power but perhaps far too deluded by the formal equality of state sovereignty and overly concerned with security and order. Perhaps more than any other scholar, Edward Said’s groundbreaking work in *Orientalism* has argued and demonstrated the long and deep complicity of academic scholarship with colonial domination.5 In addition to spawning whole new areas of scholarship such as postcolonial studies, Said’s writings have had considerable influence in his own discipline of comparative literature but also in such varied disciplines as anthropology, geography and history, all of which have taken serious and sustained stock of their own participation in imperial projects and in fact regrouped around that consciousness in a way that has simply not happened with International Relations.6 It has been 30 years since Stanley Hoffman accused IR of being an ‘American social science’ and noted its too close connections to US foreign policy elites and US preoccupations of the Cold War to be able to make any universal claims,7 yet there seems to be a curious amnesia and lack of curiosity about the political history of the discipline, and in particular its own complicities in the production of empire.8 Through what discourses the imperial gets reproduced, resurrected and re-energised is a question that should be very much at the heart of a discipline whose task it is to examine the contours of global power. Thinking this failure of IR through some of Edward Said’s critical scholarly work from his long distinguished career as an intellectual and activist, this article is an attempt to politicise and hence **render questionable** the **disciplinary traps** that have, ironically, circumscribed the ability of scholars whose very business it is to think about global politics to actually think *globally* and *politically*. What Edward Said has to offer IR scholars, I believe, is a certain kind of global sensibility, a critical but sympathetic and felt awareness of an inhabited and cohabited world. Furthermore, it is a profoundly political sensibility whose globalism is predicated on a cognisance of the imperial and a firm non-imperial ethic in its formulation. I make this argument by travelling through a couple of Said’s thematic foci in his enormous corpus of writing. Using a lot of Said’s reflections on the role of public intellectuals, I argue in this article that IR scholars need to develop what I call a ‘global intellectual posture’. In the 1993 Reith Lectures delivered on BBC channels, Said outlines three positions for public intellectuals to assume – as an outsider/exile/marginal, as an ‘amateur’, and as a disturber of the status quo speaking ‘truth to power’ and self-consciously siding with those who are underrepresented and disadvantaged.9 Beginning with a discussion of Said’s critique of ‘professionalism’ and the ‘cult of expertise’ as it applies to International Relations, I first argue the importance, for scholars of global politics, of taking *politics* seriously. Second, I turn to Said’s comments on the posture of exile and his critique of identity politics, particularly in its nationalist formulations, to ask what it means for students of global politics to take the *global* seriously. Finally, I attend to some of Said’s comments on humanism and contrapuntality to examine what IR scholars can learn from Said about *feeling and thinking globally* concretely, thoroughly and carefully. IR Professionals in an Age of Empire: From ‘International Experts’ to ‘Global Public Intellectuals’ One of the profound effects of the war on terror initiated by the Bush administration has been a significant constriction of a democratic public sphere, which has included the active and aggressive curtailment of intellectual and political dissent and a sharp delineation of national boundaries along with concentration of state power. The academy in this context has become a particularly embattled site with some highly disturbing onslaughts on academic freedom. At the most obvious level, this has involved fairly well-calibrated neoconservative attacks on US higher education that have invoked the mantra of ‘liberal bias’ and demanded legislative regulation and reform10, an onslaught supported by a well-funded network of conservative think tanks, centres, institutes and ‘concerned citizen groups’ within and outside the higher education establishment11 and with considerable reach among sitting legislators, jurists and policy-makers as well as the media. But what has in part made possible the encroachment of such nationalist and statist agendas has been a larger history of the corporatisation of the university and the accompanying ‘professionalisation’ that goes with it. Expressing concern with ‘academic acquiescence in the decline of public discourse in the United States’, Herbert Reid has examined the ways in which the university is beginnincritg to operate as another transnational corporation12, and critiqued the consolidation of a ‘culture of professionalism’ where **academic bureaucrats** **engage in bureaucratic role-playing,** minor academic **turf battles mask the larger managerial power play** on campuses and the increasing influence of a relatively autonomous administrative elite and the rise of insular ‘expert cultures’ have led to academics relinquishing their claims to public space and authority.13 While it is no surprise that the US academy should find itself too at that uneasy confluence of neoliberal globalising dynamics and exclusivist nationalist agendas that is the predicament of many contemporary institutions around the world, there is much reason for concern and an urgent need to rethink the role and place of intellectual labour in the democratic process. This is especially true for scholars of the global writing in this age of globalisation and empire. Edward Said has written extensively on the place of the academy as one of the few and increasingly precarious spaces for democratic deliberation and argued the necessity for public intellectuals immured from the seductions of power.14 Defending the US academy as one of the last remaining utopian spaces, ‘the one public space available to real alternative intellectual practices: no other institution like it on such a scale exists anywhere else in the world today’15, and lauding the remarkable critical theoretical and historical work of many academic intellectuals in a lot of his work, Said also complains that ‘the American University, with its munificence, utopian sanctuary, and remarkable diversity, has defanged (intellectuals)’16. The most serious threat to the ‘intellectual vocation’, he argues, is ‘professionalism’ and mounts a pointed attack on the proliferation of ‘specializations’ and the ‘cult of expertise’ with their focus on ‘relatively narrow areas of knowledge’, ‘technical formalism’, ‘impersonal theories and methodologies’, and most worrisome of all, their ability and willingness to be **seduced by power**.17 Said mentions in this context the funding of academic programmes and research which came out of the exigencies of the Cold War18, an area in which there was considerable traffic of political scientists (largely trained as IR and comparative politics scholars) with institutions of policy-making. Looking at various influential US academics as ‘organic intellectuals’ involved in a dialectical relationship with foreign policy-makers and examining the institutional relationships at and among numerous think tanks and universities that create convergent perspectives and interests, Christopher Clement has studied US intervention in the Third World both during and after the Cold War made possible and justified through various forms of ‘intellectual articulation’.19 This is not simply a matter of scholars working for the state, but indeed a larger question of **intellectual orientation**. It is not uncommon for IR scholars to feel the need to formulate their scholarly conclusions in terms of its relevance for global politics, where ‘relevance’ is measured entirely in terms of policy wisdom. Edward Said’s searing indictment of US intellectuals – policy-experts and Middle East experts - in the context of the first Gulf War20 is certainly even more resonant in the contemporary context preceding and following the 2003 invasion of Iraq. The space for a critical appraisal of the motivations and conduct of this war has been considerably diminished by the expertise-framed national debate wherein certain kinds **of ethical questions irreducible to formulaic ‘for or against’ and ‘costs and benefits’ analysis** can simply **not be raised**. In effect, what Said argues for, and IR scholars need to pay particular heed to, is an understanding of ‘intellectual relevance’ that is larger and more worthwhile, that is about the posing of critical, historical, ethical and perhaps unanswerable questions rather than the offering of recipes and solutions, that is about *politics* (rather than techno-expertise) in the most fundamental and important senses of the vocation.21