\*\*TW: semi-graphic depictions of anti-black violence

# 1

#### Interpretation: The aff can’t specify a type of worker or subset of workers. To clarify, defending only incarcerated workers is not topical.

#### The upward entailment test and adverb test determine the genericity of a bare plural

Leslie and Lerner 16 [Sarah-Jane Leslie, Ph.D., Princeton, 2007. Dean of the Graduate School and Class of 1943 Professor of Philosophy. Served as the vice dean for faculty development in the Office of the Dean of the Faculty, director of the Program in Linguistics, and founding director of the Program in Cognitive Science at Princeton University. Adam Lerner, PhD Philosophy, Postgraduate Research Associate, Princeton 2018. From 2018, Assistant Professor/Faculty Fellow in the Center for Bioethics at New York University. Member of the [Princeton Social Neuroscience Lab](http://psnlab.princeton.edu/).] “Generic Generalizations.” Stanford Encyclopedia of Philosophy. April 24, 2016. <https://plato.stanford.edu/entries/generics/> TG

1. Generics and Logical Form

In English, generics can be expressed using a variety of syntactic forms: bare plurals (e.g., “tigers are striped”), indefinite singulars (e.g., “a tiger is striped”), and definite singulars (“the tiger is striped”). However, none of these syntactic forms is dedicated to expressing generic claims; each can also be used to express existential and/or specific claims. Further, some generics express what appear to be generalizations over individuals (e.g., “tigers are striped”), while others appear to predicate properties directly of the kind (e.g., “dodos are extinct”). These facts and others give rise to a number of questions concerning the logical forms of generic statements.

1.1 Isolating the Generic Interpretation

Consider the following pairs of sentences:

(1)a.Tigers are striped.

b.Tigers are on the front lawn.

(2)a.A tiger is striped.

b.A tiger is on the front lawn.

(3)a.The tiger is striped.

b.The tiger is on the front lawn.

The sentence pairs above are prima facie syntactically parallel—both are subject-predicate sentences whose subjects consist of the same common noun coupled with the same, or no, article. However, the interpretation of first sentence of each pair is intuitively quite different from the interpretation of the second sentence in the pair. In the second sentences, we are talking about some particular tigers: a group of tigers in ([1b](https://plato.stanford.edu/entries/generics/#ex1b)), some individual tiger in ([2b](https://plato.stanford.edu/entries/generics/#ex2b)), and some unique salient or familiar tiger in ([3b](https://plato.stanford.edu/entries/generics/#ex3b))—a beloved pet, perhaps. In the first sentences, however, we are saying something general. There is/are no particular tiger or tigers that we are talking about.

The second sentences of the pairs receive what is called an existential interpretation. The hallmark of the existential interpretation of a sentence containing a bare plural or an indefinite singular is that it may be paraphrased with “some” with little or no change in meaning; hence the terminology “existential reading”. The application of the term “existential interpretation” is perhaps less appropriate when applied to the definite singular, but it is intended there to cover interpretation of the definite singular as referring to a unique contextually salient/familiar particular individual, not to a kind.

There are some tests that are helpful in distinguishing these two readings. For example, the existential interpretation is upward entailing, meaning that the statement will always remain true if we replace the subject term with a more inclusive term. Consider our examples above. In ([1b](https://plato.stanford.edu/entries/generics/#ex1b)), we can replace “tiger” with “animal” salva veritate, but in ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) we cannot. If “tigers are on the lawn” is true, then “animals are on the lawn” must be true. However, “tigers are striped” is true, yet “animals are striped” is false. ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) does not entail that animals are striped, but ([1b](https://plato.stanford.edu/entries/generics/#ex1b)) entails that animals are on the front lawn (Lawler 1973; Laca 1990; Krifka et al. 1995).

Another test concerns whether we can insert an adverb of quantification with minimal change of meaning (Krifka et al. 1995). For example, inserting “usually” in the sentences in ([1a](https://plato.stanford.edu/entries/generics/#ex1a)) (e.g., “tigers are usually striped”) produces only a small change in meaning, while inserting “usually” in ([1b](https://plato.stanford.edu/entries/generics/#ex1b)) dramatically alters the meaning of the sentence (e.g., “tigers are usually on the front lawn”). (For generics such as “mosquitoes carry malaria”, the adverb “sometimes” is perhaps better used than “usually” to mark off the generic reading.)

#### Violation:

#### Standards:

1. Limits – You can spec in any sector like climate, tech, manufacturing, healthcare almost every sector has experienced strikes. There’s no universal DA since if you spec a hyper specific sector it won’t have any impact on the economy. That explodes neg prep burdens and kills engagement – even if generics solve, it’s a horrible model that leads to the same stale debates.

**DTD, no RVIs, CI**

# 2

#### Counterplan: [The United States] ought to recognize the conditional right of [incarcerated] workers to strike with the condition that strikers are not asking for employers to discriminate and don’t utilize violence/discrimination during the strikes.

\*\*TW: semi-graphic depictions of anti-black violence

#### Enforcement in the card.

BPSC [Unfair Labor Practices by Union, <http://bpscllc.com/unfair-labor-practices-by-unions.html>, N.D., Business & People Strategy Consulting Group, California's trusted source for workplace human resources and employment law] [SS]

Causing or Attempting to Cause Discrimination: Section 8(b)(2) makes it **an unfair labor practice for a labor organization to cause** or attempt to cause **an employer to discriminate** against an employee in violation of Section 8(a)(3). The section is violated by agreements or arrangements with employers, other than lawful union-security agreements, that condition employment or job benefits on union membership, on the performance of union membership obligations or on arbitrary grounds. But union action that causes detriment to an individual employee does not violate Section 8(b)(2) if it is consistent with nondiscriminatory provisions of a bargaining contract negotiated for the benefit of the total bargaining unit, or if the action is based on some other legitimate purpose. **A union’s conduct, accompanied by statements advising** or suggesting **that action is expected of an employer,** may be enough to find a violation of this section **if the union’s action can be shown to be a causal factor in the employer’s discrimination.** Contracts or informal arrangements with a union under which an employer gives preferential treatment to union members also violate Section 8(b)(2). However, an employer and a union may agree that the employer will hire new employees exclusively through the union hiring hall if there is no discrimination against nonunion members on the basis of union membership obligations. In setting referral standards, a union may consider legitimate aims such as sharing available work and easing the impact of local unemployment. The union may also charge referral fees if the amount of the fee is reasonably related to the cost of operating the referral service. A union that attempts to force an employer to enter into an illegal union-security agreement, or that enters into and keeps in effect such an agreement, also violates Section 8(b)(2), as does a union that attempts to enforce such an illegal agreement by bringing about an employee’s discharge. Even when a union-security provision of a bargaining contract meets all statutory requirements, a union may not lawfully require the discharge of employees under the provision unless they were informed of the union-security agreement and their specific obligation under it. A union violates Section 8(b)(2) if it tries to use the union-security provisions of a contract to collect payments other than those lawfully required, such as assessments, fines and penalties. Other examples of Section 8(b)(2) violations include: Causing an employer to discharge employees because they circulated a petition urging a change in the union’s method of selecting shop stewards Causing an employer to discharge employees because they made speeches against a contract proposed by the union Making a contract that requires an employer to hire only members of the union or employees “satisfactory” to the union Causing an employer to reduce employees’ seniority because they engaged in anti-union acts **Refusing referral or giving preference on the basis of race** or union activities when making job referrals to units represented by the union Seeking the discharge of an employee under a union-security agreement for failure to pay a fine levied by the union

#### The East St. Louis riots lead to over 200 deaths and were one of the worst race related riots in history – it all started with a racist union striking in favor of discrimination and a lack of government intervention.

People’s World ‘17

[This week in history: East St. Louis rocked by race riot, 1917, <https://www.peoplesworld.org/article/this-week-in-history-east-st-louis-rocked-by-race-riot-1917/>, June 26 2017, voice for progressive change and socialism in the United States. It provides news and analysis of, by, and for the labor and democratic movements to our readers across the country and around the world.] [SS]

\*\*Bracketed for offensive language

**The East St. Louis riots (or massacres**) of May and July 1917 **were an outbreak of labor- and race-related violence** **that caused up to 200 deaths** and extensive property damage. East St. Louis, Ill., is an industrial city on the east bank of the Mississippi River across from St. Louis, Mo. **These incidents** of 100 years ago **have been described** as the worst case of labor-related violence and **among the worst race riots in 20th-century American history**. In 1917 the U.S. had an active economy boosted by World War I. With many workers now absent in the armed forces, industries were in need of labor. Seeking better work and living opportunities, as well as an escape from harsh conditions, the Great Migration of African Americans out of the South toward industrial centers across the North was well underway. Blacks were arriving in St. Louis during Spring 1917 at the rate of 2000 per week. Traditionally **white unions sought to strengthen their bargaining position by** hindering or **excluding black workers**, while industry owners utilized blacks as replacements or strikebreakers, adding to deep-seated societal divisions. At the same time **Louisiana farmers were worried about losing their labor force, and** had **requested** East St. Louis Mayor Fred W. Mollman’s assistance **to help discourage black migration**. Many blacks found work at the Aluminum Ore and the American Steel companies in East St. Louis. Some **whites feared job and wage security from** this **new competition**. That February, **470 African American workers were hired to replace white workers who had gone on strike** against Aluminum Ore. **Tensions** between the groups **escalated, including rumors of black men and white women fraternizing at a labor meeting** on May 28, following which some **3000 white men marched** into downtown East St. Louis **and began attacking African Americans**. The mobs stopped trolleys and streetcars, pulling black passengers out and beating them on the streets. With mobs destroying buildings and assaulting people, Ill. Gov. Frank O. Lowden called in the National Guard to prevent further rioting, and the mood eased somewhat for a few weeks. **The** East St. Louis Central **Labor Council** responded to the rioting **implying that** “southern [**black people]** Negroes **were misled** **by false advertisements and unscrupulous employment agents** to come to East St. Louis in such numbers under false pretenses of secure jobs and decent living quarters.” Little was done to prevent further problems. No precautions were taken to ensure white job security or to grant union recognition. **No reforms were made in the police force which did little to quell the violence**. This further increased the already-high level of hostilities towards African Americans. On July 2, a car occupied by white males drove through a black area of the city and several shots were fired into a standing group. An hour later, a car containing four people, including a journalist and two police officers passed through the same area. Black residents, possibly assuming they were the original suspects, opened fire, killing one officer instantly and mortally wounding another. Later that day, thousands of white spectators who assembled to view the detectives’ bloodstained automobile marched into the black section of town and started rioting. **After cutting the water hoses of the fire department, the rioters burned entire sections of the city, shot inhabitants as they escaped the flames, and lynched several [black people]** blacks. Guardsmen were called in, but according to contemporary accounts, they joined in the rioting rather than stop it. Young white women and girls brandishing clubs chased a black woman and called upon the men to kill her. After the riots, the St. Louis Argus said, “The entire country has been aroused to a sense of shame and pity by the magnitude of the national disgrace enacted by the blood-thirsty rioters in East St. Louis Monday, July 2.” According to the Post-Dispatch of St. Louis, “All the impartial witnesses agree that the police were either indifferent or encouraged the barbarities, and that **the major part of the National Guard was indifferent or inactive.** **No organized effort was made to protect the [black people]** Negroes or disperse the murdering groups…. Ten determined officers could have prevented most of the outrages. **One hundred men acting with authority** and vigor **might have prevented any outrage**.” After the riots, varying estimates of the death toll circulated. The police chief estimated that 100 blacks had been killed. The renowned journalist Ida B. Wells reported in The Chicago Defender that 40-150 black people were killed**. The NAACP estimated deaths at 100–200. Six thousand** blacks **were left homeless** after their neighborhood was burned. The coroner specified nine white deaths, but the deaths of black victims were less clearly recorded: Activists argued that the true number of deaths would never be known because many corpses were neither recovered nor had passed through the hands of undertakers. The ferocious brutality of the attacks and the failure of the authorities to protect innocent lives contributed to the radicalization of many blacks across the nation. Marcus Garvey, president of The Universal Negro Improvement Association (UNIA), declared, “This is no time for fine words, but a time to lift one’s voice against the savagery of a people who claim to be the dispensers of democracy.” On July 6 the Chamber of Commerce met with the mayor to demand the resignation of top police officials and radical reform. In addition to the lives lost, mobs had caused extensive property damage. The Southern Railway Company’s warehouse was burned, with over 100 carloads of merchandise. A white theatre valued at more than $100,000, 44 freight cars and 312 houses were destroyed. In response to the rioting, the NAACP sent W.E.B. DuBois and Martha Gruening to investigate the incident. They compiled a report entitled “Massacre at East St. Louis,” which was published in the NAACP’s magazine, The Crisis. In New York City on July 28, 10,000 black people carrying signs marched down Fifth Avenue in a Silent Parade, protesting the riots. The march was organized by the NAACP and Du Bois, and other groups in Harlem. Women and children were dressed in white; the men were dressed in black. Authorities were slow to respond to calls for an investigation. President Woodrow Wilson stated that his Department of Justice could not find enough evidence to justify federal action in the matter. A Special Committee formed by the U.S. House of Representatives launched an investigation into police actions during the East St. Louis Riot. It found that the National Guard and the East St. Louis police force had not acted adequately during the riots, revealing that the police often fled from the scenes of murder and arson. Some even fled from station houses and refused to answer calls for help. The investigation also resulted in the indictment of several members of the East St. Louis police force. Among those brought to trial was Dr. LeRoy Bundy, a dentist and prominent leader in the East St. Louis black community, who was formally charged with inciting a riot. The trial was held in the St. Clair county court. Bundy, along with 34 defendants, of whom ten were white, were given prison time in connection to the riot.

#### It’s competitive – unconditional right to strike doesn’t include reasonable limits.

ITUC ‘14

[THE RIGHT TO STRIKE AND THE ILO: THE LEGAL FOUNDATIONS, INTERNATIONAL TRADE UNION CONFEDERATION (ITUC), March 2014, https://www.ituc-csi.org/IMG/pdf/ituc\_final\_brief\_on\_the\_right\_to\_strike.pdf, The International Trade Union Confederation is the world's largest trade union federation.] [SS]

Between the extremes of an unconditional right to strike and an absolute prohibition on strikes “in accordance with national law,” the international community is converging on the general principle of the right to strike within reasonable limits. The authors of this document acknowledge the tension between countries’ varying degrees of limitations on the right to strike and the normal requirement of uniformity of state practice to find customary international law. It is believed that the tension can be resolved by distinguishing between divergence in detail and convergence in principle. Procedural requirements in national law are details; the right to strike within reasonable limits is the common principle.

# 3

#### CP: The United States ought to meet the 10 demands of the prisoner strikes from 2018

**IAWPAN and JLS n/d** [iamWE Prisoners Advocacy Network is a nonprofit, human rights organization, dedicated to promoting religious tolerance, prisoner human rights, and human kindness. Jailhouse Lawyers Speak (JLS) is a collective of imprisoned human rights advocates. The National Prison Strikes called by JLS continue to break record as the largest prisoner strikes in US history.] "2018 National Prison Strike Demands," <http://www.iamweubuntu.com/2018-national-prison-strike-demands.html> //SR

1. Immediate improvements to the conditions of prisons and prison policies that recognize the humanity of imprisoned persons  2. An immediate end to prison slavery. All persons imprisoned in any place of detention under U.S. jurisdiction must be paid the prevailing wage in their state or territory for their labor  3. The Prison Litigation Reform Act must be rescinded, allowing imprisoned humans a proper channel to address grievances and violations of their rights  4. The Truth in Sentencing Act and the Sentencing Reform Act must be rescinded so that imprisoned humans have a possibility of rehabilitation and parole. No human shall be sentenced to Death by Incarceration or serve any sentence without the possibility of parole  5. An immediate end to the racial overcharging, over-sentencing, and parole denials of Black and brown humans. Black humans shall no longer be denied parole because the victim of the crime was white, which is a particular problem in southern states  6. An immediate end to racist gang enforcement laws targeting Black and brown humans  7. No imprisoned human shall be denied access to rehabilitation programs at their place of detention because of their label as a violent offender  8. State prisons must be funded specifically to offer more rehabilitation services  9. \* We demand the immediate release of all political prisoners   10. The voting rights of all confirmed citizens serving prison sentences, pretrial detainees, and so called “ex felons” must be counted. Representation is demanded. All voices count

**Solves the aff--addresses racism, mass incarceration, employment issues, and allows for non-strike methods of bargaining to make labor conditions safer.**

#### Low wages and labor law exemptions are key for pandemic and national disaster response

Kutz 21 (Jessica Kutz – Assistant Editor for High Country News who is interviewing Carlee Purdum who researches incarcerated labor conditions and trends, “The essential — and dangerous — work prisoners do: Incarcerated people respond to pandemics, wildfires, avian flu outbreaks, mudslides and more”, https://www.hcn.org/articles/south-labor-the-essential-and-dangerous-work-prisoners-do, 23 April 2021, EmmieeM)

Last year, when the COVID-19 pandemic swept through nursing homes, exhausted medical supplies and sent the country into lockdown, prison officials gave incarcerated people their marching orders: Manufacture hand sanitizer, sew face masks, transport dead bodies, dig graves.

The workers toiled in crowded factories, overflowing morgues and inside their own prisons, where they often lacked access to essentials like soap and adequate medical care. In the process, they became one of the most vulnerable — and yet essential — parts of the nation’s emergency response.

Seven Western states — Montana, Washington, Idaho, Oregon, Nevada, California and Arizona — specify incarcerated labor as a resource in their state emergency operation plans. Others, like Colorado, passed legislation in 1998 like the Inmate Disaster Relief Program, which allowed the state to use the workforce for wildfires and other emergencies. (Recently, Colorado passed a new law by the same name that requires the state’s fire division to encourage formerly incarcerated firefighters to apply for paid work in the field.) The reason is simple: “(Incarcerated workers) are extremely low-cost,” said Carlee Purdum, an assistant research professor with the Hazard Reduction and Recovery Center at Texas A&M University. According to the Prison Policy Initiative, such workers received anywhere from 14 cents to $1.41 an hour on average in 2017. And because they are technically considered a state resource, said Purdum, the Federal Emergency Management Agency, or FEMA, further subsidizes the cost of their labor when states are overwhelmed by natural disasters.

“I’ve seen and documented the use of incarcerated workers for a lot of different types of hazardous work.”

The workers can be tapped for nearly anything. “I’ve seen and documented the use of incarcerated workers for a lot of different types of hazardous work, from cleaning up oil spills to going through and eliminating infected birds with the avian flu,” said Purdum. “Really, anything that happens in a disaster, if it overwhelms the community, and (state or local officials) feel like they have a need, they will turn to incarcerated workers.”

But incarcerated people aren’t just vulnerable owing to the hazardous nature of the work they do; they lack the power to keep themselves safe and are forced to rely on prison officials for their well-being in dangerous situations. High Country News spoke with Purdum, who has spent her career researching the unique problems faced by incarcerated people during disasters, along with lesser-known aspects of prisoners’ labor. This interview has been edited for length and clarity.

High Country News: Much of your work focuses on the vulnerability of incarcerated people when a disaster hits. What are some of the less obvious ways prison populations are impacted by an extreme weather event or natural disaster?

Carlee Purdum: The location of prisons contributes to that vulnerability because there is a priority for cheap land, and that is often in rural areas. When prisons are impacted, it’s difficult to get resources to them. And then the characteristics of a prison itself create a lot of vulnerability: Incarcerated persons have to rely on the state and the staff at their individual unit to protect them, and that is often a very challenging thing. There are also the characteristics of incarcerated persons themselves. They are a stigmatized population, so they’re often on the lowest priority in terms of disaster resources.

Incarcerated persons have very limited rights, so if they are told that they are going to go out and do a certain type of work, they don't have the right to refuse. If they do refuse, they can be written up with disciplinary infractions, they can be put in solitary confinement; it can have real-world impacts on them and their chances of being released. One man, Neil Ambrose, was doing debris cleanup, and there was a downed power line after a storm. The power line sparked a small fire, and the guard ordered the incarcerated persons to stomp the fire out — and when Neil did that, he was electrocuted and died.

Even if they perceive that their health and their safety and even their lives are at risk, they don’t have a right to say, “No, we’re not going to participate in that.”

HCN: In your research, you analyzed state emergency operation plans. How are prison populations addressed in state disaster planning?

CP: I found that incarcerated persons are viewed as a vulnerable population, a hazardous population and as a workforce. States will include some references as to how incarcerated persons need to be protected in disasters. And evacuations of prisons do happen. One example is wildfire in Western states when institutions are threatened.

But, on the other hand, they are also viewed as a hazardous population. (And) in emergency planning, there’s a disproportionate focus on emergencies that are defined as “inmate-precipitated”— which includes hostage situations, riots, things like that. Those are more frequently included in not only in planning documents but also in emergency management within prisons.

There’s this focus on incarcerated persons perceived as being a threat, but less focus on the kinds of emergencies and disasters where incarcerated people are the survivors and need a humanitarian response. That’s been recognized as a problem in prison emergency management for the last two decades.

HCN: What are some lesser-known uses of incarcerated labor in the West that the general public might not think about?

CP:  For any major disaster that happens, there’s typically going to be some kind of role for incarcerated workers, and that's because disaster programs subsidize it.

There is a really compelling example in California, where incarcerated workers were helping with mudslides back in 2005. They pulled out more than 150 incarcerated folks from the prisons to help dig out this debris that had impacted this community. They were working alongside the cadaver dogs and other workers with specialized equipment. They were looking for possible survivors or possible deceased victims. In Nevada, incarcerated persons have been active in flooding events. On the website of (Nevada’s) Department of Corrections, they also say that their work crews were involved with recovery efforts for the space shuttle Columbia disaster.

The impact of hazards and disasters on incarcerated persons is extremely traumatic, and we just have no idea what the true toll is on people, on their health, on their relationships with their families, on their life trajectories.

It’s throughout the lifecycle of disasters, too. You may not think of construction workers at the prison as being involved in disaster work, but if they’re repairing a damaged state facility, if they’re providing some kind of construction work on a damaged school — that is recovery work. In California, they’re helping to do the seismic retrofitting of buildings. That’s hazard mitigation work. They’re really involved throughout the entire lifecycle, and in disasters, that’s mitigation, preparedness, response and recovery.

HCN: Can you talk more about the people themselves and what is at stake for them?

CP: When you look at the public health impact, or even just the emotional trauma and physical harm, there are many examples of incarcerated people suffering in the context of disasters. Whenever (they) are evacuated from a facility, that can be very traumatic for family members who may have no idea where their child is, or where their husband or wife is. When evacuations happen, (prison officials) often keep that information private until the evacuation is really complete.

Then we have these very infamous examples of the trauma that incarcerated people at the Orleans Parish prison suffered after Hurricane Katrina. They were stuck in their cells with chest-high water that was contaminated. These are people having medical emergencies. They had no access to fresh water or food, and then when some people tried to escape this very dangerous situation, they’re viewed as this threat.

The impact of hazards and disasters on incarcerated persons is extremely traumatic, and we just have no idea what the true toll is on people, on their health, on their relationships with their families, on their life trajectories. It’s an unexplored subject. There needs to be further research on how being incarcerated can impact a person’s life if they’re exposed to disasters.

HCN: What are you hoping people will take away from this research?

CP: I have talked to other organizations that are trying to put together materials for communities to be able to hold their local prisons responsible for how they interact with incarcerated persons in disasters. The environmental justice program with the NAACP put together a resource for communities after disasters to make recovery more equitable. It serves as a checklist: First, look in your community and see if incarcerated persons are being used for disaster work. And if they are, ask if that work is voluntary; ask what kind of training is being used; ask what kind of equipment like personal protective equipment incarcerated persons are being given.

I recommend people look into tools like that, look into resources like that, to make the practice more visible and to hold those agencies accountable for how they are treating people.

#### Lack of quick oil spill response (OSR) is an existential threat – innovative clean-up tech has slowed and barriers prevent alternate prevention measures or different actors solving, citing meta analysis of studies and spills from 67’ to now

Little et al 21 (David I. Little (Environmental Consultancy @ Cambridgeshire), Stephen R.J. Sheppard (Collaboration for Advanced Landscape Planning & Department of Forest Resource Management @ Faculty of Foresty @ University of British Columbia), David Hulme (Global Development Institute @ University of Manchester), “A perspective on oil spills: What we should have learned about global warming”, https://www.sciencedirect.com/science/article/pii/S0964569120304166, Ocean & Coastal Management, Volume 202, 1 March 2021, EmmieeM)

Scientific knowledge of marine pollution and oil spill response (OSR) innovation has diffused over half a century. Local community resilience to spills and the equitable application of knowledge worldwide are constrained by several barriers. These range from access, governance, cost minimisation, through austerity and poverty in affected areas, to realpolitik (e.g. vested interests, nationalism, corruption, security breakdown and war). Ongoing incidents show inequalities in spill risk and OSR capability. Advances in knowledge have belatedly brought us to the conclusion that the logical way to reduce adverse impacts of oil in an era of global warming is to accelerate decarbonisation. This would rapidly and simultaneously reduce the frequency, magnitude and consequences of oil spills. Meanwhile, mitigating spills, managing OSR, and restoring local communities and ecosystems at spill sites are fundamental obligations for the oil industry. These obligations should be routinely enforced by all responsible governments, and backed by inter-governmental agencies and conventions. However, we must no longer assume that even the best practices in exploration, production, refining, transport and consumption of hydrocarbons can adequately reduce their leading role in the ongoing destruction of the global environment.

1. Introduction

1.1. Background

Aged fourteen and led by an ex-wildfowler parent, two of the authors had already visited the UK's teeming seabird colonies on Handa Island, Bass Rock, Farne Islands and Skomer Island. Seeing the ‘Torrey Canyon’ oil spill on TV on March 18, 1967 was a terminal shock to childhood. Marine oil pollution suddenly became the environmental hot topic internationally for the public. The background was one of increasing concern over persistent organochlorine pesticides, highlighted in USA by Rachel Carson (1962). Cold war tensions came to a head that year in the Cuban missile crisis. Although Pacific nuclear bomb tests continued into the 1990s, a treaty banning atmospheric testing led to peak fallout in 1963, until the Chernobyl accident (1986). There was socio-political upheaval in the civil rights and peace movements, with growth in multilateral pressure groups.

Public pressure on environmental problems achieves results. Leaded petrol was phased out from 1975 in USA, from 1983 in UK (after Royal Commission on Environmental Pollution), and completed in 1999. Some countries acted on ozone layer depletion in 1978, and (after work by British Antarctic Survey), the 1987 Montreal Protocol phased-out chlorofluorocarbons (CFCs) globally. By 1979 the international dimension of acid rain from SO2 pollution made headlines leading to the United Nations Economic Commission for Europe (UNECE) Convention on Long-range Transboundary Air Pollution (the first global environmental accord). From 1990, SO2 and NOx emissions reduced in USA with the first market cap-and-trade system. Acceptance of the economic case by industry and government was essential to finding alternatives to leaded petrol and CFCs. Growing public expectations of peace, social justice and environmental protection underpinned all these changes, and oil spills inevitably ceded their position as No. 1 environmental issue.

1.2. Anthropogenic climate change

Decades later, the perceptions of ordinary people have renewed intensity. Peak concern passed to greenhouse gas (GHG) emissions causing climate change. Compared to the outrage caused by dramatic oil tanker accidents, this change in perception started slowly but grows relentlessly. The global warming hypothesis is robustly tested and accepted (except by populists and vested interests) as much as major scientific hypotheses such as the Earth's age, plate tectonics and evolution. Unlike these subjects, runaway climate change is a man-made existential crisis. It is neither academic nicety nor liberal conspiracy.

Climate change is also the eponymous crisis of the Anthropocene: over-arching, synchronous, cascading processes affecting the harsh lived experience of hundreds of millions of people with ramifications for millennia. It is the key global stressor of the planet's ecosystems, driving coastal squeeze, desertification, flooding, food security, forest fires, freak weather, human migrations, invasive species and rapid extinctions. It increases the risk of wars and viral pandemics. These stressors are intensified by positive feedback loops that are not the product of mass hysteria from social media, or a vague perception of worsening weather in news reports.

The 2008 and 2009 Conference of Parties (COP)14 and COP15 of the United Nations Framework Convention on Climate Change (UNFCCC) discussed a successor to the Kyoto Protocol that was postponed as the global financial crisis deepened. In 2015 the aim of COP21 to accelerate action and investment in a low-carbon future was enshrined in the Paris Agreement, from which President Trump would have withdrawn USA had he not lost the November 3, 2020 election. In 2019 COP25 was sabotaged by President Bolsonaro of Brazil and moved via Chile to Madrid, losing more precious time. Glasgow's COP26 is postponed until 2021 due to COVID-19.

By now we should have been well on our way to mitigating catastrophic climate change. Instead, we focused on bailing out the financial system that caused the economic crisis, and on restoring the very economy that massively discounts future impacts of climate change. A decade later we continue relying on the carbon industries, despite climate change and inequality being seen as the world's most pressing problems (Hulme, 2016). Foreign aid should encourage sustainable development, not fossil fuel projects such as $1.2 billion (B) from UK Export Finance for a Mozambique liquefied natural gas project. To avoid the calamity resulting from a mean temperature increase of 1.5 °C we have only a decade to cut CO2 emissions by 45% from a 2010 baseline (UNFCCC, 2019).

It will take ‘cold turkey’ to stop a fossil fuel addiction that provides warm or air-conditioned homes, air travel, and ever-growing numbers of cars. In a poll of 26 000 people in 26 countries under lockdown in July/August 2020, the following percentages said they would use their car more afterwards: >60% in Brazil and S. Africa; >40% in Australia, India and USA; >30% in China and Italy; and >20% in Japan, Germany and UK (Watts, 2020).

Looking at three scenarios after COVID-19 (‘good, bad and ugly’), the ‘bad’ scenario (business as usual) is identified as the most likely outcome (Hulme and Horner, 2020). With currently hollowed-out state sectors, there will be disastrous consequences if we return to the excessive consumption of business as usual, driven by poorly-regulated markets, out-of-control outsourcing, private equity, shell companies, offshore tax havens, money laundering and organised crime. Among the legal beneficiaries of the ‘bad’ scenario are opaque think-tanks, arms salesmen and the fomenters of fake news and climate change denial. What some powerful elites prefer, the rest of us as consumers apathetically seem to covet. The ‘ugly’ scenario (socio-environmental breakdown and war) would spread ever more widely. As to whether it will, our life and times are already framed by culture wars with each side seeing an enemy in plain view. In place of such populism, we must learn behaviours to manage the crises of politics, economics and environment.

Whereas a rapid shift to a low-carbon economy is extremely challenging, there is hope for a ‘good’ scenario if city and rural dwellers in developed and emerging regions are not divided and ruled by fossil fuel lobbyists, political donors and their protégés. We must ‘build back greener’ and not retreat into carbon-heavy lifestyles. An example is set by Vancouver, whose leadership in 2009 aspired to be the world's greenest city by 2020. It now leads North America in reducing carbon pollution, receiving requests for advice from 2000 cities worldwide. Standing alongside First Nations communities, Vancouver opposes bitumen export pipelines to the British Columbia coast from the Athabasca tar sands in land-locked Alberta (Mauro, 2018).

In hindsight, the 1967 ‘Torrey Canyon’ and subsequent oil spills are landmarks clearly pointing to the climate crisis becoming the ultimate emergency. The OSRs we have conducted recognize the importance of prevention (mitigation), clean-up and restoration (adaptation). Our visceral reaction to TV footage of spill impacts on seabirds in 1967 was triggered visually. Consequences of climate change can be brought home to people using landscape visualisation (Sheppard, 2005). Although CO2 is invisible, the mitigation and adaptation lessons must be applied globally, rapidly and visibly to avert climate catastrophe (Sheppard, 2012).

1.3. Research objectives

In a 2013 interview J.G. Speth articulated a serious practical dilemma: “I used to think that the top global environmental problems were biodiversity loss, ecosystem collapse, and climate change. I thought that thirty years of good science could address these problems. I was wrong. The top environmental problems are selfishness, greed and apathy, and to deal with these we need a cultural and spiritual transformation. And we scientists don't know how to do that” (quoted by Berry, 2018).

With the aim of addressing this dilemma, the following research questions were examined from the perspective of cumulative experience of oil spills:

1) What are the valuable lessons from the history of oil spills in terms of changes in public perception, responses to present and future threats and specifically to anthropogenic climate change?

2) What are the effects (on spills and climate change) of variations in public and private sector governance, ranging from moral, legal and multilateral actions to the opposite extreme of neo-colonialism and corruption among businesses and governments?

3) How can the attention of more people be stimulated to peaceful action on the urgency of global environmental protection, so that industry, governments and public cooperate on decarbonisation (i.e. GHG phase-out)?

2. Methods

With an emphasis on key oil spill incidents from 1967 to-date, the study approach was chronological but grouped into phases defined by growth in knowledge and the changing public reactions to spills. Concerns ranged from scientific to socio-economic, political and global development issues. Oil spill cases and responses were reviewed and interpreted. Climate change and oil spill perceptions were considered in cultural as well as scientific terms, illustrated by references to art, literature, music and video.

Questions for assessment of an oil spill contingency plan (OSCP) were used to invite comparison with the primary response to COVID-19. Sources included news media, technical reports, OSR handbooks and scientific articles. The lead author's knowledge since 1975 in the oil port of Milford Haven (UK) came from over 20 oil spills worldwide, spanning multiple years in four cases (‘Exxon Valdez’, ‘Sea Empress’, Gulf War, Niger Delta). Two of these assignments were as principal investigator and/or expert witness, and three as steering committee member/independent reviewer. If all spills were the same and all their OSR lessons were applied effectively and equitably, a ‘career in spills’ would have been unnecessary.

3. Results: oil spill impacts and response

3.1. The ‘new normal’ of spills

Oil has seeped into the ocean for hundreds of millions of years; thankfully, otherwise the microbial communities capable of breaking down hydrocarbons at sea would not have evolved. During WW2 fuel oil was spilled faster, in larger quantities and amid horrific loss of life. The only upside was that over-fishing was impossible in strategic waters during the conflict, and so marine fishery stocks recovered despite the oil. Oil spills affect seawater quality and ocean ecology on relatively limited temporal and spatial scales. Natural mitigating processes include: oil evaporation, spreading and dilution; water turbulence and mixing; flocculation, biodegradation, biopackaging and sedimentation of suspended oil droplets; rapid recovery or replacement as a result of plankton communities’ patch dynamics; toxin depuration physiology of fish; and wildlife mobility or avoidance behaviours.

However, in sheltered areas of coastal seas, estuaries, deltas, and particularly in fine-grained sediments and wetlands, stranded oil is often persistent and toxic. Depending on the efficacy of response and clean-up, lingering oil can cause significant adverse impacts on receptors and natural resources, affecting biodiversity, ecological succession, and bioaccumulation (primarily in shellfish). The socio-economic activities affected include tourism amenities, desalination and cooling water intakes, wild fishery market closures, and oiling of seafood aquaculture facilities. In addition to any crew fatalities and injuries, human health is affected in some receiving environments. Impacts of some spills are well-documented, and we do not cover them here in detail. This section examines lessons from case studies of spilled oil fate, behaviour and effects, how they are assessed, and how they drive evolving clean-up options.

Summary data are given in Table 1 for 24 larger tanker spills worldwide, showing key references in a range of locations, 50% European. Although smaller, the last three are included by the International Tanker Owners Pollution Federation (ITOPF). In 33% of these spills, all outside Europe, no opportunity for study arose or impacts were not assessed (N/A).  
Table 2 shows the approximate costs of the oil spills in this study (footnote [b](https://www.sciencedirect.com/science/article/pii/S0964569120304166" \l "tbl1fnb) in Table 1). In addition to the cause, size and oil type, the costs depend on weather conditions at the time, geographic location, access, security, geopolitics, governance, legal circumstances, and affluence in the affected region. The limit of insurance liability also drives/minimises costs. If, despite the ‘polluter pays’ principle, no spiller OSR is forthcoming, then government, United Nations (UN), European Commission (EC), ITOPF or non-governmental organisations (NGOs) may assist.

Over the two decades following ‘Torrey Canyon’ there were two further landmark spills: March 16, 1978 ‘Amoco Cadiz’; and March 24, 1989 ‘Exxon Valdez’. All three incidents catalysed international efforts to prevent spills, improve response and examine ecological impacts. Responders did not get it right every time, but by getting it wrong in new and imaginative ways they gradually made fewer mistakes. ‘Torrey Canyon’ was bombed by the RAF using high explosives and napalm. The first-generation dispersants sprayed and poured onto shorelines were industrial cleaning products (mostly aromatic hydrocarbons) that did more damage than Kuwait crude oil alone. After the ‘Amoco Cadiz’ spill (Iranian light and Arabian crudes), shoreline clean-up involved the French army removing an oiled saltmarsh. ‘Exxon Valdez’ (Alaska North Slope) crude oil was cleaned from rocky shores using hot seawater and pressure washing that was controversial: effective if the perception was that all oil had to be removed, but not necessarily using net environmental benefit analysis (NEBA).

In a spirit of cooperation, experts from industry, government, civil society and multilateral agencies lobbied, funded and conducted R&D. The Environmental Sensitivity Index (ESI) was developed to prepare for oil spills including in remote areas (Gundlach and Hayes, 1978). Entering into force in 1983, the IMO International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) was instrumental in preventing tank washing at sea and improving ports' waste reception facilities. Spill compensation schemes were refined (summarized in ITOPF, 2020b). Spill trajectory modelling, aerial surveillance and clean-up technologies improved the oil encounter rate at sea and the effectiveness of oil recovery equipment (pumps, booms, skimmers). Lower-toxicity chemical dispersants and aerial spraying capability came together. The reluctance to use dispersants after ‘Torrey Canyon’ was overcome for some spills where resource managers agreed that NEBA might result in less impact than oil alone. Training improved in deployment and monitoring the effectiveness and effects of countermeasures. As part of the OSCP, stockpiles of OSR equipment were created, and ‘spill drills’ simultaneously became world-class and routine. To improve OSR, clean-up cooperatives were established from 1985. Lessons learned were documented and fed back into the revised plans and clean-up manuals.

For positive outcomes to spills, a strategy and a well-rehearsed, tactical OSCP are both needed. These enable responders to apply the technical data and scientific knowledge that are codified in regulations, procedures, guidelines and advice. The uneven COVID-19 response worldwide has shown the critical importance of international coordination and rigorous testing of contingency plans. The UK central government and others failed to ask, let alone answer the right questions, as can be seen by substituting the COVID-19 equivalent in the following OSCP questions (Table 3; see section 4.1).

Experiments conducted in the field, in the laboratory and at the meso-scale (e.g. tank tests and enclosed ecosystems), refined and confirmed many of the observations from oil spill case studies. Seminal work was conducted by scientists from the Field Studies Council (FSC) Oil Pollution Research Unit in Wales, who among others were also engaged in environmental monitoring of coastal refinery discharges and the proliferating oil and gas fields in the North Sea and elsewhere. Despite the inevitable blind alleys in oil spill R&D, learning from the mistakes and moving quickly on were hallmarks of the progress that was needed. The experimental, adaptive management approach facilitated controlled comparisons between clean-up options, leading to development of practical OSR guidelines that in turn informed contingency plans. The FSC and other natural history NGOs have wider historical, ecological and cultural importance, including tracking the evolution of perception and ethics in environmental learning (Berry and Crothers, 1987).

It seemed that the coincidental 11-year intervals between the three landmark spills were enough to make real progress. And yet it was too long because funding as well as public and professional vigilance dwindled before the next large spill. ‘Amoco Cadiz’ and ‘Exxon Valdez’ were cases that were heard or settled in US courts. Not content with the international compensation schemes that limit the spiller's liability (mainly relating to tankers), after ‘Exxon Valdez’ the USA quickly ratified the Oil Pollution Act 1990 (OPA 90). This created a comprehensive prevention, response, liability and compensation regime for oil pollution in US navigable waters (fresh and marine) and from all vessels and other facilities including offshore platforms. The Americans developed a formal process for Natural Resource Damage Assessment (NRDA), alongside compelling musical (Zappa, 1993) and artistic perceptions (Troll, 1989, Fig. 1).

Apart from NRDA, oil spill impact assessment was not standardised, and remained an evolving, patchy process. Many spills had no impact assessment and even those for ‘Torrey Canyon’, ‘Amoco Cadiz’ and ‘Exxon Valdez’ came from separate sources (Table 1). Tracking recovery from multiple inputs against fluctuating baselines can take decades (Hawkins et al., 2017). In addition to official assessments, essential knowledge was gained from experience, case studies and expert reviews during ‘peacetime’ between spills. In place of anecdotal data there was better understanding of the physics, chemistry and biology of oil spill behaviour and effects.

Some complained about the high cost and litigious nature of the ‘Exxon Valdez’ response, but the thorough science undoubtedly improved reliability of impact assessments. ‘Exxon Valdez’ technical innovations were deployed later in other spills (e.g. ‘Deepwater Horizon’ blowout in 2010, section 3.2.4). The multi-agency Shoreline Clean-up Assessment Technique (SCAT) included ground and aerial survey methods that, with early Geographic Information Systems (GIS), were pioneered in the ‘Exxon Valdez’ response. The Global Positioning System (GPS) and field computers later helped long-term impact surveys and NRDA. Fine sediment particle interaction with oil was shown to influence oil behaviour, and prolonged deep (>1m) oil penetration into coarse sediments was studied in unprecedented detail (Fig. 2).

The advanced chemistry forensics, oil source fingerprinting, bioremediation trials, and wildlife and cultural resource programmes benefitted all sides in the ‘Exxon Valdez’ case. These innovations are still widely applied. Cultural resource studies used First Nations anthropology expertise from Alaska and British Columbia. The involvement of local communities continued after the spill (e.g. Alaskan Regional Citizens' Advisory Councils). In contrast, in some recent spills and geographies a science-led response seems impractical, cursory, and not always reliable or inclusive of local and indigenous communities (section 3.3).

3.2. Growing recognition of oil's global impact

3.2.1. Changing circumstances

At the end of Soviet communism (1991) and South African apartheid (1994), the years 1991–2002 saw growing democratic values, a sense of optimism, improving technology, and increasingly sustainable development. From 1991 to 2000 IPIECA produced 10 habitat-specific guidelines on oil pollution impacts, OSR and NEBA. Three key UN conventions on biodiversity, climate change and desertification followed the Rio Earth Summit (1992). In that year, tanker spill compensation liability limits were expanded to $280 million (M). In a temporarily ‘unipolar’ world where ascendant USA was committed to multilateralism, a UN agency with oil spill remediation and reconstruction responsibilities was created to assist recovery from the 1991 Gulf War (section 3.3.1).

The average numbers/decade of medium and large oil spills from tankers halved between the 1970s and 1990s. The reduction since the 1970s is now more than an order of magnitude, thanks to public pressure and better environmental management (e.g. effective regulation, standards, certification, audit, prevention, surveillance and reporting; Fig. 3).

Estimated oil inputs into World Oceans from shipping and other (including unknown) sources were 4 million t/year during the 1990s (Fig. 4).

The inverse, but not causal, relationship between rising emissions/concentrations of CO2 and falling oil spill frequency is shown in Fig. 5. The juxtaposition and common inflection points in the early 1970s are striking. After the OPEC oil embargo in 1973, the reduction in spills' frequency (if not always their size) was sustained in spite of tanker trade increasing from c. 60 to 100 million t/year between the 1970s and 2000s. There is a huge difference between c. 4 million t/year of oil inputs to the oceans from all sources and c. 30 billion tons of CO2/year emitted to the atmosphere. Oil spills are a low but highly visible hazard generating historically high levels of public outrage. In total contrast, anthropogenic climate change is an extreme hazard that until recently has produced little outrage, considering the acceleration in CO2 inputs 50 years ago, when a ‘red flag’ should have been raised (Fig. 5).

Being unaware of climate change was the norm in 1970 but to deny it after the early 2000s is indefensible, given that the challenge of necessary adaptation far outweighs that presented by spills. Dismantling UN agreements is not the way forward. Instead, climate emergency planning is essential with UNFCCC taking the lead. Mitigating and adapting to the increased frequencies of extreme events also demands active transformation across society, industry and government.

3.2.2. Winter(s) of discontent (Shakespeare, 1597)

Despite the general downward trend in number of tanker spills (Fig. 3), there was a spate of large spills from 1991 to 2002, mostly during northeast Atlantic winters (footnote [b](https://www.sciencedirect.com/science/article/pii/S0964569120304166#tbl1fnb) in Table 1). The adverse impacts of these spills did not change the whole direction and pace of oil spill response R&D as did the three landmark spills. This does not mean that the 1991–2002 spill record was acceptable; the large spills of the 1990s were a wake-up call to re-establish the positive trend. Innovative approaches to clean-up were developed on cliff coastlines using climbers, and R&D was commissioned into responses to spills of heavy oils.

The ‘Haven’ (Iranian heavy crude) and ‘Aegean Sea’ (Brent crude) spills burned and caused severe impacts and fishery closures. The latter vessel was a modern double-hulled tanker, as mandated by OPA 1990 for US trade, and yet she broke up and burned on the waterfront in the evacuated centre of La Coruña. Burning oil slicks floated >5 km across the bay setting fire to maritime cliff vegetation near Breixo. This failure of prevention shows that improvements in tanker design and also in countermeasures are not a panacea, due to variations in oil spill behaviour, weather and human factors.

The ‘Braer’ and ‘Sea Empress’ both grounded in protected conservation areas, although each spill had rather less adverse impact than originally feared. The ‘Braer’ lost 85 000 t of Gullfaks oil as she broke up near the shore, but storm-force winds meant hardly any of the light crude oil stranded. Most oil evaporated or carried as aerosol overland. Remaining oil formed dilute oil-in-water suspensions in the water column. The ‘Braer’ cargo and bunkers were a total loss, with one-third eventually settling out with fine particles that had been suspended by the storm. The ‘Sea Empress’ losses of 72 000 t of Forties blend crude oil were mainly dispersed by February gales and effective use of chemical dispersants on the ebb tide before she was brought into the shelter of Milford Haven. Some bunker oil persists along with historic inputs sequestered in fine-grained sediments of the estuary. Nevertheless, it seems large oil tankers can suffer grounding or destruction on or near the shoreline without long-term ecological impact. It would have been a very different outcome if ‘Braer’ or ‘Sea Empress’ had foundered two months later, in the seabird breeding season.

In contrast, the persistence at sea of a relatively small spill of 20 000 t heavy fuel oil (HFO) lost in midwinter from ‘Erika’ led to probably the worst seabird kill in Europe, and heavy shoreline impacts. The ‘Erika’ and ‘Prestige’ HFO spills prompted improvements of spill response for this problematic oil type, better international cooperation in the European Union (EU), and HFO spill compensation under the 2001 Bunkers Convention. The formation of a viscous water-in-oil emulsion (‘mousse’) from HFO or crude oil under wave action creates a much higher volume of plumage-clogging, persistent pollutant that is also difficult to skim and pump. Galicians cried “Never Again” as they manually retrieved oil from ‘Prestige’ (Fig. 6).

One exception to these NE Atlantic incidents was the ‘Katina P’ spill of 66 700 t HFO in Mozambique, severely oiling 3 km of mangroves in Maputo Bay and less severely 1450 km in total (550 km in South Africa). The ship's ‘innocent passage’ was nothing to do with Mozambique, but Table 2 shows that the government did not receive much of their damage claim. This was harsh considering that 15 years of post-colonial civil war still had four months to run, with small arms fire heard during clean-up (Little, 2018).

Another problem with HFO is that there is low demand due to the welcome move away from its use in power generation, to protect air quality. Consequently it is surplus and cheap, leading to a perverse incentive for ocean-going ships to burn highly-polluting HFO with c. 1 billion t/year GHG emissions still not adequately controlled by IMO. In each of the above spills a substantial proportion of the HFO was burned or spilled along with the cargo. They all involved environmental and economic impacts including fishery closures. Each had novel features and was traumatic for local communities, and all became media events.

Despite, or maybe because of colourful and immediate media coverage of the 1990s incidents, public perceptions of these spills were increasingly subject to spill fatigue. In the long-run the 1990s incidents will not be regarded as R&D landmarks of the magnitude of ‘Torrey Canyon’, ‘Amoco Cadiz’ and ‘Exxon Valdez’. These were landmarks not because of their size; after all, ‘Exxon Valdez’ lost ‘only’ 37 000 t. Rather, it was because they led to step changes in spill prevention, OSR capability, and lasting improvement in environmental understanding, all of which had been demanded by public opinion. Some of the innovations diffused very slowly. After ‘Exxon Valdez’ the UK scientific approach was improved, although not until 2007–9 were SCAT and advanced chemistry methods from Alaska fully codified in practical guidelines in UK scientific contingency plans (PREMIAM, 2009; 2018).

3.2.3. Concern shifts from spills to climate change

Although GHG impacts did not feature significantly in environmental impact assessment (EIA) until the new millennium, NGOs and the public were beginning to focus less on individual oil spills than on other concerns, including global warming. This focus was sharpened in 2005 by Hurricane Katrina and Vice-President Gore's ‘An Inconvenient Truth’ (Sheppard, 2012). By 2013, climate change and biodiversity were integrated into EIA more prominently in European Union guidance (EU, 2013).

Although public concern over spills remains a leading driver of opposition to coastal pipelines and tankers in places such as British Columbia, the oil that is not spilled is in fact the real problem. For example, spilled oil sedimenting out in an accretional environment is carbon that in effect is sequestered. The universal burning of fossil fuel is the main culprit in man-made global warming. Hydrocarbon combustion and agriculture are the main global stressors where the public (by exercising consumer choice) can play an urgent part in mitigating. A comparatively small contribution to global warming comes from oil spills, and this is mostly from the evaporation of volatile organic compounds (VOCs) from oil spilled at sea (and also welcomed by responders because it reduces shoreline impacts). Contributing to global warming from the upstream industry during leaks and upset conditions are potent GHGs such as methane, in particular from the industrial northern hemisphere. Downstream processing and retail sites have successfully improved VOCs capture and recovery.

Safety and high utilization (e.g. waste and emissions minimisation) are paramount for as long as we continue to use hydrocarbons. However, the pace of replacement of fossil fuels by renewables must now rapidly accelerate. Renewables technologies including hydroelectric projects are improving all the time, and some costs are coming down. There are concerns that lithium, palladium and rare earth elements (REE) used in batteries, fuel cells and other renewables processes lead to adverse impacts of mining (onshore, in the deep sea, and potentially off-planet). Conflicts might arise over access to REE resources due to their geopolitical scarcity. Nuclear power will remain a primary energy source beyond fossil fuels, partly because safe storage of radioactive wastes demands sustained expertise and vigilance.

3.2.4. When life looks like easy street there's danger at your door (Hunter and Garcia, 1970)

After about 2002, the oil industry must have seemed under control to the wider public, as headlines were not dominated by major oil spills. To secure their licence to operate, steady improvements had been made in the regulation and reduction of spills and drilling mud emissions from offshore oil and gas fields on continental shelves and in ever-deeper or colder waters. Whether the spills occur from tanker accidents, in E&P operations, from land-based sources, or down the drains of our industrial or housing estates, the cumulative knowledge gained can be effectively applied. It is possible to get through the emergency phase and manage OSR as a project like any other, preferably with transparent cooperation among industry, government, scientists, NGOs, media and public.

A lower visibility of pollution should not mean complacency. During 2002 there were other serious and ongoing distractions: the burst of the ‘Dotcom Bubble’; Severe Acute Respiratory Syndrome (SARS) spreading human-to-human from Guangdong, China; and the aftermath of the 9/11 attacks in USA leading to the ‘War on Terror’ and the 2003 invasion of Iraq. Before it can be regarded a success, any response to oil spills (or chemical accidents, or viral pandemics) must protect lives and minimise health and safety impacts. At the same time, responders must trade-off economic/cultural resource impacts against adverse ecological impacts. As we see in COVID-19, getting these trade-offs right, documenting, validating and communicating them in a truthful, balanced way in the glare of the media, is the difficult part.

Step forward Tony Hayward CEO of BP, after the explosion and blowout of the ‘Deepwater Horizon’ drilling rig on April 20, 2010 in the Macondo prospect, Gulf of Mexico. With massive oil releases of 700 000 t from the seabed wellhead showing live on subsea video over four months, BP could not be shielded by their hierarchy of contractors. Outsourcing by BP had already been intensified by the previous CEO John Browne, but some deep water technological challenges were new. Serious doubts about blowout preventers were raised, prompting rapid and business-interrupting risk reassessments in the E&P industry around the world. Media and other stakeholders including President Obama sensed a BP cost minimisation back-story. Public perception darkened dramatically as Mr Hayward, while sympathising with the affected communities, declared: “We're sorry for the massive disruption it's caused their lives. There's no one who wants this over more than I do. I would like my life back”.

3.3. Problem spills during conflicts

3.3.1. Desertshore (Nico, 1970)

3.3.1.1. Gulf War spills

Away from TV cameras there were glimpses of other lives not being ‘back’, especially in war zones. These were spills that can make all the above seem ephemeral and colourful despite their impact. Even larger than the ‘Deepwater Horizon’ spill, the 1991 Gulf War spills (1 000 000 t) and fires in Kuwait were caused by sabotage by retreating Iraqi forces under Saddam Hussein. The spills were the first to be branded as eco-terrorism. The slicks contaminated 800 km of coastline including bays choked with oil in Saudi Arabia almost to Qatar. Much of the sediment infaunal community died when their burrows filled with oil, and algae bloomed in the absence of invertebrate grazing. Channels blocked by layers of algae and fine sediment led to feedback loops that changed the drainage hydrology and ecology of the tidal flats.

An inter-disciplinary impact assessment was made in 1991–1993, representing a high point in international cooperation in oil spill science. A special issue of Marine Pollution Bulletin (MPB, 1993) described the scientific response including the 100-day ‘Mt Mitchell’ marine survey in 1992. The survey produced scientific data, fostered environmental awareness and cooperation among 140 scientists from 15 nations, and was organised by: International Oceanographic Commission (IOC); UNEP; Regional Organisation for the Protection of the Marine Environment (ROPME); US National Oceanic and Atmospheric Administration (NOAA); and Marine Spill Response Corporation (MSRC). Because oiling conditions and impacts were likely to have changed in the decade since these international surveys just after the Gulf War, intensive shoreline monitoring and rapid ecological assessment surveys in Saudi Arabia were undertaken in 2002–3. The degree of change 1993–2003 was assessed by building on SCAT, modified for vegetated, burrowed, carbonate sediments. More than 3100 transects were surveyed, almost 26 200 total petroleum hydrocarbon (TPH) samples and 2660 fingerprinting samples were analysed.

Chemistry analyses were carried out in a state-of-the-art analytical chemistry laboratory established by Battelle close to the affected areas. The trained analysts produced top-notch data that was used later to calibrate SCAT field observations on oil character, to assess oil weathering, and to predict toxicity and ecological effects. The spills left TPH concentrations in visibly oiled sediment from 3200 mg/kg to 41 000 mg/kg. This oil persistence occurred despite the emergency response and initial clean-up. Using estimates of the volume of oiled sediment, this approximates to the total amount of oil lost by either the ‘Braer’ or ‘Sea Empress’. Less than ten years after these latter spills in high-energy areas, traces of remaining oil in sediment had been practically undetectable. In contrast, free-phase brown oil was visible after 20 years trapped in low-energy shorelines of the Arabian Gulf (Fig. 7).

3.3.1.2. UN Compensation Commission (UNCC)

All oil spills caused by armed hostilities are hard to respond to, and unfortunately they are not covered by insurance and compensation funds. And so a new agency, the UNCC, was created after the first Gulf War. The necessary funds were raised from the sale of otherwise sanctioned Iraqi oil exports that were also used, amid some controversy, to fund emergency food and medical aid. From 1991, 2.6 million individual claims totalling $352B for wartime losses and compensation were processed by UNCC. Of these, after scrutiny by UNCC, about 70 claims were awarded for all losses ($52.4B). Of these, in 2005 the Follow-up Programme for Environmental Awards (F4) under Decision 258 awarded a total of $4.3B to Kuwait, Iran, Jordan and Saudi Arabia (Table 2).

Added to the initial response this was the most expensive spill between ‘Exxon Valdez’ in 1989 and BP's 2010 blowout. The $4.3B included $0.51B for contracts in Saudi Arabia covering coastal remediation and restoration projects, and concentrating on the worst-hit locations at the time (2003 data). In addition, $6.17M was awarded for the creation and management of several marine protected areas (MPAs) elsewhere in Saudi Arabia. In the decade since the design of a visitor and educational centre, it is not known if lack of progress in MPA designation is due to poor disclosure or graft.

During 2007, teams of independent reviewers (IRs) for the F4 programme were organised by UNCC under contract to recipient states. Baseline IRs surveys took place in 2007–8 with the respective national focal point (NFP). In the hiatus after the 2002-3 surveys, the UNCC noticed in 2009 that there were two parallel NFPs in Saudi Arabia. One of these had already awarded a design contract for salt marsh remediation, initially costing more than the entire 'Haven' or 'Braer' response (Table 2), and which UNCC adjusted downwards.

After further scoping by the NFP, IRs and UNCC during 2009, tidal flats were added to marshes in the planned contracts. The coastal F4 contracts in Saudi Arabia were for clean-up and restoration of 1800 ha of heavily-oiled saltmarsh and intertidal flats, covering the worst areas of lingering oil. The projects to refresh the blocked channels, excavate new channels, transplant mangroves, till sediment flats, and monitor all operations were designed and supervised by a team of experienced environmental scientists (Pandion Technology-RPI, 2003). The team included some who took part in the shoreline surveys in both 1991–93 and 2002–3. Progress was at last being made, due to leadership continuity and an approach using field experiments and adaptive management. The low-profile remediation included sign-off by quantity surveyors. Saudi Arabian restoration is still ongoing 30 years after the Gulf War.

The Saudi Arabia NFP was supported by advice from the regional offices of three of the ‘big four’ accountants (EY, KPMG, and PwC). One of these firms designed an accrual-based project accounting system because at the outset only cash-based accounting was in place. The first and smallest contract awarded was almost $10M for chemistry laboratory services. However, during the period of most intense remedial design and fieldwork, very few samples were analysed reliably, mostly overseas, despite the IRs' questions in their visits and six biannual reports (January 2010 to October 2012). In reply, there was no mention of the fit for purpose chemistry laboratory created in 2001 to compare sediment contaminants data to those from 1991 to 1993. Decadal sampling to compare sediment contamination could by now have been in its fourth collection phase, continuing the high standards set in 1992 (MPB, 1993) and by Pandion Technology-RPI (2003).

Including quantity surveyor and chemistry contracts, seven terrestrial and 13 marine remediation contracts covered most of the Saudi Arabia F4 programme. Information on bidders was scant. Few had demonstrable qualifications (e.g. website), which made it hard to check their remediation experience and identify possible collusion among firms. Improbably for competitive tendering, the winner and runner-up bids in each of the 20 contracts were separated by as little as 0.05% of the price. Across all contracts, there was low statistical probability (p < 0.005) that the significant separation of the two front-runners from the remaining bids occurred by chance. The IRs asked how this had occurred, but got no answer.

With all major contracts awarded and most payments disbursed to recipient nations, the UNCC wrote its final report on the F4 awards in 2012–2013 (UNCC, 2016). The Saudi Arabia IRs disagreed when in Decision 269 UNCC declared its mandate fulfilled by the systems and assurances for recipients to continue without independent review. At the disengagement of the UNCC, the unresolved issues included stakeholder engagement, oily waste management, provision of hydrocarbon data, creation of seed banks for desert re-vegetation, site protection and designation of MPAs. Apart from RPI's technical publications (e.g. Minter et al., 2014), there was little transparency since the departure of the Saudi Arabia IRs team and UNCC in 2012–2013.

3.3.2. Multiple activities of UN agencies

The UNCC had only one mission, albeit a huge one. As a consequence, UNCC was not available to assist in 2007 when requested by UN Development Programme (UNDP) following another deliberate Middle East oil spill in July 2006, this time in Lebanon. In retaliation to rocket attacks on Israel by Hezbollah, a fuel oil spill of 15 000 t (and fire c. 55 000 t) was caused by the Israeli Defence Force bombing El-Jiyeh power station in southern Lebanon (UN, 2007).

Spill assistance was by the EC, ITOPF, International Union for the Conservation of Nature (IUCN), and the following UN agencies: IMO Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC); Food and Agriculture Organisation (FAO); UNDP; UNEP; UN Educational, Scientific, and Cultural Organisation (UNESCO, focusing on Byblos World Heritage Site); World Bank; and World Health Organisation (WHO). UN estimated spill costs at $203M (1% of 2006 Lebanon GDP, and 28% of total war damage). Funding was by UNDP and OPEC, but only $15M of the estimate was paid by 2007 (Table 2).

Despite UNCC experience with planning environmental restoration after the Gulf War spills and various agencies’ work in Lebanon, the UN system had difficulty coordinating these responses amid rising tensions in the region. This was not helped by the lack of success in gaining compensation from Israel, despite repeated UN Resolutions over 13 years to “direct Israel to respond with prompt and adequate compensation” (UN, 2019).

Briefly and without success, UNEP was considered from 2013 as a possible successor to UNCC to track progress in the ongoing Gulf War spills restoration (section 3.3.1). This did not happen, perhaps because UNEP was getting involved in assessment of the environmental effects of the Syrian civil war, including the use of chemical weapons by President Assad on his own people. As far as is known, there are no plans to revive UNCC despite the impacts of ramifying conflicts in the oil-rich region, for example the civil war in Libya or the aftermath of Daesh warfare across the fertile crescent of Iraq and Syria.

Oil spills are highly probable in Yemen due to ongoing civil war. A ballast tank was breached on the tanker ‘Syra’ after striking a mine in the Gulf of Aden on October 2, 2020. Another tanker ‘Safer’ was used as a floating storage and offloading (FSO) terminal until 2015, but now is held hostage with 155 000 t of Marib crude oil that threatens conservation sites in the Red Sea and Gulf of Aden (e.g. Farasan Islands, Socotra). The UN has been prevented from inspecting the FSO since 2019 (BBC, 2020a).

3.3.3. Ogoniland conflict: foreign companies dey Africa carry all our money go (Fela, 1981)

3.3.3.1. UNEP in ogoniland

By early 2007 after the Lebanon spill, UNEP was invited by the federal government to assist in a post-conflict response in Ogoniland in SE Nigeria. Ogoniland is part of what was called Biafra in the Nigerian civil war (1967–1970). The problems of gross oil pollution over decades had overwhelmed the capacity of industry and government to respond. However, in this case the local population density is high and most people are extremely poor. Despite the much smaller size of the individual Niger Delta spills compared to all the above examples, the environmental and social impacts are severe and tensions very high. So much so, that no oil production has been possible in Ogoniland for almost three decades. The deadlock came about because of civil and NGO protests that were met with a violent federal government response, leading to the trial and execution on November 10, 1995 (BBC, 2020b) of nine Ogoni leaders and writers including ‘Ken’ Saro-Wiwa (2013).

Neonatal mortalities are twice as high within 10 km of Niger Delta oil spills. Comparing pairs of siblings born to the same mother but conceived respectively before and after a documented nearby oil spill, there is a significant increase in neonatal mortality of 38.3 excess deaths/1000 live births (n = 23 000) according to Bruederle and Hodler (2018). Their paired sample design controlled for other factors than nearby oil spills, and found that oil spills occurring before conception are killing in their first month of life as many as 16 000 infants per year in the Niger Delta. Public health, housing, food and cooking fuel, sanitation, waterways, recreation, cultural life and livelihoods in Bodo are heavily dependent on local natural resources in the mangrove-dominated coastal zone. This contrasts with the sparse population and greater per capita wealth of Saudi Arabia, where the affected marshes are almost devoid of human activity.

Unlike all the major tanker spills described above, the poor in local communities affected in the Niger Delta are cast in a frankly colonial mentality as being part of the problem rather than for the most part as victims of criminally inadequate environmental practices. By stereotyping the local people as oil thieves, the western oil companies betray the majority of people of the Niger Delta while continuing to sell the oil. International oil companies have operated profitably in the Niger Delta since 1956 (Shell) and 1962 (ENI and Total). Potentially complicit parties include Nigerian National Petroleum Corporation (NNPC), Nigerian federal and local governments, judiciary, security forces, shareholders and pension funds (including those of the Church of England). To solve this, all that must be done is to uphold the rule of law (Fig. 8, Fig. 9).

Environmental surveys have previously been completed (1980 Funiwa #5 20 000 t offshore well blowout; 1983 onshore production areas; 1995 delta-wide; and 1997 Niger Delta Environmental Survey). Each of these involved evermore strategic environmental and socio-economic scope. However, few were able to engage fully with the local affected people by seeking the free, prior, informed consent that inter-governmental agencies and NGOs agree are needed. A breakthrough looked promising in 2007 when the federal government invited UNEP to carry out a baseline survey of Ogoniland to assess the scale of remediation required.

The UNEP project was a detailed multi-discipline survey of air, water, sediment, soil, biota, and a preliminary study of human health, all of which showed that many local people are indeed 'living in oil' (UNEP, 2011). By overcoming logistical challenges and the legacy of mistrust, UNEP succeeded in providing a faltering start in planning the clean-up. A restoration fund of $1B was recommended, including a centre of excellence in remediation technology (Table 2). And so the federal government formed a new agency (Hydrocarbon Pollution Restoration Project; HYPREP). After some confusion between existing agencies charged with regulating oil pollution, if successful in Ogoniland, HYPREP could begin the huge task of clean-up across the entire Niger Delta. The Bayelsa State Oil and Environmental Commission are also now examining regional remediation precedents. But first the endemic oil theft must be stopped, or else any clean-up is futile. Meanwhile, according to the Extractive Industries Transparency Initiative, oil theft is costing Nigeria over $4B/year. This was almost 1% of GDP in 2019, after Nigeria displaced South Africa as the largest African economy. The failure to prevent criminal activity is an ongoing fatal flaw in all restoration plans because repeated inputs of fresh crude oil will inevitably stress or kill vegetation.

A status report on the clean-up published in June 2020 involved revisiting some original UNEP sites (FoE, 2020). The report concluded that a new start is needed across the entire delta. The emergency measures recommended by UNEP over a decade ago to protect human health have not been provided (e.g. replacing drinking water wells contaminated by benzene). No health impacts have been or are being monitored. Most contractors are not qualified; 11 of 16 companies contracted for oil clean-up are reportedly without expertise in remediation. Only 11% of the sites recommended by UNEP for clean-up and remediation are completed. HYPREP has been compromised by conflicts of interest and procurement irregularities, with $31m spent since 2018 not properly accounted for. HYPREP has now recruited new personnel with UNEP and Bodo project experience.

3.3.3.2. Bodo community

Bodo is a Niger Delta fishing village in Ogoniland. Pipeline maintenance failures led to two spills in late 2008 (totalling 580 t Bonny light crude oil). In this area, Shell Petroleum Development Company (SPDC) is the E&P operator on behalf of a joint venture with the NNPC, Total Exploration and Production Nigeria Limited and Nigerian Agip Oil Company Limited (part of ENI). Liability was admitted by SPDC for probably the largest mangrove kill in history, but partly due to endemic security problems it was unable to fix the pipeline, recover the oil, remediate the former mangrove sediment habitats, or restore their high biodiversity and subsistence values.

Despite SPDC experience in numerous smaller delta spills over decades and the back-up of Shell, Total and ENI international experts, a cumulative 1000 ha mangrove forest was killed in Bodo after the two pipeline spills in 2008. Shell, Total and ENI are shareholders in the industry-owned emergency response organisation (Oil Spill Response Limited; OSRL) whose website promises: “Wherever your oil spill risks lie in the supply chain, we are ready to respond with our expertise and resources anytime, anywhere”. It is unclear whether OSRL was asked to deliver on this in 2008 by Shell or the SPDC joint venture. Implementation of the findings of the UNEP (2011) report is now described by subsidiary SPDC rather than Shell Nigeria, whose website link to 'UNEP implementation' appears defunct (Shell Nigeria, 2016). The parent company may be distancing itself from liability for its subsidiary's impacts in Ogoniland, but ultimate responsibility lies with Shell (Shell Nigeria, 2016).

Average TPH concentrations of 40 000 mg/kg were found in the former mangrove sediments seven years after the spills (Little et al., 2018). This is exacerbated by organised criminals who tap the export pipeline crossing Ogoniland to the Bonny Island terminal (Gundlach, 2018). The stolen oil is processed in improvised ‘refineries’ for sale locally and regionally. Fifty-three spills from over 200 illegal refineries occurred 2008–2019, totalling 1165 t of oil. Cooking up oil in leaky oil drums over open fires adds carcinogenic combustion products to the spills of crude oil (Fig. 8).

The Bodo Mediation Initiative (BMI) from 2013 and a successful court case prosecuted by the Bodo community in London in 2014 were both essential to breaking the deadlock with SPDC and getting clean-up underway to international standards, at least in part of the delta. In 2015 Shell settled the compensation claims against the company for $73M (Table 2). The cash was distributed to the individual victims of the Bodo community via newly opened bank accounts. The Bodo community separately agreed that their claim for clean-up would remain in place so that they could return to court in London in future if the BMI clean-up did not meet international standards. Shell tried to strike this out in June 2017, but the community's right was upheld in London in May 2018 (Leigh Day, 2018, Leigh Day, 2020).

Practical fieldwork could only begin in May 2015 after signing of a memorandum of understanding between SPDC and the Bodo community. Crucially, from May through August 2015 SCAT teams started to provide a strong participative framework for the essential scientific and technical aspects. Good agreement between SCAT descriptors and sediment TPH concentrations was established from the 2015 samples (n = 32; Little et al., 2018), and confirmed at-scale in 2017 samples (n = 624; Bonte et al., 2020). The reliance on chemistry sampling for monitoring against target levels is reduced by reaching field consensus on fine-tuning the clean-up methods for the vegetated and burrowed fine-grained sediments of Bodo.

The challenge is to use NEBA for in situ remediation, recognising that clean-up guidelines typically recommend ‘leave-alone’ in such habitats (after the oiled Île Grande marsh was destroyed during ‘Amoco Cadiz’ clean-up; section [3.1](https://www.sciencedirect.com/science/article/pii/S0964569120304166" \l "sec3.1)). Trial work is needed on how much nursery soil is transplanted with the seedlings to insulate them from lingering oil. Such adaptive management would track performance of the young trees as their root ball breaks out of nursery soil, compared to the effect of fresh oil spills on leaves or pneumatophores. Transplanted mangroves can grow successfully in cohesive oily sediments, in contrast with sediments that are flushed for long periods. Such intrusive treatment may produce cleaner sediments, but if they become liquefied then adverse impacts due to water-logging, loss of structure and erosion will delay recovery. In addition to mangrove seedling transplants, success depends on natural spread of healthy propagules. Phytoremediation improves longer-term sediment quality and biodiversity, even if in the short-term oil concentrations are high or temporarily increase (Bonte et al., 2020).

The project stopped for almost two years after violence erupted in October 2015 due to dissatisfaction with the procurement process (Bruyne, 2020). A phase of surficial oil removal between September 2017 and August 2018 was followed by sediment remediation from November 2019, now interrupted by COVID-19. The SCAT process has helped operator and community to embrace new ideas in clean-up. Only by building mutual trust will the inevitable concerns be addressed and tensions defused. The success of BMI and SPDC also depends on reducing the huge inequalities by supporting alternative employment opportunities to take people out of illegal refining.

3.3.4. Mauritius spill

On July 25, 2020 the bulk carrier ‘Wakashio’ grounded on a coral reef in SE Mauritius spilling >1000 t HFO and iron ore cargo. In addition to corals bleached by acidification from climate change, at risk are mangroves, seagrasses, coastal and pelagic birds, fishing communities and tourism. Under pandemic quarantine the vessel was 17% below required manning levels. Her Panamanian flag allowed contract extension such that two crew members had been onboard >1 year, risking crew fatigue. Panama's inspection blamed the incident on the change of course to look for internet signals, an allegation denied by the Japanese owner (PE, 2020). Regional investment in OSR and training has been patchy in East Africa and Indian Ocean, despite the efforts of foreign and UN aid programmes (e.g. Mauritius' coastal oil spill ESI atlas dates from 1989, before many states; Gundlach and Murday, 1989). Mauritius being a major tax haven, funds for OSR contingency planning and pollution control should be in place. In contrast, for the locals only partial sewage treatment is available. Tax avoidance is colonialism by other means, when accountability is as vulnerable as in authoritarian or hollowed-out state sectors (Little, 2018).

4. Discussion

4.1. Songs of innocence and experience (Blake, 1826)

In his poetry in 1789-1794, William Blake does not assume a unidirectional progression from ignorance to awareness, but the duality of human values and belief in the wisdom of young people. In order to overcome our climate crisis ‘learning disability’, we need to challenge authoritarian and paternalistic assumptions about learning. As when we were children, we can see now that many ‘emperors’ of business and government have no clothes (Andersen, 1837).

During COVID-19, economies and world trade struggle, mariners quarantine in their vessels, and layers of uncertainty halt investment. Record-breaking recession and unemployment are inevitable. In democracies, the pandemic response runs a gamut of kind and effective (New Zealand, South Korea) to dangerously incompetent (Brazil, UK, USA). Pandemic had already been identified as a primary threat, and incredibly in retrospect, the UK was rated highly for global pandemic preparedness. In October 2016, ‘Exercise Cygnus’ tested the UK response to an influenza pandemic, and the UK press reported overwhelmed health services, duplication of responsibilities, confusion, lack of preparedness and lack of clarity (PHE, 2017; redacted). Planning lessons got lost in the real emergency of 2020, replaced by confused messaging based on wishful thinking, cronyism in political elites, and expensive, wasteful and opaque procurements. According to the National Audit Office and legal challenges, lessons were neither documented nor revised in COVID-19 arrangements.

Multilateralism represented by agencies of the EU and UN is under assault by resurgent nationalism. Some leaders are emboldened to ignore UN agencies (e.g. WHO in COVID-19 response) and international law, to the extent of undermining multilateral arms-controls. Crisis managers, management consultants and public relations purport to ‘manage complexity’ amid raging political, economic, health and environmental crises. The first two of these preoccupied the Enlightenment economist and statistician Thomas Malthus, FRS. He thought geometric population growth would be limited only by arithmetic growth in food production (Malthus, 1798). This is controversial because rather than wealthy consumers (high-carbon footprint), he ‘blamed’ the demographic problem on the high birth rates of the poor (low-carbon footprint); unsurprising from Professor of Political Economy at the East India Company. Although he did not anticipate the agricultural revolution feeding more people, Malthus' pessimism may yet be vindicated by current stressors on humanity (e.g. cumulative environmental impacts of fossil fuels and modern agriculture).

The pandemic is re-shaping society's interest in science and understanding of the biodiversity/climate crises. The window of opportunity to meet these overlapping challenges places better leadership and governance front and centre of decarbonisation investments. The net-zero technologies are already here, with costs at-scale falling (e.g. hydrogen for fuel cells; lithium and REE batteries; electric multi-modal transport; wind, wave, tidal, solar and hydro-electricity; air- and ground-source heat pumps; carbon capture and storage for heavy industry). In his December 23, 2020 Reith Lecture, Mark Carney said “ask not what the climate is doing to your country, but what your country can do for the climate”.

Without altering the ever-increasing GHG concentrations, the dramatic reduction of noise and toxic emissions during COVID-19 lockdowns gave a glimpse of nature's restorative capacity. Achievement of this vision as we mitigate and adapt to climate change was discussed by Sodha (2020), who argued that ‘cathedral thinking’ is needed to emulate the long-term projects that were not completed during the medieval builders' lifetimes. This perception would help us all to connect with our descendants properly, unlike the rich and powerful continuing to rely on inherited wealth. Young people will bear the brunt of the present crises. Solidarity with their values is our bridge to sustainability. In forging this emotional connection there is a vital role for arts and culture, and no place for culture wars. If we fail to connect, then a shocking metaphor for the ‘ugly’ scenario is visible in Goya's painting ‘Saturno devorando a su hijo’ (Goya, 1820).

4.2. The ‘relationship’ between oil spills and climate change

In the Russian Arctic on 29 May and July 12, 2020, two spills occurred at the giant Norilsk Nickel smelter. They were caused by melting permafrost, subsidence, and failure of a fuel storage tank and pipeline (respectively 21 000 t diesel and 45 t aviation fuels). North towards the Pyasina delta (Arctic Ocean) tundra and lake habitats are important for wildfowl. Environmental agencies requested $2B, referred to variously as compensation, fine, and clean-up estimate. Accusing the operator of negligence, President Putin declared a state of emergency, but a transparent impact assessment is unlikely. The spills were labelled by media “the Arctic's worst-ever environmental catastrophe”, but the melting permafrost and release of methane and CO2 from thawing and burning peat are part of a world catastrophe. Melting ice and permafrost was avoidable until recently, but the Norilsk spills are among the direct effects of anthropogenic climate change reaching ‘tipping point’. Authorities are now checking other hazardous sites built on permafrost (BBC, 2020c).

Norilsk is also the site of a major study of conifer tree rings linking reduced growth rates since the 1960s to degraded air quality from point-source pollution (Kirdyanov et al., 2020). The thinning of tree rings is also due to Arctic air mass circulation and long-range transport of particulates reducing incident sunlight, photosynthesis and growth rates. As temperatures rise the optimism that boreal forests would sequester more carbon is diminished. Instead, both tundra and taiga join tropical rainforests in their vulnerability to global warming, with cascading impacts in drainage basins and downstream coastal zones from Tropics to Arctic.

Hardly ever an exact science, at least OSR is conducted in good faith. Thanks to effective knowledge creation and diffusion, oil spills can be managed provided access, equipment and expertise are made available and tested by contingency planning. Unfortunately, the continuity of such efforts depends on the price of oil. Success is possible in spite of the inequitable distributions around the world of spill risk, OSR capability, and community resilience. It is impossible to predict where and when spills will occur, and those during armed conflicts prevent immediate response. The impacts of deep sea tanker losses and many unreported spills in remote and war-torn countries go undocumented. In hindsight, oil spills were not an environmental hot topic, only a door to our slowly-awakening perception. Although locally to regionally damaging, the ecological effects of spills rarely deserve the ‘disaster’ or ‘catastrophe’ label. The bigger problem is climate change and long-term socio-environmental catastrophe, to which the young are especially vulnerable ([Fig. 10](https://www.sciencedirect.com/science/article/pii/S0964569120304166" \l "fig10)).

We can no longer ignore the global scale of fossil fuel impacts. The processes and responses we describe are rooted in carbon: oil exploration, production, transport, refining, and consumption cause pollution throughout the life cycle of fuels and petrochemicals. The oil ‘spilled’ by everyone into the air by combustion is the gravest problem, driving global warming and melting sea ice, ice caps and permafrost. Slumping tundra peat causes further damage and spills, releasing more GHGs to drive runaway climate change. These feedback loops are irreversible, as are the impacts on wetlands, shorelines, cities and livelihoods that are lost to sea level rise, wildfires, and refugee camps full of migrating people. While temporarily in the background of COVID-19, the global climate emergency intensifies. The pandemic has itself been facilitated by a feedback loop of the biodiversity/climate crisis: ►habitat loss imposing ecological stress on wild animals ►capture and sale of live animals infected by viruses ►viral infection spreading to humans ►rapid viral spread via high-carbon international air travel ►‘refueling’ the climate crisis.

In the global north we have wasted precious time (‘easy street’) that might have speeded our transition to low-carbon. Considering the massive costs to everyone of burning oil, the current low price could be used to leave hydrocarbon assets stranded in the ground. Skilled oilfield engineers could be re-employed to shut in the wells and retrain in renewables (Bloomberg, 2020). Coal was largely closed down in the 1980s with little thought for the UK communities left behind. Despite some evidence of societal learning, there are actually deep learning disabilities manifested in denial and procrastination. To overcome such disinformation we need good information literacy and critical thinking. Just doing good OSR anywhere in the world is no longer enough. Oil spills in this sense have even been a distraction. We can and should restore damaged wetlands, shorelines, communities and ecosystems because they support local people and wildlife, provide coastal protection, and sequester carbon. Beyond this, we cannot avoid the conclusion that industry, governments and people must now rapidly decarbonise.

# 4

#### **The standard is maximizing expected well being. Prefer cuz they literally don’t have a standard**

Prefer:

#### **1**] use epistemic modesty – multiply probability of the fwk times the magnitude of the impacts A) clash – encourages both substantive and phil debates so that we talk about all the offense B) leads to the net most morality and proves that only beating fwk is not enough to win the debate

#### **2] extinction first**

Pummer 15 [Theron, Junior Research Fellow in Philosophy at St. Anne's College, University of Oxford. “Moral Agreement on Saving the World” Practical Ethics, University of Oxford. May 18, 2015] AT

There appears to be lot of disagreement in moral philosophy. Whether these many apparent disagreements are deep and irresolvable, I believe there is at least one thing it is reasonable to agree on right now, whatever general moral view we adopt: that it is very important to reduce the risk that all intelligent beings on this planet are eliminated by an enormous catastrophe, such as a nuclear war. How we might in fact try to reduce such existential risks is discussed elsewhere. My claim here is only that we – whether we’re consequentialists, deontologists, or virtue ethicists – should all agree that we should try to save the world. According to consequentialism, we should maximize the good, where this is taken to be the goodness, from an impartial perspective, of outcomes. Clearly one thing that makes an outcome good is that the people in it are doing well. There is little disagreement here. If the happiness or well-being of possible future people is just as important as that of people who already exist, and if they would have good lives, it is not hard to see how reducing existential risk is easily the most important thing in the whole world. This is for the familiar reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. There are so many possible future people that reducing existential risk is arguably the most important thing in the world, even if the well-being of these possible people were given only 0.001% as much weight as that of existing people. Even on a wholly person-affecting view – according to which there’s nothing (apart from effects on existing people) to be said in favor of creating happy people – the case for reducing existential risk is very strong. As noted in this seminal paper, this case is strengthened by the fact that there’s a good chance that many existing people will, with the aid of life-extension technology, live very long and very high quality lives. You might think what I have just argued applies to consequentialists only. There is a tendency to assume that, if an argument appeals to consequentialist considerations (the goodness of outcomes), it is irrelevant to non-consequentialists. But that is a huge mistake. Non-consequentialism is the view that there’s more that determines rightness than the goodness of consequences or outcomes; it is not the view that the latter don’t matter. Even John Rawls wrote, “All ethical doctrines worth our attention take consequences into account in judging rightness. One which did not would simply be irrational, crazy.” Minimally plausible versions of deontology and virtue ethics must be concerned in part with promoting the good, from an impartial point of view. They’d thus imply very strong reasons to reduce existential risk, at least when this doesn’t significantly involve doing harm to others or damaging one’s character. What’s even more surprising, perhaps, is that even if our own good (or that of those near and dear to us) has much greater weight than goodness from the impartial “point of view of the universe,” indeed even if the latter is entirely morally irrelevant, we may nonetheless have very strong reasons to reduce existential risk. Even egoism, the view that each agent should maximize her own good, might imply strong reasons to reduce existential risk. It will depend, among other things, on what one’s own good consists in. If well-being consisted in pleasure only, it is somewhat harder to argue that egoism would imply strong reasons to reduce existential risk – perhaps we could argue that one would maximize her expected hedonic well-being by funding life extension technology or by having herself cryogenically frozen at the time of her bodily death as well as giving money to reduce existential risk (so that there is a world for her to live in!). I am not sure, however, how strong the reasons to do this would be. But views which imply that, if I don’t care about other people, I have no or very little reason to help them are not even minimally plausible views (in addition to hedonistic egoism, I here have in mind views that imply that one has no reason to perform an act unless one actually desires to do that act). To be minimally plausible, egoism will need to be paired with a more sophisticated account of well-being. To see this, it is enough to consider, as Plato did, the possibility of a ring of invisibility – suppose that, while wearing it, Ayn could derive some pleasure by helping the poor, but instead could derive just a bit more by severely harming them. Hedonistic egoism would absurdly imply she should do the latter. To avoid this implication, egoists would need to build something like the meaningfulness of a life into well-being, in some robust way, where this would to a significant extent be a function of other-regarding concerns (see chapter 12 of this classic intro to ethics). But once these elements are included, we can (roughly, as above) argue that this sort of egoism will imply strong reasons to reduce existential risk. Add to all of this Samuel Scheffler’s recent intriguing arguments (quick podcast version available here) that most of what makes our lives go well would be undermined if there were no future generations of intelligent persons. On his view, my life would contain vastly less well-being if (say) a year after my death the world came to an end. So obviously if Scheffler were right I’d have very strong reason to reduce existential risk. We should also take into account moral uncertainty. What is it reasonable for one to do, when one is uncertain not (only) about the empirical facts, but also about the moral facts? I’ve just argued that there’s agreement among minimally plausible ethical views that we have strong reason to reduce existential risk – not only consequentialists, but also deontologists, virtue ethicists, and sophisticated egoists should agree. But even those (hedonistic egoists) who disagree should have a significant level of confidence that they are mistaken, and that one of the above views is correct. Even if they were 90% sure that their view is the correct one (and 10% sure that one of these other ones is correct), they would have pretty strong reason, from the standpoint of moral uncertainty, to reduce existential risk. Perhaps most disturbingly still, even if we are only 1% sure that the well-being of possible future people matters, it is at least arguable that, from the standpoint of moral uncertainty, reducing existential risk is the most important thing in the world. Again, this is largely for the reason that there are so many people who could exist in the future – there are trillions upon trillions… upon trillions. (For more on this and other related issues, see this excellent dissertation). Of course, it is uncertain whether these untold trillions would, in general, have good lives. It’s possible they’ll be miserable. It is enough for my claim that there is moral agreement in the relevant sense if, at least given certain empirical claims about what future lives would most likely be like, all minimally plausible moral views would converge on the conclusion that we should try to save the world. While there are some non-crazy views that place significantly greater moral weight on avoiding suffering than on promoting happiness, for reasons others have offered (and for independent reasons I won’t get into here unless requested to), they nonetheless seem to be fairly implausible views. And even if things did not go well for our ancestors, I am optimistic that they will overall go fantastically well for our descendants, if we allow them to. I suspect that most of us alive today – at least those of us not suffering from extreme illness or poverty – have lives that are well worth living, and that things will continue to improve. Derek Parfit, whose work has emphasized future generations as well as agreement in ethics, described our situation clearly and accurately: “We live during the hinge of history. Given the scientific and technological discoveries of the last two centuries, the world has never changed as fast. We shall soon have even greater powers to transform, not only our surroundings, but ourselves and our successors. If we act wisely in the next few centuries, humanity will survive its most dangerous and decisive period. Our descendants could, if necessary, go elsewhere, spreading through this galaxy…. Our descendants might, I believe, make the further future very good. But that good future may also depend in part on us. If our selfish recklessness ends human history, we would be acting very wrongly.” (From chapter 36 of On What Matters)

#### 3] Subjective violence is much worse—it’s irreversible and causes massive psychological harm

Linden ’12

(Harry van der, Butler University, “On the Violence of Systemic Violence: A Critique of Slavoj Zizek”, 1-1-2012, http://digitalcommons.butler.edu/cgi/viewcontent.cgi?article=1249&context=facsch\_papers&sei-redir=1&referer=http%3A%2F%2Fwww.google.com%2Furl%3Fsa%3Dt%26rct%3Dj%26q%3Dstructural%2520violence%2520coady%26source%3Dweb%26cd%3D6%26ved%3D0CEUQFjAF%26url%3Dhttp%253A%252F%252Fdigitalcommons.butler.edu%252Fcgi%252Fviewcontent.cgi%253Farticle%253D1249%2526context%253Dfacsch\_papers%26ei%3D445nUNPLGon49QTQpoHIBA%26usg%3DAFQjCNHAtwi4GF88kWuuxN3ymbIA8Y3Ggw#search=%22structural%20violence%20coady%22)

The “force” at the endpoint of the process of subjective violence, however, stays in place whether the violence is technologically mediated or not, and this force leads to a much more narrow range of harms inflicted by subjective violence than is caused by systemic violence. The harms of subjective violence are death, bodily harms, and acute psychological malfunctioning caused by “force,” while social injustice or systemic violence leads to such a wide variety of harms as social and political exclusion, inadequate intellectual development due to insufficient educational opportunities, harsh working conditions, subsistent wages, lack of free time and recreational opportunities, inadequate housing or no housing at all, lack of basic medical care, hunger, and inadequate access to clean water. We have noted that the degree of permitted counter-violence should vary with the seriousness of the violent threat and the culpability of the perpetrator, and that from this perspective much counter-violence in our society is disproportionate or excessive. Some of the harms of systemic violence (e.g., restricted educational opportunities) are such that revolutionary violence as counter-violence would be disproportionate, especially since revolutionary violence may easily escalate and inevitably include seriously harming people with limited moral responsibility. Other harms caused by poor institutions, though, such as serious illness, starvation, or a much-reduced lifespan, are such that they meet the bar set by proportionality. What should be taken into account in making such proportionality judgments is that subjective violence tends to have a different psychological impact on its victims than systemic violence, even when their respective harms are otherwise equally bad or even similar in kind. Only subjective violence tends to come suddenly to its victims, often leaving them in fear, shock, paralysis, and helplessness. What adds to their trauma is the very realization that another human being is intent on physically harming or killing them, disrupting the everyday trust in minimal human decency and cooperation. So, for example, even a preventable industrial accident that occurs due to infrequent safety inspections as an instance of systemic violence will have a different psychological impact on a mining community than a brutal attack by the mine owner’s private army against a peaceful protest of his workers in support of greater mine safety. Much systemic violence can be integrated into everyday life, but the same is much more difficult to do with regard to most subjective violence. It is this very fact that makes oppressive political violence so often effective in the short run. But, again, the differences here between subjective and systemic violence are less pronounced when subjective violence becomes impersonally or “bureaucratically” executed, as, for example, in penal violence (what happens during an execution provides a good illustration) and strategic bombing (assuming that the bombing campaigns remain limited in scope and frequency). This brings me to the most crucial distinction – for my purpose here – between systemic and subjective violence: the range of options available to the victims in addressing the former are much greater than for the latter. Once the clubs come down or the bullets fly in political protest, the choice is to flee and capitulate, fight back, or hope that nonviolent sacrifice will cease the violence. Similarly, once a war of aggression is under way the basic choice is to fight back or surrender and then hope that a massacre will not follow. Surrender does not preclude nonviolent resistance to the aggressor, but it means at least that the aggressor has been initially successful in imposing his political will. In cases of political violence, the intention of the perpetrator is typically to impose his political will, restricting the options of the victims by making resistance to this will very costly. Personal violence might not have such coercive intent, but similar limited action options are in place. Basically, once an individual attacks you personally, the choice is to fight back or hope that the cheek is not hit too hard when it is turned. In my view, fighting back, or counter-violence, is a prima facie right, but to make its actual execution morally right presumes that other moral standards are satisfied, such as proportionality in the case of individual counter-violence and jus ad bellum and jus in bello standards (or approximations thereof) in the case of collective violence. The mere fact of systemic violence, to the contrary, does not warrant counter-violence; for social injustice can be effectively addressed in many different ways, including through institutional reforms from within, nonviolent protests, boycotts, collective strikes, lobbying, and electoral action. Even when social injustice can only be addressed through revolutionary change, counter-violence is not prima-facie warranted because it might be disproportionate. More importantly, it might not be necessary because it has become abundantly clear during the past few decades that nonviolence strategies can be remarkably successful in overthrowing oppressive regimes and the recent emergence of the global public sphere will only increase the chance of success of future endeavors. However, once the struggle for social justice is met by widespread violence inflicted, or supported, by the state, revolutionary counter-violence is prima facie morally right. Broadly speaking, the ethics of self-defense retains its moral force in light of the fact that nonviolence has not proven to be effective against agents who have no qualms unleashing subjective violence. No doubt, these are all difficult moral issues that should be carefully discussed and placed within their historical context. But all too often this does not happen in Žižek’s work, especially in Violence, and what we find instead is the claim that systemic violence rightfully begets subjective violence because it projects violence. This claim has only a ring of plausibility when we neglect that the two types of violence in this equation create very different ranges of options for remedial action. A more critical use of the concept of violence would not enable him to offer such a broad and facile justification of revolutionary violence. To avoid misunderstanding, I am not claiming that the notion of systemic violence necessarily leads to a broad and superficial justification of revolutionary violence. Galtung, for example, does not make such an inference. However, one must then ask why the inference is not appropriate since it is commonly accepted that counter-violence against wrongful violence is justified. This means that one must show how systemic violence differs from subjective violence so that counter-violence is generally only prima facie just with regard to the latter. I 18 suspect that once such differences are articulated (as I have tried to do in this paper) the notion of systemic violence loses much of its credibility. At any rate, the proponent of the notion of systemic violence should at least caution or clarify that our typical emotive and moral responses to subjective violence might not apply to systemic violence. The proponent also should outline some convincing limits on extending the core concept of violence because without such limits, as will become clear in the next section, we might end up with more conceptual and practical confusion and questionable support of revolutionary violence.

#### 4] It’s excluded by traditional policymaking apparatuses: our brains are psychologically biased against high magnitude scenarios since we’re emotionally unable to understand the suffering of millions of pople

Dunn 07

[Elizabeth Dunn and Claire Ashton, “On emoitional innumeracy: Predicted and actual affective responses to grand-scale tragedies”, May 29 2007 Journal of Experimental Social Psychology]

The present research demonstrates that people overestimate the intensity of their emotional responses to grand-scale tragedies. Participants predicted that they would feel significantly worse if thousands of people were killed in a disaster than if only a few people were killed, and yet they exhibited an ‘‘emotional flatline,’’ feeling equally sad regardless of the number of people killed. This unforeseeable emotional flatline was demonstrated in response to deaths stemming from human violence and natural disasters, both close to home and far away (including hurricanes in the United States, a forest fire in Spain, and the Iraq War). Participants’ actual emotional responses were calibrated with fatalities only when abstract death tolls were translated into concrete images. We argue that affective forecasts and emotional experiences may arise from separate systems, leading to reliable forecasting errors, as well as influencing subsequent judgments. 2007 Elsevier Inc. All rights reserved. Keywords: Affective forecasting; Scope sensitivity; Temporal discounting; Cognitive experiential self theory Would you be more upset about a hurricane in which 5000 people were killed than one in which 5 people were killed? Although most people might predict feeling worse in response to the larger scale tragedy, most people might be wrong; recent research demonstrates that people often go astray in imagining their own future emotional responses to events (e.g., Dunn & Laham, 2006; Dunn, Biesanz, Human, & Finn, 2007; Wilson & Gilbert, 2003; Wilson, Wheatley, Meyers, Gilbert, & Axsom, 2000). Such predictions (or affective forecasts) may be inaccurate in part because affective forecasts and actual emotional experiences are likely to be driven by different modes of information processing. According to Epstein’s (1994, 1998) cognitive-experiential self theory (CEST), humans apprehend reality through the operation of two distinct information processing systems: the rational system, which is relatively slow and logical and represents a recent evolutionary development, and the experiential system, which is relatively fast and holistic and evolutionarily ancient (for similar dual-process theories, see Chaiken & Trope, 1999; Sloman, 1996). As a uniquely human capacity that relies on logical reasoning, affective forecasting should stem primarily from the operation of the rational system. Because the rational system is responsive to abstract symbols, words, and numbers (Epstein, 1998), affective forecasts should be sensitive to the scope of a tragedy; that is, people should predict feeling worse as a function of the number of individuals killed. Emotions, however, are a signature product of the experiential system, which responds not to abstract numbers, but to concrete images, metaphors, and narratives (Epstein, 1998). Therefore, actual emotional experiences may be relatively insensitive to the scope of a tragedy. Existing research suggests that people are largely insensitive to scope when they make economic or policy-oriented decisions; people place little weight on the number of individuals a program will help or the amount of a good to be 0022-1031/$ - see front matter 2007 Elsevier Inc. All rights reserved. doi:10.1016/j.jesp.2007.04.011 \* Corresponding author. Fax: +1 604 822 6923. E-mail address: edunn@psych.ubc.ca (E.W. Dunn). www.elsevier.com/locate/jesp Available online at www.sciencedirect.com Journal of Experimental Social Psychology 44 (2008) 692–698 provided in deciding how much they are willing to pay or what tradeoffs they are willing to accept (e.g., Baron & Greene, 1996; Fetherstonhaugh, Slovic, Johnson, & Friedrich, 1997; Hsee, Rottenstreich, & Xiao, 2005). Decisions become particularly scope insensitive when people are led to rely on their feelings during decision-making (Hsee & Rottenstreich, 2004), suggesting that scope-insensitive decisions may be rooted in scope-insensitive emotional responses (for related arguments, see Loewenstein, Weber, Hsee, & Welch, 2001; Slovic, Finucane, Peters, & MacGregor, 2002). Thus, recent research on decision-making provides indirect support for the idea that emotions—as a product of the experiential system—are relatively unresponsive to abstract numbers, such that people may exhibit an ‘‘emotional flatline’’ in the face of increasing death tolls. To the extent that affective forecasting is supported by the rational system, however, affective forecasts should be relatively sensitive to scope (operationally defined here as death toll), such that people may predict feeling increasingly negative as a function of the number of people killed in a disaster. As a result, affective forecasts and emotional experiences should diverge as the scope of a disaster increases, leading to greater forecasting errors with regard to grand-scale versus small-scale disasters. We tested this idea in a series of studies by asking participants to predict how they would feel or to report their actual feelings regarding specific tragedies, given various death tolls. In Study 1, we conducted an initial real-world demonstration of this idea by manipulating the perceived scope of US hurricanes.

# 5

#### Biden’s continued PC is key to pass Build Back Better next week – despite inflation concerns

Barrón-López 11-11 (Laura Barrón-López, White House Correspondent for Politico, formerly covered Congress for the Washington Examiner, HuffPost and The Hill, BA political science, California State University, Fullerton, “Dems to White House: The only prescription is more Biden,” Politico, 11-11-2021, <https://www.politico.com/news/2021/11/11/dems-white-house-biden-520946)//re-cut> by Elmer

After months of deference to Congress, President Joe **Biden moved** more **assertively last week** to shepherd half his domestic agenda into law. With the other half still in limbo, Democrats want some of that Biden punch again. Outside groups fear that congressional Democrats could come up short on Biden’s social spending package. They are **concerned** that moderates in the House may end up buckling if the budget scores on the bill come back worse than anticipated. And there is residual anxiety that one of the two wavering Senate Democrats — Joe **Manchin** of West Virginia **and** Kyrsten **Sinema** of Arizona — **could vote “no” over concerns about inflation** and long-term debt. **The** clearest **solution** to avoiding this, they argue, **is more Biden**. “All eyes are on the president, all expectations are on the president,” said Lorella Praeli, co-president of the progressive Community Change Action. “We are playing our role. We are mobilizing. We're reminding people everyday what this is about.” Praeli added that Biden must ensure there aren’t future cuts to the package, which dropped from $3.5 trillion to $1.75 trillion to accommodate centrist Democrats in the House and Senate. “This is what he campaigned on. Only the president can deliver it in the end.” Until last week, Biden’s involvement in negotiations had been more deferential than managerial. That befuddled lawmakers, who were waiting for him to draw red lines about which priorities he wants in and out of the deal or to even demand votes. To date, Biden has publicly refrained from drawing a red line around including paid leave in the final version of the legislation, leaving the leadership in the House at odds with centrists in the Senate. But Biden did ramp up his involvement in the negotiations last week. And Democrats viewed that as key to getting an agreement in the House on their infrastructure bill, as well as on a rule to move forward with their social spending package, which funds universal pre-K, expands Medicare access, cuts taxes for families with children 18 years old and under, and combats climate change. Now they want more. Expectations are high for Biden to keep the House to its promise of a vote on that social spending plan the week of Nov. 15. “They basically made a promise,” said Rahna Epting, executive director of the progressive advocacy group MoveOn. “And Biden was able to get enough progressives to vote for the bipartisan infrastructure bill, on that promise. We are expecting Biden and the Democratic Caucus will make good on their word and pass the Build Back Better Act no later than Nov 15th as stated.” White House officials contend that Biden and his team remain in close touch with the Hill, and their legislative affairs staff continues to push the social spending bill toward a vote. The **White House** said it is **communicating regularly with** a range of lawmakers including **Manchin**, but did not answer when asked whether Biden has spoken to the West Virginia senator or other moderates in recent days. “There has been no kind of slowdown when it comes to our Hill outreach,” a White House official said. The growing demands for Biden to stay heavily involved reflect a fear in the party that the **window to act on the agenda is quickly closing**, especially as concerns mount about lingering inflation and the midterms near. If the House meets its deadline next week and passes the social spending bill, some Democrats want Biden to issue a deadline for the Senate to act. Others noted that the end-of-year legislative calendar is short and brutal. The “dynamic has totally changed,” said a Democratic strategist. “**The president secured this agreement** **with the five holdouts for** **House passage of BBB next week and it’s on him to enforce it**.” A top climate operative echoed that assessment telling POLITICO that Biden “will have failed” on tackling climate change if the second piece of the agenda doesn’t pass. But the operative also expressed a newfound fear that Biden’s current effort to sell the benefits of the infrastructure bill could distract or complicate Democrats’ attempt to keep public interested in the social spending plan. "They need to sell [physical infrastructure] but also act like it's not enough," said the activist. "How are they also creating the urgency for BBB to get done, for it to stay on the timeline of getting it done by Thanksgiving? It's a balancing act.” Matt Bennett, co-founder of the moderate group Third Way, agreed that the dynamics were “tricky” in trying to sell one just-passed bill as historic while simultaneously making the case that another ambitious bill is needed. Biden will travel to New Hampshire and Michigan next week to highlight the money the infrastructure bill will direct toward new roads, bridges and transit projects across the country. “This moment that we're in is hard,” said Bennett. “It will be much, much easier when both bills are completed. There is a very profound political imperative for Democrats to get this finished, to end the infighting and sausage-making and shift to creating a narrative about what Democrats have just done for Americans because they've been utterly unable to do that.” A number of **groups plan to amp up pressure next week** as Congress returns. House Speaker Nancy Pelosi and the White House have repeated their desire to have a vote on the social spending plan by the end of next week. The Service Employees International Union will descend on Capitol Hill with some 500 union members, said Mary Kay Henry, the union’s president. “We are escalating phone calls, text messages,” said Henry. “We're bringing members into Washington next Tuesday, we have the president's back, to get Congress to act quickly and get the full back package.” Democratic outside groups have spent more than $150 million on TV and digital ads promoting the president’s social spending plan, known as “Build Back Better.” The League of Conservation Voters and Climate Power launched new digital ads calling on the five moderates who reached an agreement with the White House and House leadership last week to follow through on their commitment to pass the second piece of Biden’s economic agenda “next week.” The longer it takes to pass the social spending plan, the harder it becomes to keep the party unified, Democrats warn, especially amid up-and-down economic news. A new report Wednesday revealed inflation hit 6.2 percent in October, its highest point in 31 years, contributing to high gas, car and food prices. It forced Biden to quickly issue a statement addressing the issue and ever-so-slightly shift his messaging, arguing that passage of the social spending plan would combat inflation. “Inflation hurts Americans’ pocketbooks, and reversing this trend is a top priority for me,” Biden said in a statement. “It is important that Congress pass my Build Back Better plan, which is fully paid for and does not add to the debt, and will get more Americans working by reducing the cost of child care and elder care, and help directly lower costs for American families.”

#### Empirics proves Pro-Labor and Pro-Union policies sap PC.

Leon 21 Luis Feliz Leon 1-6-2021 "If we want it, we’re going to have to fight like hell for it" - Labor faces an uphill battle to pass the PRO Act" <https://www.thestrikewave.com/original-content/labor-faces-uphill-battle-to-pass-pro-act> (Organizer and journalist)//Elmer

In New York City, after years of organizing fast-food workers, 32BJ SEIU won two ‘just cause’ laws protecting 67,000 workers from being fired arbitrarily. In California, after a 17-year battle for a union, 45,000 childcare providers finally won the “largest single union election America has seen in seven years.” New Mexico just became the ninth state—including California, New York, New Jersey, Illinois, Massachusetts, Oregon, Washington, and Maine—to create a pathway for mandatory recognition using card check, which makes it easier for workers to gain union recognition by submitting a majority of signed cards of workers rather than through a drawn-out election campaign where the employer can interrogate workers, hold captive audience meetings, and fire union supporters. Despite these recent labor victories at the state level, the share of all workers belonging to a union continues to dwindle, at a nadir of 10.3 percent. With the share of private-sector workers in a union at 6.2 percent, the labor movement has effectively been beaten back to the dregs of the 1890s: the good-old days of the Gilded Age, when Andrew Carnegie and a coterie of plutocrats pillaged workers’ labor and amassed an obscene amount of wealth to make the headless Marie Antoinette’s nerve endings twitch in the grave. With “right-to-work” laws all but banning the union shop in 27 states and Guam, the National Labor Relations Board packed by Donald Trump with lawyers from union-busting firms, and states gutting the bargaining rights of state employees, how can organized labor build power to win back lost ground? The answer is to make it easier for workers to join unions. The Protecting the Right to Organize (PRO) Act, H.R. 2474, is a compendium of labor’s wish-list items. It would make it easier for workers to form unions, imposing consequence on union-busting employers who violate labor law, and weakening “right-to-work” laws. It passed the House last year by a vote of 224-194, signifying both Democrats wanting to burnish their pro-labor bona fides before the campaign season and the growing leftist bloc within its ranks. The Senate version garnered 42 co-sponsors, but Majority Leader Mitch McConnell blocked it. If enacted, it would strengthen workers’ right to unionize by updating the 1935 National Labor Relations Act and reversing the damage of the anti-union Taft-Hartley Act of 1947, repealing its ban of secondary boycotts, and making it possible for unions to coordinate solidarity strikes as truck drivers represented by the Teamsters did last year when they refused to cross the picket during strikes at Stop & Shop organized by the United Food and Commercial Workers. The **inclusion of the right to strike** in solidarity with other unions in some Teamster contracts hearkens back to a legacy of labor militancy. It would also end the misclassification of workers as “independent contractors” using an ‘ABC’ test to determine whether they are genuinely independent businesspeople. The PRO Act would set deadlines for workers to secure agreement on a first contract, overcoming a stalling tactic employers use to undermine unionizing efforts, and set up mediation to resolve disputes with employers. To discourage union-busting, it would ban employers from coercing workers from signing away their right to pursue litigation and prohibit permanently replacing workers who have gone on strike with strikebreakers. It also bars employers from forcing workers to attend “captive audience” meetings to discourage unionization and imposes stiff penalties on employers who violate workers’ rights. These practices are common. Unions charge employers with violating federal law in 41.5 % of all union-election campaigns, according to a study by the Economic Policy Institute (EPI), a left-leaning think tank. “Given the data on employer conduct during union elections, it stands to reason that enabling workers to avoid a rigged process and win a union would make a difference in union density,” said EPI director of government affairs Celine McNicholas. “This is especially true when you consider how many private-sector workers say they would want a union if they could win one in their workplace.” Nearly 50 percent of all nonunion workers say they would vote for a union if given the chance, one recent poll found. The most recent Gallup poll shows that 65 percent of Americans have a favorable view of unions. “Labor law is broken, often making the NLRB election process a hellish gauntlet for workers who want to form a union," said Daisy Pitkin, UNITE HERE’s laundry organizing director in Arizona from 2002 to 2009. “In order for workers to make it through that gauntlet, they and the union they're building have to be really strong to withstand the company’s attacks.” “Industrial laundries are dangerous places to work," Pitkin continued. "Workers are routinely injured and burned by machinery, and in the factories that wash hospital linen, they are exposed to bodily fluids and waste, surgical tools, fluids bags and the like.” One Phoenix hospital laundry the union was trying to organize, Sodexho Commercial Linen Exchange, was charged by the NLRB with 22 separate violations, according to Pitkin. Sodexho – now known as Sodexo – is a major international services chain, with contracts ranging from serving cafeteria food in colleges to prisons. The union was able to provide enough evidence of unfair labor practice violations, including firing workers during organizing drives, surveillance and other intimidation tactics, that the NLRB issued a Gissel bargaining order, forcing the employer to recognize and bargain with the union. Pitkin led organizing campaigns at nine industrial laundries across Arizona alongside “mainly women workers in this deep-red, right-to-work, Arpaio country,” referring to Sheriff of Maricopa County Joe Arpaio, the neo-fascist blowhard nationally known for blustering displays of cruelty to immigrants and incarcerated people. UNITE HERE organized three by card check, another after workers went on a spontaneous strike due to safety concerns, and five through drawn-out elections. Ultimately, it was able to claim 65% percent union density in the state’s industrial-laundry sector. “Our theory was that if we could organize midrange companies, then clean up the market by going after the smaller, local and regional players, we could raise industry standards for wages and health and safety even before organizing the big national and international corporations,” said Pitkin. "This partially proved true: when we got to above 50% density, we were able to bring the floor up for wages across the state." The challenge has been less workers’ lack of interest in joining a union than the roadblocks making it difficult to do so. For the last decade, the labor movement has tried to remove these barriers, but largely failed. The PRO Act’s key **provisions** are a **throwback to** Sen. Bernie Sanders’ **W**orkplace **D**emocracy **A**ct, which would have repealed state "right-to-work" laws that drain union coffers by allowing non-union members to benefit from the benefits of union representation, or “free ride,” without paying dues. The Employee Free Choice Act (**EFCA**), which **died** **in the Senate** during President Barack Obama’s first term, **had** **similar potential to** **increase union membership**, as it would have enabled workers to get union representation if a majority signed union cards (“card check”) rather than through an election. It **died because** **Obama was unwilling to put p**olitical **c**apital **behind it to overcome opposition from Republicans and center-right Democrats.** “**EFCA was very close to becoming law**. At the end of the day, in my view, the **Obama** administration **did not put** the **necessary p**olitical **c**apital **into securing its passage**,” said EPI's McNicholas. “The Obama administration **decided to focus on** ‘**bipartisan’** and ‘reach across the aisle’ type **solutions** to the 2008 financial crisis, and thus **didn't care** about EFCA in the face of the anti-EFCA mobilization **by strong ‘antis’** like the Chamber of Commerce,” says Susan Kang, a professor of political science at John Jay College who studies political economy, labor, and human rights. “Basically, labor was swept aside by the Obama administration … at the exact moment when he had the strongest mandate and political capital.” Another issue, said Patrick Burke, an organizer with United Auto Workers Local 2322 in Massachusetts, was that EFCA's card-check provisions, when framed as a replacement for elections, “became very easy to demonize and difficult to explain to people not already familiar with labor law.” “The short story is that the EFCA was **doomed from** a few **moderate Dems not being willing to go through** with card check once actually in power to enact it. The long story is that the labor movement's disappearance from the ‘adult table’ of Democratic politics has cyclical downward effects. They're less able to convince Dems to go out on the limb for them and to prioritize their legislative requests,” said Brandon Magner, a labor lawyer in Indiana. Despite a history of betrayal and rejection, labor and immigrant rights organizations, coalesced around Biden, a self-professed “union guy,” after the primaries and helped deliver him to the White House in the hope that doing so would lead to executive action on immigration and labor law reform. “We call on Congress to pass and Biden to sign the Protecting the Right to Organize (PRO) Act early in 2021 to make sure every worker who wants to form or join a union is able to do so freely and fairly,” AFL-CIO President Richard Trumka said in a statement after the election. But union organizers, researchers, and labor lawyers see dim prospects for winning significant labor reform during the Biden administration.

#### **BBB wins the US the Tech Competition Race.**

Prins 21 Nomi Prins 3-15-2021 “Infrastructure Should Be the Great Economic Equalizer” <https://truthout.org/articles/infrastructure-should-be-the-great-economic-equalizer/> (former managing director at Goldman Sachs and author of All the Presidents’ Bankers and Collusion: How Central Bankers Rigged the World, due to be released in paperback on May 7.)//Elmer

Prins 3-15 (Nomi Prins is a former managing director at Goldman Sachs and author of All the Presidents’ Bankers and Collusion: How Central Bankers Rigged the World, due to be released in paperback on May 7. She served on Sen. Bernie Sanders’s Federal Reserve Reform Advisory Council. "Infrastructure Should Be the Great Economic Equalizer" 3/15/21 <https://truthout.org/articles/infrastructure-should-be-the-great-economic-equalizer/> NL)

**Infrastructure as an International Race for Influence** In an [interview with CNBC](https://www.cnbc.com/2021/02/18/cnbc-exclusive-cnbc-transcript-united-states-treasury-secretary-janet-yellen-speaks-with-cnbcs-closing-bell-today.html) in February 2021, after being confirmed as the first female treasury secretary, Janet Yellen stressed the crucial need not just for a Covid-19 stimulus relief but for a sustainable infrastructure one as well. As part of what the **Biden** administration has labeled its **“**[**Build Back Better**](https://joebiden.com/build-back-better/)**” agenda**, she **underscored** the “**long-term structural problems in the U.S. economy** that have resulted in inequality [and] slow productivity growth.” She also highlighted how **a major** new **focus on clean-energy investments could make** the **economy more competitive globally**. When it comes to **infrastructure and sustainable development** efforts, the **U.S. is being left in the dust** **by** its primary **economic rivals**. Following his first phone call with Chinese President **Xi** Jinping, President Biden [noted](https://www.bbc.com/news/business-56036245) to a group of senators on the Environment and Public Works Committee that, “if we don’t get moving, they are going to eat our lunch.” He went on to say, “They’re **investing** **billions** of dollars dealing with a whole range of issues that relate to transportation, the environment, and a whole range of other things. We just have to step up.” As this country, deep in partisan gridlock, **stalls on infrastructure** measures of any sort, its **global competitors** are **proceeding full speed** ahead. Having helped to jumpstart its economy with projects like high-speed railways and massive new bridges, **China** is now **accelerating** its efforts to further develop its **technological infrastructure**. As Bloomberg [reported](https://www.bloomberg.com/news/articles/2020-05-20/china-has-a-new-1-4-trillion-plan-to-overtake-the-u-s-in-tech), the Chinese are focused on supporting the build-up of “everything from wireless networks to artificial intelligence. In the master plan backed by President Jinping himself, China will invest an estimated $1.4 trillion over six years” in such projects.

#### Losing causes extinction - uncontrolled risks from emerging tech cause rapid shifts in strategic stability and misuse - American dominance is key.

Jain **’20** [Ash; 2020; Senior fellow with the Scowcroft Center for Strategy and Security; Strategic Studies Quarterly; “Present at the Re-Creation: A Global Strategy for Revitalizing, Adapting, and Defending a Rules-Based International System,” <https://www.atlanticcouncil.org/wp-content/uploads/2019/10/Present-at-the-Recreation.pdf>]

The system must also be adapted to deal with new issues that were not envisioned when the existing order was designed. Foremost among these issues is emerging and disruptive technology, including AI, additive manufacturing (or 3D printing), quantum computing, genetic engineering, robotics, directed energy, the Internet of things (IOT), 5G, space, cyber, and many others. Like other disruptive technologies before them, these innovations promise great benefits, but also carry serious downside risks. For example, AI is already resulting in massive efficiencies and cost savings in the private sector. Routine tasks and other more complicated jobs, such as radiology, are already being automated. In the future, autonomous weapons systems may go to war against each other as human soldiers remain out of harm’s way. Yet, AI is also transforming economies and societies, and generating new security challenges. Automation will lead to widespread unemployment. The final realization of driverless cars, for example, will put out of work millions of taxi, Uber, and long-haul truck drivers. Populist movements in the West have been driven by those disaffected by globalization and technology, and mass unemployment caused by automation will further grow those ranks and provide new fuel to grievance politics. Moreover, some fear that autonomous weapons systems will become “killer robots” that select and engage targets without human input, and could eventually turn on their creators, resulting in human extinction. The other technologies on this lisgt similarly balance great potential upside with great downside risk. 3D printing, for example, can be used to “make anything anywhere,” reducing costs for a wide range of manufactured goods and encouraging a return of local manufacturing industries.61 At the same time, advanced 3D printers can also be used by revisionist and rogue states to print component parts for advanced weapons systems or even WMD programs, spurring arms races and weapons proliferation.62 Genetic engineering can wipe out entire classes of disease through improved medicine, or wipe out entire classes of people through genetically engineered superbugs. Directed-energy missile defenses may defend against incoming missile attacks, while also undermining global strategic stability. Perhaps the greatest risk to global strategic stability from new technology, however, comes from the risk that revisionist autocracies may win the new tech arms race. Throughout history, states that have dominated the commanding heights of technological progress have also dominated international relations. The United States has been the world’s innovation leader from Edison’s light bulb to nuclear weapons and the Internet. Accordingly, stability has been maintained in Europe and Asia for decades because the United States and its democratic allies possessed a favorable economic and military balance of power in those key regions. Many believe, however, that China may now have the lead in the new technologies of the twenty-first century, including AI, quantum, 5G, hypersonic missiles, and others. If China succeeds in mastering the technologies of the future before the democratic core, then this could lead to a drastic and rapid shift in the balance of power, upsetting global strategic stability, and the call for a democratic- led, rules-based system outlined in these pages.63 The United States and its democratic allies need to work with other major powers to develop a framework for harnessing emerging technology in a way that maximizes its upside potential, while mitigating against its downside risks, and also contributing to the maintenance of global stability. The existing international order contains a wide range of agreements for harnessing the technologies of the twentieth century, but they need to be updated for the twenty-first century. The world needs an entire new set of arms-control, nonproliferation, export-control, and other agreements to exploit new technology while mitigating downside risk. These agreements should seek to maintain global strategic stability among the major powers, and prevent the proliferation of dangerous weapons systems to hostile and revisionist states.

# Case

answering their ansell card here:

1. powertagged - this card just says that structural violence exists, not why it outweighs ethically
2. extinction turns this – nuke war or climate change magnifies these issues especially for low income communities
3. 1a is too late, they need framework justifiations in the AC

## Prisons

#### Worker strikes empirically fail in prisons and there’s a laundry list of tactics non-employers use within the system to prevent effectiveness without technically violating the right to strike – prisons don’t even have strike task forces because they don’t criminalize the actual striking

Washington 18 (Robin Washington – former interim commentary editor for The Marshall Project interviewing a prison warden, The Marshall Project, “A Former Warden’s View on Prison Strikes”, https://www.themarshallproject.org/2018/08/22/a-former-warden-s-view-on-prison-strikes, 22 August 2018, EmmieeM)

This week, a prison strike has been called for inmates at 17 facilities nationwide in response to an April riot at South Carolina’s Lee Correctional Institution, where seven inmates were killed while prison staff failed to immediately respond.

Among 10 demands stated by the [Incarcerated Workers Organizing Committee](https://incarceratedworkers.org/campaigns/prison-strike-2018), one of several groups endorsing the strike, are improvements in prison conditions, prevailing wages for incarcerated workers, voting rights for all confined citizens and an end to the racial overcharging, over-sentencing and parole denials to people of color. The strike is planned to continue until Sept. 9, the 47th anniversary of [the Attica prison uprising](https://www.themarshallproject.org/records/292-attica-correctional-facility).

For a view into the nature of prison strikes and how authorities respond to them, The Marshall Project spoke with Cameron Lindsay, a retired warden of three federal facilities: the Federal Correctional Institution in Lompoc, California, the U.S. Penitentiary in Canaan, Pennsylvania, and the Metropolitan Detention Center in Brooklyn, N.Y. Lindsay also ran privatized institutions in Philipsburg and Glen Mills, Pennsylvania, and has taught at several colleges. He now serves as a consultant and an expert witness in corrections cases. He spoke with Interim Commentary Editor Robin Washington. The views expressed are his own, and this interview has been edited for brevity and clarity.

Q: Have you experienced any strikes, hunger strikes, work strikes or other organized prisoner actions?

A: I’ve seen pretty much all of that over the course of 29 years. The most widespread strike that I ever saw that comes close to what I’m hearing about this week was in federal prisons in October of 1995. It was mostly African American inmates. They were protesting the vast disparity of sentencing laws between powder cocaine and crack cocaine.

It was the first and only time in history that (the federal prison system) announced a nationwide lockdown. The lockdown of a facility is something to be taken very, very seriously. It’s complicated and fraught with all kinds of problems. It’s not a decision to be made lightly.

I can promise you if these inmates do engage in some kind of systematic strikes that wardens will lock down the facilities.

Q: What have you experienced specifically?

In 1995, I worked at the Federal Correctional Institution, McKean, in Bradford, Pennsylvania. It started as a work strike. The first inmate called to duty is at 4 a.m. What we experienced on Oct. 24, 1995, was the inmate crew refused to go to work. There were some that wanted to but they didn’t because they feared retaliation. I have had others on a less severe scale. We had a very brief food strike at the (U.S. Penitentiary) in Lewisburg, Pennsylvania. It was small and isolated.

There are food strikes, work strikes, then all-out disturbances and/or riots, depending on the severity. You might have food service inmates who are upset about wages or the way they are being treated by staff. A work strike is the most common way — inappropriate, I might add — that inmates will demonstrate in an attempt to get the attention of the staff. Typically when it happens, the warden will lock down the facility until they have a chance to gauge what really is going on. They’ll gather intelligence, talk to informants, listen to telephone calls, until they can figure out what is going on out there. They may even reach out to certain inmate leaders. Usually, the next thing they do is remove the quote-unquote “agitators” from the general population and put them in isolation. Then they interview every single inmate so that nobody feels singled out.

Q: Does a strike ever work? From the inmate point of view?

In the short term, no. They don’t work because the ringleaders tend to get locked up, and after they are isolated they’re transferred to other facilities.

In the long term, they may be able to effect some change because they do get some media and political attention. In 1987 in Oakdale, Louisiana, and Atlanta, there were simultaneous riots. There was a specific cadre of Cuban inmates from the Mariel boatlift. Our government decided to repatriate them to Cuba. They did not want to go, so they raised hell in their facility. In the long term, their actions did lead to some changes.

Q: The cocaine sentencing disparities protested in the 1995 strike also were eventually changed.

There you go.

Q: Do prisons have a strike task force of some kind, with COs appointed to investigate?

That’s a tough answer. People talk about the “criminal justice system,” but it’s not one system, it’s a whole bunch of systems. There are local corrections, state corrections and federal corrections. There’s very rarely a coordinated effort on a widespread basis for a type of strike.

In the federal Bureau of Prisons, they are really good about gathering and cultivating intelligence. The staffers should be able to predict when one of these happens. Conversely, if you have a correctional facility that is not well operated and they don’t know that something is going to go down, when it does, they’re not going to know how to react.

#### Prison strikes don’t work – at best they cause incremental, half-hearted reforms; at worst prisoners get punished for them – proven by cx

Thompson ’16 (Christie; writer for the Marshall Project; 9-21-2016; “Do Prison Strikes Work?”; Marshall Project; https://www.themarshallproject.org/2016/09/21/do-prison-strikes-work; Accessed: 11-8-2021; AU)

On Sept. 9, prisoners across the country stopped showing up for their work assignments to protest what they call slave-like conditions for incarcerated workers. Inmates make pennies an hour keeping the prison running — such as cleaning and cooking — or providing cheap manufacturing for private businesses. Inmates involved in the protest are calling for higher wages, better working conditions and less severe punishment while on the job. The work stoppage was organized by inmates in multiple states and labor activists with the Industrial Workers of the World to coincide with the 45th anniversary of the Attica riot, which was preceded by a strike in the prison’s metal shop. Prisoners and labor organizers on the outside hoped it would be the largest prison strike in history. It’s hard to quantify exactly how many prisoners in how many states have participated, as prison officials and organizers give conflicting accounts of its scope. Activists claim inmates in at least 11 states are taking part. This strike is the latest in a long history of prisoners trying to use what little leverage they have — whether work stoppages or hunger strikes — to demand change from administrators. Some have been more successful **than others**. Here’s a look at five other prison strikes and **what came of them**: Post-WWII Labor Strikes University of Michigan professor Heather Ann Thompson’s history of labor movements in prison details how a series of work stoppages and sit-down protests took off in prisons across the U.S. in 1947. In little over a decade, hundreds of prisoners in Connecticut, New Jersey, New York, Wisconsin, Louisiana, Ohio, and Georgia stopped working to protest long hours, trifling pay, and grueling work environments. Prisoners in Georgia and Louisiana went even further and slit their heel tendons so they could not be forced to work. While the work stoppages **did not lead** to immediate **changes**, they inspired another era of prison protest in the ‘60’s and ‘70’s, which included the Attica work stoppage and eventual riot. Those movements achieved **slight pay raises** and improved safety precautions in some states and led to the creation of prisoner-led unions. 2010 Georgia Labor Strike In 2010, state prisoners across Georgia launched what many then called the largest prison work strike in U.S. history — though official numbers are difficult to confirm. At the protest’s height, organizers said thousands of inmates participated across at least six state prisons. Georgia inmates were paid nothing for their work, as dictated by state law, and were asking for better conditions and more access to programming. Not only were Georgia inmates not showing up to their job assignments — they refused to leave their cells at all until their demands were met. The strike **lasted six days**, and garnered coverage in news outlets like The New York Times. It ended when prisoners decided to leave their cells to go to the law library and try to sue for improvements instead. (It’s **unclear** what became of those efforts). **Prisoners in Georgia are still not paid for their labor**. 2011-2013 Pelican Bay Hunger Strike In 2011, 400 prisoners in California’s supermax prison started refusing their meals. Their numbers grew to 7,000 as they were joined by prisoners all over the state. The inmates had a list of five demands, including limits on solitary confinement and changes to how the prison determines gang membership. Their fast ended after three weeks when prison officials agreed to reconsider some of their solitary confinement policies. Inmates returned to hunger-striking later in 2011 and again in 2013 saying the **changes were too small and too slow**. But the protests did have a significant impact. After the initial strike, the chair of the California Assembly’s Public Safety Committee held a hearing on conditions at Pelican Bay. In 2012, the nonprofit Center for Constitutional Rights filed a class-action lawsuit against the state over its use of prolonged isolation. Todd Ashker, one of the strike’s organizers, was the lead plaintiff. The suit was settled in September 2015, addressing many of the strikers’ concerns about how people end up in solitary and how long they remain there. 2013 Guantanamo Hunger Strike Detainees at the U.S. military prison in Cuba began hunger-striking in March 2013 to fight against their indefinite detention and alleged mistreatment. At the strike’s peak in July that year, 106 men were refusing to eat and 45 were being force-fed through nasal tubes. The strike — for its duration, size, and the graphic nature of force-feeding — **outraged** the public and policymakers and increased pressure on President Obama to fulfill his promise of closing the controversial prison. Since the strike, Obama has lowered the number of men held at Guantanamo from over 2,000 to 61, but has yet to close the prison entirely. 2015-2016 Immigration Detention Center Hunger StrikesSince 2015, hunger strikes have begun at various immigration detention centers — prison-like facilities where immigrants are held while their deportation case is decided — throughout the U.S. Roughly 200 detainees at Eloy Detention Center in Arizona stopped eating in June 2015, in part to pressure an investigation into recent deaths at the facility. That fall, immigrants in detention in California, Alabama, Louisiana, and Texas also stopped eating to object to their indefinite detention and poor conditions. More recently, 22 mothers being held with their children in a family detention center in Pennsylvania went on a hunger strike this August. Their strike accompanied a series of handwritten letters they sent to immigration officials asking to be released from indefinite detention. The strike has continued off-and-on since then, with even their children threatening to refuse to attend classes in solidarity with their mothers. It’s too soon to tell what the impact of their protests might be.

1) Workers don’t have leverage – there’s zero incentive for prisons to raise wages since workers have to be there anyway. Private-sector strikes work because companies are scared of losing labor, so they have to negotiate; but prisons are a monopoly and thus control the labor market. That’s 1NC Thompson.

#### 2) No visibility – lack of public attention means strikes never generate sufficient pressure to spark change – justifies the CP.

HLR ’19 (Harvard Law Review; 3-8-2019; “Striking the Right Balance: Toward a Better Understanding of Prison Strikes”; Harvard Law Review; https://harvardlawreview.org/2019/03/striking-the-right-balance-toward-a-better-understanding-of-prison-strikes/; Accessed: 11-8-2021; AU)

But more broadly, the prison strikers sought to draw public attention to longstanding grievances over inhumane treatment within prisons across the country and to call for significant criminal justice reforms. The strikers, through the inmate organization Jailhouse Lawyers Speak, issued a list of ten national demands, calling for, among other things, improved prison conditions, better access to rehabilitation programs, voting rights for all current and former prisoners, and the “immediate end to the racial overcharging, over-sentencing, and parole denials of Black and brown humans.”4× Most critically, the strikers passionately called for the “immediate end to prison slavery”5× — the label that activists use to describe the exploitative labor practices within prisons of putting prisoners to work, sometimes compulsorily, for just “cents an hour or even for free.”6× Although **none of the strikers’ ten demands have yet been met**, the 2018 nationwide prison strike was still a remarkable event in its scope and coordination, as well as its ability to generate public support and attention. An estimated 150 different organizations endorsed the strike; citizens held numerous demonstrations outside of prisons in solidarity; and a range of national media publications provided detailed coverage of the protest’s motivations, objectives, tactics, and status as potentially the “largest prison strike in U.S. history.”7× Despite the 2018 prison strike’s apparent gravity, it is difficult to fully contextualize its significance because **surprisingly little attention** has been paid to prison strikes previously. For instance, just two years prior, in 2016, a similar nationwide prison strike was described as “[t]he **largest** prison strike . . . you [probably] **haven’t heard about**.”8× In light of this reality, this Note peers behind prison walls to improve our understanding of prison strikes — the end goal being to open the door to a broader discussion of why and how these strikes should receive legal protection. Part I briefly documents America’s history of prison strikes, showing that the 2018 nationwide strike is the latest in a long, important tradition of prisoners using the only real means available to them — collective actions against prison administrators — to protest labor conditions and other deeply held grievances. Part II then evaluates the legal framework governing prison strikes, demonstrating that such strikes likely do not receive sufficient protections under either the Constitution or federal and state statutes and therefore can be shut down by prison administrators without fear of judicial oversight. Part III, informed by the rich history of prison strikes, argues that their potential and demonstrated value demands, at the very least, consideration of the merits of protecting incarcerated individuals’ right to strike, and it contends that the First Amendment framework offers one potential avenue to allow prisoners to peacefully surface pressing problems in our carceral system and to collectively express their humanity and dignity.

#### Multiple alt causes to recidivism – low wages are a drop in the bucket.

Tegeng et al. ’18 (Goche; professor in the Department of Psychology at Wollo University; 2018; “Exploring Factors Contributing to Recidivism: The Case of Dessie and Woldiya Correctional Centers”; Arts and Social Sciences Journal; https://www.hilarispublisher.com/open-access/exploring-factors-contributing-to-recidivism-the-case-of-dessie-and-woldiya-correctional-centers-2151-6200-1000384.pdf; Accessed: 11-8-2021; AU)

Recidivism is “one of the most fundamental concepts in criminal justice” and relevant in understanding the core functions of the criminal justice system such as incapacitation, deterrence, and rehabilitation [1]. Within criminal justice agencies, the level of recidivism is an important outcome variable that provides the basis for determining the extent to which an agency has been able to effectively intervene in the criminality of the offender populations it serves, identifying the needs for more effective programs, communicating the need for increased resources, and demonstrating accountability to the public and to legislators [2]. There are **many different plausible contributing factors** that might explain why released offenders could not successfully reenter the community. A notable number of studies examined the contributing factors to recidivism among released offenders. The **most plausible reasons** to explain the relatively high recidivism rate among released offenders were centered on the offenders’ **educational illiteracy**, **lack** of vocational **job skills**, lack of interpersonal skills, or **criminal history**. Besides, socio-economic factors such as gender, **age and employment status** influence the possibility of committing crimes after first conviction. In terms of gender, men are more likely to return to prison because of **criminal peer associations**, **carrying weapons**, alcohol abuse, and **aggressive feelings** [3]. According to United States Sentencing commission 24.3 and 13.7 percent of males and females were recidivates respectively in USA. **Age is** also another demographic **determinant factor** for recidivism. A study in USA shows that recidivism rates decline relatively consistently as age increases. So youths are more likely to offend than older people. Among all offenders under age 21, the recidivism rate is 35.5 percent, while offenders over age 50 have a recidivism rate of 9.5 percent (United States Sentencing commission, 2004). Therefore, incarceration, particularly at a young age, can lead to an accumulation of disadvantages over the life course, with future opportunities severely restricted [4]. On the other hand, the **absence of employment** is a consistent factor in recidivism and parole or probation violations, and **having a criminal history** limits employment opportunities and **depresses wages**. In New York State, labor statistics show that **89%** of formerly incarcerated people who violate the terms of their probation or parole are unemployed at the time of violation. Further research suggests that 1 year after release, up to 60% of former inmates are not employed. Nationally, according to a study by Bushway and Reuter [5], one in three incarcerated people reported being unemployed before entering state prison, and fewer than half had a job lined up before release. Moreover, family is **another main factor** in the formation of individual and social personally of the child. From the child’s point of view, parents are the most important and most valuable models of the universe. Prisoners’ recidivism rates are associated with the amount of contact they receive with their families [6]. Less care of family to their children [7] and lack of family involvement is **strongly related** to crime and incarceration rates. In line with this, studies in Australia revealed that, offenders with limited family support or attachment are more likely to reoffend. Alongside, drugs problem is one of the **main headline crime stories** of our times which leads to crime. The urge to commit crimes by drug addicts and alcoholics is **motivated** by the desire to support their habits. Much of these offenders’ behavior can be linked to substance abuse and addictions (UNODC, 2012). Because they tend to serve short-term sentences, their access to treatment and other programmers while in detention is quite limited and they remain at high risk of reoffending. The issue crime in general and recidivism in particular has attracted the interest of some researchers in Ethiopia. These studies were basically focused on criminal behavior; juvenile delinquency and the criminal justice system i.e. have tried to point out from legal perspectives. Yet the amount of researches and the knowledge obtained from those researches do not suffice to explain the extent and depth of the problem related to recidivism rather they try to highlight the issue from criminal behavior. Andargachew [8] in his book “The Crime Problem and Its Correction” found that Ethiopian prisons are suffered from over crowdedness, lack of sanitation, and insufficient amount and quality of food service. He has also focused the history of Ethiopian police force as well as the history of judicial system in Ethiopia. However, Andargachew failed address the issue of recidivism and lack of rehabilitation on repeat offenders. Daniel [9] also studied Crime incidences in Addis Ababa with an emphasis on the nature, spatial pattern, causes, consequences and possible remedies and showed different variables causing criminal behavior. But he too failed to identify the major causes of recidivism. Nayak [10] studies magnitude and impact Juvenile Delinquency in Gondar, explored that Juveniles who were from large sized /or disintegrated family commit delinquent act than smaller sized and healthy family. It has a greater impact on different levels like, individual, family, community and society at large. Yet, he also lacked from discussing recidivism. In addition to this, Meti [11] in his/her study in Addis Ababa tried analyze the influence of socio economic factors on crime with particular emphasis on the triggering factors that prompt criminal behavior is a timely endeavor. But he still refrained from explaining the factors contributing to recidivism. On top of that, methodologically, the aforementioned studies gave a huge emphasis on quantitative method in the understanding of crime and criminal behavior, for the sake of describing socio-economic and demographic characteristics of study participants’ vis-à-vis recidivism. On the contrary, in the present study attempt has made to incorporate qualitative method intensively due to the fact that lived experience of recidivists are more understandable through a detailed and rich data that could be collected by giving more attention to qualitative method.

## Wages

#### Turning Wages – this answers their Internal Link to solving Inequality.

#### 1] Unions reduce wages for the majority and harm general employment rates – flips their labor shortage links

Hazlitt 19 [Henry Hazlitt; Author on Economics; 12/17/2019; " How Unions Reduce Real Wages"; Mises Institute; https://mises.org/wire/how-unions-reduce-real-wages] //Miller

For more than a century the economic thinking not only of the public but of the majority of economists has been dominated by a myth — the myth that labor unions have been on the whole a highly beneficent institution, and have raised the level of real wages far above what it would have been without union pressure. Many even talk as if the unions had been chiefly responsible for whatever gains labor has made. Yet the blunt truth is that labor unions cannot raise the real wages of all workers. We may go further: the actual policies that labor unions have systematically followed from the beginning of their existence have in fact reduced the real wages of the workers as a whole below what they would otherwise have been. Labor unions are today the chief antilabor force. To realize why this is so we must understand what determines wages in a free market. Wage rates are prices. Like other prices they are determined by supply and demand. And the demand for labor is determined by the marginal productivity of labor. If wage rates go above that level, employers drop their marginal workers because it costs more to employ them than they earn. They cannot long be employed at a loss. If, on the other hand, wage rates fall below the marginal productivity of workers, employers bid against each other for more workers up to the point where there is no further marginal profit in hiring more or bidding up wages more. So assuming mobility of both capital and labor, assuming free competition between workers and free competition between employers, there would be full employment of every person wanting and able to work, and the wage rate of each would tend to equal his marginal productivity. It will be said — it has in fact repeatedly been said — that such an analysis is merely a beautiful abstraction and that in the actual world this mobility and competition of labor and capital do not exist. There is, some economists have argued, in fact a wide range of "indeterminacy" in wages, and it is the function of unions to make sure that wage rates are fixed at the top rather than the bottom of this range or zone. We cannot reply that this indeterminacy theory is wholly wrong; but what we can say is that in relation to the problem of unions it is unimportant. The indeterminacy theory is true of wages only to the extent that it is true of other prices: it is true where the market is narrow or specialized. It is true, say, of highly specialized jobs in journalism, or in the universities, or in scientific research, or in the professions. But wherever we have large numbers of unskilled workers, or large numbers of approximately equal special but widespread skills — such as carpenters, bricklayers, painters, plumbers, printers, train-men, truckdrivers — this zone of indeterminacy shrinks or disappears. It is the craft unions themselves who insist that their individual members are so nearly equal to each other in competence that all should be paid on equal "standard" wage. And so we have the paradox that the unions exist and flourish precisely where they are least necessary to assure that their members get a market wage equal to their marginal productivity. It is true, of course, that an individual union can succeed in forcing the money wage rates of its members above what the free market rate would be. It can do this through the device of a strike, or often merely through the threat of a strike. Now a strike is not, as it is constantly represented as being, merely the act of a worker in "withholding his labor," or even merely a collusion of a large group of workers simultaneously to "withhold their labor" or give up their jobs. The whole point of a strike is the insistence by the strikers that they have not given up their jobs at all. They contend that they are still employees — in fact, the only legitimate employees. They claim an ownership of the jobs at which they refuse to work; they claim the "right" to prevent anybody else from taking the jobs that they have abandoned. That is the purpose of their mass picket lines, and of the vandalism and violence that they either resort to or threaten. They insist that the employer has no right to replace them with other workers, temporary or permanent, and they mean to see to it that he doesn't. Their demands are enforced always by intimidation and coercion, and in the last resort by actual violence. So wherever a union makes a gain by a strike or strike threat, it makes it by forcibly excluding other workers from taking the jobs that the strikers have abandoned. The union always makes its gains at the expense of these excluded workers. Overlooking the Victims It is amazing to find how systematically the self-proclaimed humanitarians, even among professional economists, have managed to overlook the unemployed, or the still more poorly paid workers, who are the victims of the union members' "gains." It is important to keep in mind that the unions cannot create a "monopoly" of all labor, but at best a monopoly of labor in certain specific crafts, firms, or industries. A monopolist of a product can get a higher monopoly price for that product, and perhaps a higher total income from it, by deliberately restricting the supply, either by refusing to produce as much as he can of it, or by withholding part of it, or even by destroying part of it that has already come into existence. But while the unions can and do restrict their membership, and exclude other workers from it, they cannot reduce the total number of workers seeking jobs. Therefore whenever the unions gain higher wage rates for their own members than free competition would have brought, they can do this only by increasing unemployment, or by increasing the number of workers forced to compete for other jobs and so comparatively reducing the wage rates paid for such jobs. All union "gains" (i.e., wage rates above what a competitive free market would have brought) are at the expense of lower wages than otherwise for at least some if not most nonunion workers. The unions cannot raise the average level of real wages; they can at best distort it. As the gains of union workers are made at the expense of nonunion workers, it is instructive to ask what proportion union members constitute of the whole working population. The answer for the United States is that union members now number about 20 million, or not more than 25 percent of the total civilian labor force of 87 million. So the unions are in a distinct minority. This might not be a fact worth emphasizing if there were reason to think that the average earnings of union workers were below the average earnings of nonunion workers. But while statistical comparisons cannot be exact, the evidence is conclusive that the case is the other way round. It is the most skilled occupations that are most unionized. In brief, we have a one-quarter minority of already higher paid union workers exploiting a three-quarters majority consisting mainly of already lower paid nonunion workers. People could save themselves a good deal of misplaced sympathy if next time they read in their newspapers of a strike for a "decent wage," they take the trouble to compare what the strikers were already getting with, say, the official statistics of average wages for all nonagricultural workers. The "gains" of union labor, of course, need not be solely at the expense of nonunion labor; they may be at the expense of some union members themselves. The higher wage rates gained in a particular industry (assuming an elastic demand for its product) will lead to less employment than otherwise in that industry. This may force unemployment on some of the members of the "successful" union. The result may then be that smaller aggregate wages will be paid in that industry than if the higher wage rate had not been successfully imposed. In addition, any union's "gains" (continuing to use "gains" in the sense of any excess over what would have been free-market wage rates) will be at the expense not only of unemployment or lower pay for other workers, but at the expense of consumers, by forcing them to pay higher prices. But as the great bulk of consumers consists of other workers, this means that these gains will be at the expense not only of nonunion workers but also of other union workers. The real wages of the mass of workers are reduced whenever they have to pay higher prices. Once it is clearly recognized that the strike-threat gains of each union are at the expense of all other unions, in forcing their members to pay higher prices for products, the whole myth of "labor solidarity" collapses. It is this myth that has kept the strike-threat system going. It has created sympathy for strikes and tolerance of the public harm they do. The mass of the working population has been taught to believe that all workers should support every strike, no matter how disorderly or for what unreasonable demands, and always to "respect the picket lines," because "Labor's" interests are unified. The success of any strike is thought to help all labor and its failure to hurt all labor. The Great Illusion This is the modern Great Illusion. In fact, each union's extorted "gains," by raising a specific industry's costs and therefore its prices, reduce the real wages of all other workers. The interests of the unions are mutually antagonistic. I have been talking so far about the damage done by strike settlements, or by "gains" extorted under the threat of strikes; I have not yet talked about the damage done by the strike itself. While strikes are ostensibly directed against the employers, most of them are in fact directed against the public. The idea is that if enough hardship is inflicted on the public, then the public will insist that the employer capitulate to the strikers' demands. There are too many instances of this to list. For examples one need not go outside of New York City in recent years. A bus and subway strike. A strike of garbage collectors, bringing filth, stench, and the threat of an epidemic. A strike in late December, 1968, of fuel-oil deliverers and oil-burner repairmen, during an extreme cold spell and flu epidemic, when at least 40,000 persons in thousands of multiple dwellings were reported to be seriously ill and were deprived of heat. A strike of 20,000 employees of the Consolidated Edison Co., which supplies the electric power for New York. Grave-diggers' strikes. Hospital employees' strikes. The chief leverage of the strikers, in securing capitulation to their demands, was the amount of hardship and suffering they were able to inflict, not directly on the employers, but primarily on the public. Yet who are the public? They are in the main other workers, including other union members. They may even be members of the striking union itself and of their families. A striking fuel-oil deliverer's own children, for example, may be sick and shivering because no fuel has been delivered. This is the absurdity of "labor solidarity." This is the folly of a "general strike." Such a strike is suicidal for the workers themselves.

#### 2] Aff gets circumvented.

Lanard 17 [Noah Lanard, editorial fellow. Donald Trump just took another swipe at the labor unions that helped elect him, Mother Jones, 7-19-2017, Accessible Online at http://www.motherjones.com/politics/2017/07/trumps-labor-board-appointments-are-another-blow-for-unions/]

Trump’s NLRB nominees are expected to create further challenges for workers seeking to unionize. Emanuel is a shareholder and longtime lawyer at Littler, the world’s largest management-side employment law firm. Sen. Elizabeth Warren (D-Mass.) has called it is one of the nation’s “most ruthless” union-busters. Emanuel’s clients include Uber and other companies accused of violating workers’ rights, according to his ethics disclosure form.

Outside of his legal practice, Emanuel has decried California’s “terrible climate for job creation,” citing the state’s generous overtime and break requirements for employees.

Kaplan was previously an attorney for the House education and labor committee. In that role, he drafted a bill to reverse an NLRB rule, dubbed the “ambush election rule” by conservative critics, that allowed workers to vote on unionization as soon as 11 days after a petition was submitted. The bill, which did not pass, would have also reversed the board’s recognition of micro-unions.

At Emanuel and Kaplan’s nomination hearing last week, Sens. Al Franken (D-Minn.) and Warren were particularly concerned by Emanuel’s record of defending the mandatory arbitration agreements that Carlson and many others have signed. Pressed by Franken, Emanuel declined to criticize arbitration agreements that prevent women who are sexually harassed from suing their employers in court. In theory, the legality of the arbitration agreements is now in the Supreme Court’s hands. But Ronald Meisburg, a former NLRB board member, has said it’s possible the NLRB could revisit the decision before the court decides. Emanuel told Warren he does not expect to recuse himself if the issue comes up.

The committee’s approval of both nominees along party lines on Wednesday follows other moves under Trump that are less than friendly to labor. Trump’s nominee for deputy labor secretary, Patrick Pizzella, was criticized last week for working with disgraced lobbyist Jack Abramoff to advocate for what was compared to sweatshop labor in the Northern Mariana Islands, a US commonwealth, in the early 2000s. The goods, which were often made by Chinese and Filipino workers, had the advantage of being stamped “Made in the USA.”

Neil Gorsuch, whom Trump appointed to the Supreme Court, has a long record of siding with employers in labor disputes. In the court’s upcoming term, Gorsuch will hear arguments in a case that will decide whether mandatory arbitration agreements violate the National Labor Relations Act.

#### 3] Strikes empirically reduce wages, job opportunities, and hurt economic recovery – reject their surface level studies that don’t account for specific factors

Sherk 09 [James Sherk; Bradley Fellow in Labor Policy in the Center for Data Analysis at The Heritage Foundation; 5-21-2009; "What Unions Do: How Labor Unions Affect Jobs and the Economy"; Heritage Foundation; https://www.heritage.org/jobs-and-labor/report/what-unions-do-how-labor-unions-affect-jobs-and-the-economy; 11-16-2021] //Miller

Unions function as labor cartels. A labor cartel restricts the number of workers in a company or industry to drive up the remaining workers' wages, just as the Organization of Petroleum Exporting Countries (OPEC) attempts to cut the supply of oil to raise its price. Companies pass on those higher wages to consumers through higher prices, and often they also earn lower profits. Economic research finds that unions benefit their members but hurt consumers generally, and especially workers who are denied job opportunities. The average union member earns more than the average non-union worker. However, that does not mean that expanding union membership will raise wages: Few workers who join a union today get a pay raise. What explains these apparently contradictory findings? The economy has become more competitive over the past generation. Companies have less power to pass price increases on to consumers without going out of business. Consequently, unions do not negotiate higher wages for many newly organized workers. These days, unions win higher wages for employees only at companies with competitive advantages that allow them to pay higher wages, such as successful research and development (R&D) projects or capital investments. Unions effectively tax these investments by negotiating higher wages for their members, thus lowering profits. Unionized companies respond to this union tax by reducing investment. Less investment makes unionized companies less competitive. This, along with the

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