## 1

#### Interpretation: affirmative debaters must delineate what intellectual property they reduce in the 1AC.

#### Four types of IP that are vastly different.

Ackerman 17 [Peter; Founder & CEO, Innovation Asset Group, Inc; “The 4 Main Types of Intellectual Property and Related Costs,” Decipher; 1/6/17; <https://www.innovation-asset.com/blog/the-4-main-types-of-intellectual-property-and-related-costs>] Justin

Intellectual property protection isn’t as simple as declaring ownership of a particular product or asset. In most countries, there are four primary types of intellectual property (IP) that can be legally protected: patents, trademarks, copyrights, and trade secrets. Each has their own attributes, requirements and costs.

Before narrowing your focus on which form of protection to use, know that these forms of protection are not mutually exclusive. Depending on what you’re doing, you might be able to use a “belt & suspenders” approach and apply multiple forms of protection, or one approach might be the most sensible. Read the descriptions below to get some of the basics.

Used to protect inventive ideas or processes – things that are new, useful and nonobvious - patents are what most often come to mind when thinking of IP protection. **Patents** are also used to protect newly engineered plant species or strains, as well.

Procedure For most companies, patents result from the following stages: Conceptualization Typically, innovation teams work to address a common problem facing their organization, industry, or the world at large when developing their idea. When they’ve arrived at a solution or concept, they’ll draw up plans and gather the resources necessary to make it a reality. Prototypes or drawings can be created to provide a more accurate description of the end product or process. Invention Disclosure An internal review process often occurs with every invention. The innovation team consists of internal counsel and an invention review panel of varying disciplines. The reviewers assess, rate, rank, score, and highlight potential flaws in the supporting documents and descriptions for the invention, which are then addressed by the inventor. These reviews can and often do take place multiple times for a single invention. Patent Application If the invention is deemed meritorious enough for the pursuit of patent protection, some organizations prepare their own provisional or nonprovisional patent applications. Others will farm this stage out. There may be more tweaks as an application is prepared, and then submission to the appropriate patent office and the prosecution stage begins (the back & forth with the government patent office). Typically it is outside counsel that manages this process and related docketing activities. Docketing is the overarching name for activities that include management of paperwork and meeting filing deadlines specified by the government patent office. Because the application process is often very complicated, patent offices highly recommend working with experienced patent attorneys to handle this process. Maintenance Once a patent is approved, it has a finite lifetime. Patent holders are responsible for maintaining and tracking the usage of their patents and paying the appropriate periodic government renewal fees. If a given technology or other patented asset is collecting dust, you might not want to renew it. Instead, you can try and sell, license or donate it. Conversely, if a patented asset is performing well through product sales or licensing activities and its life is getting shorter, you might think about innovating ahead and maintaining competitive momentum. Costs Costs will vary depending on the country or countries where you file an application, and can run into tens of thousands of dollars depending on the invention’s complexity, plus attorney fees. Maintenance fees over the lifetime of the patent can run into thousands more per patent, per country where patent rights have been granted. You have to keep your eyes on these costs.

Trademark

A trademark is unlike a patent in that it protects words, phrases, symbols, sounds, smells and color schemes. Trademarks are often considered assets that describe or otherwise identify the source of underlying products or services that a company provides, such as the MGM lion roar, the Home Depot orange color scheme, the Intel Inside logo, and so on.

Procedure Trademarks do not necessarily require government approval to be in effect; they can apply through abundant use in interstate commerce. Still, registration of a trademark affords far superior protection and is gained by filing an application with the proper government office. A trademark application requires the company or user to provide a clear description and representation of the mark and its uses in conjunction with associated products or services. As with patents, it’s a good idea to partner with outside counsel that specializes in trademark applications and/or search services so they can help ensure there is a clear path for your desired mark. Costs Trademarks are generally quite less expensive to obtain. According to the US Patent and Trademark Office, trademark registration currently costs between $225 and $325 for each class code you use per mark. Attorney and search fees are extra. There are also periodic (and relatively inexpensive) government maintenance fees for trademarks.

Copyrights do not protect ideas, but rather the manner in which ideas are expressed (“original works of authorship”) - written works, art, music, architectural drawings, or even programming code for software (most evident nowadays in video game entertainment). With certain exceptions, copyrights allow the owner of the protected materials to control reproduction, performance, new versioning or adaptations, public performance and distribution of the works. Procedure Copyrights in general attach when the original works become fixed in a tangible medium, but should be registered with the government copyright office for optimal protection in the form of damages, injunctions and confiscation. Copyright registration applications are much simpler than patents or trademarks, and typically can be obtained by the author alone. The US Copyright Office encourages use of their online application system, and requires a sample of the work to be protected and some background information about the author. Costs Depending on the type of work being protected, currently fees vary between $25-$100 in the US. The most frequent copyright registration sought is for one work by one author, and costs about $35.

Trade Secret

Trade secrets are proprietary procedures, systems, devices, formulas, strategies or other information that is confidential and exclusive to the company using them. They act as competitive advantages for the business. Procedure There actually isn’t a federally-regulated registration process for trade secrets. Instead, the onus is on the company in possession of the secret to take necessary precautions to maintain it as such. This is an ongoing, proactive process and can include clearly marking relevant documents as “Confidential,” implementing physical and data security measures, keeping logs of visitors and restricting access. The issuance of nondisclosure agreements or other documented assurances of secrecy can also be employed. One of the first defenses typically put up when you assert that someone misappropriated your trade secret is that you failed to adequately treat it as a trade secret. Costs Though there are no official registration costs, there are costs associated with taking appropriate precautions and security measures. You must weigh the competitive significance of your secrets against the cost of protecting them.

#### Violation: they don’t

#### Negate:

#### 1] Shiftiness- they can redefine what intellectual properties the 1ac defends in the 1ar which decks strategy and allows them to wriggle out of negative positions which strips the neg of specific IP DAs, IP PICs, and case answers. They will always win on specificity weighing.

#### CX can’t resolve this and is bad because A] Not flowed B] Skews 6 min of prep C] They can lie and no way to check D] Debaters can be shady.

#### 2] No Solvency - since the WTO, absent spec, can circumvent aff’s policy since they can say they didn’t know what was affected.

#### This spec shell isn’t regressive- it literally determines what the affirmative implements and who it affects

#### Fairness and education are voters – its how judges evaluate rounds and 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.

#### This lack stems from negative dialectics in which signifiers define each other through differentiation which creates an inability to fully articulate our desires through language and close off indeterminacy.

**Van Haute 2** (\*\*Bracketed for Gendered Language\*\* Philippe, Against Adaptation: Lacan’s “Subversion” of the Subject Translated by Paul Crowe and Miranda Vankerk 2002) SJCP//JG

Thus it also becomes clear why we said, in our exposition of Freud above, that the expression “reality outside of us” requires further consideration, and cannot simply be accepted as it stands. The world in which we carry on our everyday existence is always already structured by the signifiers of language. The world in which we shape our lives receives its form from our expectations, intentions, representations, and so on, and these are themselves structured in turn by the symbolic systems that determine us (for example, in articulating the difference between man and wom[x]n). At the very least, then, the opposition between language and the thing about which it speaks is more complex than we suggested above, and than Freud sometimes seems to think. The world about which we speak and in which we live is no “brute” reality; it is itself already mediated and structured by the signiﬁers of language, which allow it to appear as a meaningful and differentiated environment (Umwelt). The signiﬁer actively institutes meaning. Language does not simply reflect reality; it is not the expression of a previously given order. The reality in which we carry on our existence must, on the contrary, be understood in a pregnant sense as the effect of the order of signiﬁers. In this context, Lacan points out that signifiers are essentially determined diacritically or differentially. In other words, they signify primarily on the basis of their difference from other signiﬁers and not, for example, by referring to a non-linguistic reality. Let us return to our example of the difference between “man” and “wom[x]n.” It is clear that the signiﬁer “man” only has meaning as opposed to the signiﬁer “wom[x]n”—for what could “man” mean without “wom[x]n”? The signifiers “man” and “wom[x]n” receive further meaning from a complex network of references in which signifiers such as “human,” “animal.” and “plant,” for example, hold a central place. The meaning of a signifier is in the first place dependent upon the linguistic context of which it is a part. Moreover, the fact that a signiﬁer only receives meaning from a complex network of signitive references immediately implies, for Lacan, that the meaning of a signiﬁer changes according to the context in which it is taken up. When an analysand says in an analytical session, Je vais a la mer (“I am going to the sea”). the analyst might hear, le vais a la mere (“I am going to the mother”), basing her interpretation on other associations that the analysand has formulated in the course of this or other sessions. A second example can perhaps make the point somewhat clearer. Some years ago, for professional reasons, I opened a bank account in Holland, and the bank clerk asked if I had any “titles.” 1 replied that I did, but immediately added that I wanted to keep them in Belgium, where l was living at the time. The man looked at me strangely, and asked me if the “titles” were not valid in Holland. After a bit of talking back and forth, it turned out that he had meant academic titles, while I, because of my Belgian background, had understood “titles” in the sense of the French titles (“financial securities&quot;).9 Just as the associative context determined the meaning of the signifier mer/mere (“sea”/“mother&quot;) in the first example, so here the meaning of the signiﬁer “title” changes depending on whether it is to be understood in an academic context or an economic one. The production of meaning is thus in principle a process that cannot be closed off. There is no ultimate context that could, as it were, embrace all contexts and so bring the production of meaning to completion.

#### 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

#### 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 te – also means there is no universal DA to spec affs

#### 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:

#### Drop the debater – their abusive advocacy skewed the debate from the start

#### Competing interps – reasonability invites arbitrary judge intervention and a race to the bottom of questionable argumentation

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

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

## 4

#### Biotech industry strong now.

Cancherini et al. 4/30 [(Laura, Engagement Manager @ McKinsey & Company, Joseph Lydon, Associate Partner @ McKinsey & Company, Jorge Santos Da Silva, Senior Partner at McKinsey & Company, and Alexandra Zemp, Partner at McKinsey & Company), “What’s ahead for biotech: Another wave or low tide?“, McKinsey & Company, 4-30-2021, https://www.mckinsey.com/industries/pharmaceuticals-and-medical-products/our-insights/whats-ahead-for-biotech-another-wave-or-low-tide] TDI

As the pandemic spread across the globe in early 2020, biotech leaders were initially pessimistic, reassessing their cash position and financing constraints. When McKinsey and BioCentury interviewed representatives from 106 biotech companies in May 2020,4 half of those interviewed were expecting delays in financing, and about 80 percent were tight on cash for the next two years and considering trade-offs such as deferring IPOs and acquisitions. Executives feared that valuations would decline because of lower revenue projections and concerns about clinical-trial delays, salesforce-effectiveness gaps, and other operational issues.

Belying this downbeat mood, biotech has in fact had one of its best years so far. By January 2021, venture capitalists had invested some 60 percent more than they had in January 2020, with more than $3 billion invested worldwide in January 2021 alone.5 IPO activity grew strongly: there were 19 more closures than in the same period in 2020, with an average of $150 million per raise, 17 percent more than in 2020. Other deals have also had a bumper start to 2021, with the average deal size reaching more than $500 million, up by more than 66 percent on the 2020 average (Exhibit 3).6

What about SPACs?

The analysis above does not include special-purpose acquisition companies (SPACs), which have recently become significant in IPOs in several industries. Some biotech investors we interviewed believe that SPACs represent a route to an IPO. How SPACs will evolve remains to be seen, but biotechs may be part of their story.

Fundamentals continue strong

When we asked executives and investors why the biotech sector had stayed so resilient during the worst economic crisis in decades, they cited innovation as the main reason. The number of assets transitioning to clinical phases is still rising, and further waves of innovation are on the horizon, driven by the convergence of biological and technological advances.

In the present day, many biotechs, along with the wider pharmaceutical industry, are taking steps to address the COVID-19 pandemic. Together, biotechs and pharma companies have more than 250 vaccine candidates in their pipelines, along with a similar number of therapeutics. What’s more, the crisis has shone a spotlight on pharma as the public seeks to understand the roadblocks involved in delivering a vaccine at speed and the measures needed to maintain safety and efficacy standards. To that extent, the world has been living through a time of mass education in science research and development.

Biotech has also benefited from its innate financial resilience. Healthcare as a whole is less dependent on economic cycles than most other industries. Biotech is an innovator, actively identifying and addressing patients’ unmet needs. In addition, biotechs’ top-line revenues have been less affected by lockdowns than is the case in most other industries.

Another factor acting in the sector’s favor is that larger pharmaceutical companies still rely on biotechs as a source of innovation. With the top dozen pharma companies having more than $170 billion in excess reserves that could be available for spending on M&A, the prospects for further financing and deal making look promising.

For these and other reasons, many investors regard biotech as a safe haven. One interviewee felt it had benefited from a halo effect during the pandemic.

More innovation on the horizon

The investors and executives we interviewed agreed that biotech innovation continues to increase in quality and quantity despite the macroeconomic environment. Evidence can be seen in the accelerating pace of assets transitioning across the development lifecycle. When we tracked the number of assets transitioning to Phase I, Phase II, and Phase III clinical trials, we found that Phase I and Phase II assets have transitioned 50 percent faster since 2018 than between 2013 and 2018, whereas Phase III assets have maintained much the same pace. There could be many reasons for this, but it is worth noting that biotechs with Phase I and Phase II assets as their lead assets have accounted for more than half of biotech IPOs. Having an early IPO gives a biotech earlier access to capital and leaves it with more scope to concentrate on science.

Looking forward, the combination of advances in biological science and accelerating developments in technology and artificial intelligence has the potential to take innovation to a new level. A recent report from the McKinsey Global Institute analyzed the profound economic and social impact of biological innovation and found that biomolecules, biosystems, biomachines, and biocomputing could collectively produce up to 60 percent of the physical inputs to the global economy. The applications of this “Bio Revolution” range from agriculture (such as the production of nonanimal meat) to energy and materials, and from consumer goods (such as multi-omics tailored diets) to a multitude of health applications.

#### IP protections are key to innovation – recouping startup costs and high risk of failure

Grabowski et al 15 [(Henry, Professor of Economics, member of the faculty for the Health Sector Management Program, and Director of the Program in Pharmaceuticals and Health Economics at Duke University) “The Roles of Patents and Research And Development Incentives In Biopharmaceutical Innovation,” Health Affairs, 2/2015] JL

The essential rationale for patent protection for biopharmaceuticals is that long-term benefits in the form of continued future innovation by pioneer or brand-name drug manufacturers outweigh the relatively short-term restrictions on imitative cost competition associated with market exclusivity. Regardless, the entry of other branded agents remains an important source of therapeutic competition during the patent term.

Several economic characteristics make patents and intellectual property protection particularly important to innovation incentives for the biopharmaceutical industry. **5** The R&D process often takes more than a decade to complete, and according to a recent analysis by Joseph DiMasi and colleagues, per new drug approval (including failed attempts), it involves more than a billion dollars in out-of-pocket costs. **6** Only approximately one in eight drug candidates survive clinical testing. **6**

As a result of the high risks of failure and the high costs, research and development must be funded by the few successful, on-market products (the top quintile of marketed products provide the dominant share of R&D returns). **7**,**8** Once a new drug’s patent term and any regulatory exclusivity provisions have expired, competing manufacturers are allowed to sell generic equivalents that require the investment of only several million dollars and that have a high likelihood of commercial success. Absent intellectual property protections that allow marketing exclusivity, innovative firms would be unlikely to make the costly and risky investments needed to bring a new drug to market.

Patents confer the right to exclude competitors for a limited time within a given scope, as defined by patent claims. However, they do not guarantee demand, nor do they prevent competition from nonidentical drugs that treat the same diseases and fall outside the protection of the patents.

New products may enter the same therapeutic class with common mechanisms of action but different molecular structures (for example, different statins) or with differing mechanisms of action (such as calcium channel blockers and angiotensin receptor blockers). 9 Joseph DiMasi and Laura Faden have found that the time between a first-in-class new drug and subsequent new drugs in the same therapeutic class has been dramatically reduced, from a median of 10.2 years in the 1970s to 2.5 years in the early 2000s. 10 Drugs in the same class compete through quality and price for preferred placement on drug formularies and physicians’ choices for patient treatment.

Patents play an essential role in the economic “ecosystem” of discovery and investment that has developed since the 1980s. Hundreds of start-up firms, often backed by venture capital, have been launched, and a robust innovation market has emerged. **11** The value of these development-stage firms is largely determined by their proprietary technologies and the candidate drugs they have in development. As a result, the strength of intellectual property protection plays a key role in funding and partnership opportunities for such firms.

#### Biopharmaceutical innovation is key to prevent future pandemics and bioterror.

Marjanovic and Feijao 20 [(Sonja Marjanovic, Ph.D., Judge Business School, University of Cambridge. Carolina Feijao, Ph.D. in biochemistry, University of Cambridge; M.Sc. in quantitative biology, Imperial College London; B.Sc. in biology, University of Lisbon.) "How to Best Enable Pharma Innovation Beyond the COVID-19 Crisis," RAND Corporation, 05-2020, https://www.rand.org/pubs/perspectives/PEA407-1.html] TDI

As key actors in the healthcare innovation landscape, pharmaceutical and life sciences 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 context.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 competition 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 pharmaceutical 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 sector. 2 It is therefore unsurprising that we are seeing industry-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 compounds to assess their utility in the fight against COVID19; screening existing compound libraries in-house or with partners to see if they can be repurposed; accelerating trials 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 accelerate 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 relatively few companies that are ‘commercial’ winners. Those who might gain substantial revenues will be under pressure 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 combination product that is being tested for therapeutic potential 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, bioterrorism 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 immediate term. The pharmaceutical industry has responded to previous public health emergencies associated with infectious 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 contributions 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 innovation conditions.

#### Extinction

Piers Millett 17, Consultant for the World Health Organization, PhD in International Relations and Affairs, University of Bradford, Andrew Snyder-Beattie, “Existential Risk and Cost-Effective Biosecurity”, Health Security, Vol 15(4), http://online.liebertpub.com/doi/pdfplus/10.1089/hs.2017.0028

Historically, disease events have been responsible for the greatest death tolls on humanity. The 1918 flu was responsible for more than 50 million deaths,1 while smallpox killed perhaps 10 times that many in the 20th century alone.2 The Black Death was responsible for killing over 25% of the European population,3 while other pandemics, such as the plague of Justinian, are thought to have killed 25 million in the 6th century—constituting over 10% of the world’s population at the time.4 It is an open question whether a future pandemic could result in outright human extinction or the irreversible collapse of civilization.

A skeptic would have many good reasons to think that existential risk from disease is unlikely. Such a disease would need to spread worldwide to remote populations, overcome rare genetic resistances, and evade detection, cures, and countermeasures. Even evolution itself may work in humanity’s favor: Virulence and transmission is often a trade-off, and so evolutionary pressures could push against maximally lethal wild-type pathogens.5,6

While these arguments point to a very small risk of human extinction, they do not rule the possibility out entirely. Although rare, there are recorded instances of species going extinct due to disease—primarily in amphibians, but also in 1 mammalian species of rat on Christmas Island.7,8 There are also historical examples of large human populations being almost entirely wiped out by disease, especially when multiple diseases were simultaneously introduced into a population without immunity. The most striking examples of total population collapse include native American tribes exposed to European diseases, such as the Massachusett (86% loss of population), Quiripi-Unquachog (95% loss of population), and theWestern Abenaki (which suffered a staggering 98% loss of population).

In the modern context, no single disease currently exists that combines the worst-case levels of transmissibility, lethality, resistance to countermeasures, and global reach. But many diseases are proof of principle that each worst-case attribute can be realized independently. For example, some diseases exhibit nearly a 100% case fatality ratio in the absence of treatment, such as rabies or septicemic plague. Other diseases have a track record of spreading to virtually every human community worldwide, such as the 1918 flu,10 and seroprevalence studies indicate that other pathogens, such as chickenpox and HSV-1, can successfully reach over 95% of a population.11,12 Under optimal virulence theory, natural evolution would be an unlikely source for pathogens with the highest possible levels of transmissibility, virulence, and global reach. But advances in biotechnology might allow the creation of diseases that combine such traits. Recent controversy has already emerged over a number of scientific experiments that resulted in viruses with enhanced transmissibility, lethality, and/or the ability to overcome therapeutics.13-17 Other experiments demonstrated that mousepox could be modified to have a 100% case fatality rate and render a vaccine ineffective.18 In addition to transmissibility and lethality, studies have shown that other disease traits, such as incubation time, environmental survival, and available vectors, could be modified as well.19-2