### 1AC: Plan

#### Plan – The member nations of the World Trade Organization ought to reduce intellectual property protections for medicines by implementing a one-and-done approach for patent and exclusivity protection.

#### The Plan solves Evergreening.

Feldman 3 Robin Feldman 2-11-2019 "‘One-and-done’ for new drugs could cut patent thickets and boost generic competition" <https://www.statnews.com/2019/02/11/drug-patent-protection-one-done/> (Arthur J. Goldberg Distinguished Professor of Law, Albert Abramson ’54 Distinguished Professor of Law Chair, and Director of the Center for Innovation)//SidK + Elmer

I believe that one period of protection **should be enough**. We should make the legal changes necessary to prevent companies **from building patent walls** and piling up mountains of rights. This could be accomplished **by a “one-and-done” approach** for patent protection. Under it, a drug would receive just one period of exclusivity, and no more. The choice of which “one” could be left entirely in the hands of the pharmaceutical company, with the election made when the FDA approves the drug. Perhaps development of the drug went swiftly and smoothly, so the remaining life of one of the drug’s patents is of greatest value. Perhaps development languished, so designation as an orphan drug or some other benefit would bring greater reward. The choice would be up to the company itself, based on its own calculation of the maximum benefit. The result, however, is that a pharmaceutical company chooses whether its period of exclusivity would be a patent, an orphan drug designation, a period of data exclusivity (in which no generic is allowed to use the original drug’s safety and effectiveness data), or something else — but **not all of the above** and more. Consider Suboxone, a combination of buprenorphine and naloxone for treating opioid addiction. The drug’s maker has extended its protection cliff eight times, including obtaining an orphan drug designation, which is intended for drugs that serve only a small number of patients. The drug’s first period of exclusivity ended in 2005, but with the additions its protection now lasts until 2024. That makes almost two additional decades in which the public has borne the burden of monopoly pricing, and access to the medicine may have been constrained. Implementing a one-and-done approach in conjunction with FDA approval underscores the fact that these problems and solutions are designed for pharmaceuticals, not for all types of technologies. That way, one-and-done could be implemented through **legislative changes to the FDA’s drug approval system**, and would apply to patents granted going forward. One-and-done would apply to both patents and exclusivities. A more limited approach, a baby step if you will, would be to invigorate the existing patent obviousness doctrine as a way to cut back on patent tinkering. Obviousness, one of the five standards for patent eligibility, says that inventions that are obvious to an expert or the general public can’t be patented. Either by congressional clarification or judicial interpretation, many pile-on patents could be eliminated with a ruling that the core concept of the additional patent is nothing more than the original formulation. Anything else is merely an obvious adaptation of the core invention, modified with existing technology. As such, the patent would fail for being perfectly obvious. Even without congressional action, a more vigorous and robust application of the existing obviousness doctrine could significantly improve the problem of piled-up patents and patent walls. Pharmaceutical companies have become adept at maneuvering through the system of patent and non-patent rights to create mountains of rights that can be applied, one after another. This behavior lets drug companies keep competitors out of the market and beat them back when they get there. We shouldn’t be surprised at this. Pharmaceutical companies are profit-making entities, after all, that face pressure from their shareholders to produce ever-better results. If we want to change the system, we must change the incentives driving the system. And right now, the incentives for creating patent walls are just too great.

#### Reforming the Patent Process would lower Drug Prices and incentivize Pharma Innovation by revitalizing the Market.

Stanbrook 13, Matthew B. "Limiting “evergreening” for a better balance of drug innovation incentives." (2013): 939-939. (MD (University of Toronto) PhD (University of Toronto))//Elmer

At issue in the Indian case was “evergreening,” a now widespread practice by the pharmaceutical industry designed to extend the monopoly on an existing drug by modifying it and seeking new patents.2 Currently, half of all drugs patented in Canada have multiple subsequent patents, extending the lifetime of the original patent by about 8 years.3 Manufacturers, in defence of these practices, predictably tout the advantages of new versions of their products, which often represent more potent isomers or salts of the original drugs, longer-lasting formulations or improved delivery systems that make adherence easier or more convenient. But the new versions are by definition “**me too” drugs**, and demonstration that the resulting **incremental benefits** in efficacy and safety are clinically meaningful **is often lacking**. Moreover, the original drugs have often been “blockbusters” used for years to improve the health of millions of patients. It seems hard to argue convincingly why such beneficial drugs require an upgrade, often just before their patents expire. Rather than the marginal benefits accrued from tinkering with already effective agents, patients worldwide are in desperate need of new classes of pharmaceuticals for the great many health conditions for which treatments are presently inadequate or entirely lacking. But developing truly innovative drugs is undeniably a high-risk venture. It is important and necessary that pharmaceutical companies continue to take these risks, because they are usually the only entities with sufficient resources to do so. Therefore, companies must continue to perceive **sufficient incentives** to continue investing in innovation. Indeed, there is evidence that the prospect of future evergreening has become part of the incentive calculation for innovative drug development.4 But surely it is perverse to extend unpredictably a period of patent protection that the government intended to be clearly defined and predictable, and to maintain incentives that drive companies to divert their **drug-development resources away from innovation**. **Current patent legislation may not be optimal** for striking the right balance between encouraging innovation and facilitating profiteering. Given the broad societal importance of patent legislation, ongoing research to enable active governance of this issue should be a national priority. In the last decade, Canada’s laws have been among the friendliest toward evergreening in the world.5 We should now reflect on whether this is really in our national interest. Governments, including Canada’s, would do well to take inspiration from India’s example and tighten regulations that currently facilitate evergreening. This might involve **denying future patents for modifications** that currently would receive one. An overall reduction in the duration of all secondary patents on a therapy might also be considered. Globally, a more flexible and individualized approach to the length of drug patents might be a more effective strategy to align corporate incentives with population health needs. Limits on evergreening would likely reduce the **extensive patent litigation** that contributes to the **high prices of generic drugs** in Canada.3 Reducing economic pressure on generic drug companies may facilitate current provincial initiatives to lower generic drug prices. As opportunities to generate revenue from evergreening are eliminated, research-based pharmaceutical companies would be left with no choice but to invest more in innovative drug development to maintain their profits.

### 1AC: Innovation

#### Advantage 1 is Innovation

#### 1] We are in an innovation crisis – new drugs are not being developed in favor of re-purposing old drugs to infinitely extend patent expiration.

Feldman 1 Robin Feldman 2-11-2019 "‘One-and-done’ for new drugs could cut patent thickets and boost generic competition" <https://www.statnews.com/2019/02/11/drug-patent-protection-one-done/> (Arthur J. Goldberg Distinguished Professor of Law, Albert Abramson ’54 Distinguished Professor of Law Chair, and Director of the Center for Innovation)//SidK + Elmer

Drug companies **have brought great innovations** to market. Society rewards innovation with patents, or with non-patent exclusivities that can be obtained for activities such as testing drugs in children, undertaking new clinical studies, or developing orphan drugs. The rights provided by patents or non-patent exclusivities provide a defined time period of protection so companies can recoup their investments by charging monopoly prices. When patents end, lower-priced competitors should be able to jump into the market and drive down the price. **But that’s not happening**. Instead, drug companies build massive patent walls around their products, extending the protection **over and over again**. Some modern drugs have an avalanche of U.S. patents, with expiration dates **staggered across time**. For example, the rheumatoid arthritis drug Humira is **protected by more than 100 patents**. Walls like that **are insurmountable**. Rather than rewarding innovation, our patent system is now largely repurposing drugs. Between 2005 and 2015, **more than three-quarters** of the drugs associated with new patents **were not new ones** coming on the market but existing ones. In other words, we are mostly churning and recycling. Particularly troubling, new patents can be **obtained on minor tweaks** such as adjustments to dosage or delivery systems — a once-a-day pill instead of a twice-a-day one; a capsule rather than a tablet. Tinkering like this may have some value to some patients, but it nowhere near justifies the rewards we lavish on companies for doing it. From society’s standpoint, incentives should drive scientists back to the lab to look for new things, not to recycle existing drugs for minimal benefit.

#### 2] We control Uniqueness – 78% of New Drugs aren’t innovative.

PFAD 21 Patients for Affordable Drugs 2-3-2021 “BIG PHARMA’S BIG LIE: THE TRUTH ABOUT INNOVATION & DRUG PRICES” <https://patientsforaffordabledrugs.org/2021/02/03/innovation-report/> (a patient advocacy and lobbying organisation based in Washington, D.C. founded by David Mitchell who suffers from multiple myeloma. Ben Wakana is the executive director. It focuses on policies to lower drug prices.)//Elmer

The drug industry talks a lot about how reforms to lower prices threaten cutting-edge breakthroughs, but in reality, **only a fraction of new medications are truly innovative**. **Since 1975**, **only 10** to 15 **percent** of drugs entering the market **represented** **therapeutic advances**; **instead**, **drug companies prioritized the development of existing drugs with minor variations that lack clinical significance**.21 Drug patents offer a stark illustration of this point. Between 2005 and 2015, **78 percent of drug patents were related to drugs already on the market.**22 **Instead of investing in R&D that could lead to new** breakthrough **therapies**, **drug companies spend resources obtaining patents on old drugs** — not to improve user experience — but **to extend patent protection**, prolong monopoly pricing periods, and keep generic competitors off the market. So if we understand that new drugs are not the same as new cures, a small reduction in new drugs doesn’t pose a threat to innovation. Harvard economist Richard Frank summed it up this way: “If drug companies claim lowering drug prices means somewhat fewer new drug launches, remember that there are **numerous new products sold every year whose elimination would have little to no impact on the health of Americans**.”23 If our current system of drug development does not result primarily in truly innovative drugs, we can’t let the pharmaceutical industry use the threat of R&D cuts as a scapegoat to thwart reforms. We can create a system that incentivizes valuable innovation that delivers meaningful clinical benefit to patients — instead of repurposing old drugs.

#### 3] The only major study confirms our Internal Link – Evergreening decimates competition by resulting in functional monopolies

Arnold Ventures 20 9-24-2020 "'Evergreening' Stunts Competition, Costs Consumers and Taxpayers" <https://www.arnoldventures.org/stories/evergreening-stunts-competition-costs-consumers-and-taxpayers/> (Arnold Ventures is focused on evidence-based giving in a wide range of categories including: criminal justice, education, health care, and public finance)//Elmer

Revlimid is a case study in a process known as “evergreening” — artificially sustaining a monopoly for years and even decades by manipulating intellectual property laws and regulations. Evergreening is most commonly used with blockbuster drugs generating the highest prices and profits. **Of the roughly 100 best-selling drugs, more than 70 percent have extended their protection** from competition at least once. More than half have extended the protection cliff multiple times. The true scope and cost of evergreening has been brought into sharper focus by a groundbreaking, publicly available, comprehensive database released Thursday by the Center for Innovation at the University of California Hastings College of Law and supported by Arnold Ventures. **The Evergreen Drug Patent Search is the first database to exhaustively track the patent protections filed by pharmaceutical companies**. Using data from 2005 to 2018 on brand-name drugs listed in the FDA’s Orange Book — a listing of relevant patents for brand name, small molecule drugs — it demonstrates the full extent of how evergreening has been used by Big Pharma to prolong patents and delay the entry of generic, lower-cost competition. “Competition is the backbone of the U.S. economy,” said Professor Robin Feldman, Director of the UC Hastings Center for Innovation, who spearheaded the database’s creation. “But it’s not what we’re seeing in the drug industry. “With evergreening, pharmaceutical companies repeatedly make slight, often trivial, modifications to drugs, dosage levels, delivery systems or other aspects to obtain new protections,” she said. “They pile these protections on over and over again — so often that 78 percent of the drugs associated with new patents were not new drugs coming on the market, but existing drugs.” Competition is the backbone of the U.S. economy. But it’s not what we’re **seeing in the drug industry**. Professor Robin Feldman Director of the UC Hastings Center for Innovation In recent decades, evergreening has systematically undermined the Drug Price Competition and Patent Term Restoration Act of 1984, which created the generic drug industry. Commonly known as the Hatch-Waxman Act, it established a new patent and market exclusivity regime in which new drugs are protected from competition for a specified period of time sufficient to allow manufacturers to recoup their investments and earn a reasonable profit. When that protection expires, generic drug makers are incentivized to enter the market through a streamlined regulatory and judicial process. Drug prices typically drop by as much as 20 percent when the first generic enters the market**, and with more than one generic manufacturer, prices can plummet by 80 to 85 percent**. “Hatch-Waxman created an innovation/reward/competition cycle, but it’s been distorted into an innovation/reward/more reward cycle,” Feldman said. “To paraphrase something a former FDA commissioner once said, the greatest creativity in Big Pharma should come from the research and development departments, not from the legal and marketing departments.” Feldman led the development of the Evergreen Drug Patent Search in response to repeated requests from Congressional committees, members of Congress, state regulators and journalists for information about specific drugs and companies. “We want to make it so anyone can have the question about drug protections at their fingertips whenever they want,” Feldman said. “It’s designed to be easy and user-friendly, and to enhance public understanding about how competition may be limited rather than enhanced through the drug patent system.” The **database** was **created through** a painstaking process of **combing** through **160,000 data points** **to examine every instance where a pharmaceutical company added a new drug patent or exclusivity**. “Most of it was done by hand,” Feldman said, “with multiple people reviewing it at every stage. And along the way we repeatedly made conservative choices. **We erred on the side of underrepresenting the evergreen gain**

to be sure we were as fair and reasonable as possible.” Among the 2,065 drugs covered in Evergreen Drug Patent Search, there are many examples of the evergreening strategy used by pharma to delay the entry of competition, especially generics, often for widely prescribed drugs, including those used to treat heartburn, chronic pain, and opioid addiction. Nexium Before Nexium, there was Prilosec, a popular drug to treat gastroesophageal reflux disease (GERD). But its patent exclusivity was due to expire in April 2001. In the late 1990s, with a precipitous drop in revenue looming, Prilosec’s manufacturer, AstraZeneca, decided to develop a replacement drug. Using “one-half of the Prilosec molecule — an isomer of it,” the result was Nexium, which received approval in February 2001. Essentially an evergreened version of Prilosec, Nexium’s exclusivity was then extended by more than 15 years, as AstraZeneca received 97 protections stemming from 16 patents. These included revised dosages, compounds, and formulations. Feldman said that tinkering changes such as Nexium’s do not involve the substantial research and development required for a new drug, nor do they constitute true innovations, yet for a decade and a half, patients and taxpayers were forced to pay far more than was warranted for GERD relief. In fact, in 2016 — one year after patent exclusivity expired — Nexium still topped all drugs in Medicare Part D spending, totaling $1.06 billion. Suboxone Use of this combination of buprenorphine and naloxone for treating opioid addiction has exploded in the wake of the opioid epidemic. Since its approval, Suboxone’s manufacturer, Reckitt Benckiser (now operating as Indivior), extended its protection cliff eight times, gaining nearly two extra decades of exclusivity through early 2030. The drug maker gained six patents for creating a film version of the drug — notably around the time protection was expiring for its tablet version. (The therapeutic benefits of the film and tablet are identical.) An earlier version of Suboxone also obtained an orphan drug designation, despite an opioid epidemic that has expanded Suboxone’s customer base to millions of potential customers. Suboxone generates more than $1 billion in annual revenue and ranks among the 40 top-selling drugs in the U.S. Truvada When Truvada, commonly referred to as PrEP, was approved in 2004, this HIV-prevention drug was a breakthrough. But 16 years later — and 14 years after its original exclusivity was to expire — it retains its monopoly status. Truvada’s manufacturer, Gilead, has received 15 patents and 120 protections since it came on the market, extending its exclusivity for more than 17 years, until July 3, 2024. In countries where generic Truvada is available, PrEP costs $100 or less per month, compared to $1,600 to $2,000 in the U.S. As a result, Truvada is unaffordable to many people **who need protection from HIV**. Barred from access, they are left vulnerable to infection. “We’re establishing a precedent that a pharmaceutical company can charge whatever it wants even as it allows an epidemic to continue, and the government refuses to intervene,” said James Krellenstein, co-founder of the group PrEP4All. “That should scare every American. If it’s HIV today, it will be another disease tomorrow.” EpiPen First approved in 1987, the EpiPen has saved the lives of countless numbers of people with deadly allergies. But it is protected from competition until 2025 — 38 years after its introduction — because its owner, Mylan, has filed five patents, four since 2010, all involving tweaks to the automatic injector. The actual medication used, epinephrine, has existed for more than a century — the innovation here is in the delivery device.

#### 2 impacts:

#### 1] Only innovation now solves AMR super-bugs -- timeframe’s key.

Sobti 19 [Dr. Navjot Kaur Sobti is an internal medicine resident physician at Dartmouth-Hitchcock-Medical Center/Dartmouth School of Medicine and a member of the ABC News Medical Unit. May 1, 2019. “Amid superbug crisis, scientists urge innovation”. <https://abcnews.go.com/Health/amidst-superbug-crisis-scientists-urge-innovation/story?id=62763415>] Dhruv

[The United Nations](https://abcnews.go.com/Politics/amal-clooney-angelina-jolie-speak-us-weighed-vetoing/story?id=62574726) has called antimicrobial resistance a “global crisis.” With the [rise in superbugs](https://abcnews.go.com/Health/superbug-fungus-global-health-threat-600-us-infected/story?id=62297532) across the globe, common infections are becoming harder to treat, and lifesaving procedures riskier to perform. Drug-resistant infections result in about 700,000 deaths per year, with at least 230,000 of those deaths due to multidrug resistant tuberculosis, [according to a groundbreaking report from the World Health Organization (WHO).](https://www.who.int/antimicrobial-resistance/interagency-coordination-group/IACG_final_report_EN.pdf?ua=1) Given that antibiotic resistance is present in every country, antimicrobial resistance (AMR) now represents a global health crisis, according to the UN, which has urged immediate, coordinated and global action to prevent a potentially devastating health and financial crisis. With the rising rates of AMR -- including antivirals, antibiotics, and antifungals -- estimates from the WHO show that AMR may cause 10 million deaths every year by 2050, send 24 million people into extreme poverty by 2030, and lead to a financial crisis as severe as the on the U.S. experienced in 2008. Antimicrobial resistance develops when germs like bacteria and fungi are able to “defeat the drugs designed to kill them,” according to the Centers for Disease Control and Prevention. Through a biologic “survival of the fittest,” germs that are not killed by antimicrobials and continue to grow. WHO explains that “poor infection control, inadequate sanitary conditions and inappropriate food handling encourage the spread” of AMR, which can lead to “superbugs.” Those superbugs require powerful and oftentimes more expensive antimicrobials to treat. Examples of superbugs are far and wide, and can range from drug-resistant bacteria like Pseudomonas aeruginosa and Staphylococcus aureus to fungi like Candida. These bugs can cause illnesses that range from pneumonia to urinary tract and sexually transmitted infections. According to the WHO, AMR has caused complications for nearly 500,000 people with tuberculosis, and a number of people with HIV and malaria. The people at the [highest risk for AMR](https://www.who.int/news-room/detail/27-02-2017-who-publishes-list-of-bacteria-for-which-new-antibiotics-are-urgently-needed) are those with chronic diseases, people living in nursing homes, hospitalized in the ICU or undergoing life-saving treatments such as organ transplantation and cancer therapy. These people often develop infections, which can become antimicrobial-resistant, rendering them difficult, if not impossible, to treat. [(MORE: Melissa Rivers talks about her father's suicide with Dr. Jennifer Ashton)](https://abcnews.go.com/Health/melissa-rivers-talks-fathers-suicide-dr-jennifer-ashton/story?id=62733179&cid=clicksource_26_null_headlines_hed) The CDC notes that “antibiotic resistance has the potential to affect people at any stage of life,” including the “healthcare, veterinary, and agriculture industries, making it one of the world’s most urgent public health problems." AMR can cause prolonged hospital stays, billions of dollars in healthcare costs, disability, and potentially, death. “The most important thing is to understand and embrace the interconnectedness of all of this,” said Dr. Robert Redfield, director of the CDC, in a recent interview with ABC News’ Dr. Jennifer Ashton. It’s not just our countries that are connected.” Research has shown that superbugs like Candida auris “came from multiple places, at the same time. It wasn’t just one organism that [evolved]” in a single location, Redfield added. Given longstanding concerns about antimicrobial misuse leading to AMR, physicians have embraced a medical approach called antibiotic stewardship. This encourages physicians to carefully evaluate which antibiotic is most appropriate for their patient, and discontinue it once it is no longer medically needed. WHO has also highlighted that the inappropriate use of antimicrobials in agriculture -- such as on farms and in animals -- may be an underappreciated cause of AMR. Noting these trends, the WHO has urged for “coordinated action...to minimize the emergence and spread of antimicrobial resistance.” It urges all countries to make national action plans, with a focus on the development of new antimicrobial medications, vaccines, and careful antimicrobial use. Redfield emphasized the importance of vaccination during the global superbug crisis, stating that “the only way we have to eliminate an infection is vaccination.” He added that investing in innovation is key to solving the crisis. While WHO continues to advocate for superbug awareness, they warn that AMR has reversed “a century of progress in health.” The WHO added that “the challenges of antimicrobial resistance” are “not insurmountable,” and that coordinated action will “help to save millions of lives, preserve antimicrobials for generations to come and secure the future from drug-resistant diseases.”

#### Evolving superbugs trigger extinction.

Srivatsa ’17 (Kadiyali; specialist in pediatric intensive and critical care medicine in the UK. Invented the bacterial identification tool ‘MAYA’; 1-12-2017; "Superbug Pandemics and How to Prevent Them", American Interest; https://www.the-american-interest.com/2017/01/12/superbug-pandemics-and-how-to-prevent-them/, Accessed: 8-31-2021; AU)

It is by now no secret that the human species is locked in a race of its own making with “superbugs.” Indeed, if popular science fiction is a measure of awareness, the theme has pervaded English-language literature from Michael Crichton’s 1969 Andromeda Strain all the way to Emily St. John Mandel’s 2014 Station Eleven and beyond. By a combination of massive inadvertence and what can only be called stupidity, we must now invent new and effective antibiotics faster than deadly bacteria evolve—and regrettably, they are rapidly doing so with our help. I do not exclude the possibility that bad actors might deliberately engineer deadly superbugs.1 But even if that does not happen, humanity faces an existential threat largely of its own making in the absence of malign intentions. As threats go, this one is entirely predictable. The concept of a “black swan,” Nassim Nicholas Taleb’s term for low-probability but high-impact events, has become widely known in recent years. Taleb did not invent the concept; he only gave it a catchy name to help mainly business executives who know little of statistics or probability. Many have embraced the “black swan” label the way children embrace holiday gifts, which are often bobbles of little value, except to them. But the threat of inadvertent pandemics is not a “black swan” because its probability is not low. If one likes catchy labels, it better fits the term “gray rhino,” which, explains Michele Wucker, is a high-probability, high-impact event that people manage to ignore anyway for a raft of social-psychological reasons.2 A pandemic is a quintessential gray rhino, for it is no longer a matter of if but of when it will challenge us—and of how prepared we are to deal with it when it happens. We have certainly been warned. The curse we have created was understood as a possibility from the very outset, when seventy years ago Sir Alexander Fleming, the discoverer of penicillin, predicted antibiotic resistance. When interviewed for a 2015 article, “The Most Predictable Disaster in the History of the Human Race,” Bill Gates pointed out that one of the costliest disasters of the 20th century, worse even than World War I, was the Spanish Flu pandemic of 1918-19. As the author of the article, Ezra Klein, put it: “No one can say we weren’t warned. And warned. And warned. A pandemic disease is the most predictable catastrophe in the history of the human race, if only because it has happened to the human race so many, many times before.”3 Even with effective new medicines, if we can devise them, we must contain outbreaks of bacterial disease fast, lest they get out of control. In other words, we have a social-organizational challenge before us as well as a strictly medical one. That means getting sufficient amounts of medicine into the right hands and in the right places, but it also means educating people and enabling them to communicate with each other to prevent any outbreak from spreading widely. Responsible governments and cooperative organizations have options in that regard, but even individuals can contribute something. To that end, as a medical doctor I have created a computer app that promises to be useful in that regard—of which more in a moment. But first let us review the situation, for while it has become well known to many people, there is a general resistance to acknowledging the severity and imminence of the danger. What Are the Problems? Bacteria are among the oldest living things on the planet. They are masters of survival and can be found everywhere. Billions of them live on and in every one of us, many of them helping our bodies to run smoothly and stay healthy. Most bacteria that are not helpful to us are at least harmless, but some are not. They invade our cells, spread quickly, and cause havoc that we refer to generically as disease. Millions of people used to die every year as a result of bacterial infections, until we developed antibiotics. These wonder drugs revolutionized medicine, but one can have too much of a good thing. Doctors have used antibiotics recklessly, prescribing them for just about everything, and in the process helped to create strains of bacteria that are resistant to the medicines we have. We even give antibiotics to cattle that are not sick and use them to fatten chickens. Companies large and small still mindlessly market antimicrobial products for hands and home, claiming that they kill bacteria and viruses. They do more harm than good because the low concentrations of antimicrobials that these products contain tend to kill friendly bacteria (not viruses at all), and so clear the way for the mass multiplication of surviving unfriendly bacteria. Perhaps even worse, hospitals have deployed antimicrobial products on an industrial scale for a long time now, the result being a sharp rise in iatrogenic bacterial illnesses. Overuse of antibiotics and commercial products containing them has helped superbugs to evolve. We now increasingly face microorganisms that cannot be killed by antibiotics, antifungals, antivirals, or any other chemical weapon we throw at them. Pandemics are the major risk we run as a result, but it is not the only one. Overuse of antibiotics by doctors, homemakers, and hospital managers could mean that, in the not-too-distant future, something as simple as a minor cut could again become life-threatening if it becomes infected. Few non-medical professionals are aware that antibiotics are the foundation on which nearly all of modern medicine rests. Cancer therapy, organ transplants, surgeries minor and major, and even childbirth all rely on antibiotics to prevent infections. If infections become untreatable we stand to lose most of the medical advances we have made over the past fifty years.

#### 2] Pharma spills-over – has cascading global impacts that are necessary for human survival.

NAS 8 National Academy of Sciences 12-3-2008 “The Role of the Life Sciences in Transforming America's Future Summary of a Workshop” //Re-cut by Elmer

Fostering Industries to Counter Global Problems The life sciences have applications in areas that range far beyond human health. Life-science based approaches could **contribute to advances in** many industries, from energy production and pollution remediation, to clean manufacturing and the production of new biologically inspired materials. In fact, biological systems could provide the basis for new products, services and industries that we cannot yet imagine. Microbes are already producing biofuels and could, through further research, provide a major component of future energy supplies. Marine and terrestrial organisms extract carbon dioxide from the atmosphere, which suggests that biological systems could be used to help manage climate change. Study of the complex systems encountered in biology is decade, it is really just the beginning.” Advances in the underlying science of plant and animal breeding have been just as dramatic as the advances in genetic can put down a band of fertilizer, come back six months later, and plant seeds exactly on that row, reducing the need for fertilizer, pesticides, and other agricultural inputs. Fraley said that the global agricultural system needs to adopt the goal of doubling the current yield of **crops while reducing key inputs like pesticides, fertilizers, and water** by one third. “It is more important than putting a man on the moon,” he said. Doubling agricultural yields would “change the world.” Another billion people will join the middle class over the next decade just in India and China as economies continue to grow. And all people need and deserve secure access to food supplies. Continued progress will require both basic and applied research, The evolution of life “put earth under new management,” Collins said. Understanding the future state of the planet will require understanding the biological systems that have shaped the planet. Many of these biological systems are found in the oceans, which cover 70 percent of the earth’s surface and have a crucial impact on weather, climate, and the composition of the atmosphere. In the past decade, new tools have become available to explore the microbial processes that drive the **chemistry of the oceans**, observed David Kingsbury, Chief Program Officer for Science at the Gordon and Betty Moore Foundation. These technologies have revealed that a large proportion of the planet’s genetic diversity resides in the oceans. In addition, many organisms in the oceans readily exchange genes, creating evolutionary forces that can have global effects. The oceans are currently under great stress, Kingsbury pointed out. Nutrient runoff from agriculture is helping to create huge and expanding “dead zones” where oxygen levels are too low to sustain life. Toxic algal blooms are occurring with higher frequency in areas where they have not been seen in the past. Exploitation of ocean resources is disrupting ecological balances that have formed over many millions of years. Human-induced changes in the chemistry of the atmosphere are changing the chemistry of the oceans, with potentially catastrophic consequences. “If we are not careful, we are not going to have a sustainable planet to live on,” said Kingsbury. Only by understanding the basic biological processes at work in the oceans can humans live sustainably on earth.

#### Climate change destroys the world.

Specktor 19 [Brandon writes about the science of everyday life for Live Science, and previously for Reader's Digest magazine, where he served as an editor for five years] 6-4-2019, "Human Civilization Will Crumble by 2050 If We Don't Stop Climate Change Now, New Paper Claims," livescience, <https://www.livescience.com/65633-climate-change-dooms-humans-by-2050.html> JW

\*\*Cites and talks about the Spratt and Dunlop study

What might an accurate worst-case picture of the planet's climate-addled future actually look like, then? The authors provide one particularly grim scenario that begins with world governments "politely ignoring" the advice of scientists and the will of the public to decarbonize the economy (finding alternative energy sources), resulting in a global temperature increase 5.4 F (3 C) by the year 2050. At this point, the world's ice sheets vanish; brutal droughts kill many of the trees in the [Amazon rainforest](https://www.livescience.com/57266-amazon-river.html) (removing one of the world's largest carbon offsets); and the planet plunges into a feedback loop of ever-hotter, ever-deadlier conditions.

"Thirty-five percent of the global land area, and 55 percent of the global population, are subject to more than 20 days a year of [lethal heat conditions](https://www.livescience.com/55129-how-heat-waves-kill-so-quickly.html), beyond the threshold of human survivability," the authors hypothesized.

Meanwhile, droughts, floods and wildfires regularly ravage the land. Nearly one-third of the world's land surface turns to desert. Entire ecosystems collapse, beginning with the planet's coral reefs, the rainforest and the Arctic ice sheets. The world's tropics are hit hardest by these new climate extremes, destroying the region's agriculture and turning more than 1 billion people into refugees.

This mass movement of refugees — coupled with [shrinking coastlines](https://www.livescience.com/51990-sea-level-rise-unknowns.html) and severe drops in food and water availability — begin to stress the fabric of the world's largest nations, including the United States. Armed conflicts over resources, perhaps culminating in nuclear war, are likely.

The result, according to the new paper, is "outright chaos" and perhaps "the end of human global civilization as we know it."

#### 1] Disparities within health are not ontological but formed and maintained by social norms upheld by legal indifference – solving the discriminatory practices of public health is uniquely key as a starting point

Matthew 18, Dayna Bowen. Just medicine: A cure for racial inequality in American health care. NYU Press, 2018. (Resident senior fellow in the Center for Health Policy, who works at the University of Colorado School of Law, the Colorado School of Public Health, and the Center for Bioethics and Humanities at the University of Colorado Health Sciences Center specializes in health and behavioral sciences and her research interests include public health law, poverty, and ethics in health professions)//Elmer

For the past thirty years, medical doctors, social scientists, psychologists, policy analysts, jurists, and a wide spectrum of health care providers have been studying and discussing health inequality in America. Meanwhile, by one estimate, 83,570 minority patients die annually due to health care disparities. Black and brown patients consistently receive inferior medical treatment—fewer angiographies, bypass surgeries, organ transplants, cancer tests, and resections, less access to pain treatment, rehabilitative services, asthma remedies, and nearly every other form of medical care—than their white counterparts. Yet minority patients are sicker and more likely to die than whites from a wide range of diseases and illnesses for which we have data. Certainly, this picture is complicated. For example, health and illness for all racial and ethnic groups follow a social gradient so that minority populations, which disproportionately occupy low socioeconomic strata, also predictably suffer relatively worse health outcomes than whites do. Although it is popular to blame the poor for the their poor healthy by pointing to risky health behaviors, careful studies of nationally representative populations conclude that the significantly higher prevalence of cigarette smoking, alcohol consumption, obesity, and physical inactivity are only one aspect of the relationship between lower socioeconomic status and poor health. Moreover, behavioral disparities must not be taken out of their societal context where unequal exposure to the stress of discrimination, inequitable access to healthy food and built environments, and inferior access to resources generally are integrally associated with many racial and ethnic differences in health behavior. In fact, racial and ethnic differences in health treatment and outcomes persist in multiple studies even after controlling for differences in insurance status, income, education, geography, and socioeconomic status. Researchers have identified numerous structural and individual determinants of these disparities at all levels. These include socioeconomic circumstances such as poverty, inferior education, and segregated housing conditions along with lack of access to healthy food choices or recreational facilities; systemic and organizational contributors such as medical practice settings and sources of insurance; and geographic proximity to care. The economic and social conditions called “social determinants of health” often drive patient-specific contributors to poor health such as poor family health history, diet, and low physical activity. All have been shown to contribute to the disparity of health outcomes experience by ethnic and racial minority patients in the United States. However, this book is about the single most important determinant of health disparities that is not being widely discussed in straightforward terms: this determinant is racial and ethnic discrimination against minority patient populations, an uncontrovertibly significant contributor to health inequality. The evidence that the majority of Americans involuntarily harbor anti-minority prejudices makes it impossible, even immoral, not to examine the impact of unconscious racism on health and health care. Therefore, this book makes a thorough examination of the scientific evidence that does exist to confirm that providers discriminate against patients and patients discriminate against providers. This cycle of discrimination produces inequality throughout the health care system. The inequality itself is not news. But the fact that it is avoidable challenges the complacency that allows the racial and ethnic discrimination that produces them to persist. This book calls for providers, patients, scientists, and jurists to face the uncomfortable truth that although overt racism, prejudice, and bigotry may have subsided in America, racial and ethnic injustice, unfairness, and even segregation in American health care have not. The most tragic proof that racial and ethnic injustice is alive and well is the phenomenon we politely call “health disparities.” The message of this book is that a significant cause of these health disparities is the unconscious racial and ethnic bias that infects our delivery system. Implicit racial and ethnic biases in health care are harmful, avoidable, and unjust. This book charts a way to deal with health and health care disparities as injustices, not merely as inevitable byproducts of human nature or a phenomenon subordinate to biological and social differences. Instead, the argument made here is that health inequality due to unconscious discrimination is a structural malady in need of a system cure. This book lays bare a disturbing contradiction. On one hand, injustice and inequality are anathema to our professed national identity. Yet on the other hand, unconscious bias has become an entrenched and acceptable social norm, empirically demonstrated to control decision-makers not only in health care, but in civil and criminal justice proceedings, law enforcement, employment, media, and education. Unconscious racism has become the new normal. Thus, to defeat inequality due to unconscious racism in health care, individuals as well as institutions must realign themselves away from this social norm that is incongruous with the core underlying values to which our nation’s doctors, patients, and health care professionals expressly aspire. The solutions this book proposes are comprehensive; they have their origin in law, and to some this may seem radical. But they are solutions grounded in a historical and empirical record. The solutions are further supported by original, qualitative interviews reported here. These narratives allow doctors, nurses, and patients to bring their voices and real-life experiences to bear on a worthy cause: achieving justice and equity in American health care. Chapter 1 recounts the historical origins of legally enforced discrimination that have laid the structural foundations for African, Asian, Hispanic, and Native Americans to suffer inferior health outcomes in the United States since this country’s inception. I argue that law has directly influenced the differences in health and health care experiences between minorities and whites throughout our nation’s history. When laws enforced slavery, segregations, and nationalism, minority health fared poorly. During the periods of our history when civil rights laws were effectively used to desegregate health care and promote equal access, health care disparities improved.

Today, however, traditional civil rights laws have become irrelevant in the effort to bring justice to health care. Those antidiscrimination laws punish only outright bigotry and the most virulent forms of racism. Now that these forms of overt racism are out of vogue and mostly absent from the health care system, the rule of law has been neutralized and no longer controls racial discrimination. Therefore, the great American traditional of running two separate and unequal medical systems for white and non-white patients is back. Chapter 2 explains the nature and evidence of discrimination in contemporary health care. The quantitative and qualitative data gathered in this chapter explain that health care providers unintentionally discriminate against racial and ethnic minority patients—and that their unintentional discrimination directly and substantially contributes to ethnic and racial health care disparities. Moreover, the evidence also shows that patients hold implicit biases and thus react to providers discrimination through the lens of their own experiences with race bias and inequity. The result is a viciously reciprocal cycle of miscommunication between doctors and patients that ultimately harms patients’ health. When patients perceive or experience discrimination arising from implicit biases, they often respond rationally by seeking to minimize the reoccurrence of the offense. Thus, minority patients are more likely to switch providers, less likely to follow up on or adhere to their doctors’ advice, and more likely to generally distrust their providers. Decreased patient satisfaction and decreased continuity of care follow, to the detriment of minority health outcomes. Much of the current discourse on health disparities “blames the victim,” charging patients with non-adherence and with poor diet and living choices or alleging the existence of biologically based justifications for inequality. My analysis of patient bias does not belong to this genre. Instead, I employ the evidence that patients unconsciously react negatively to unconscious racism to explain how implicit bias is a culprit on both sides of the clinical encounter, which occurs within a structurally unsound environment that in turn reinforces bias. Chapter 3 presents a preponderance of evidence showing that providers’ disparate treatment of their minority patients is closely associated with their implicit racial and ethnic biases. This chapter identifies physicians’ unconscious racism as a primary contributor to health disparities. Chapters 4, 5, and 6 present the Biased Care Model, one of this book’s core contributions to advance our understanding of health and health care disparities. The Biased Care Model organizes the best social science literature on implicit bias into a conceptual framework to answer important, but hitherto unresolved questions raised by the Institute of Medicine in its landmark 2003 report on American health disparities. Specifically, the Biased Care Model identifies the mechanisms by which implicit biases affect disparate health outcomes. The model explains how health providers continue to discriminate against minority patients even as polls and surveys tell us that most Americans, especially doctors, are decidedly not racists. The model’s mechanisms are grounded in empirical literature and are supported by the voices of doctors and patients whose interviews confirm the presence and influences of implicit biases in their clinical experiences. Thus, the rich qualitative and quantitative data that supports the Biased Care Model spans three chapters. Chapter 4 describes the impact implicit biases have before a physician and patient meet, chapter 5 discusses the role of implicit biases during the clinical encounter, and chapter 6 examines the mechanisms that permit implicit biases to continue contributing to health disparities even after the clinical encounter ends. The questions these chapters confront are tough, and the facts are uncomfortable. The answers the Biased Care Model provides fill an important void in our understanding of the way health inequalities evolve, and thus they lay the foundation for fashioning evidence-based policy solutions. Chapter 7 introduces an evidentiary “game changer” in the discourse about addressing implicit bias in health care. This chapter explains the social science evidence that implicit racial and ethnic biases are malleable. Contrary to popular fiction, unconscious racism is neither inevitable nor unalterable. This chapter is full of evidence that confirms that the habit of acting out of one’s implicit racial biases can be changed. Therefore, the chapter concludes, health care providers and the institutions that employ them can be held morally responsible for addressing the inequities these biases cause. This chapter opens the way for structural responses to the health disparity crisis. The next chapter explains why responding to this crisis is not only a moral responsibility, but also appropriately a legal one.

Chapter 8 answers the question that will plague many health care providers who read this book, especially those who are sympathetic to the cause of justice and equality in health care: Why do we need a law to deal with implicit bias? The short answer is that other avenues will simply not work. Political efforts at universalizing access, regulatory efforts at enforcing cultural competency, and private efforts at “doing the right thing” have all failed. At best, these well-intentioned efforts have only reinforced the culture in which it is assumed that explicit racial motives have little remaining influence on health disparities today. Implicit biases are not entirely impervious to these programs and policies, but the public health policy literature helps to explain why they are insufficient solutions. The more complete answer is that health care disparities are rooted in structural inequities and therefore require a structural solution. Consequently, the legal reforms I propose will change the context in which health care is delivered and shift the social norm that has tolerated health inequality for far too long. The policy problem presented by health care disparities has both the good and bad fortune to be a late-comer to the list of complex practical conundrums that fundamentally challenge broad constitutionally protected American values such as racial equality and justice, but require interventions at the intersection of law and science to solve. For example, law has joined with scientific expertise to help regulate the evolving challenges presented by climate change, genetically modified foods. and pharmacogenomics just to name a few examples. Accordingly, chapter 8 makes the case for strengthening legal interventions to promote health equality. Chapter 9 proposes concrete reforms founded on legal and scientific solutions to the problem of racial and ethnic health disparities. This chapter challenges current antidiscrimination law’s “naive” assumption that humans act solely in accordance with their explicit and conscious intentions. In fact, the scientific evidence indicates that we all act much more consistently with our unconscious and implicit intentions. I compare the assumptions about human behavior that underlie the current law to what we know about real human behavior as it impacts health and health care, and I argue that antidiscrimination law should better match reality. I conclude with an appeal for action directed towards the four stakeholder groups I hope to impact most: social scientists, health care providers, law and policy-makers, and patients. I ask each group to consider its role in eradicating health inequality and to consider this book’s broader implications for the fight for racial and ethnic equality beyond health care. While my focus here is on unconscious racism, I do not overlook other determinants of health disparities that will not succumb to legal remedies. Changing only the law will not solve the socioeconomic disparities that lie at the foundation of our society and produce the poor health experienced by many poor people. Yet neither do I use the complexity of the problem and its causes as an excuse to avoid forthrightly addressing the pervasiveness of discriminatory health care. I also cannot shrink from confronting implicit racial bias due to a seemingly paralyzing fear that doing so is the equivalent of charging health care providers with outright racism and bigotry. The cure for this paralysis is an accurate understanding that implicit and unconscious biases are facts of American life that contradict and work against most Americans’ true intentions. Physicians are no exception; they need not be racist to discriminate against racial minorities. Nevertheless, discrimination due to implicit bias must be addressed because it unnecessarily decreases the quality and length of life of people in this country who are not white. Distinguishing overt from unconscious racism frees us to honestly and candidly address the problem of providers’ implicit bias. In the process. we will see that the scientific evidence is legally sufficient to warrant or even mandate reform of antidiscrimination law. I reach one primary conclusion in this book. It is that the presently available social science evidence associating implicit racial and ethnic bias with health disparities provides a morally compelling and legally sufficient basis for legal action. A sufficient stack of “further research” –the social scientist’s beloved refrain—could not be generated fast enough to slow the devastating effects of implicit bias on the lives of tens of thousands of minority patients each year. Ignoring health disparities due to discrimination is costly. In addition to the nearly 84,000 people of color who needlessly lose their lives annually due to health disparities, there are significant economic burdens imposed by health care discrimination. A 2009 report by the Joint Center for Political and Economic Studies estimated that eliminating health disparities would have reduced direct medical care expenditures by $229.4 billion and indirect costs due to illness and premature death by approximately $1 trillion during 2003-2006. Therefore, the pages that follow unite the medical, neuroscientific, psychological, and sociological expertise on the issue of implicit bias and health disparities with the powerful influence of explicit and enforceable rules of law to devise an effective and innovative plan to reduce implicit biases in health care and eliminate the inequity they cause so that all in America can enjoy a just, humane health care system, regardless of color, race, or national origin.

#### 2] Debates surrounding health policies are good.

Shelton 17, Rachel C., Derek M. Griffith, and Michelle C. Kegler. "The promise of qualitative research to inform theory to address health equity." Health Education & Behavior 44.5 (2017): 815-819. (Assistant Professor, Sociomedical Sciences, Columbia University)//Elmer

In the 30 years since the 1985 Secretary’s Task Force Report on Black and Minority Health was released (Heckler, 1985), the 20 years since Society of Public Health Education (SOPHE) published its first research agenda (Clark & McLeroy, 1995), and the decade since the Inaugural SOPHE Summit on Eliminating Racial and Ethnic Health Disparities (Airhihenbuwa, 2006), the patterns of health and illness in the United States continue to tell a story of societal inequity. Whether implicit or explicit, theory is critical in that it serves as a lens through which we can view the contours of health issues and inequities. Given our modest progress in reducing health disparities over the past 20 years, it is possible that our current theories are not directing us to the priority determinants, which, if modified, could enable us make significant progress in achieving health equity. It is also plausible that the theory-based change strategies and interventions that researchers and practitioners typically implement fall short of what is needed to create significant changes to redress structural, social, and historical injustices that have contributed to health disparities. Qualitative methods are uniquely poised to offer insight into not just the theory of the problem but insight into the principles and theories that may be the best candidates on which to build an intervention (McLeroy et al., 1993). Yet qualitative methods (used on their own or in the context of mixed-methods research) tend to be perceived within the scientific community as less valuable and important than quantitative methods in the context of health disparities research. To understand the perspectives, context, and daily lives and experiences that shape health, qualitative research is essential. Particularly in the context of health education and health promotion, qualitative research has provided critical insights into the factors that shape modifiable determinants of health across all levels of the ecological model (McLeroy, Bibeau, Steckler, & Glanz, 1988). Previously, there has been little critical or systematic consideration of how qualitative research could be used to advance research on health disparities or health equity in our field. In this commentary, we reflect on some of the theoretical and conceptual challenges facing health disparities and health equity research and highlight how qualitative methods provide important and unique insights that inform future research and practice. Role of Theory In health education and health promotion, we discuss the theory of the problem and change theories or theories of action (Glanz, Rimer, & Viswanath, 2015). Theories of the problem are explanatory and help identify and describe determinants of a problem and identify modifiable factors that can be prioritized for change (Glanz et al., 2015). Theories of change inform how to design intervention strategies that will influence priority determinants and also help pinpoint logical short-term and intermediate outcomes for logic models and evaluation efforts (Bartholomew, Parcel, Kok, Gottlieb, & Fernandez, 2011; Crosby, Kegler, & DiClemente, 2009; Eldredge, Markham, Ruiter, Kok, & Parcel, 2016; Glanz et al., 2015). Thus, theories provide an organizing framework for our research and practice by systematically guiding us toward constructs to target with our interventions and organize our evaluation and research results. Despite growing recognition of the importance of broader organizational, community, and policy-related factors in shaping health and health disparities, our field’s tendency to use theories at the individual and interpersonal levels is well documented (Golden & Earp, 2012; Painter, Borba, Hynes, Mays, & Glanz, 2008). Even our program and intervention planning models, which allow for selection of constructs from a range of theories depending on the identified determinants (Airhihenbuwa, 1995; Bartholomew et al., 2011; Green & Kreuter, 2005; Iwelunmor, Newsome, & Airhihenbuwa, 2014), largely rely on our existing theories to shape the questions we ask and how we go about addressing the identified determinants. In the context of informing efforts to pursue health equity, however, the challenge is that few of our theories specify how constructs intersect and interact across levels, and which of these are most powerful in explaining behavior and the environmental conditions that create, maintain, or exacerbate disparities. Moreover, our theories **generally** **do not provide guidance** as to which causal pathways are most likely to specifically reduce disparities and in which populations (Diez Roux, 2012). Additionally, theories at the higher levels of the social ecology are less likely to be operationalized and measured in a manner consistent with our quantitative research methods, which may present barriers to more widespread application. Furthermore, with some rare exceptions (e.g., critical race theory/public health critical race praxis; Ford & Airhihenbuwa, 2010a, 2010b), our existing theories in health behavior and health education neither critically examine nor address the important fundamental causes of health, including the social and political determinants that may be at the root of health inequities. Given the nature of short-term grant and budget cycles (and prohibitions on lobbying with federal funds), it is not surprising that the theories most typically pursued in our field focus on proximal or short-term outcomes and what is perceived as more easily addressable determinants of health. Therefore, as a field, we do not typically recognize or attempt to address historical and ongoing societal factors that have implications for health disparities like racism and power. The Promise of Qualitative Methods In considering how qualitative research might advance theory pertinent to health equity, it is first important to recognize that experts approach the application of theory in research from a variety of perspectives. Hennink, Hutter, and Bailey (2011) describe an interplay between deductive and inductive reasoning in their approach and describe how theory is central in the design phase with a clear role in framing research questions and informing conceptual models and frameworks (Hennink et al., 2011). Depending on the goal and context of the research, the analytic process can involve developing inductive theory or applying deductive codes from the research questions, existing theory, or conceptual frameworks. Hennink et al. (2011) argue there is always a theory underlying research and making it explicit is essential, typically in the form of a conceptual framework to guide the research (e.g., categories of questions asked, coding, organization of data, and results; Hennink et al., 2011). Patton (2015) describes theory primarily within the context of sampling and analysis. For example, he describes deductive theoretical sampling for deepening or verifying theory-derived constructs, giving examples such as resilience, trauma, and respect. He also describes inductive grounded theory sampling in which the sample is constructed as the emerging theory begins to take shape and evolves from exploratory to verification. These examples highlight that there is a vast array of opportunities for theory to inform disparities-oriented research. To date, however, there has been relatively little attention paid to the use of qualitative research to advance theory in the area of health disparities and health equity. The volume of literature describing health disparities and discussing strategies to eliminate health disparities has not made strong conceptual or empirical distinctions between minority health promotion and health disparities elimination (Srinivasan & Williams, 2014). While both outcomes are important and deserve attention, it is likely that each has different determinants and intervention strategies that matter most; as such, the theoretical and conceptual frameworks used to study them may also be different. Furthermore, there are some limitations to relying predominately on a comparative approach that has become the cornerstone of health disparities research in recent years (Bediako & Griffith, 2007). In this context, qualitative methods can play an important role in how we understand and describe the problem of health inequities and their determinants. Not only can these approaches help illuminate social, cultural, and political factors that may underlie health disparities, but qualitative approaches are also uniquely positioned to document and contextualize how these factors affect health across levels of the social–ecological framework in a more nuanced and in-depth way. Qualitative methods also have the potential to illuminate new theories of change, particularly those that operate at higher levels of the social ecological framework, as well as interactions between constructs at varying levels of the framework. Providing insight into how well-accepted theoretical constructs should be operationalized or adapted for specific subpopulations (e.g., social norms, social capital, intention, or attitudes; Burke, Bird, et al., 2009; Pasick, Barker, et al., 2009; Pasick, Burke, et al., 2009) is another potential strength of a qualitative approach. By acknowledging the complex interplay of factors that influence and underlie health disparities, social ecologic approaches that have been informed by qualitative methodologies may provide a good blueprint for moving toward health equity. While qualitative methods offer these possibilities, according to Hennink et al. (2011), without theory development of some kind, qualitative research ends purely in description,

which does not explain a phenomenon and neglects to answer “how” and “why” questions (Hennink et al., 2011). Similarly, Patton (2015) states that “much qualitative inquiry stops at reporting the explanations of the people studied” (p. 583) without attempting further qualitative causal analysis. He further acknowledges that asserting that qualitative analysis can yield causal explanations remains controversial, and this is undoubtedly true in health education and health promotion as well. This may relate in part to the tendency by qualitative researchers to downplay or minimize the generalizability of findings, often due to relatively small sample sizes, which is in sharp contrast to quantitative research that seeks to highlight the generalizability and reproducibility of its findings. However, we encourage our fellow qualitative researchers to go further with our studies and make a concerted (and well-documented) effort to develop, extend, or refine theory within the context of trying to figure out how to reduce health disparities, and when appropriate, to highlight any insights that are consistent with prior work and could be scaled up and tested on a broader scale. Moving Forward To make real progress in addressing health disparities and moving toward health equity will require a renewed commitment to and deeper understanding of qualitative research on the part of health disparities researchers in our field. In particular, we encourage researchers to move beyond only descriptive documentation of disparities toward thinking about mechanisms and theory building and refining, with an eye toward informing interventions, strategies, and health promotion messaging in public health and clinical contexts. Through this process, it will be important that researchers refrain from relying only on individual and interpersonal theories, and begin explicitly incorporating behavior change theories with theories at the social, organizational, community, and policy levels, and consider how factors interact synergistically across levels. While we agree that the field should be selective and parsimonious with respect to the development of new theories (Glanz et al., 2015), we also assert that with respect to promoting health equity, there is room for the development of new theories and refinement of theoretical constructs, particularly for those pertaining to the social, organizational, community, and policy levels. Building theoretical and conceptual frameworks and models that can be applied across multiple levels is highly pertinent to disparities research in several ways. First, these theories are more likely to address the larger societal and social factors that shape disparities and can help researchers identify which factors matter most across levels (e.g., what is most relevant and meaningful for a population), and should therefore be prioritized as intervention or policy targets. While most research to date has focused on using qualitative research to provide insight into the populations experiencing inequities, we recommend researchers use qualitative research to advance understanding of “behaviors in context,” and the settings and social context in which disparities arise (Burke, Joseph, Pasick, & Barker, 2009; Okechukwu, Davison, & Emmons, 2014). This includes investigating the contexts in which interventions to address disparities are implemented, with an eye toward theory building and theory refinement. Second, we encourage researchers to move beyond approaching health disparities largely as a single dimension toward considering the possible intersectionality of social dimensions that have implications for health equity (Bauer, 2014; Bowleg, 2008). Using qualitative research that is grounded in the daily experiences of people’s lives may help address the methodological challenges of thinking about social categories as additive and instead frame them as related and intersecting social structures that create and recreate social disadvantage and health inequity. There are also many opportunities for researchers to use more community-engaged, participatory, and action-oriented theories and frameworks that not only focus narrowly on health disparities but also encourage an assets-based approach that focuses on promoting health equity (Grieb, Smith, Calhoun, & Tandon, 2015; Wallerstein & Duran, 2006). This Commen-tary is consistent with Bowleg’s (2017) Perspective in Health Education & Behavior, which advocates for the wider use of critical theoretical frameworks in health equity research. In making advances in this area, it is also clear that we have much to learn from other disciplines that have rich histories in both theory and qualitative research, including anthropology, history, and sociology (Chowkwanyun, 2011; Hirsch, Wardlow, & Smith, 2009; Livingood et al., 2011; Livingood, Allegrante, & Green, 2016; Nathanson, 2007; Pasick & Burke, 2008). Of note, these fields have also incorporated a much broader range of qualitative approaches in their research (e.g., textual analysis, comparative ethnography) that we encourage researchers to explore and embrace. Finally, we recommend that in examining health disparity issues, researchers in this area be thoughtful and detailed in the social dimension and lenses through which they are grouping “disparity” populations, as there is tremendous diversity and heterogeneity within groups (e.g., documented differences among Latinos in health disparities and determinants of health by country of origin; Shelton, Jandorf, Thelemaque, King, & Erwin, 2012). This will help increase the likelihood that interventions will be developed or adapted with cultural specificity when needed (e.g., when the determinants are unique to that population) or will help identify when there are commonalities across social groups that can be addressed across disparity populations (Emmons, Barbeau, Gutheil, Stryker, & Stoddard, 2007; Goldman et al., 2003). In addition, qualitative research can be used to inform the operationalization and measurement of constructs that may be newly identified within a social context and/or are culturally specific (Airhihenbuwa, 2006; Airhihenbuwa & Liburd, 2006). In conclusion, we believe there is much work to do to make progress in both eliminating health disparities and promoting health equity. In fact, in examining qualitative research focused on promoting health equity, the majority of research, including the rich scholarship featured in this special issue, focuses on the methodological and intervention implications of their research findings. However, we also believe that there are tremendous opportunities for qualitative and health equity scholars to advance research and practice in this area through the expansion and application of rigorous, theoretically informed qualitative research. We hope researchers will recognize and seize this challenging, but critically important opportunity.

#### 3] Debate is imperfect, but only our interpretation can harness legal education to understand the law’s strategic reversibility paired with intellectual survival skills.

Archer 18, Deborah N. "Political Lawyering for the 21st Century." Denv. L. Rev. 96 (2018): 399. (Associate Professor of Clinical Law at NYU School of Law)//Elmer

Political justice lawyers must be able to break apart a systemic problem **into manageable components**. The complexity of social problems, can cause law students, and even experienced political lawyers, to become overwhelmed. In describing his work challenging United States military and economic interventions abroad, civil rights advocate and law professor Jules Lobel wrote of this process: “Our foreign-policy litigation became a sort of Sisyphean quest as we maneuvered through a hazy maze cluttered with gates. Each gate we unlocked led to yet another that blocked our path, with the elusive goal of judicial relief always shrouded in the twilight mist of the never-ending maze.”144 Pulling apart a larger, systemic problem into its smaller components can help elucidate options for advocacy. An instructive example is the use of excessive force by police officers against people of color. Every week seems to bring a new video featuring graphic police violence against Black men and women. Law students are frequently outraged by these incidents. But the sheer frequency of these videos and lack of repercussions for perpetrators overwhelm those students just as often. What can be done about a problem so big and so pervasive? To move toward justice, advocates must be able to break apart the forces that came together to lead to that moment: intentional discrimination, implicit bias, ineffective training, racial segregation, lack of economic opportunity, the over-policing of minority communities, and the failure to invest in non-criminal justice interventions that adequately respond to homelessness, mental illness, and drug addiction. None of these component problems are easily addressed, but breaking them apart is more manageable—and more realistic—than acting as though there is a single lever that will solve the problem. After identifying the component problems, advocates can select one and repeat the process of breaking down that problem until they get to a point of entry for their advocacy. 2. Identifying Advocacy Alternatives As discussed earlier, political justice lawyering embraces litigation, community organizing, interdisciplinary collaboration, legislative reform, public education, direct action, and other forms of advocacy to achieve social change. After parsing the underlying issues, lawyers need to identify what a lawyer can and should do on behalf of impacted communities and individuals, and this includes determining the most effective advocacy approach. Advocates must also strategize about what can be achieved in the short term versus the long term. The fight for justice is a marathon, not a sprint. Many law students experience frustration with advocacy because they expect immediate justice now. They have read the opinion in Brown v. Board of Education, but forget that the decision was the result of a decades-long advocacy strategy.145 Indeed, the decision itself was no magic wand, as the country continues to work to give full effect to the decision 70 years hence. Advocates cannot only fight for change they will see in their lifetime, they must also fight for the future.146 Change did not happen over night in Brown and lasting change cannot happen over night today. Small victories can be building blocks for systemic reform, and advocates must learn to see the benefit of short-term responsiveness as a component of long-term advocacy. Many lawyers subscribe to the American culture of success, with its uncompromising focus on immediate accomplishments and victories.147 However, those interested in social justice must adjust their expectations. Many pivotal civil rights victories were made possible by the seemingly hopeless cases that were brought, and lost, before them.148 In the fight for justice, “success inheres in the creation of a tradition, of a commitment to struggle, of a narrative of resistance that can inspire others similarly to resist.”149 Again, Professor Lobel’s words are instructive: “the current commitment of civil rights groups, women’s groups, and gay and lesbian groups to a legal discourse to legal activism to protect their rights stems in part from the willingness of activists in political and social movements in the nineteenth century to fight for rights, even when they realized the courts would be unsympathetic.”150 Professor Lobel also wrote about Helmuth James Von Moltke, who served as legal advisor to the German Armed Services until he was executed in 1945 by Nazis: “In battle after losing legal battle to protect the rights of Poles, to save Jews, and to oppose German troops’ war crimes, he made it clear that he struggled not just to win in the moment but to build a future.”151 3. Creating a Hierarchy of Values Advocates challenging complex social justice problems can find it difficult to identify the correct solution when one of their social justice values is in conflict with another. A simple example: a social justice lawyer’s demands for swift justice for the victim of police brutality may conflict with the lawyer’s belief in the officer’s fundamental right to due process and a fair trial. While social justice lawyers regularly face these dilemmas, law students are not often forced to struggle through them to resolution in real world scenarios—to make difficult decisions and manage the fallout from the choices they make in resolving the conflict. Engaging in complex cases can force students to work through conflicts, helping them to articulate and sharpen their beliefs and goals, forcing them to clearly define what justice means broadly and in the specific context presented. Lawyers advocating in the tradition of political lawyering anticipate the inevitable conflict between rights, and must seek to resolve these conflicts through a “hierarchy of values.”152 Moreover, in creating the hierarchy, the perspectives of those directly impacted and marginalized should be elevated “because it is in listening to and standing with the victims of injustice that the need for critical thinking and action become clear.”153 One articulation of a hierarchy of values asserts “people must be valued more than property. Human rights must be valued more than property rights. Minimum standards of living must be valued more than the privileged liberty of accumulated political, social and economic power. Finally, the goal of increasing the political, social, and economic power of those who are left out of the current arrangements must be valued more than the preservation of the existing order that created and maintains unjust privilege.”154 C. Rethinking the Role of the Clinical Law Professor: Moving From Expert to Colleague Law students can learn a new dimension of lawyering by watching their clinical law professor work through innovative social justice challenges alongside them, as colleagues. This is an opportunity not often presented in work on small cases where the clinical professor is so deeply steeped in the doctrine and process, the case is largely routine to her and she can predict what is to come and adjust supervision strategies accordingly.155 However, when engaged in political lawyering on complex and novel legal issues, both the student and the teacher may be on new ground that transforms the nature of the student-teacher relationship. A colleague often speaks about acknowledging the persona professors take on when they teach and how that persona embodies who they want to be in the classroom—essentially, whenever law professors teach they establish a character. The persona that a clinical professor adopts can have a profound effect on the students, because the character is the means by which the teacher subtly models for the student—without necessarily ever saying so— the professional the teacher holds herself to be and the student may yet become. In working on complex matters where the advocacy strategy is unclear, the clinical professor makes himself vulnerable by inviting students to witness his struggles as they work together to develop the most effective strategy. By making clear that he does not have all of the answers, partnering with his students to discover the answers, and sharing his own missteps along the way, a clinical law professor can reclaim opportunities to model how an experienced attorney acquires new knowledge and takes on new challenges that may be lost in smaller case representation.156 Clinical law faculty who wholeheartedly subscribe to the belief that professors fail to optimize student learning if students do not have primary control of a matter from beginning to end may view a decision to work in true partnership with students on a matter as a failure of clinical legal education. Indeed, this partnership model will inevitably impact student autonomy and ownership of the case.157 But, there is a unique value to a professor working with her student as a colleague and partner to navigate subject matter new to both student and professor.158 In this relationship, the professor can model how to exercise judgment and how to learn from practice: to independently learn new areas of law; to consult with outside colleagues, experts in the field, and community members without divulging confidential information; and to advise a client in the midst of ones own learning process.159 III. A Pedagogical Course Correction “If it offends your sense of justice, there’s a cause of action.” - Florence Roisman, Professor, Indiana University School of Law160 In response to the shifts in my students’ perspectives on racism and systemic discrimination, their reluctance to tackle systemic problems, their conditioned belief that strategic litigation should be a tool of last resort, and my own discomfort with reliance on small cases in my clinical teaching, I took a step back in my own practice. How could I better teach my students to be champions for justice even when they are overwhelmed by society’s injustice; to challenge the complex and systemic discrimination strangling minority communities, and to approach their work in the tradition of political lawyering. I reflected not only on my teaching, but also on my experiences as a civil rights litigator, to focus on what has helped me to continue doing the work despite the frustrations and difficulties. I realized I was spending too much time teaching my students foundational lawyering skills, and too little time focused on the broader array of skills I knew to be critical in the fight for racial justice. We regularly discussed systemic racism during my clinic seminars in order to place the students’ work on behalf of their clients within a larger context. But by relying on carefully curated small cases I was inadvertently desensitizing my students to a lawyer’s responsibility to challenge these systemic problems, and sending the message that the law operates independently from this background and context. I have an obligation to move beyond teaching my students to be “good soldiers for the status quo” to ensuring that the next generation is truly prepared to fight for justice.161 And, if my teaching methods are encouraging the reproduction of the status quo it is my obligation to develop new interventions.162 Jane Aiken’s work on “justice readiness” is instructive on this point. To graduate lawyers who better understand their role in advancing justice, Jane Aiken believes clinics should move beyond providing opportunities for students to have a social justice experience to promoting a desire and ability to do justice.163 She suggests creating disorienting moments by selecting cases where students have no outside authority on which to rely, requiring that they draw from their own knowledge base and values to develop a legal theory.164 Disorienting moments give students: experiences that surprise them because they did not expect to experience what they experienced. This can be as simple as learning that the maximum monthly welfare benefit for a family of four is about $350. Or they can read a [ ] Supreme Court case that upheld Charles Carlisle’s conviction because a wyer missed a deadline by one day even though the district court found there was insufficient evidence to prove his guilt. These facts are often disorienting. They require the student to step back and examine why they thought that the benefit amount would be so much more, or that innocence would always result in release. That is an amazing teaching moment. It is at this moment that we can ask students to examine their own privilege, how it has made them assume that the world operated differently, allowing them to be oblivious to the indignities and injustices that occur every day.165 Giving students an opportunity to “face the fact that they cannot rely on ‘the way things are’ and meet the needs of their clients” is a powerful approach to teaching and engaging students.166 But, complex problems call for larger and more sustained disorienting moments. Working with students on impact advocacy in the model of political lawyering provides a range of opportunities to immerse students in disorienting moments. A. Immersing Students in “Disorienting Moments”: Race, Poverty, and Pregnancy Today, I try to immerse my students in disorienting moments to make them justice ready and move them in the direction of political lawyering. My clinic docket has always included a small number of impact litigation matters. However, in the past these cases were carefully screened to ensure that they involved discrete legal issues and client groups. In addition, our representation always began after our outside co-counsel had already conducted an initial factual investigation, identified the core legal issues, and developed an overall advocacy strategy, freeing my students from these responsibilities. Now, my clinic takes on impact matters at earlier stages where the strategies are less clear and the legal questions are multifaceted and ill- defined. This mirrors the experiences of practicing social justice lawyers, who faced with an injustice, must discover the facts, identify the legal claims, develop strategy, cultivate allies, and ultimately determine what can be done—with the knowledge that “nothing” is not an option. This approach provides students with the space to wrestle with larger, systemic issues in a structured and supportive educational environment, taking on cases that seem difficult to resolve and working to bring some justice to that situation. They are also gaining experience in many of the fundamentals of political lawyering advocacy. Recently, my students began work on a new case. Several public and private hospitals in low-income New York City neighborhoods are drug testing pregnant women or new mothers without their knowledge or informed consent. This practice reflects a disturbing convergence between racial and economic disparities, and can have a profound impact on the lives of the poor women of color being tested at precisely the time when they are most in need of support. We began our work when a community organization reached out to the clinic and spoke to us about complaints that hospitals around New York City were regularly testing pregnant women—almost exclusively women of color—for drug use during prenatal check ups, during the chaos and stress of labor and delivery, or during post-delivery. The hospitals report positive test results to the City’s Administration for Children’s Services (“ACS”), which is responsible for protecting children from abuse and neglect, for further action.167 Most of the positive tests are for marijuana use. After a report is made, ACS commences an investigation to determine whether child abuse or neglect has taken place, and these investigations trigger inquiries into every aspect of a family’s life. They can lead to the institution of child neglect proceedings, and potentially to the temporary or permanent removal of children from the household. Even where that extreme result is avoided, an ACS investigation can open the door to the City’s continued, and potentially unwelcome, involvement in the lives of these families. These policies reflect deeply inequitable practices. Investigating a family after a positive drug test is not necessarily a bad thing. After all, ACS offers a number of supportive services that can help stabilize and strengthen vulnerable families. And of course, where children’s safety is at risk, removal may sometimes be the appropriate result. However, hospitals do not conduct regular drug tests of mothers in all New York City communities. Private hospitals in wealthy areas rarely test pregnant women or new mothers for drug misuse. In contrast, at hospitals serving poor women, drug testing is routine. Race and class should not determine whether such testing, and the consequences that result, take place. Investigating the New York City drug-testing program immersed the students in disorienting moments at every stage of their work. During our conversations, the students regularly expressed surprise and discomfort with the hospitals’ practices. They were disturbed that public hospitals— institutions on which poor women and women of color rely for something as essential as health care—would use these women’s pregnancy as a point of entry to control their lives.168 They struggled to explain how the simple act of seeking medical care from a hospital serving predominantly poor communities could deprive patients of the respect, privacy, and legal protections enjoyed by pregnant women in other parts of the City. And, they were shocked by the way institutions conditioned poor women to unquestioningly submit to authority.169 Many of the women did not know that they were drug tested until the hospital told them about the positive result and referred them to ACS. Still, these women were not surprised: that kind of disregard, marginalization, and lack of consent were a regular aspect of their lives as poor women of color. These women were more concerned about not upsetting ACS than they were about the drug testing. That so many of these women could be resigned to such a gross violation of their rights was entirely foreign to most of my students. B. Advocacy in the Face of Systemic Injustice Although the students are still in the early stages of their work, they have already engaged in many aspects of political justice lawyering. They approached their advocacy focused on the essence of political lawyering— enabling poor, pregnant women of color who enjoy little power or respect to claim and enjoy their rights, and altering the allocation of power from government agencies and institutions back into the hands of these women. They questioned whose interests these policies and practices were designed to serve, and have grounded their work in a vision of an alternative societal construct in which their clients and the community are respected and supported. The clinic students were given an opportunity to learn about social, legal, and administrative systems as they simultaneously explored opportunities to change those systems. The students worked to identify the short and long term goals of the impacted women as well the goals of the larger community, and to think strategically about the means best suited to accomplish these goals. And, importantly, while collaborating with partners from the community and legal advocacy organizations, the students always tried to keep these women centered in their advocacy. In breaking down the problem of drug testing poor women of color, the students worked through an issue that lives at the intersection of reproductive freedom, family law, racial justice, economic inequality, access to health care, and the war on drugs. In their factual investigation, which included interviews of impacted women, advocates, and hospital personnel, and the review of records obtained through Freedom of Information Law requests, the students began to break down this complex problem. They explored the disparate treatment of poor women and women of color by health care providers and government entities, implicit and explicit bias in healthcare, the disproportionate referral of women of color to ACS, the challenges of providing medical services to underserved communities, the meaning of informed consent, the diminished rights of people who rely on public services, and the criminalization of poverty. The students found that list almost as overwhelming as the initial problem itself, but identifying the components allowed the students to dig deeper and focus on possible avenues of challenge and advocacy. It was also critically important to make the invisible forces visible, even if the law currently does not provide a remedy. Working on this case also gave the students and me the opportunity to work through more nuanced applications of some of the lawyering concepts that were introduced in their smaller cases, including client-centered lawyering when working on behalf of the community; large-scale fact investigation; transferring their “social justice knowledge” to different contexts; crafting legal and factual narratives that are not only true to the communities’ experience, but can persuade and influence others; and how to develop an integrated advocacy plan. The students frequently asked whether we should even pursue the matter, questioning whether this work was client- centered when it was no longer the most pressing concern for many of the women we met. These doubts opened the door to many rich discussions: can we achieve meaningful social change if we only address immediate crises; can we progress on larger social justice issues without challenging their root causes; how do we recognize and address assumptions advocates may have about what is best for a client; and how can we keep past, present, and future victims centered in our advocacy? The work on the case also forced the clinic students to work through their own understanding of a hierarchy of values. They struggled with their desire to support these community hospitals and the public servants who work there under difficult circumstances on the one hand, and their desire to protect women, potentially through litigation, from discriminatory practices. They also struggled to reconcile their belief that hospitals should take all reasonable steps to protect the health and safety of children, as well as their emotional reaction to pregnant mothers putting their unborn children in harms way by using illegal drugs against the privacy rights of poor and marginalized women. They were forced to pause and think deeply about what justice would look like for those mothers, children, and communities. CONCLUSION America continues to grapple with systemic injustice. Political justice lawyering offers powerful strategies to advance the cause of justice—through integrated advocacy comprising the full array of tools available to social justice advocates, including strategic systemic reform litigation. It is the job of legal education to prepare law students to become effective lawyers. For those aspiring to social justice that should include training students to utilize the tools of political justice lawyers. Clinical legal offers a tremendous opportunity to teach the next generation of racial and social justice advocates how to advance equality in the face of structural inequality, if only it will embrace the full array of available tools to do so. In doing so, clinical legal education will not only prepare lawyers to enact social change, they can inspire lawyers overwhelmed by the challenges of change. In order to provide transformative learning experiences, clinical education must supplement traditional pedagogical tools and should consider political lawyering’s potential to empower law students and communities.

**4] Realism is true and inevitable – takes out their IR and root cause claims**

Marcelo Araujo, 2014 (Moral Enhancement and Political Realism. Journal of Evolution and Technology. 24. 29-43. <https://drive.google.com/file/d/1GQlbxW7uhk00AB5MZWs-XsTjijYelCSJ/view?usp=sharing>)

According to Morgenthau, politics is governed by laws that have their origin in human nature: “Political realism believes that politics, like society in general, is governed by objective laws that have their roots in human nature” (Morgenthau 2006, 4). Just like human enhancement theorists, Morgenthau also takes for granted that human nature has not changed over recent millennia: “Human nature, in which the laws of politics have their roots, has not changed since the classical philosophies of China, India, and Greece endeavored to discover these laws” (Morgenthau 2006, 4). And since, for Morgenthau, human nature prompts human beings to act selfishly, rather than cooperatively, political leaders will sometimes favor conflict over cooperation, unless some superior power compels them to act otherwise. Now, this is exactly what happens in the domain of international relations. For in the international sphere there is not a supranational institution with the real power to prevent states from pursuing means of self-defense. The acquisition of means of self-defense, however, is frequently perceived by other states as a threat to their own security. This leads to the security dilemma and the possibility of war. As Morgenthau put the problem in an article published in 1967: “**The actions of states are determined not by moral principles and legal commitments but by considerations of interest and power**” (1967, 3). Because Morgenthau and early modern political philosophers such as Machiavelli and Hobbes defended political realism on the grounds provided by a specific conception human nature, their version of political realism has been frequently called “human nature realism.” The literature on human nature realism has become quite extensive (Speer 1968; Booth 1991; Freyberg-Inan 2003; Kaufman 2006; Molloy 2006, 82–85; Craig 2007; Scheuerman 2007, 2010, 2012; Schuett 2007; Neascu 2009; Behr 2010, 210–225; Brown 2011; Jütersonke 2012). It is not my intention here to present a fully-fledged account of the tradition of human nature realism, but rather to emphasize the extent to which some moral enhancement theorists, in their description of some of the gloomy scenarios humankind is likely to face in the future, implicitly endorse this kind of political realism. Indeed, like human nature realists, moral enhancement theorists assume that human nature has not changed over the last millennia, and that violence and lack of cooperation in the international sphere result chiefly from human nature’s limited inclination to pursue morally desirable goals. One may, of course, criticize the human enhancement project by rejecting the assumption that conflict and violence in the international domain should be explained by means of a theory about human nature. In a reply to Savulescu and Persson, Sparrow correctly argues that **“structural issues,”** rather than **human nature**, constitute the main factor underlying political conflicts (Sparrow 2014, 29). But he does not explain what exactly these “structural issues” are, as I intend to do later. Sparrow is right in rejecting the human nature theory underlying the human enhancement project. But this underlying assumption, in my view, is not trivially false or simply “ludicrous,” as he suggests. Human nature realism has been implicitly or explicitly endorsed by leading political philosophers ever since Thucydides speculated on the origins of war in antiquity (Freyberg-Inan 2003, 23–36). True, it might be objected that “human nature realism,” as it was defended by Morgenthau and earlier political philosophers, relied upon a metaphysical or psychoanalytical conception of human nature, a conception that, actually, did not have the support of any serious scientific investigation (Smith 1983, 167). Yet, over the last few years there has been much empirical research in fields such as developmental psychology and evolutionary biology that apparently gives some support to the realist claim. Some of these studies suggest that an inclination to aggression and conflict has its origins in our evolutionary history. This idea, then, has recently led some authors to resume “human nature realism” on new foundations, devoid of the metaphysical assumptions of the early realists, and entirely grounded in empirical research. Indeed, some recent works in the field of international relations theory already seek to call attention to evolutionary biology as a possible new start for political realism. This point is clearly made, for instance, by Bradley Thayer, who published in 2004 a book called Darwin and International Relations: On the Evolutionary Origins of War and Ethnic Conflict. And in a paper published in 2000, he affirms the following: Evolutionary theory provides a stronger foundation for realism because it is based on science, not on theology or metaphysics. I use the theory to explain two human traits: egoism and domination. I submit that the egoistic and dominating behavior of individuals, which is commonly described as “realist,” is a product of the evolutionary process. I focus on these two traits because they are critical components of any realist argument in explaining international politics. (Thayer 2000, 125; see also Thayer 2004) Thayer basically argues that a tendency to egoism and domination stems from human evolutionary history. The predominance of conflict and competition in the domain of international politics, he argues, is a reflex of dispositions that can now be proved to be part of our evolved human nature in a way that Morgenthau and other earlier political philosophers could not have established in their own time. Now, what some moral enhancement theorists propose is a direct intervention in our “evolved limited moral psychology” as a means to make us “fit” to cope with some possible devastating consequences from the predominance of conflict and competition in the domain of international politics (Persson and Savulescu 2010, 664). Moral enhancement theorists comprehend the nature of war and conflicts, especially those conflicts that humankind is likely to face in the future, as the result of human beings’ limited moral motivations. Compared to supporters of human nature realism, however, moral enhancement theorists are less skeptical about the prospect of our taming human beings’ proclivity to do evil. For our knowledge in fields such as neurology and pharmacology does already enable us to enhance people’s performance in a variety of activities, and there seems to be no reason to assume it will not enable us to enhance people morally in the future. But the question, of course, is whether moral enhancement will also improve the prospect of our coping successfully with some major threats to the survival of humankind, as Savulescu and Persson propose, or to reduce evil in the world, as proposed by Walker. V. The point to which I would next like to call attention is that “human nature realism” – which is implicitly presupposed by some moral enhancement theorists – has been much criticized over the last decades within the tradition of political realism itself. “Structural realism,” unlike “human nature realism,” does not seek to derive a theory about conflicts and violence in the context of international relations from a theory of the moral shortcomings of human nature. Structural realism was originally proposed by Kenneth Waltz in Man, the State and War, published in 1959, and then later in another book called Theory of International Politics, published in 1979. In both works, Waltz seeks to avoid committing himself to any specific conception of human nature (Waltz 2001, x–xi). Waltz’s thesis is that the thrust of the political realism doctrine can be retained without our having to commit ourselves to any theory about the shortcomings of human nature. What is relevant for our understanding of international politics is, instead, our understanding of the “structure” of the international system of states (Waltz 1986). John Mearsheimer, too, is an important contemporary advocate of political realism. Although he seeks to distance himself from some ideas defended by Waltz, he also rejects human nature realism and, like Waltz, refers to himself as a supporter of “structural realism” (Mearsheimer 2001, 20). One of the basic tenets of political realism (whether “human nature realism” or “structural realism”) is, first, that the **states are the** main, if not the **only, relevant actors** in the context of international relations; **and** second, that **states compete for power** in the international arena. **Moral considerations** in international affairs, according to realists, **are secondary** **when set against the state’s primary goal,** namely **its own security and survival**. But while human nature realists such as Morgenthau explain the struggle for power as a result of human beings’ natural inclinations, structural realists like Waltz and Mearsheimer argue that **conflicts in the international arena** **do not stem from human nature, but from the very “structure” of the international system of states** (Mearsheimer 2001, 18). According to Waltz and Mearsheimer, it is **this** **structure** that **compels individuals to act as they do in** the domain of **international affairs.** And one distinguishing feature of the international system of states is its **“anarchical structure,”** **i.e. the lack of a central government** analogous to the central governments that exist in the context of domestic politics. It **means that each** individual **state is responsible for its own integrity and survival**. **In the absence of a superior authority,** over and above the power of each sovereign state, **political leaders** **often feel compelled to favor** **security over morality**, even if, all other things being considered, they would naturally be more inclined to trust and to cooperate with political leaders of other states. On the other hand, when political leaders do trust and cooperate with other states, it is not necessarily their benevolent nature that motivates them to be cooperative and trustworthy, but, again, it is the structure of the system of states that compels them. The concept of human nature, as we can see, does not play a decisive role here. Because Waltz and Mearsheimer depart from “human nature realism,” their version of political realism has also sometimes been called “neo-realism” (Booth 1991, 533). Thus, **even if** human beings turn out to become **morally enhanced** in the future, humankind may still have to face the same **scary scenarios** described by some moral enhancement theorists. This is likely to happen if, indeed, human beings remain compelled to cooperate within the present structure of the system of states. Consider, for instance, the incident with a Norwegian weather rocket in January 1995. Russian radars detected a missile that was initially suspected of being on its way to reach Moscow in five minutes. All levels of Russian military defense were immediately put on alert for a possible imminent attack and massive retaliation. It is reported that for the first time in history a Russian president had before him, ready to be used, the “nuclear briefcase” from which the permission to launch nuclear weapons is issued. And that happened when the Cold War was already supposed to be over! In the event, it was realized that the rocket was leaving Russian territory and Boris Yeltsin did not have to enter the history books as the man who started the third world war by mistake (Cirincione 2008, 382).3 But under the crushing pressure of having to decide in such a short time, and on the basis of unreliable information, whether or not to retaliate, even a morally enhanced Yeltsin might have given orders to launch a devastating nuclear response – and that in spite of strong moral dispositions to the contrary. Writing for The Guardian on the basis of recently declassified documents, Rupert Myers reports further incidents similar to the one of 1995. He suggests that as more states strive to acquire nuclear capability, the danger of a major nuclear accident is likely to increase (Myers 2014). What has to be changed, therefore, is not human moral dispositions, but the very structure of the political international system of states within which we currently live. As far as major threats to the survival of humankind are concerned, moral enhancement might play an important role in the future only to the extent that it will help humankind to change the structure of the system of states. While **moral enhancement** may possibly have desirable results in some areas of human cooperation that do not badly threaten our security – such as donating food, medicine, and money to poorer countries – it **will not motivate political leaders to** **dismantle their nuclear weapons**. Neither will it deter other political leaders from pursuing nuclear capability, at any rate not as long as **the structure of international politics compels them to see prospective cooperators** **in the present as possible enemies in the future.** The idea of a “structure” should not be understood here in metaphysical terms, as though it mysteriously existed in a transcendent world and had the magical power of determining leaders’ decisions in this world. The word “structure” denotes merely a political arrangement in which there are no powerful law-enforcing institutions. And in the absence of the kind of security that law-enforcing institutions have the force to create, political leaders will often **fail to cooperate,** and occasionally engage in conflicts and wars, in those areas that are critical to their security and survival. Given the structure of international politics and the basic goal of survival, this is likely to continue to happen, **even if,** in the future, political leaders become **less egoistic and power-seeking** through moral enhancement. On the other hand, since the structure of the international system of states is itself another human institution, there is no reason to suppose that it cannot ever be changed. If people become morally enhanced in the future they may possibly feel more strongly motivated to change the structure of the system of states, or perhaps even feel inclined to abolish it altogether. In my view, however, addressing major threats to the survival of humankind in the future by means of bioengineering is unlikely to yield the expected results, so long as moral enhancement is pursued within the present framework of the international system of states.

#### 5] Psychoanalysis can’t explain state action

Charlotte Epstein 11. The University of Sydney, NSW, Australia. 06/2011. “Who Speaks? Discourse, the Subject and the Study of Identity in International Politics.” European Journal of International Relations, vol. 17, no. 2, pp. 327–350.

One key advantage of the Wendtian move, granted even by his critics (see Flockhart, 2006), is that it simply does away with the level-of-analysis problem altogether. If states really are persons, then we can apply everything we know about people to understand how they behave. The study of individual identity is not only theoretically justified but it is warranted. This cohesive self borrowed from **social psychology** is what allows Wendt to bridge the different levels of analysis and travel between the self of the individual and that of the state, by way of a third term, ‘group self’, which is simply an aggregate of individual selves. Thus for Wendt (1999: 225) ‘the state is simply a “group Self” capable of group level cognition’. Yet that the individual possesses a self does not logically entail that the state possesses one too. It is in this leap, from the individual to the state, that IR’s **fallacy** of composition surfaces most clearly. Moving beyond Wendt but maintaining the psychological self as the basis for theorizing the state Wendt’s bold ontological claim is far from having attracted unanimous support (see nota­bly, Flockhart, 2006; Jackson, 2004; Neumann, 2004; Schiff, 2008; Wight, 2004). One line of critique of the states-as-persons thesis has taken shape around the resort to **psy­chological theories**, specifically, around the respective merits of Identity Theory (Wendt) and SIT (Flockhart, 2006; Greenhill, 2008; Mercer, 2005) for understanding state behav­iour.9 Importantly for my argument, that the state has a self, and that this self is pre-social, remains unquestioned in this further entrenching of the psychological turn. Instead questions have revolved around how this pre-social self (Wendt’s ‘Ego’) behaves once it encounters the other (Alter): whether, at that point (and not before), it takes on roles prescribed by pre-existing cultures (whether Hobbessian, Lockean or Kantian) or whether instead other, less culturally specific, dynamics rooted in more universally human char­acteristics better explain state interactions. SIT in particular emphasizes the individual’s basic need to belong, and it highlights the dynamics of in-/out-group categorizations as a key determinant of behaviour (Billig, 2004). SIT seems to have attracted increasing interest from IR scholars, interestingly, for both critiquing (Greenhill, 2008; Mercer, 1995) and rescuing constructivism (Flockhart, 2006). For Trine Flockart (2006: 89–91), SIT can provide constructivism with a different basis for developing a theory of agency that steers clear of the states-as-persons thesis while filling an important gap in the socialization literature, which has tended to focus on norms rather than the actors adopting them. She shows that a state’s adherence to a new norm is best understood as the act of joining a group that shares a set of norms and val­ues, for example the North Atlantic Treaty Organization (NATO). What SIT draws out are the benefits that accrue to the actor from belonging to a group, namely increased self-esteem and a clear cognitive map for categorizing other states as ‘in-’ or ‘out-group’ members and, from there, for orientating states’ self–other relationships. Whilst coming at it from a stance explicitly critical of constructivism, for Jonathan Mercer (2005: 1995) the use of psychology remains key to correcting the systematic evacuation of the role of emotion and other ‘non-rational’ phenomena in rational choice and behaviourist analyses, which has significantly impaired the understanding of inter­national politics. SIT serves to draw out the emotional component of some of the key drivers of international politics, such as trust, reputation and even choice (Mercer, 2005: 90–95; see also Mercer, 1995). Brian Greenhill (2008) for his part uses SIT amongst a broader array of psychological theories to analyse the phenomenon of self–other recog­nition and, from there, to take issue with the late Wendtian assumption that mutual recognition can provide an adequate basis for the formation of a collective identity amongst states. The main problem with this psychological turn is the very utilitarian, almost **mecha­nistic**, approach to non-rational phenomena it proposes, which tends to evacuate the role of meaning. In other words, it further shores up the **pre-social** dimension of the concept of **self** that is at issue here. Indeed norms (Flockhart, 2006), emotions (Mercer, 2005) and recognition (Greenhill, 2008) are hardly appraised as symbolic phenomena. In fact, in the dynamics of in- versus out-group categorization emphasized by SIT, language counts for very little. Significantly, in the design of the original experiments upon which this approach was founded (Tajfel, 1978), whether two group members communicate at all, let alone share the same language, is non-pertinent. It is enough that two individuals should know (say because they have been told so in their respec­tive languages for the purposes of the experiment) that they belong to the same group for them to favour one another over a third individual. The primary determinant of individual behaviour thus emphasized is a pre-verbal, primordial desire to belong, which seems closer to pack animal behaviour than to anything distinctly human. What the group stands for, what specific set of meanings and values binds it together, is unimportant. What matters primarily is that the group is valued positively, since posi­tive valuation is what returns accrued self-esteem to the individual. In IR Jonathan Mercer’s (2005) account of the relationship between identity, emotion and behaviour reads more like a series of buttons mechanically pushed in a sequence of the sort: posi­tive identification produces emotion (such as trust), which in turn generates specific patterns of in-/out-group discrimination. Similarly, Trine Flockhart (2006: 96) approaches the socializee’s ‘desire to belong’ in terms of the psychological (and ultimately social) benefits and the feel-good factor that accrues from increased self-esteem. At the far opposite of Lacan, the concept of desire here is reduced to a Benthamite type of pleasure- or utility-maximization where mean­ing is nowhere to be seen. More telling still is the need to downplay the role of the Other in justifying her initial resort to SIT. For Flockhart (2006: 94), in a post-Cold War con­text, ‘identities cannot be constructed purely in relation to the “Other”’. Perhaps so; but not if what ‘the other’ refers to is the generic, dynamic scheme undergirding the very concept of identity. At issue here is the confusion between the reference to a specific other, for which Lacan coined the concept of *le petit autre*, and the reference to *l’Autre*, or Other, which is that symbolic instance that is essential to the making of *all* selves. As such it is not clear what meaning Flockhart’s (2006: 94) capitalization of the ‘Other’ actually holds. The individual self as a proxy for the state’s self Another way in which the concept of self has been centrally involved in circumventing the level-of-analysis problem in IR has been to treat the self of the individual as a proxy for the self of the state. The literature on norms in particular has highlighted the role of individuals in orchestrating norm shifts, in both the positions of socializer (norm entre­preneurs) and socializee. It has shown for example how some state leaders are more sus­ceptible than others to concerns about reputation and legitimacy and thus more amenable to being convinced of the need to adopt a new norm, of human rights or democratization, for example (Finnemore and Sikkink, 1998; Keck and Sikkink, 1998; Risse, 2001). It is these specific psychological qualities pertaining to their selves (for example, those of Gorbachev; Risse, 2001) that ultimately enable the norm shift to occur. Once again the individual self ultimately remains the basis for explaining the change in state behaviour. To summarize the points made so far, whether the state is **literally** considered as a person by ontological overreach, whether so only by analogy, or whether the person stands as a **proxy** for the state, the ‘self’ of that person has been consistently taken as the **reference** point for studying state identities. Both in Wendt’s states-as-persons thesis, and in the broader psychological turn within constructivism and beyond, the debate has con­sistently revolved around the need to evaluate which of the essentialist assumptions about human nature are the most useful for explaining state behaviour. **It has never ques­tioned the validity of starting from these assumptions in the first place.** That is, what is left unexamined is this **assumption** is that what works for individuals **will work for states too.** This is IR’s central **fallacy of composition**, by which it has persistently **eschewed** rather than resolved the level-of-analysis problem. Indeed, in the absence of a clear dem­onstration of a logical identity (of the type A=A) between states and individuals, the assumption that individual interactions will explain what states do rests on **little more than a leap of faith**, or indeed an analogy.

### 1AC: Drug Prices

#### 6] The Alternative to the Aff isn’t no medicine but exploitive medicine – the Plan’s orientation is a sequencing strategy to resistance.

Ahmed 20 A Kavum Ahmed 6-24-2020 "Decolonizing the vaccine" <https://africasacountry.com/2020/06/decolonizing-the-vaccine> (A. Kayum Ahmed is Division Director for Access and Accountability at the Open Society Public Health Program in New York and teaches at Columbia University Law School.)//Duong+Elmer

Reflecting on a potential COVID-19 vaccine trial during a television interview in April, a French doctor stated, “If I can be provocative, shouldn’t we be doing this study in Africa, where there are no masks, no treatments, no resuscitation?” These remarks reflect a colonial view of Africa, reinforcing the idea that Africans are non-humans whose black bodies can be experimented on. This colonial perspective is also clearly articulated in the alliance between France, The Netherlands, Germany and Italy to negotiate priority access to the COVID-19 vaccine for themselves and the rest of Europe. In the Dutch government’s announcement of the European vaccine coalition, they indicate that, “… the alliance is also working to make a portion of vaccines available to low-income countries, including in Africa.” In the collective imagination of these European nations, Africa is portrayed as a site of redemption—a place where you can absolve yourself from the sins of “vaccine sovereignty,” by offering a “portion of the vaccines” to the continent. Vaccine sovereignty reflects how European and American governments use public funding, supported by the pharmaceutical industry and research universities, to obtain priority access to potential COVID-19 vaccines. The concept symbolizes the COVID-19 **vaccine** (when it eventually becomes available) as **an instrument of power deployed to exercise control** **over who will live and who must die**. In order to counter vaccine sovereignty, we must decolonize the vaccine. Africans have a particular role to play in leading this decolonization process as subjects of colonialism and as objects of domination through coloniality. Colonialism, as an expansion of territorial dominance, and coloniality, as the continued expression of Western imperialism after colonization, play out in the vaccine development space, most notably on the African continent. So what does decolonizing the vaccine look like? And how do we decolonize something that does not yet exist? For Frantz Fanon, “**Decolonization**, which sets out to change the order of the world, **is**, obviously, a program of **complete disorder**.” **Acknowledging** **that the** COVID-19 **vaccine has been weaponized** **as an instrument of power** by wealthy nations, **decolonization** **requires** a Fanonian program of **radical re-ordering.** In the context of vaccine sovereignty, this re-ordering **necessitates** the **dismantling** of the **profit-driven biomedical system**. This program starts with **de-linking from** **Euro-American constructions of knowledge and power** that reinforce vaccine sovereignty through the profit-driven biomedical system. Advocacy campaigns such as the “People’s Vaccine”, which calls for guaranteed free access to COVID-19 vaccines, diagnostics and treatments to everyone, everywhere, are a good start. Other mechanisms, such as the World Health Organization’s COVID-19 Technology Access Pool, similarly supports universal access to COVID-19 health technologies as global public goods. Since less than 1% of vaccines consumed in Africa are manufactured on the continent, regional efforts to develop vaccine manufacturing capacity such as those led by the Africa Center for Disease Control and Prevention, as well as the Alliance of African Research Universities, must be supported. These efforts collectively advance delinking and move us closer toward the re-ordering of systems of power. The opportunity for disorder is paradoxically enabled by the COVID-19 pandemic, which has permitted moments of existential reflection in the midst of the crisis. A few months ago, a press release announcing the distribution of “a portion of the vaccines” to Africans, may have been lauded as European benevolence. But in the context of a pandemic that is more likely to kill black people, Africa’s reliance on Europe for vaccine handouts is untenable, necessitating a re-examination of the systems of power that hold this colonial relationship in place. The Black African body appears to be good enough to be experimented on, but not worthy of receiving simultaneous access to the COVID-19 vaccine as Europeans. Consequently, Africans continue to feel the effects of colonialism and white supremacy, and understand the pernicious nature of European altruism. By reinforcing the current system of vaccine research, development and manufacturing, it has become apparent that European governments want to retain their colonial power over life and death in Africa through the COVID-19 vaccine. Resistance to this colonial power requires the decolonization of the vaccine.

### Framework

#### The standard is maximizing expected wellbeing.

#### Prefer:

#### 1] Pleasure and pain are intrinsic value and disvalue-- robust neuroscience prove.

Blum et al. 18

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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.

#### o2] Extinction outweighs

#### **a] Moral uncertainty – if we’re unsure about which interpretation of the world is true – we ought to preserve the world to keep debating about it.**

#### **b] Forecloses improvement – we can never improve society because our impact is irreversible.**

#### **c] Turns suffering – mass death causes suffering because people can’t get access to resources and basic necessities.**

#### **d] Moral obligation – allowing people to die is unethical and should be prevented because it creates ethics towards other people.**

#### **e] Objectivity – body count is the most objective way to calculate impacts because comparing suffering is unethical.**

**3] Actor specificity: A] Governments must aggregate since every policy benefits some and harms others, which also means side constraints freeze action. B] States lack wills or intentions since policies are collective actions. Actor-specificity comes first since different agents have different ethical standings. Link turns calc indites because the alt would be *no* action.**

#### 4] Util first – Death is the worst evil

Craig **Paterson** (20**03**, Department of Philosophy, Providence College, Rhode Island., “A Life Not Worth Living?”, Studies in Christian Ethics, https://pubmed.ncbi.nlm.nih.gov/15000090/)

Contrary to those accounts, I would argue that it is death per se that is really the objective evil for us, not because it deprives us of a prospective future of overall good judged better than the alter- native of non-being. It cannot be about harm to a former person who has ceased to exist, for no person actually suffers from the sub-sequent non-participation. Rather, death in itself is an evil to us because it ontologically destroys the current existent subject — it is the ultimate in metaphysical lightening strikes.80 The evil of death is truly an ontological evil borne by the person who already exists, independently of calculations about better or worse possible lives. Such an evil need not be consciously experienced in order to be an evil for the kind of being a human person is. Death is an evil because of the change in kind it brings about, a change that is destructive of the type of entity that we essentially are. Anything, whether caused naturally or caused by human intervention (intentional or unintentional) that drastically interferes in the process of maintaining the person in existence is an objective evil for the person. What is crucially at stake here, and is dialectically supportive of the self-evidency of the basic good of human life, is that death is a radical interference with the current life process of the kind of being that we are. In consequence, death itself can be credibly thought of as a ‘primitive evil’ for all persons, regardless of the extent to which they are currently or prospectively capable of participating in a full array of the goods of life.81 In conclusion, concerning willed human actions, it is justifiable to state that any intentional rejection of human life itself cannot therefore be warranted since it is an expression of an ultimate disvalue for the subject, namely, the destruction of the present person; a radical ontological good that we cannot begin to weigh objectively against the travails of life in a rational manner. To deal with the sources of disvalue (pain, suffering, etc.) we should not seek to irrationally destroy the person, the very source and condition of all human possibility.82