## 1

#### Interpretation: The aff may not specify a situation that member nations of the World Trade Organization reduce intellectual property protections for medicines.

#### Violation: They spec pandemics

#### Limits – there are countless affs and specific situations – specific virus out break, war time, etc. unlimited topics incentivize obscure affs that negs won’t have prep on – limits are key to reciprocal prep burden – potential abuse doesn’t justify foregoing the topic and 1AR theory checks PICs

#### Ground – spec guts core generics like innovation since it relies on a long term – also means there is no universal DA to spec affs

#### Pigoen hole us into only a small part of the resolution which kills topic education

#### TVA solves – read as an advantage to whole rez -we still get discussion on it – non-uniques any reason why their aff is uniquely good.

#### Paradigm issues:

#### Fairness is a voter ­– necessary to determine the better debater

#### Education is a voter – why schools fund debate

#### Neg theory is DTD - 1ARs control the direction of the debate because it determines what the 2NR has to go for – DTD allows us some leeway in the round by having some control in the direction

#### Competing interps – Reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation – it also collapses since brightlines operate on an offense-defense paradigm

#### No RVIs – A – Going all in on theory kills substance education which outweighs on timeframe B - Discourages checking real abuse which outweighs on norm-setting C – Encourages theory baiting – outweighs because if the shell is frivolous, they can beat it quickly

## 2

#### Behold the image of the disgusting disabled child, which causes one to wince in the face of egoistic empathy. This is self-reflection, a process constitutive of the psyche that results in the disability drive, the culmination of primary pity where the non-disabled subject embodies itself in the position of the disabled object, and secondary pity, which portrays the ego’s overcompensation to regain its position and pushes a desire from lack for the eradication of disability.

**Mollow 15** Anna (2015): The Disability Drive, A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in English in the Graduate Division of the University of California, Berkeley Committee in charge: Professor Kent Puckett, Chair Professor Celeste G. Langan Professor Melinda Y. Chen Spring 2015 <https://digitalassets.lib.berkeley.edu/etd/ucb/text/Mollow_berkeley_0028E_15181.pdf> SJCP//JG

A Tale of Two Pities “Piss on pity,” declares a well-known disability activist bumper sticker. A more polite companion to this tag, the slogan “No pity” is a rallying cry of the disability rights movement.119 For disability studies, a field that since its inception has vigorously resisted the imposition of pity upon disabled people, Tiny Tim is anathema. Understandably so: every year, the image of Tiny Tim is used to drum up pity for disabled people; the widespread circulation of this affect, disability scholars have compellingly argued, does not alleviate the social barriers that we face but instead reinforces our oppression. Indispensable as this disability studies analysis is, it leaves some important questions about pity unanswered. For example: if, as is commonly said, “No one wants to be pitied,” then why is this so? And also, if nobody wants to be pitied, who, if anyone, wants to feel pity? At first glance, the answer to the latter question might seem to be “everyone.” Certainly, multitudes of moviegoers appear to enjoy our culture’s annual recitations of Tiny Tim’s pity inducing tale. If it can be fun to perform pity, perhaps this is because pity gives a boost to the ego of the pitying person. “You are broken, and I am whole,” the pitier says to the one who is pitied. “I look down on you because you suffer.” Naturally, disabled people resist performing this service for the nondisabled. “Spare us your pity,” we say, because pity is felt to be demeaning. 73 Yet an incoherence structures this familiar account of pity: if pity fortifies the ego of the subject who feels it, then why do people so often resist feeling pity? Some folks get pissed when they are prodded to pity. “Your appeals to pity won’t work,” they say. “I have no pity for you.” This is the attitude that Scrooge takes toward Tiny Tim. It’s also the stance that Edelman invites queers to take in relation to the Child—and not only to the Child per se, but also to anyone who calls for a performance of pity. Edelman argues that compassion (which, of course, is a close relative of pity) is fundamentally narcissistic (73). When we call ourselves compassionate, we think we’re feeling for the other; but, Edelman contends, we’re really only feeling for ourselves (83). That is, compassion involves projecting one’s own ego onto the object of one’s compassion. In this schema, the pitied person is used as a vehicle for the pitier to feel sorry for his or her own self. But in calling compassion a cover for narcissism, Edelman may inadvertently point to a connection between compassion and the drive. Freud’s theorization of narcissism, which is a precursor to his idea of the death drive, suggests that although some forms of narcissism can bolster the ego, other forms can do just the opposite. “On Narcissism” posits a distinction between what Freud calls “primary” and “secondary” narcissism; this distinction provides the basis for a contrast that I wish to draw between what could be called primary and secondary pity. To elucidate these two pities, let us look at the tale that Freud tells about two narcissisms. The story begins, as many Freudian narratives do, with the image of a child at its mother’s breast. Freud gives the name “primary narcissism” to the perfect autoerotic pleasure in which the child luxuriates. This pleasure takes place in the absence of a stable self, as the child does not yet conceive of itself as a distinct entity, undifferentiated from its external environment (87-88). It’s the best of times, but it can’t last: the child’s primary narcissism, Freud recounts, is exposed to numerous “disturbances,” ranging from the castration complex (in which boys fear losing the penis and girls, Freud assumes, wish that they had one) to parental discipline and criticism.120 But still, we keep seeking that lost, best time: because humans are “incapable of giving up a satisfaction” that we have “once enjoyed,” we continually try to return to the primary narcissism of childhood. We do this by engaging in secondary narcissism. All the familiar attitudes and behaviors that one tends to think of when one disparages someone as “narcissistic” fall into the category of what Freud defined as secondary narcissism: the puffed up ego, the feeling of superiority over others. But even secondary narcissism, with its many patent problems, does not only aim to aggrandize the ego. The impetus of secondary narcissism, after all, is to return to a state in which the ego as such does not exist. The child’s autoerotic enjoyment at its mother’s breast is pleasurable in part because the child is not yet a subject. As with the death drive’s impulsion to return to “an earlier state of things,” secondary narcissism draws the subject back toward a prior time when the ego did not exist (Beyond 45). Yet if primary narcissism is looked back upon as the best of times, it must, from the vantage point of a fully constituted ego, appear as the worst of times, too. To be drawn back to primary narcissism would be to imagine the abolition of one’s self. For this reason, even though secondary narcissism may threaten to break down the ego, it also entails a defense against the threat/pleasure of that breaking down. Much as the differentiation between the inseparable processes of primary and secondary narcissism rests on a distinction between building up and breaking down the ego, a similar heuristic distinction gives structure to my concepts of primary and secondary pity. To be clear, pity and narcissism are not the same thing: if narcissism can be understood as love of the self, pity involves a complex affective reaction to the suffering of someone else. Primary pity entails a response to the image of another person succumbing to what I have termed the “tragedy of disability.”121 Primary pity arises when one witnesses a fall of the self, a collapse of the ego; such falling is at once painful and pleasurable to observe. In other words, primary pity could be described as a vicarious experience of the tragedy of disability. A great deal of the pain and pleasure of primary pity center on questions about what, or who, this fallen self is. When most people think about pity, we refer to an affect in which, to adopt Edelman’s phrase, we purport to “feel for the other.” But as with primary narcissism, in which the self has not yet been constituted, and therefore cannot be said to enter into intersubjective relations with an “other,” primary pity entails a mixing up of self and other such that the ego, in becoming permeable to pain that may properly belong to “someone else,” is profoundly threatened in its integrity. Primary pity is that intense pain-pleasure complex that is provoked by the image of a suffering other who, it seems momentarily, both is and is not one’s self. This affective response can feel unbearable, as seen in Siebers’s formulation: one “cannot bear to look…but also cannot bear not to look.” Primary pity is difficult to bear because it involves a drive toward disability (one cannot bear not to look), which menaces the ego’s investments in health, pleasure, and control—because to contemplate another person’s suffering is to confront the question, “Could this happen to me?” Such a prospect, although frightening, may also be compelling; in this way, primary pity replicates the self-rupturing aspects of sexuality. Indeed, the unbearability of primary pity reflects its coextensiveness with sexuality. Sex, or the Unbearable, a book coauthored by Edelman and by Lauren Berlant, argues that sex “unleashes unbearable contradictions that we nonetheless struggle to bear” (back cover). This claim accords with Freud’s account of sexuality as a “pleasurable” “unpleasure” that the ego can never fully master or control (Three 49,75). As Leo Bersani puts it in his reading of Freud, “the pleasurable unpleasurable tension of sexual enjoyment occurs when the body’s „normal‟ range of sensation is exceeded, and when the organization of the self is momentarily disturbed”; thus, “sexuality would be that which is intolerable to the structured self” (Freudian 38). Primary pity is also intolerable to the structured self, because it entails a fascination with the fantasy of a self in a state of disintegration or disablement. Secondary pity is something else, although it cannot wholly be differentiated from primary pity. Secondary pity attempts to heal primary pity’s self-rupturing effects by converting primary pity into a feeling that is bearable. As with secondary narcissism, secondary pity involves both an attempt to get back to that ego-shattering state of painfully pleasurable primary pity, and at the same time to defend against that threat to the ego by aggrandizing oneself at someone else’s expense. Secondary pity refers to all those ego-bolstering behaviors that most people think of when they talk about pity. Disabled people are all too familiar with these behaviors: the saccharin sympathy, the telethon rituals of “conspicuous contribution,” the insistence that “they” (i.e., nondisabled people) could never endure such suffering. More commonly known in our culture simply as “pity,” secondary pity encompasses our culture’s most clichéd reactions to disability: charity, tears, and calls for a cure. Correlatives of these commonplace manifestations of secondary pity are the obligatory claims that disabled people’s suffering is “inspiring.” Indeed, the speed with which conventional cultural representations of disability segue from overt expressions of pity to celebrations of “the triumph of the human spirit” highlights the ways in which secondary pity, as a defense against primary pity’s incursions, reinforces the ego’s fantasy of sovereignty. Secondary pity, in other words, can be seen as a variation of secondary narcissism: these affects enlarge the ego of the pitier or the narcissist at the expense of someone else. But primary pity is not the same as either primary narcissism, secondary narcissism, or secondary pity. Unlike primary narcissism, a feeling that emerges out of a relation to the world in which notions of “self” and “other” do not obtain, primary pity does depend upon the constructs of self and other, although these constructions are unstable and are continually threatening to come undone. Primary pity can thus be envisioned as a threshold category occupying a liminal position between the total denial of the other that is inherent to primary narcissism and the rigid structure of (superior) self and (inferior) other that constitutes secondary narcissism and secondary pity. My concept of primary versus secondary pity also differs from Freud’s primarysecondary narcissism distinction at the level of genealogy. Like Freud’s account of primary and secondary narcissisms, my model of primary and secondary pities involves a temporal transition; but whereas Freud imagines the movement from primary to secondary narcissism as a passage from an earlier to a later stage of an individual’s development, the temporal shift from primary to secondary pity happens much more quickly than this. It happens in an instant: that moment in which we feel primary pity and then, almost before we can blink, deny that we feel or have felt it. The denial is understandable: who wants to admit that one gets pleasure from the sight of another person’s suffering—or, to make matters worse, that this pleasure derives in part from the specter of disability’s transferability, the possibility that this suffering could be—and, fantasmatically, perhaps already is—an image of one‟s own self undone? Indeed, the model of primary pity that I have been constructing may sound a bit too close to sadism for some people’s liking. Pity does come close to sadism, and at the same time, to masochism, which Freud theorizes as sadism’s obverse. In “Mourning and Melancholia,” an essay that can be read as a sequel to “On Narcissism,” Freud approaches a distinction between primary and secondary masochism, which accords with my primary-secondary pity heuristic.122 If the story that I traced in “On Narcissism” could be summarized as “child gets breast; child loses breast; child gets breast back, albeit in a secondary, adulterated form,” the tale that Freud tells about masochism takes much the same form. In this story, subject loves object; subject loses object; and subject tries to get object back by becoming object, that is, by identifying with the object in such a way that object starts to seem—and perhaps in some ways is—part of subject’s self. This last phase is a dysfunctional and disabling form of identification, Freud makes clear. Subject is still angry at object for having left it, and it takes out that anger on the object that is now part of itself. This is the reason that people suffering from melancholia are so hard on themselves, Freud says; the “diminution in…self-regard” that typically accompanies melancholia results from the subject’s attacks on the loved-and-lost object that the subject has incorporated into its ego (“Mourning” 246). Freud had not wanted there to be such a thing as primary masochism; for a long time, he had insisted that sadism, or “aggression,” was the primary instinct, and that masochism was only a turning-inward of this originary aggression. But in “Mourning and Melancholia,” although Freud does not yet use the term “primary masochism,” he nonetheless gets at this concept. The problem of suicide, Freud notes in this essay, raises the possibility that the ego “can treat itself as an object” that it wants to destroy (252). When it comes to such an extreme act as suicide, the possibility of carrying “such a purpose through to execution” must, Freud surmises, involve more than a sadistic wish to punish others. Perhaps, then, there is an innate desire to destroy one’s own self, Freud hypothesizes. If so, this self would not be a single thing: it would be “me” and at the same time, the lost object whose image “I” have internalized. Freud’s notion of a primary masochism is tied very closely to his conceptualization of the drive. Beyond the Pleasure Principle, the text in which Freud first used the term “death drive,” was published three years after “Mourning and Melancholia.” In the later text, Freud’s speculations about the death drive lead him to acknowledge that “there might be such a thing as primary masochism” (66). After all, Freud points out, the idea that either sadism or masochism definitively takes precedence over the other does not ultimately make much sense, as “there is no difference in principle between an instinct turning from the object to the ego and its turning from the ego to an object” (66). If sadism and masochism are ultimately indistinguishable obverses of each other, then pity, in both its primary and its secondary forms, would have to be both sadistic and masochistic. This is a deeply troubling possibility, but I suggest that trying to overcome pity will only make matters worse. There are many ways of trying to overcome primary pity, and each one ultimately aggravates the violence of primary pity. One way is the “pitiless” refusal of compassion that Edelman advocates (70). Another is the disability activist “No pity” injunction. A third example is secondary pity, as in the query, commonly addressed to disabled people, “Have you ever thought of killing yourself?”123 In this question, disabled people correctly hear the wish, “I’d like to kill you.” Indeed, primary pity is so unsettling that our culture has been driven to “mercifully” kill people in the name of secondary pity. We have also been driven to lock people in institutions, to let them languish on the streets, to stare, to punish, and to sentimentalize—all, I would suggest, in the interest of not owning, not naming, not acknowledging that self-shattering, ego-dissolving, instantaneous and intolerable moment of primary pity. Because primary pity is tied up with the disability drive, it must, like the drive itself, be regarded as unrepresentable. However, I will quote at length from a passage of writing that comes close not only to representing primary pity but also perhaps to producing it. In his memoir, One More Theory About Happiness, Paul Guest describes an experience that he had in the hospital after sustaining a spinal cord injury when he was twelve years old: My stomach still roiled and it was hard to keep anything down. Late one night, a doctor came to my bedside, leaning over me, his hands knotted together. He seemed vexed, not quite ready to say anything. Used to the look, I waited. And then he began. “The acids in your stomach, Paul, because of everything you’re going through, it’s like your body, everything about it, is upset. That’s why you feel so nauseous all the time. We’re going to treat that by putting a tube into your nose and down into your stomach, so we can give you medicine, OK?” When he walked away, I felt something begin to give way inside me. Up until then, I’d faced more misery and indignity than I would have thought possible. I lay there, numb and sick in a diaper, helpless. It was too much to bear, too frightening, a last invasion I could experience and not break, utterly. When he returned with nurses, I was already sobbing. Anyone so limited could hardly fight, but I tried. I tried. The neck collar prevented much movement, and any was dangerous, but I turned my head side to side, just slightly, a pitiful, unacceptable range. Fat tears rolled down my face like marbles. I begged them all, no, no, no, please no. “Hold him, hold him still,” the doctor said. Nurses gripped my head on either side. From a sterile pack, the doctor fished out a long transparent tube and dabbed its head in a clear lubricant. He paused almost as if to warn me but then said nothing. 77 Then the tube entered one nostril, its gauge slight enough to pass through, down my throat and into my stomach. I couldn’t thrash or resist. I could only relent. To the pain, the discomfort, but most distressingly the feeling of powerlessness, of violation. It was in that moment, I think, that the weight of everything which had happened fell upon me, undeniably, and the knowledge of it crushed me. (23-24) “Too much to bear,” Guest writes. The word “unbearable” would indeed be an accurate descriptor of this passage: both the experience of violence that it narrates and also the retelling of that experience produce sensations that, as in Berlant and Edelman’s account of sexuality, one cannot bear but must nonetheless “struggle to bear” (back cover). Guest’s account of a nonconsensual administration of an unwanted medical treatment is especially difficult to bear because it gives the reader no recourse to secondary pity: the passage offers no “lesson” to be learned, no invitation to feel “inspired,” nothing to make one feel in any way okay about what has happened. The medical violence that Guest recounts seems particularly devastating because it is readable as sexual: it takes the form of forced penetration, and it results in a “feeling of powerlessness, of violation” that resonates with experiences recounted by survivors of sexual assault.

#### The affirmative’s politics are tied to a rehabilitative futurism where the signifier of the fantasmatic child is placed forward to eradicate and cure disability – this deems the disabled child a threat and excludes disability from the political. They don’t get to weigh case – if we win their starting point is violent, they don’t get to weigh their end point since we indict the process of how they got there.

**Mollow 2** Anna (2015): The Disability Drive, A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in English in the Graduate Division of the University of California, Berkeley Committee in charge: Professor Kent Puckett, Chair Professor Celeste G. Langan Professor Melinda Y. Chen Spring 2015 <https://digitalassets.lib.berkeley.edu/etd/ucb/text/Mollow_berkeley_0028E_15181.pdf> SJCP//JG

Elsewhere, I have argued that No Future’s impassioned polemic is one that disability studies might take to heart.109 Indeed, the figure that Edelman calls “the disciplinary image of the “innocent” Child” is inextricable not only from queerness but also from disability (19). For example, the Child is the centerpiece of the telethon, a ritual display of pity that demeans disabled people. When Jerry Lewis counters disability activists’ objections to his assertion that a disabled person is “half a person,” he insists that he is only fighting for the Children: “Please, I’m begging for survival. I want my kids alive,” he implores (in Johnson, Too Late 53, 58). If the Child makes an excellent alibi for ableism, perhaps this is because, as Edelman points out, the idea of not fighting for this figure is unthinkable. Thus, when Harriet McBryde Johnson hands out leaflets protesting the Muscular Dystrophy Association, a confused passerby cannot make sense of what her protest is about. “You’re against Jerry Lewis!” he exclaims (61). The passerby’s surprise is likely informed by a logic similar to that which, in Edelman’s analysis, undergirds the use of the word “choice” by advocates of legal abortion: “Who would, after all, come out for abortion or stand against reproduction, against futurity, and so against life?” (16). Similarly, why would anyone come out for disability, and so against the Child who, without a cure, might never walk, might never lead a normal life, might not even have a future at all? The logic of the telethon, in other words, relies on an ideology that might be defined as “rehabilitative futurism,” a term that I coin to overlap and intersect with Edelman’s notion of “reproductive futurism.” If, as Edelman maintains, the future is envisaged in terms of a fantasmatic “Child,” then the survival of this future-figured-as-Child is threatened by both queerness and disability. Futurity is habitually imagined in terms that fantasize the eradication of disability: a recovery of a “crippled” or “hobbled” economy, a cure for society’s ills, an end to suffering and disease. Eugenic ideologies are also grounded in both reproductive and rehabilitative futurism: procreation by the fit and elimination of the disabled, eugenicists promised, would bring forth a better future.110

#### The starting point of the 1AC is epistemically flawed and an independent link – fiat is illusory and anything that doesn’t begin from the question of disability allows for ableism to infiltrate modes of thought which means we’re an epistemic prerequisite. Thus, the role of the ballot is to vote for the debater who best methodologically challenges ableism.

**Campbell 13** Fiona Kumari (2013): Problematizing Vulnerability: Engaging Studies in Ableism and Disability Jurisprudence, Fiona Kumari Campbell undertakes research in Studies in Ableism, coloniality, disability studies as well as explorations about Buddhist formations of disability. Trained in sociology, theology and legal studies; she is interested in ways that law, new technologies and the governance of marginal populations produces understandings of the productive citizen, normative bodies, ideas of periphery and ways that ablement privileges and entitles certain groups in society. Campbell is the author of Contours of Ableism: The Production of Disability and Abledness (Palgrave, 2009) and numerous other journal articles and book chapters. SJCP//JG

Studies in Ableism What is meant by the concept of ableism? The literature suggests that the term is often used fluidly with limited definitional or conceptual specificity. The work of Carlson (2001)5 and Campbell (2001) represented a turning point in bringing attention to this new site of subordination not just in terms of disablement but also ableism’s application to other devalued groups. Ableism is deeply seeded at the level of knowledge systems of life, personhood and liveability. Ableism is not just a matter of ignorance or negative attitudes towards disabled people; it is a schema of perfection, a deep way of thinking about bodies, wholeness and permeability.6 As such integrating ableism into social research and advocacy strategies represents a significant challenge to practice as ableism moves beyond the more familiar territory of social inclusion and usual indices of exclusion to the very divisions of life. Bringing together the study of existence and knowledge systems, ableism is difficult to pin down. Ableism is a set of processes and practices that arise and decline through sequences of causal convergences influenced by the elements of time, space, bodily inflections and circumstance. Ability and the corresponding notion of ableism are intertwined. Compulsory ablebodiedness is implicated in the very foundations of social theory, therapeutic jurisprudence, advocacy, medicine and law; or in the mappings of human anatomy. Summarised by Campbell (2001, 44) Ableism refers to; …A network of beliefs processes and practices that produces a particular kind of self and body (the bodily standard) that is projected as the perfect, speciestypical and therefore essential and fully human. Disability then is cast as a diminished state of being human. Writing today (2013) I add an addition to this definition: ‘The ableist bodily configuration is immutable, permanent and laden with qualities of perfectionism or the enhancement imperative orientated towards a self-contained improvability’. Sentiency applies to not just the human but the ‘animal’ world. As a category to differentiate the normal from the pathological, the concept of abledness is predicated on some preexisting notion about the nature of typical species functioning that is beyond culture and historical context. Ableism does not just stop at propagating what is typical for each species. An ableist imaginary tells us what a healthy body means – a normal mind, the pace, the tenor of thinking and the kinds of emotions and affect that are suitable to express. Of course these ‘fictional’ characteristics then are promoted as a natural ideal. This abled imaginary relies upon the existence of an unacknowledged imagined shared community of able-bodied/minded people held together by a common ableist world view that asserts the preferability and compulsoriness of the norms of ableism. Such ableist schemas erase differences in the ways humans express our emotions, use our thinking and bodies in different cultures and in different situations. This in turn enacts bodily Otherness rendered sometimes as the ‘disabled’, ‘perverted’ or ‘abnormal body’, clearly demarcating the boundaries of normal and pathological. A critical feature of an ableist orientation is a belief that impairment or disability is inherently negative and at its essence is a form of harm in need of improvement, cure or indeed eradication.

#### Vote negative to endorse an unwavering pessimism and radical failure – we reject the political and notions of futurism in exchange for an affirmation of disability’s abjection as something beautiful.

**Selck 16** Michael (2016): Crip Pessimism: The Language of Dis/ability and the Culture that Isn't, Southern Illinois University Carbondale, SJCP//JG

The disabled are dying and with them dis/abled culture is being eradicated. In the time between formulating this project and its completion already too many disabled souls have been taken from this world, including pivotal disability studies influences for this research. I barely had enough time to mourn the loss of disability advocate and inspiration porn critic Stella Young before grieving the loss of disability studies exemplar Tobin Siebers. Attached to the grief I feel as a result of the fading disability studies community is the perpetual grief I harbor since my disabled Father’s suicide and in turn the grief concomitant to the claiming of a disabled identity. I choose to start out this project with grief because it communicates the tenor of this research; this is not the disability studies project of inspiration or utopia. My entry point to the disability studies dialogue is riddled with grief, anger, and pain and it is as such that this project plots a course of disability research that attempts to make a space free from the ideological constraints of optimism. The language surrounding dis/ability is highly political. Entire words, phrases, and identities are stretched between, in, and out of the nexus of dis/ability. The choice, for instance, to include a backslash in the word dis/ability represents for Goodley (2014) a desire to delineate and expand each of the categories in the face of global neoliberalism. My initial research inquired about the impact of dis/abled terms and phrases. I went to interrogate rhetoric like “special education”, “handicapable”, and one of the most glaringly overused insults in the American education system “retard”. The scholarship I was coming up with was plentiful but was for the most part located entirely outside of intercultural communication programs like the one I was attending. For the most part the few and far between intercultural communication projects about dis/ability I was able to locate were without modal complexity and didn’t bear semblance to so many of my own experiences. I was beginning to notice a layer of optimism that has been communicatively imprinted upon the negotiation of dis/abled identity. The angst started to manifest as I questioned if I was in the correct field or if dis/ability even was ‘cultural’. I felt a very real cultural erasure of dis/ability in academia and ultimately that glaring lack of consideration is what pushed me to performance studies. I first worked to close the apparent research gap by crafting a collaborative performance titled Under the Mantle (UTM), which put dis/ability, communication scholarship, and pessimist philosophy on stage. The larger purpose of this research report is to antagonize the erasure of dis/ability from communication studies by autoethnographically analyzing the crip-pessimist performance art project Under The Mantle. This research report will first detail the components of the theoretical work that was drawn on to create UTM. Next I offer a literature review to demonstrate the combination of optimism and neglect dis/ability has undergone in intercultural communication models. Following that section I mark my shift to performance methods as I explain how narrative autoethnography can illuminate cultural misconceptions regarding the dis/abled. In the last sections of this report I offer a textual analysis of the performance UTM and analyze three significant arguments of the instillation before concluding. Contextualizing Critical Dis/Ability Theory Often used interchangeably, critical disability theory (CDT) and critical disability studies (CDS) contest dis/ablism (Goodley, 2011, 2014; Devlin & Pothier, 2006; Hosking, 2008). There are several unique additions made to CDS with every new instantiation. Scholars in European countries and Canada attend to the theory, with United States academics often underrepresented. There are three concurrent themes of CDT that I will synthesize in this section with some dis/ability studies authors claiming there are as many as seven themes of CDT (Hosking, 2008). In the introduction to their edited collection of dis/ability essays, Richard Devlin and Dianne Pothier (2006) present three themes of CDT as, first, to highlight the unequal status to which persons with disabilities are confined; second, to destabilize necessitarian assumptions that reinforce the marginalization of persons with disabilities; and third, to help generate the individual and collective practical agency of persons with disabilities in the struggles for recognition and redistribution. (p. 18, emphasis mine) Already the connections between the CDT and the critical communication paradigm are visible as each respectively forefronts notions of power, privilege, identity, and agency. Outlined in more detail, the first theme of CDT argues that there is systemic micro and macro level discrimination against bodies with disabilities. To some critical communication scholars, this theme might be obvious, but it seldom is when “the resulting exclusion of those who do not fit able-bodied norms may not be noticeable or even intelligible” (Delvin & Pothier, 2006, p. 7). As the bumper sticker on my laptop proudly disclaims, “Not all disabilities are visible,” which necessarily adds a level of nuance and complexity to the way that dis/ability studies attend to the prospect of discrimination and violence. Often times, “social organization according to able-bodied norms is just taken as natural, normal, inevitable, necessary, even progress” (Delvin & Pothier, 2006, p. 7). It might be true that the lack of collaborative work between critical communication studies and dis/ability studies is because neoliberalism is supremely effective at rebranding marginalized oppression as a marker of its progress. The implications of this assertion are dire but essential to the basis of crip-pessimism. Theoretical approaches based in pessimism and skepticism are often necessary to distinguish the instruments of self destruction that have been mistaken for those of self betterment. Thus, a key question remains, what is regarded as progress and to whom does it count? The politics of progress call for the second tenet of CDT, which is a destabilization of neoliberal practices that strip power and agency from bodies with disabilities. Devlin and Pothier (2006) use the language of “anti-necessitarian” (p. 2), which refers to the efficacy of social organizations and an unflinching skepticism of liberalism. For Shildrick and Price (1999), “disabled bodies call into question the ‘giveness’ of the ‘natural body’ and, instead, posit a corporeality that is fluid in its investments and meanings” (p. 1). Anti-necessitarian logics ask questions that remain innocuous to the critical communication paradigm. Can the architectural proliferation of stairs and multiple levels on buildings be attributed to neoliberalism and active disablism? If stairs seem to focus too exclusively on physical impairments, then what about the sensitivity of the building’s lighting, acoustics, and spatiality? Finally, if neoliberalism fights to protect its grand narrative of progress then is the social exclusion of bodies with disabilities necessary for the day-to-day operation of our globalized world? As Donaldson (2002) posits: “theories of gendered, raced, sexed, classed, and disabled bodies offer us critical languages for ‘denaturalising’ impairment’” (p. 112) at the level of the subjective and inter-subjective. The third theme of CDT is to attend to the agency of bodies with disabilities in the struggle for recognition. One key element of extending agency to the disabled is the use of social experience. Experience is subjective “but experience remains intimately connected to political and social existence, and therefore individuals and societies are capable of learning from their experiences” (Siebers, 2008, p. 82). Though absolutely necessary, it is not enough to write treatises on the oppression of the disabled over time. Academics, theorists, intercultural trainers, and storytellers alike should be aware of the constant risks of representation. Representation and context are at the core of critical disability studies. The notion of agency is as unstable as the notions of dis/ability. There is no one-size-fits-all human rights based approach that will be suitable to address all disabled experiences, as the theoretical call for crip-pessimism will remind us. Instead of a universal abstract Rawlsian concept of social justice, CDS “attend(s) to the relational components of dis/ablism” (Goodley, 2011, p. 159). By a Rawlsian concept of social justice I mean a model that relies on distributive justice with utopist equality at its core. Where utopist equality projects highlight human sameness to the point of purity. CDT unavoidably invites a discussion about difference into the folds as postmodern and post-structural thinkers position the self as defined constantly in relation to others. Therein lies the difference between an equality model and a justice model of social identity. Often in the attempt to open up spaces for reconsidering self and other, CDS celebrates disability as a positive identity marker. This essay offers a strong argument of caution that the inclusion of CDS in critical communication studies might rely too heavily on celebrations of disabled identity. Nothing better demonstrates that reliance on celebrating identity than the myriad language choices used to describe a disabled identity including: differently-abled, special needs, person with disability, disabled person, temporarily able-bodied, and others. Often, able- bodied audiences have a tendency to sensationalize the presence of disability in a space that has not traditionally welcomed it. Examples of this are highlighted by the increasingly popular discussion of ‘inspiration porn’ (Young, 2014) and Hollywood’s representation of disability. The tendency is to inspirationalize the disabled for achieving tasks that would not be celebrated if they were accomplished by an unimpaired body. Crossing the street, showing up on time, entering a building by oneself are all tasks profoundly routine to the non-disabled and yet simultaneously cherished as markers of progress for the disabled. Philosophical pessimism is articulated next as a way to temper the risk of sensationalizing dis/ability. The theories ultimately fuse together like orchids and wasps to generate the larger theme of crip-pessimism. Philosophical Pessimism Throughout the 19th century pessimism was one of the most popular intellectual and philosophical strains, crossing countries and continents. Authors such as Rousseau, Leopardi, Schopenhauer, and Nietzsche overwhelmingly created and lead the spirit of pessimism. Contemporarily however, the word ‘pessimism’ is pejorative and describes a body’s emotional discontent rather than intellectual engagement with the world. Dienstag (2009) writes, “Since pessimism is perceived more as a disposition than as a theory, pessimists are seen primarily as dissenters from whatever the prevailing consensus of their time happens to be, rather than as constituting a continuous alternative” (p. 3). Power is responsible for ontological shifts, and during shifts some populations benefit while others are harmed. The turn in thinking about pessimism from an intellectual position to an emotional state has been particularly gratuitous for bodies with disabilities. I come to pessimism because of my experience with disability. My anxiety disorder comes with an exteriority of anti-social behavior that has branded me pessimistic. The concern for my anxiety in public situations is often commented on as overly critical, negative, narcissistic, and most often pessimistic. I experience an anxious state of becoming different, and after years of failing to rehabilitate my sameness to able-bodied standards, I have come to a comfort with pessimism. I choose to include pessimism as a theoretical crutch to avoid communication studies’ sensationalism of disability. I imagine that when critical communication studies does bridge the dis/ability research gap that it might, at least initially, extend some neoliberal logics at the expense of CDS. This might manifest by scholars simply asserting disabled personhood where it does not institutionally, culturally, or individually exist. I find that CDT and philosophical pessimism combine in unique and valuable ways, particularly around tensions of personhood, abstract ideal humanism, and neoliberalism. Neoliberalism should be understood as “the superiority of individualized, market-based competition over other modes of organization. This basic principle is the hallmark of neo-liberal thought— one with old roots that lay partly in Anglo economics and partly in German schools of liberalism” (Mudge, 2008, p. 706-707). There are four components of pessimism outlined by Joshua Foa Dienstag (2006) in his book Pessimism: Philosophy, Ethic, Spirit that I wish to explore difference through. They are as following that: (1) time is a burden, (2) history is ironic, (3) human existence is absurd, and finally (4) resignation or affirmation. To write about pessimism necessarily involves questions of time, temporality, and history. The development of philosophical pessimism, specifically, the theories regarding the burden of time-consciousness, begins with difference. For the pessimist, the concept of time begets a differentiation between human and animal. Being a dog-owner myself, I have heard the colloquial aphorism that dogs, as all animals, have no concept of time. Pessimists understand time consciousness as a unique, but ultimately loathsome, trait of the human condition. Even in projects that appear to be geared toward sameness there are always unperceived and neglected populations. For example, even the U.S. constitution alleges persons of color were (and still are often) racially subjugated as property instead of considered to be fully human. The notion of difference is at the center of the pessimist’s position on time-consciousness because the philosophy accepts that the conditions of our existence are subject to relentless unpredictable change. “To the pessimists, however, the human condition is existentially unique— its uniqueness consisting precisely in the capacity for time-consciousness” (Dienstag, 2009, p. 20). For the pessimist nothing is ever the same, everything is always different, and to inhabit linear time means that everything in existence is always rushing off into the past. The advent of human time consciousness is also what leads the pessimist to find the course of history to be ironic. History is ironic for the pessimist because progress is always related to a greater set of unperceived consequences. As suggested above, philosophical pessimism acknowledges that change occurs; technologies develop and improve over time. Pessimists ask if those improvements are related to a greater set of costs that are not immediately recognizable. (Dienstag, 2006, p. 25) Similar to critical disability theory, pessimism interrogates power and privilege. Pessimists rely on the logic of difference to chart consequences. Consequences go unperceived because they occur across populations with disproportionate access to power, populations that are often culturally unintelligible. For instance, the massive boom in mobile technologies like cell phones and laptops has created vast pits of ‘e-waste’ in Africa, surges in child labor, and conflict over rare earth minerals (Vidal, 2013). Pessimists use difference to tease out the distinction between the instruments of suffering and those of betterment. The third philosophical pessimistic position is that human existence is absurd. The absurdity of existence “is illustrated by the persistent mismatch between human purposes and the means available to achieve them: or again, between our desire for happiness and our capacity to encounter or sustain it” (Dienstag, 2006, p. 32). Difference is built upon exanimations of power, which is both fluid and transferable but ultimately permanent. Classical western philosophy has an optimistic pragmatism built into it that posits there must be an answer to our questions. Alternatively, the pessimist embraces uncertainty, ambiguity, and intersubjectivity. Pessimism encourages a sense of comfort around the idea of multiple, coexistent, and perhaps competing histories. Neoliberal optimism is the logic of conflict as materially reconcilable, rather than antagonistically irreconcilable. The fourth and final tenet of pessimism that we are to examine asks what we are to do about our dire human condition. There are multiplicities of rationales that ultimately inform the pessimistic dualism to either resign from life or affirm it entirely. I defer to an existential or Nietzschean pessimism that recognizes suffering is inevitable for two reasons. First, human time-consciousness necessitates an awareness of our impending death. Second, mutually assured value systems will always intersubjectively exist. The choice to affirm life in its entirety is a pessimistic choice. Embracing life as both miserable and beautiful, fleeting and enduring, validates the perpetually fragmented subject seeking a world that exists beyond good and evil and instead just is.

#### Psychoanalysis is both falsifiable and accurate – studies prove.

Grant & Harari 5 (Don and Edwin, psychiatrists, “Psychoanalysis, science and the seductive theory of Karl Popper,” Australian and New Zealand Journal of Psychiatry)

Attacks on psychoanalysis and the long-term therapies derived from it, have enjoyed a long history and much publicity [1-4]. Yet, the justification for such attacks has been challenged on many grounds, including their methodology [5] and the empirically demonstrable validity of core psychoanalytic concepts [6,7]. Also, burgeoning neuroscience research, some of which is summarized below, indicates likely neurological correlates for many key clinically derived psychoanalytic concepts such as self-coherence [8], repression [9] and projective identification [10]. Furthermore, the effectiveness of psychoanalysis and its derivative therapies has been supported by empirical research [11,12], particularly for patients with DSM axis II pathology. Despite this evidence, the attacks on psychoanalysis continue unabated, not only from some psychiatrists [13,14] but also from the highest levels of politics and health bureaucrats [15], although what exactly is being attacked is often unclear.

#### No perms: (a) view it as artificially distinct since it’s key to fully flesh out the individual intricacies of both methods and create more concrete proposals (b) justifies infinite aff conditionality – allowings permutations allows infinite new 1AR advocacies which skews 1 mins of the 1NC and destroys neg ground (c) irreciprocal – we can’t permute their methods which means they can always intrinsic perm or sever which destroys neg ground (d) illogical – the alt isn’t fiated in the sense of the aff so endorsing a fiated world mixed with a pre-fiat orientation is incoherent (e) hold the 1AC method by itself since anything else endorses bad scholarship since it justifies severence – justifying both in the aff solves.

## 3

#### IPR is the backbone of innovation, but threat of restrictions such as compulsory licensing imperil it

DeRoo 11

Pier DeRoo (J.D. Candidate 2011, University of Michigan Law School; A.B. 2006, Chemistry, Princeton University). “Public Non-Commercial Use' Compulsory Licensing for Pharmaceutical Drugs in Go Pharmaceutical Drugs in Government Health Car ernment Health Care Programs.” Michigan Journal of International Law, vol. 32, issue 2. 2011. JDN. https://repository.law.umich.edu/mjil/vol32/iss2/3/

B. The Pharmaceutical Development Outlook

Government health care programs, however, when combined with compulsory licensing and important pharmaceutical markets, represent a corresponding threat to the current R&D infrastructure of drug development, which is funded both by purchasers of pharmaceutical products and by taxpayers via public research entities. With **only one of every 5,000**-10,000 **tested compounds** reaching the market and taking an average of **11**.8 **years to get there**, drug R&D investment requires a high risk premium. Although the exact amount is disputed, current estimates to develop an innovative, new molecular entity drug range from $802-$868 million, and costs continue to rise. o0 Pharmaceutical development is also far from a purely private enterprise, with the NIH annually spending over $31 billion in taxpayer dollars in basic medical research, which supports downstream drug development by the pharmaceutical industry.'o4 R&D therefore usually targets drugs that have an expected return high enough to generate substantial profit and fund subsequent R&D. Because R&D investment decisions are guided by the expected economic return for a particular line of research, **palatability of risk is proportional to the magnitude of the expected returns.**'" Assuming that research into risky, unexplored areas of health is desirable, low expected returns, whether due to a small market for a particular drug or weakened patent exclusivity rights as a result of **compulsory licensing**, may chill such R&D. After a pharmaceutical drug runs the gamut of patenting, clinical trials, and regulatory approval procedures, the patent specification and a wealth of safety and efficacy data are available to the public, resulting in **serious appropriability concerns.**' In the absence of strong patent protection and regulatory data exclusivity, generic producers are able to rapidly reverse-engineer drugs, obtain regulatory approval by relying on the patent holder's safety and efficacy data, and sell the generic version on a competitive market against the innovative firm that incurred the stratospheric R&D and original regulatory approval costs.0o Without such protection, the innovative pharmaceutical developer could expect little return on investment, and private R&D would dissipate. Indeed, pharmaceutical appropriability in India resulted in a commodified Indian pharmaceutical market devoid of R&D. In the Indian Patents Act of 1970, India abolished pharmaceutical compound patentability in favor of short seven-year pharmaceutical production-process patents, creating incentives to devise increasingly efficient production processes while permitting any manufacturer to produce the pharmaceutical compound itself.'" Drug **firms flooded the market** as the number of licensed manufacturers grew from 2,237 enterprises in 1969-70 to an estimated 16,000 by 1992-93, illustrating that barriers to entry into the pharmaceutical market were not onerous. Profitability predictably plunged over that period, reducing R&D expenditures from 15.5% of sales prior to the 1970 Patents Act to a **mere 1.4%** in 1992-93 because of comparative declines in expected returns on R&D investment due to the absence of exclusivity for drug compounds.'" 1.4% does not fund much R&D: India has become the world's leading generic pharmaceutical producer, but contributes little to the development of new pharmaceutical medicines."2 The most powerful developing countries followed India in prohibiting patent protection for pharmaceuticals. Between 1971 and 1996, Brazil prohibited patents for both pharmaceutical products and processes."' Mexico and Argentina had similarly lowered pharmaceutical patent protection prior to TRIPS." 4 As a result, today only a handful of developed countries have a sufficiently sophisticated pharmaceutical industry and research base to conduct complex R&D. Compulsory licensing, if widely used as an escape-hatch from patent protection, presents a potential threat to continued research by relegating innovative producers to a level playing field with generic producers.' Once a compulsory license is granted, licensees simply have to send a royalty check to the patent holder.7 These royalty payments are uniformly puny. For example, Indonesia offered a mere **0.5%** royalty on the generic sale price for its HIV/AIDS compulsory licenses,"' Zambia offered 2.5%,"' and Mozambique offered 2%.120 Meanwhile, Thailand has offered 0.5% to 2.0%.121 The pharmaceutical market has already encountered the likely bleak effects of widespread compulsory licensing and its low royalty rates. The post-1970 Indian pharmaceutical industry demonstrated that extremely low margins do not incentivize R&D.122 In a similar vein, the Egyptian pharmaceutical industry is currently discovering that its cost-plus pricesetting system, using the costs of ingredients as the benchmark, establishes a profit ceiling that acts as a de facto limit on R&D expenditures.123 Limiting economic returns on pharmaceutical R&D through abusive compulsory licensing, especially if in one or more of the few countries with innovative pharmaceutical industries,'2 **therefore poses a threat to continued R&D** into unexplored areas of medicine.

#### Pharmaceutical innovation is key to stop bioterrorism and antimicrobial resistance – and it turns the case through effective disease response

Marjanovic and Fejiao 20 Marjanovic, Sonja, and Carolina Feijao. Sonja Marjanovic, Ph.D., Judge Business School, University of Cambridge. Carolina Feijao, Ph.D. in biochemistry, University of Cambridge; M.Sc. in quantitive biology, Imperial College London; B.Sc. in biology, University of Lisbon. "Pharmaceutical Innovation for Infectious Disease Management: From Troubleshooting to Sustainable Models of Engagement." (2020). [Quality Control]

As key actors in the healthcare innovation landscape, pharmaceutical and life sci-ences companies have been called on to develop medicines, vaccines and diagnostics for pressing public health challenges. The COVID-19 crisis is one such challenge, but there are many others. For example, MERS, SARS, Ebola, Zika and avian and swine flu are also infectious diseases that represent public health threats. Infectious agents such as anthrax, smallpox and tularemia could present threats in a bioterrorism con-text.1 The general threat to public health that is posed by antimicrobial resistance is also well-recognised as an area in need of pharmaceutical innovation.

Innovating in response to these challenges does not always align well with pharmaceutical industry commercial models, shareholder expectations and compe-tition within the industry. However, the expertise, networks and infrastructure that industry has within its reach, as well as public expectations and the moral imperative, make pharmaceutical companies and the wider life sciences sector an indispensable partner in the search for solutions that save lives.

This perspective argues for the need to establish more sustainable and scalable ways of incentivising pharmaceu-tical innovation in response to infectious disease threats to public health. It considers both past and current examples of efforts to mobilise pharmaceutical innovation in high commercial risk areas, including in the context of current efforts to respond to the COVID-19 pandemic.

In global pandemic crises like COVID-19, the urgency and scale of the crisis – as well as the spotlight placed on pharmaceutical companies – mean that contributing to the search for effective medicines, vaccines or diagnostics is essential for socially responsible companies in the sec-tor.2 It is therefore unsurprising that we are seeing indus-try-wide efforts unfold at unprecedented scale and pace. Whereas there is always scope for more activity, industry is currently contributing in a variety of ways. Examples include pharmaceutical companies donating existing com-pounds to assess their utility in the fight against COVID-19; screening existing compound libraries in-house or with partners to see if they can be repurposed; accelerating tri-als for potentially effective medicine or vaccine candidates; and in some cases rapidly accelerating in-house research and development to discover new treatments or vaccine agents and develop diagnostics tests.3,4 Pharmaceutical companies are collaborating with each other in some of these efforts and participating in global R&D partnerships (such as the Innovative Medicines Initiative effort to accel-erate the development of potential therapies for COVID-19) and supporting national efforts to expand diagnosis and testing capacity and ensure affordable and ready access to potential solutions.3,5,6

The primary purpose of such innovation is to benefit patients and wider population health. Although there are also reputational benefits from involvement that can be realised across the industry, there are likely to be rela-tively few companies that are ‘commercial’ winners. Those who might gain substantial revenues will be under pres-sure not to be seen as profiting from the pandemic. In the United Kingdom for example, GSK has stated that it does not expect to profit from its COVID-19 related activities and that any gains will be invested in supporting research and long-term pandemic preparedness, as well as in developing products that would be affordable in the world’s poorest countries.7 Similarly, in the United States AbbVie has waived intellectual property rights for an existing com-bination product that is being tested for therapeutic poten-tial against COVID-19, which would support affordability and allow for a supply of generics.8,9 Johnson & Johnson has stated that its potential vaccine – which is expected to begin trials – will be available on a not-for-profit basis during the pandemic.10

Pharma is mobilising substantial efforts to rise to the COVID-19 challenge at hand. However, we need to consider how pharmaceutical innovation for responding to emerging infectious diseases can best be enabled beyond the current crisis. Many public health threats (including those associated with other infectious diseases, bioterror-ism agents and antimicrobial resistance) are urgently in need of pharmaceutical innovation, even if their impacts are not as visible to society as COVID-19 is in the imme-diate term. The pharmaceutical industry has responded to previous public health emergencies associated with infec-tious disease in recent times – for example those associated with Ebola and Zika outbreaks.11 However, it has done so to a lesser scale than for COVID-19 and with contribu-tions from fewer companies. Similarly, levels of activity in response to the threat of antimicrobial resistance are still low.12 There are important policy questions as to whether – and how – industry could engage with such public health threats to an even greater extent under improved innova-tion conditions.

#### Bioterror is the largest medical threat—it outweighs natural pandemics

Bakerlee 21 Chris Bakerlee is a Ph.D. candidate studying evolutionary genetics at Harvard University and a fellow in the Council on Strategic Risks’s Fellowship for Ending Bioweapons Programs. "Mother Nature is not 'the ultimate bioterrorist' - STAT." STAT, 8 Jan. 2021, www.statnews.com/2021/01/08/mother-nature-is-not-the-ultimate-bioterrorist. [Quality Control]

Taken together, these examples show that this meme no longer serves us well. It is undoubtedly a mistake to underestimate the threats from natural pathogens. At the same time, it is equally unwise to wield this 19-year-old expression like a magic wand, intending to briskly banish concerns about people causing harm with biology. We can’t afford to blind ourselves or others to the uncomfortable truth that, with each passing day, humans grow more capable of outdoing nature and harnessing biotechnology to cause harm on a staggering scale, by either cruelty or carelessness.

Nature has no interests, motives, or political goals. To the extent it can be said to “want” anything, it is to perpetually enhance populations’ differential reproductive success, which only rarely aligns with causing greater harm to humans. Notably, the trillions of bacteria living in the average human’s colon appear to have adapted toward a peaceful and often mutually beneficial coexistence with their host. And even deadly pathogens may theoretically evolve toward making humans less sick if doing so opens up more opportunities for transmission between hosts.

The process of natural selection, for all its power, is highly constrained in its ability to generate “superbugs” possessing a diabolical suite of traits. Like human bioengineers, natural selection must work around stubborn physiological trade-offs between traits, such as genome replication rate and mutation rate. But natural selection is also handicapped by near-sightedness, driving improvements in traits that enhance a population’s fitness in its current environment with no attention to maintaining or improving traits that enhance fitness in other environments.

If creating an especially deadly pathogen were like winning a soccer match against a formidable opponent, natural selection would be competing with all the cunning of an especially persistent horde of 5-year-olds, glued to the ball and only ever capable of playing offense, defense, or goalie at any one time.

By contrast, modern biologists are gaining the ability to see the whole field, develop an intuition about where the ball will be next, and play multiple positions simultaneously. Through a combination of rational design, directed evolution, breeding, and brute force trial and error, they can increasingly engineer organisms that excel in multiple desired functions at once, such as the ability to grow quickly in a massive industrial fermenter while churning out commercially valuable biomolecules. This growing capability promises tremendous benefits for agriculture, industry, and human health, but its potential application to the creation of pathogens poses serious concerns.

It is worth emphasizing that trained biologists — let alone terrorists — still have difficulty one-upping natural selection’s creative output. Our understanding of biology is very much in its infancy. Yet our knowledge and capabilities are maturing rapidly, as evidenced by Twist’s prolific gene synthesis capabilities, along with recent feats in predicting protein structure, gene editing, and genome assembly. We are much closer to this exciting but frightening horizon today than we were in 2001, and this trend will likely persist.

It’s also worth noting that, when it comes to weapons-grade biotechnology, states likely pose a greater risk than non-state terrorists. States have vastly more resources to support the development of biological weapons, and about 23 are known or suspected to have maintained biological weapons programs in the 20th century. Some programs, like North Korea’s, likely persist to this day. As countries jockey for advantage, state biological weapons programs remain an ever-present danger, despite the treaties and export controls designed to rein them in. Covid-19, which has exposed countries’ vulnerability to biological threats, has done little to mitigate this danger.

Accidental releases pose an additional source of anthropogenic biorisk. Thanks to the U.S. government’s monitoring program, we know that dozens of agents and toxins with the potential to pose a severe threat to public health and agriculture are reported accidentally lost or released from U.S. labs every year. We also know that accidental releases around the world have already caused significant harm. Such risks increase as biotechnology expands across the world and gains in strength.

Biotechnology, with all its promise and peril, is moving fast. It’s irresponsible of us to shrug off current and emerging biotechnological threats by reciting “Nature is the ultimate bioterrorist” like some article of faith. As with global warming, the cost of willful ignorance and inaction is high — and increasing.

Our health security requires that we engage cautiously but honestly with the full spectrum of evolving biological risks, striving toward solutions with open eyes and moral courage.

#### Bioterrorism causes Extinction

Walsh 20 Bryan Walsh 5-14-2020 “The coronavirus pandemic reawakens bioweapon fears” <https://www.axios.com/coronavirus-pandemic-pathogen-bioweapon-45417c86-52aa-41b1-8a99-44a6e597d3a8.html> (Axios Future correspondent)//Elmer

I’ve lived through disease outbreaks, and in the previous chapter I showed just how unprepared we are to face a widespread pandemic of flu or another new pathogen like SARS. But a deliberate outbreak caused by an engineered pathogen would be far worse. We would face the same agonizing decisions that must be made during a natural pandemic: whether to ban travel from affected regions, how to keep overburdened hospitals working as the rolls of the sick grew, how to accelerate the development and distribution of vaccines and drugs. To that dire list add the terror that would spread once it became clear that the death and disease in our midst was not the random work of nature, but a deliberate act of malice. We’re scared of disease outbreaks and we’re scared of terrorism—put them together and you have a formula for chaos. As deadly and as disruptive as a conventional bioterror incident would be, an attack that employed existing pathogens could only spread so far, limited by the same laws of evolution that circumscribe natural disease outbreaks. But a virus engineered in a lab to break those laws could spread faster and kill quicker than anything that would emerge out of nature. It can be designed to evade medical countermeasures, frustrating doctors’ attempts to diagnose cases and treat patients. If health officials manage to stamp out the outbreak, it could be reintroduced into the public again and again. It could, with the right mix of genetic traits, even wipe us off the planet, making engineered viruses a genuine existential threat.