# Speech 1AC Grapevine Rd 5 vs Guyer 9-11 3PM

Theory after phil

### FW

#### Perspectivism is true –

#### 1] Opacity – we can never access another person’s perspective because we can never fully understand who someone else is or what they think. Every truth I create cannot be universalized because I can’t guarantee that they will create the same truth because they do what they want.

#### 2] Resolvability – Centuries of moral debate proves we can’t come to an objectively correct answer so it has to be indexed to individual subjects. High school debaters can’t come to a correct conclusion on their own and moral dilemmas are too complicated to “solve” in 45 minutes, so you should prefer a perspectivist account.

#### 3] Subjectivity only has meaning when it interacts with other machines – there are no intrinsic values and a failure to recognize that stratifies subjects and reifies violence.

**Malins 04** [Brackets Original. Peta Malins (Program Manager of the Bachelor of Legal and Dispute Studies and a Lecturer in Criminology and Justice Studies @ RMIT University). “Machinic Assemblages: Deleuze, Guattari and an Ethico-Aesthetics of Drug Use”. The University of Melbourne. 2004. Accessed 2/19/21. http://janushead.org/wp-content/uploads/2020/06/Malins.pdf //Xu]

As an assemblage, a [drug using body] has only itself, in connection with other assemblages and in relation to other bodies without organs. We will never ask what a [drug using body] means, as signified or signifier; we will not look for anything to understand in it. We will ask what it functions with, in connection with what other things it does or does not transmit intensities, in which other multiplicities its own are inserted and metamorphosed, and with what bodies without organs it makes its own converge. A [drug using body] exists only through the outside and on the outside. A [drug using body] itself is a little machine (Deleuze and Guattari, 1988: 4)1 The work of Deleuze and Guattari is perhaps best conceived of as a ‘tool box’2 –as a collection of machinic concepts that can be plugged into other machines or concepts and made to work. This is how I approach their writing, and why–despite initial misgivings–I have transformed the above excerpt (surreptitiously replacing the concept ‘book’ with ‘drug using body’) to suit the purposes of this paper. In making this transformation, I soon discovered that it became a perfect little language-machine: not only articulating where I want to take the concept of drug use, but also [through its parentheses] expressing the open applicability of Deleuze and Guattari’s work. Insert body of choice: a sexual body; a bicycle, a language; a body of art; a film–the excerpt works for them all. In this openly mutating state the passage introduces some of the key concepts in Deleuze and Guattari’s philosophical project: becomings, rhizomatic connections, and multiplicities. It also, more explicitly, outlines their project to take thought (and ethics) away from internal meanings, causes, and essences, and toward surface effects, intensities and flows. However it is the particular concept of the body activated by the excerpt–the concept of the body as machinic assemblage–that I find most useful to the task of rethinking drug use. It is a concept that unravels the modern fantasy of the body as a stable, unified, bounded entity, and gives a language to the multitude of connections that bodies form with other bodies (human and otherwise). A body’s function or potential or ‘meaning’ becomes entirely dependent on which other bodies or machines it forms an assemblage with. Colebrook’s (2002) example of the bicycle is useful here: a bicycle is a machine that doesn’t begin to work or have a particular meaning until it connects up with another machine. When it connects up with a cyclist, it becomes a vehicle; when is placed in a gallery, it becomes an artwork. A cigarette is similarly multiple: when smoked it becomes a drug; when held seductively at the end of ones fingertips it becomes an object of beauty; when shown in a film it becomes a plot device (Klein, 1993). And a drug using body is no different: when it connects up to bicycle, it becomes a cyclist; to a cigarette, a smoker; to LSD, a tripper. The drug using body is multiple. While numerous writers have begun to make movements toward rethinking drug use via Deleuze and Guattari3 , very few have explored this intersection in detail4 . In this paper I will map out some of the specific implications of rethinking the drug using body in this way. I will begin by exploring what happens to the subject (the ‘drug user’, the ‘addict’) when the body becomes a multiplicity. Like Deleuze and Guattari: I will not ask what a drug using body ‘means’ or signifies; but rather, what affects its assemblages produce and what flows of desire they cut off (its components and affects). I will then explore Deleuze and Guattari’s own particularly bleak conception of drug-use, arguing that the pessimism it engenders can be strategically sidestepped using Deleuze and Guattari’s other philosophical tools. I will explore how we might productively approach drug use via a Deleuzian ethics, and will argue for a specific ethical rethinking of drug use according to the concepts of the machinic assemblage and rhizomatic multiplicities. A strategy with implications not only for social policy, but also for how we understand ourselves. And who we might become. Subjectivity and the drug using body Bodies that fall prey to transcendence are reduced to what seems to persist across their alterations. Their very corporeality is stripped from them, in favor of a supposed substrate–soul, subjectivity, personality, identity–which in fact is no foundation at all, but an end effect, the infolding of a forcibly regularized outside. (Massumi, 1992: 112) For Deleuze and Guattari a body (human, animal, social, chemical) has no interior truth or meaning; it exists only through its external connections and affects. They write: We know nothing about a body until we know what it can do, in other words, what its affects are, how they can or cannot enter into composition with other affects, with the affects of another body. (ATP5 : 257) So where does this leave the subject? And identity? If we are to talk only of the drug using body and its multiplicities–where does the ‘drug user’ or ‘addict’ disappear to? For Deleuze and Guattari the subject is nothing more (and nothing less) than a particular way in which bodies have become organised and stratified in the post-Enlightenment social world. In order to comprehend the ‘human’ body, the social world (or socius) reduces the complexity and chaos of an ever-changing multiplicity of bodily flux to discrete categories of meaning and constancy. Bodies become ordered and delimited according to hierarchical binary presuppositions: human/animal, man/woman, healthy/unhealthy, lawful/criminal, hetero/gay, clean/junkie. Binaries that bodies never fully correspond to: No real body ever entirely coincides with either category. A body only approaches its assigned category as a limit: it becomes more or less “feminine” or more or less “masculine” depending on the degree to which it conforms to the connections and trajectories laid out for it by society… “Man” and “Woman” as such have no reality other than that of logical abstraction. (Massumi, 1992: 86) Yet when bodies fall outside these binaries, or try to claim a different identity, they are rarely granted anything outside a third term (‘bi-sexual’, ‘reformedsmoker’) that remains reliant upon, and limited to, those binary relations. Multiplicities reduced to binaries and trinities. Manifold potential reduced to a discrete set of bodily possibilities. You will be a boy or a girl; a smoker or a non-smoker; a civilized human being (with all bodily parts fulfilling civilized ‘human’ functions)’ or an animal. Your choice. You will subscribe to modern selfhood (and all its bodily and linguistic demands) or you’ll be rejected: You will be organized, you will be an organism, you will articulate your body–otherwise you’re just depraved. You will be signifier and signified, interpreter and interpreted–otherwise you’re just a deviant. You will be a subject, nailed down as one, a subject of the enunciation recoiled into a subject of the statement–otherwise you’re just a tramp. (ATP: 159)

**This commits us to practical deliberation as the method of moral inquiry   
Serra 09**Juan Pablo Serra. What Is and What Should Pragmatic Ethics Be? Some Remarks on Recent Scholarship*.* EUROPEAN JOURNAL OF PRAGMATISM AND AMERICAN PHILOSOPHY. 2009. Francisco de Vitoria College, Humanities Department, Faculty member. https://journals.openedition.org/ejpap/905

This separation of theory and practice runs parallel to another split, namely, that of ethics and morals or, better put, of ethical theory and moral practice. Peirce denies that morality is subject to rationality and thinks that ethics is valuable as a science in a broad sense. But he also regards ethics as a science which bears on human conduct only indirectly, through the examination of past actions and the self-correction of the self in view of future action. In addition, ethics would be a normative knowledge only in so far as it analyzes the adjustment of actions to ends and in so far as it studies the general way in which a good life can be lived. In morals Peirce appeals to instinct and sentiment, and in ethics he recommends the use of logical thinking —just as scientists do. However, even within the framework of his system, it’s not obvious that scientists may so easily set aside their instincts —in fact, instinct (or ‘rational instinct’ as he called it in 1908) plays a significant role in the economy of re- search. Moreover, the statement that in moral issues there may be no possibility of carrying out an inquiry that is truth-oriented is not an uncontroversial one. After all, moral inquiry is performed in a deliberative way, weighing up argumentations, beliefs and principles, and comparing them either with their probable or conceivable consequences or with lived as well as possible experiences that can be forceful or impinge upon the deliberative subject in such a way as to acquire the compulsory resistance due to reality. As Misak puts it succint- ly, “the practice of moral deliberation is responsive to experience, reason, argument, and thought experiments... Such responsiveness is part of what it is to make a moral decision and part of what it is to try to live a moral life” (2000: 52)3. Likewise, this same deliberative activity implies an effort to acquire habits, beliefs and principles that contribute to a truly free deliberation which, in turn, can result in creative conclusions. For Peirce, as you get more habit-governed, you become more creative and free, and your selfhood acquires plas- ticity and receptiveness to experience4. Vincent Colapietro has referred to Peirce’s description of human reason in terms of a deliberative rationality (1999: 24). Also, in another place he has explained that deliberation for Peirce is a process of preparation for future action which has to do with the checking of previous acts, the rehearsal in imagination of different roads to be followed by possible conduct and the nurturing of ideals (Colapietro 1997: 270, 281). It is precisely this experi- ment carried out within imagination that generates habits, because, as Peirce says in “A Survey of Pragmaticism”, “it is not the muscular action but the accompanying inward ef- forts, the acts of imagination, that produce the habit” (CP 5.479, 1907). Habits are regular ways of thinking, perceiving and interpreting that generate actions. As such, habits have a huge influence on human behavior, manifest themselves in the con- crete things we do and, at the same time, are formed within those same activities. Even more, according to Peirce, the activity takes the form of experimentation in the inner world; and the conclusion (if it comes to a definite conclusion), is that under given conditions, the interpreter will have formed the habit of acting in a given way whenever he may desire a given kind of result. The real and living logical conclusion is that habit (CP 5.491, 1907). Much more evidence could be given to support the view that habits are virtually decided (CP 2.435, c.1893) and also that intelligence comprises inward or potential actions that in- fluence the formation of habits (CP 6.286, 1893). Suffice it to say that, according to Peirce, deliberation is a function of the imagination, and that imagination is in itself an experiment which may have unexpected consequences that impose themselves upon the deliberative subject.

#### Thus, the standard is consistency with pragmatic deliberation.

#### Impact Calc – deliberation is procedural, which means that agents ought to act in a deliberative fashion by employing the pragmatic procedure of deliberation, not the substance or conditions where deliberation can arise. To clarify, consequences are a sequencing question.

#### Prefer Additionally

#### 1] impacts cannot be isolated from their history and the only way to test the validity of truth is through application.

**Dewey 02** [John Dewey (head of the Philosophy Department at the University of Chicago). “The Evolutionary Method as Applied to Morality: II. Its Significance for Conduct.” The Philosophical Review, Vol. 11, No. 4 (Jul., 1902), pp. 353-371. Accessed 12/31/20. <https://www.jstor.org/stable/pdf/2176470.pdf> //Recut Xu]

The problem of the best method of arriving at correct judg- ments on points of moral worth, necessarily traverses ground covered by the time-honored and time-worn theories of intuition- alism and empiricism. Even at the risk of threshing old straw, it will be advisable to compare the evolutionary method with these other points of view. In such a comparison, however, it is to be borne in mind that the sole point under review is that of the log- ical relationship of the theory examined to the meaning and sanc- tion of our moral judgments. The question is not whether or no there are intuitions; whether or no they can be utilized in special cases, or whether or no all supposed intuitions can be accounted for as products of associative memory. The problem is not one of fact but of value. It is a logical problem. If we suppose such necessary and universal beliefs as go by the name of ' intuition' to exist, does such existence settle anything regarding the valid- ity of what is believed, either in general or in part? It is a question of the relation of the intuition to fact -to the moral order in reality. Under what conditions alone, and in what measure or degree, are we justified in arguing from the existence of moral intuitions as mental states and acts to facts taken to correspond to them ? The reply already hinted at is that the mere existence of a belief, even admitting that as a belief it cannot in any way be got rid of, determines absolutely nothing regarding the objectivity of its own content. The worth of the intuition depends upon genetic considerations. In so far as we can state the intuition in terms of the conditions of its origin, development, and later career, in so far we have some criterion for passing judgment upon its pretentions to validity. If we can find that the intuition is a legitimate response to enduring and deep-seated conditions, we have some reason to attribute worth to it. If we find that historically the belief has played a part in maintaining the integrity of social life, and in bringing new values into it, our belief in its worth is additionally guaranteed. But if we cannot find such historic origin and functioning, the intuition remains a mere state of consciousness, a hallucination, an illusion, which is not made more worthy by simply multiplying the number of people who have participated in it. Put roughly we may say that intuitionalism, asordinarily conceived, makes the ethical belief a brute fact, because unrelated. Its very lack of genetic relationship to the situation in which it appears condemns it to isolation. This isolation logically makes it impossible to credit it with objective validity. The intuitionalist, in proclaiming the necessity of his content, proclaims thereby its objective reference; but in asserting its non-genetic character he denies any reference whatsoever. The genetic theory holds that the content embodied in any so-called intuition is a response to a given active situation: that it arises, develops, and operates somehow in reference to this situation. This functional reference establishes in advance some kind of relationship to objective conditions, and hence some presumption of validity. If the ' intuition' persists, it is within certain limits because the situation persists. If the particular moral belief is really inexpugnable, it is just because the conditions which require it are so enduring as to persistently call out an attitude which is relevant to them. The probability is that it continues in existence simply because it continues to be necessary in function.

#### 2] Pluralistic Materialism – other theories rely on minimalistic criteria; our framework understands knowledge as changing and uses experience to base social change and revise ideas. Glaude 7Eddie S. (Eddie S. Glaude Jr. is the African-American chair of the Center for African-American Studies and the William S. Tod Professor of Religion and African-American Studies at Princeton University.) In a Shade of Blue : Pragmatism and the Politics of Black America. University of Chicago Press, 2007. EBSCOhost. (5-7)

In a Shade of Blue is my contribution to the tradition I have just sketched. My aim is to think through some of the more pressing conceptual problems confronting African American political life, and I do so as a Deweyan prag-matist. I should say a bit about what I mean by this self-description. John Dewey thought of philosophy as a form of cultural and social criticism. He held the view that philosophy, properly understood as a mode of wis-dom, ought to aid us in our efforts to overcome problematic situations and worrisome circumstances. The principal charge of the philosopher, then, is to deal with the problems of human beings, not simply with the problems of philosophers. For Dewey, over the course of his long career, this involved bridging the divide between science, broadly understood, and morals—a divide he traced to a conception of experience that has led philosophers over the centuries to tilt after windmills. Dewey declared, “The problem of restoring integration and co-operation between man’s beliefs about the world in which he lives and his beliefs about values and purposes that should direct his conduct is the deepest problem of any philosophy that is not isolated from life.”9Dewey bases this conclusion on several features of his philosophy: (1) anti foundationalism, (2) experimentalism, (3) contextualism, and (4) soli-darity.10 Antifoundationalism, of course, is the rejection of foundations of knowledge that are beyond question. Dewey, by contrast, understands knowledge to be the fruit of our undertakings as we seek “the enrichment of our immediate experience through the control over action it exercises.”11He insists that we turn our attention from supposed givens to actual consequences, pursuing a future fundamentally grounded in values shaped by experience and realized in our actions. This view makes clear the experimental function of knowledge. Dewey emphasized that knowledge entails efforts to control and select future experience and that we are always con-fronted with the possibility of error when we act. We experiment or tinker, with the understanding that all facts are fallible and, as such, occasionally afford us the opportunity for revision.12Contextualism refers to an understanding of beliefs, choices, and actions as historically conditioned. Dewey held the view that inquiry, or the pursuit of knowledge, is value-laden, in the sense that we come to problems with interests and habits that orient us one way or another, and that such pursuits are also situational, in the sense that “knowledge is pursued and produced somewhere, some when, and by someone.”13Finally, solidarity captures the associational and cooperative dimensions of Dewey’s thinking. Dewey conceives of his pragmatism as “an instrument of social improvement” aimed principally at expanding democratic life and broadening the ground of individual self-development.14Democracy, for him, constitutes more than a body of formal procedures; it is a form of life that requires constant attention if we are to secure the ideals that purportedly animate it. Individuality is understood as developing one’s unique capacities within the context of one’s social relations and one’s community. The formation of the democratic character so important to our form of associated living involves, then, a caring disposition toward the plight of our fellows and a watchful concern for the well-being of our democratic life.

#### 3] Best studies prove pluralistic tendencies are inevitable

Polzler 19[Thomas Pölzler and Jennifer Cole Wright- “Empirical research on folk moral objectivism” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6686698/> NCBI. Published July 5th 2019]

Examining these studies' results more closely, however, makes it less clear whether this interpretation is appropriate (Pölzler, 2018b). Take again Goodwin and Darley's study. In this study, almost 30% of subjects' responses to the disagreement measure and almost 50% of their responses to the truth‐aptness measure fell on the option that the researchers took to be indicative of subjectivism (Goodwin & Darley, 2008, pp. 1347, 1351). Moreover, while some moral statements were dominantly classified as objective (e.g., the above statement about robbery), many others were dominantly classified as nonobjective (e.g., the stem cell research statement). This suggests that subjects in Goodwin and Darley's study may have actually favored what Wright, Grandjean, and McWhite (2013) called “metaethical pluralism,” i.e., they sometimes sided with objectivism and other times with nonobjectivism. More recent studies have by and large confirmed this hypothesis of folk metaethical pluralism. Wright et al. (2013) and Wright, McWhite, and Grandjean (2014), for example, replicated Goodwin and Darley's results, using the exact same measures, but letting subjects classify the presented statements as moral and nonmoral themselves. Objectivity ratings for statements that were dominantly self‐classified as moral varied between as little as 5% and as much as 85%. Research based on different measures yielded high proportions of intrapersonal variation as well (e.g., Beebe, 2014; Beebe, Qiaoan, Wysocki, & Endara, 2015; Beebe & Sackris, 2016; Fisher, Knobe, Strickland, & Keil, 2017; Goodwin & Darley, 2012; Heiphetz & Young, 2017; Wright, 2018; Zijlstra, forthcoming‐a).2

#### 4] Performativity- when you enter debate, you presume that you can discuss the topic because of deliberation. This means denial of my framework is impossible and all objections should be ignored on face because responding to my framework requires my framework to do so.

#### 5] Liberation- Only a radical democracy that constantly questions its own foundations can ever be open to radical revision – other systems insist on their own foundation even when that’s exclusionary or illegitimate. The aff is a better model for constructing a political institution that must secure its own legitimacy over time and to changing groups of citizens.

#### 6] Root Cause- Ethical problems arise due to conflicts between antagonistic positions. This is due to multiple scenarios and analyses of situations leading to differing ethical conclusions. Conflicting ethical viewpoints does not require the inevitable exclusion of one over another but rather the acceptance that both could be relevant and valuable ethical tool.

### Affirm

#### IP laws prioritize uniformity and predictability as a method of homogenizing knowledge and refusing experimentation.

Wu 14 [Tim Wu (Julius Silver Professor of Law, Science and Technology at Columbia University). “Intellectual Property Experimentalism By Way of Competition Law”. Columbia Law School. 2014. Accessed 8/16/21. <https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=2843&context=faculty_scholarship> //Xu]

The goals of uniformity and predictability has had its clearest implications at the international level. Unlike competition law, which varies significantly between OECD nations, over the last several decades all of the IP laws have become subject to a much stronger and geographically broader web of harmonizing international agreements, on multinational, regional and bilateral levels. The general aim of these treaties is to homogenize the world’s IP regimes, reducing or eliminating geographical variation. All of the major laws are the subject of longstanding global treaties specifying minimum protections (The Berne and Paris conventions), which were fortified in 1994 by the addition of an intellectual property agreement to the World Trade Organization, and further strengthened by numerous bilateral treaties since then. And of course the World Trade Organization, unlike the informal organizations common to competition law, has the power to punish deviations from the intellectual property treaties with serious trade sanctions. The pattern can also be observed at the national level. Both in Europe and the United States the last few decades have witnessed many important measures taken to create uniformity. In the United States, a single appeals court, the Federal Circuit, has heard the nation’s appeals in patent cases since 1982 in an effort to bring greater uniformity to the patent law. Though proposals for constructing a uniform patent court akin to the Federal Circuit in the European Union have been unsuccessful so far,26 the European Patent Convention, founded in 1973, provides a common application for the prosecution of patents in each of the member states.27 In short, stronger protection of uniform rights has been the clear trajectory of the intellectual property laws over the last few decades. That tendency is sharply at odds with the predispositions of the competition laws. The dichotomy I am suggesting here is, of course, not absolute. In certain areas of the competition law, one can sense the influence of a vested rights theory, in, for example, the resistance to breakups of dominant terms, even if the economic case for doing so might be quite strong. And there are areas in IP law, like the American fair use doctrine (a judicial and scholarly favorite), which have, in fact, served as important outlets for judicial tinkering in the face of changing conditions. For example the famous Sony decision, blessing the VCR, broke with prevalent copyright doctrine, arguably as a reaction to perceived technological necessity.28 Similarly, following a decade of bad press, Congress, the courts, and the American Patent Office have begun to make adjustments with American patent law. An example is the new post-grant review process, which includes a particular provision targeted at business method patents. Nonetheless it would be hard to describe the intellectual culture of either the intellectual property laws as truly committed to experimental improvement of the law. It would be even harder to describe competition law as devoted to the protection of fundamental rights. We are left with a divergence in intellectual cultures with broad implications for just about every advanced economy in the world. IV. USING ANTITRUST FOR PATENT EXPERIMENTALISM AT THE UNITED STATES SUPREME COURT I believe there is a need for a more experimentalist approach to the intellectual property laws, and particularly to the patent laws. The law, I believe, needs better mechanisms not simply to celebrate its successes, but to correct its errors, both specific and general. One way this might be achieved is to act within the structure and institutions of the laws themselves; as just discussed, this is a project underway in certain respects. But the other path is to rely on the competition laws as a kind of oversight and adjustment mechanism for the intellectual property laws.

#### The law is necessarily fallible and constrained by imperfection which requires constant experimentation to reconstruct “foundational” truths.

Wu 2 [Tim Wu (Julius Silver Professor of Law, Science and Technology at Columbia University). “Intellectual Property Experimentalism By Way of Competition Law”. Columbia Law School. 2014. Accessed 8/16/21. <https://scholarship.law.columbia.edu/cgi/viewcontent.cgi?article=2843&context=faculty_scholarship> //Xu]

Experimentalism is not a word that attorneys use very often. At its most general, the idea of legal experimentalism is to apply the scientific method of hypothesis, experiment, and observation of consequence to challenging legal and policy problems. It is, as such, closely related to a “pragmatist” legal philosophy.5 John Dewey is usually credited with laying a philosophical foundation for policy experimentalism in his writings in the 1910s and 1920s. Dewey, whose background was in education, believed that a successful democracy needed the capacity to learn and improve itself. The key to learning, he believed, was the processing of experiences, or in his words the “reconstruction or reorganization of experience which adds to the meaning of experience and which increases ability to direct the course of subsequent experience.”6 As relevant to the legal system, Dewey thought policy and “proposals for social action” should be subject to the experimental method. Policy-making, he said, should be a constant process of learning from experience, rather than relying on rigid or foundational truths. “Policies,” Dewey argued, should be “experimental in the sense that they will be entertained subject to constant and well-equipped observation of the consequences they entail when acted upon, and subject to ready and flexible revision in the light of observed consequences.”7 As understood here we can describe legal experimentalism as comprising three main principles. First, for the experimentalist, laws are simply instruments meant to achieve some end and useful only to the extent they do so. A law has no intrinsic value, and its existence should not necessarily count in favor of its retention. Second, every law should be thought of as an ongoing experiment. That is to say, every enactment, regu- lation or judicial opinion must be seen as that moment’s best guess as to what a rule should be, in light of imperfect information and human fallibility. Borrowing Dewey’s language, policies should be thought of as a “working hypothesis, not as programs to be rigidly adhered to and executed.”8 Given the imperfect nature of law-making, policy should be subject to revision when faced with new information or changed conditions. The law must also be able to learn and improve itself based on observation of consequences, intended or otherwise.

### Method

#### 1] 1AR theory is legit – anything else means infinite abuse

#### – drop the debater – 1AR is too short to make up for the time trade-off

#### – no RVIs – 6 min 2NR means they can brute force me every time

#### – competing interps – reasonability narrows the theory debate to one issue of brightline, making it easy for the Neg to collapse to the issue in the long 2NR

#### – 1AR theory is the highest layer – the NC has 7 minutes to be abusive and 6 minutes to leverage the abuse against 1A theory in the 2N, making checking abuse lexically impossible

#### 2] Give me new weighing in the 2AR for 1AR shells – I don’t know what arguments will be read in the 2NR so 1AR weighing is impossible as I don’t know what to weigh against.

#### 3] Affirm if I win offense to a counterinterp

#### A] Timeskew – 6 Minute 2NR with collapse to whatever I undercover means that you can win theory and substance, but I need to go for both in half the time and split it between the 2 layers.

#### B] Reciprocity – you get T and theory so I should get theory and an RVI to make the burden reciprocal.

#### 4] Nothing in the 1AC has triggered it, but Presumption and permissibility affirm –

#### a) We always default to assuming something true until proven false ie if I told you my name is Daniel you would believe me

#### b) empirics

**Shah 19,**[Shah, Sachin. “A STATISTICAL ANALYSIS OF SIDE-BIAS ON THE 2019 JANUARY-FEBRUARY LINCOLN-DOUGLAS DEBATE TOPIC.” NSD Update, National Symposium of Debate, 16 Feb. 2019, <http://nsdupdate.com/2019/a-statistical-analysis-of-side-bias-on-the-2019-january-february-lincoln-douglas-debate-topic/> ]//LHPSS accessed 9/4/19

As a final note, it is also interesting to look at the trend over multiple topics. In the rounds **from** 93 TOC bid distributing tournaments (**2017 – 2019** YTD), **the neg**ative **won 52.99% of ballots** (**p-value < 0.0001)** and 54.63% of upset rounds (p-value < 0.0001). **This suggests the bias might be structural, and not topic specific, as this data spans six different topics.**

**5] No 2n theory arguments and paradigm issues- a) overloads the 2AR with a massive clarification burden b) it becomes impossible to check NC abuse if you can dump on reasons the shell doesn't matter in the 2n**

### Disclosure

#### Interpretation: Debaters must disclose all constructive positions on open source with the full text of all cards with highlighting on the 2019-20 NDCA LD wiki after the round in which they read them.

#### Violation – they don’t osourceGraphical user interface Description automatically generated with low confidence

#### 1] Debate resource inequities—you’ll say people will steal cards, but that’s good—it’s the only way to truly level the playing field for students such as novices in under-privileged programs.

Antonucci 05 [Michael (Debate coach for Georgetown; former coach for Lexington High School); “[eDebate] open source? resp to Morris”; December 8; http://www.ndtceda.com/pipermail/edebate/2005-December/064806.html //]

a. Open source systems are preferable to the various punishment proposals in circulation. It's better to share the wealth than limit production or participation. Various flavors of argument communism appeal to different people, but banning interesting or useful research(ers) seems like the most destructive solution possible. Indeed, open systems may be the only structural, rule-based answer to resource inequities. Every other proposal I've seen obviously fails at the level of enforcement. Revenue sharing (illegal), salary caps (unenforceable and possibly illegal) and personnel restrictions (circumvented faster than you can say 'information is fungible') don't work. This would - for better or worse. b. With the help of a middling competent archivist, an open source system would reduce entry barriers. This is especially true on the novice or JV level. Young teams could plausibly subsist entirely on a diet of scavenged arguments. A novice team might not wish to do so, but the option can't hurt. c. An open source system would fundamentally change the evidence economy without targeting anyone or putting anyone out of a job. It seems much smarter (and less bilious) to change the value of a professional card-cutter's work than send the KGB after specific counter-revolutionary teams.

#### 2] Evidence ethics – open source is the only way to verify pre-round that cards aren’t miscut or highlighted or bracketed unethically. That’s a voter – maintaining ethical ev practices is key to being good academics and we should be able to verify you didn’t cheat

#### 3] Depth of clash – it allows debaters to have nuanced researched objections to their opponents evidence before the round at a much faster rate, which leads to higher quality ev comparison – outweighs cause thinking on your feet is NUQ but the best quality responses come from full access to a case.

#### The impact is fairness—a] it’s an intrinsic good – debate is fundamentally a game and some level of competitive equity is necessary to sustain the activity, b] probability – debate can’t alter subjectivity, but it can rectify skews which means the only impact to a ballot is fairness and deciding who wins, c] it internal link turns every impact – a limited topic promotes in-depth research and engagement which is necessary to access all of their education

#### Education is a voter – it gives us portable skills for life like research and thinking.

#### Dtd – incoherent

#### No rvi – 7 min to dump

#### Ci – best norms for disclosure

### Advantage

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

The – “used to point forward to a following qualifying or defining clause or phrase”. Google. <https://www.google.com/search?q=the+definition&rlz=1C1CHBF_enUS877US877&oq=the+definition&aqs=chrome.0.69i59j69i64j69i61j69i60l2.2103j0j7&sourceid=chrome&ie=UTF-8>

member nations of the World Trade Organization – it’s a term of art so put away your aprioris – we will defend official list – <https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm>

Ought – “used to express obligation”. Merriam Webster. <https://www.merriam-webster.com/dictionary/ought>

To – “used as a function word to indicate application or attention”. Merriam Webster. <https://www.merriam-webster.com/dictionary/to>

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Intellectual property protections – it’s a term of art – “Intellectual property rights are the rights given to persons over the creations of their minds. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time”. WTO. https://www.wto.org/english/tratop\_e/trips\_e/intel1\_e.htm

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<https://www.who.int/intellectualproperty/submissions/Pharmacoevolution.pdf?ua=1>

https://pubs.acs.org/doi/10.1021/acsmedchemlett.9b00497

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

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

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

#### The Plan solves Evergreening.

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

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

#### Evergreening keeps Drug Prices high.

Amin 18 Tahir Amin 6-27-2018 "The problem with high drug prices isn't 'foreign freeloading,' it's the patent system" [High drug prices caused by US patent system, not 'foreign freeloaders' (cnbc.com)](https://www.cnbc.com/2018/06/25/high-drug-prices-caused-by-us-patent-system.html) <https://www.cnbc.com/2018/06/25/high-drug-prices-caused-by-us-patent-system.html> (co-founder of nonprofit I-MAK.org)//Elmer

**'Evergreening'** Instead of going to new medicines, the study finds that 74 percent of new patents during the decade went to drugs that already existed. It found that 80 percent of the nearly 100 best-selling drugs extended their exclusivity protections at least once, and 50 percent extended their patents more than once—with the effect of **prolonging** the **time before generics** could reach the market **as drug prices continued to rise**. The strategy is called “evergreening”: drug makers add on new patents to prolong a drug’s exclusivity, even when the additions aren’t fundamentally new, non-obvious, and useful as the law requires. One of the most expensive cancer drugs on the market, **Revlimid**®, is a case in point: **priced at** over $**125,000** per year of treatment, Celgene has sought **105 patents** on Revlimid®, many of which have been granted, extending its monopoly until the end of 2036. That gives the Revlimid® patent portfolio a lifespan of 40 years, which is being used to block or deter generic competitors from entering the market. But a recent I-MAK analysis finds that several of Celgene’s patents are mere add-ons—not fundamentally new to deserve a patent. And because of the thicket of patents around Revlimid®, **payers** are **projected to spend $45 billion** **in excess costs** on that drug alone as compared to what they could be paying if generic competitors were to enter when the first patent expires in 2019. Meanwhile, Celgene is also among the pharmaceuticals that have been recently scolded by the FDA for refusing to share samples with generic makers so they can test their own products against the brands in order to attain FDA approval. **In the absence of** genuine **competition** in the U.S. prescription drug market, **monopolies are yielding reckless pricing schemes and prohibitively expensive drugs** for Americans (and people around the world) who need them. In 2015, for example, U.S. Senators Wyden and Grassley found after an 18-month bipartisan investigation that the notorious $84,000 price tag for the hepatitis C drug made by Gilead was based on “a pricing and marketing strategy designed to maximize revenue with little concern for access or affordability.” Gilead’s subsequent hepatitis C drug Harvoni® was introduced to the market at a still higher cost of $94,500. Who benefits when drugs are priced so high? Not the 85 percent of Americans with hepatitis C who are still not able to afford treatment.

#### High Drug Prices forces patients to go underground for drugs.

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Bryant 11 Clifton Bryant 2011 “The Routledge Handbook of Deviant Behaviour” (former professor of sociology at VA Tech)//Elmer

Now, the field of medicine is able to achieve seemingly miraculous results, through organ transplantation, reviving patients who have been "clinically" dead, and curing supposedly "incurable diseases." Medical miracles are not cheap, however, and the costs of medical care and drugs have risen (and continue to rise) at a near-astronomical rate. Consequently, neither private medical insurance plans nor Medicare will now cover certain procedures, treatments, and medicines. In the future, with continuing reform of the US healthcare system, even fewer procedures, treatments, and medications might will be covered. Certainly, some medical treatment will be "rationed," and particular categories of people (such as the elderly) may be systematically denied the coverage they need. As a result of all this, medical- and health-related crime and deviance will inevitably rise. Medical insurance, Medicare, and Medicaid fraud, which is already prevalent today, will increase exponentially. Smugglers will "bootleg" ever more pharmaceuticals into the US, and a large, thriving, nationwide black market will develop for those who cannot afford to buy uncovered medications. More medicines and diagnostic equipment will be stolen, and back- street medical procedures using such stolen equipment may well be offered for cash with no questions asked. Armed robberies of valuable pharmaceuticals from drug stores and super- markets will increase, too. Bribery to obtain insurance-uncovered or rationed medical care (or, indeed, any kind of medical care where demand exceeds supply) will likely mushroom. This is actually common in some countries around the world. Counterfeiting expensive pharmaceuticals will be prevalent, and medical frauds of all kinds will be very widespread. Many of these frauds will be directed at the elderly population as it continues to increase in size. The elderly will be particularly vulnerable because they are most likely to be denied coverage for certain medical procedures or treatments. For instance, private health insurance and Medicare will both refuse to cover a woman in her mid-80s for potentially life-saving heart-bypass surgery. As a result, she will be a prime candidate for victimization by medical fraud that offers her affordable, but bogus, treatment. There is already a thriving international black market in human organs (Schepper-Hughes 2009). Kidneys are obtained from poor individuals in impoverished countries for relatively modest sums of money. This cash allows the donors to purchase luxuries, such as a small automobile, educate their children, or simply sustain their families for a few months. The organs are sometimes transferred quickly to a hospital in the donor's own country for transplant surgery. But on other occasions they are transported to the US or another Western country. In the US, obtaining an organ for transplantation in this fashion is illegal. Nevertheless, the practice will undoubtedly increase greatly in the future. Where medical care and medicines become exorbitantly expensive, cheaper ways to obtain them, even when these are illicit, will be sought. Where there are shortages of medical care or medicines, perhaps because of rationing, other means of obtaining them, even if deviant, will surely be employed. As the cost and the difficulty of obtaining medical care and medicines increase, the implications for increased crime and deviance become almost limitless.

#### Counterfeit Drugs cause Anti-Biotic Resistance.

Jahnke 19 Art Jahnke 1-14-2019 "How Bad Drugs Turn Treatable Diseases Deadly" <https://www.bu.edu/articles/2019/how-bad-drugs-turn-treatable-diseases-deadly/> (Senior editor Art Jahnke began his career at the Real Paper, a Boston area alternative weekly. He has worked as a writer and editor at Boston Magazine, web editorial director at CXO Media, and executive editor in Marketing & Communications at Boston University, where his work was honored with many awards. Art has served on the editorial board of the Boston Review and has taught at Harvard University summer school and Emerson College.)//Elmer

Four decades later as a Boston University professor of biomedical engineering and materials science and engineering, Zaman was reminded of the dangers of low-quality drugs in his native country when he learned that **more than 200 people in the city of Lahore died after being treated with an adulterated version of a hypertension drug.** That event, in 2012, altered the course of Zaman’s research. Now, he focuses on the global problem of “**substandard drugs**,” poorly made medicines containing ingredients that are either ineffective or toxic. His most recent discovery has startling implications for our understanding of drug resistance: a low-quality version of rifampin, a broad spectrum antibiotic typically used as the first line of defense to treat tuberculosis, **can** greatly **contribute to the development of drug-resistant infections**. The findings, published in Antimicrobial Agents and Chemotherapy, are particularly pressing because **drug-resistant TB** is **an increasing** **problem worldwide**. Of the **10 million new cases** of tuberculosis in 2016, about 600,000 were rifampin resistant, requiring second-line treatments which come with increased toxicity. “**There had not been a definitive study** showing that lack of [antibiotic] quality leads to resistance,” says Zaman, who is also a Howard Hughes Medical Institute Professor of Biomedical Engineering and International Health. “**Now we are sure that it does**, and it does with TB, **a** global **problem that has become stubbornly hard to resolve**.” “We had always thought of this a scientific issue, but now it is also an ethical issue.”Muhammad Zaman Zaman says substandard drugs, as well as drugs that are **deliberate counterfeits**, are all too common in developing nations. A recent survey by the World Health Organization found that in low- and middle-income countries, **one in ten medicines is substandard or falsified**. One contributing factor could be that government enforcement of safe manufacturing practices is feeble or nonexistent. In Pakistan, for example, a country of nearly 200 million people, only a handful of federal inspectors monitor the quality of drug manufacturing.

#### Extinction - generic defense doesn’t apply.

Srivatsa 17 Kadiyali Srivatsa 1-12-2017 “Superbug Pandemics and How to Prevent Them” <https://www.the-american-interest.com/2017/01/12/superbug-pandemics-and-how-to-prevent-them/> (doctor, inventor, and publisher. He worked in acute and intensive pediatric care in British hospitals)//Elmer

It is by now no secret that the human species is locked in a race of its own making with “superbugs.” Indeed, if popular science fiction is a measure of awareness, the theme has pervaded English-language literature from Michael Crichton’s 1969 Andromeda Strain all the way to Emily St. John Mandel’s 2014 Station Eleven and beyond. By a combination of massive inadvertence and what can only be called stupidity, we must now invent new and effective antibiotics faster than deadly bacteria evolve—and regrettably, they are rapidly doing so with our help. I do not exclude the possibility that bad actors might deliberately engineer deadly superbugs.1 But even if that does not happen, humanity faces an existential threat largely of its own making in the absence of malign intentions. As threats go, this one is entirely predictable. The concept of a “black swan,” Nassim Nicholas Taleb’s term for low-probability but high-impact events, has become widely known in recent years. Taleb did not invent the concept; he only gave it a catchy name to help mainly business executives who know little of statistics or probability. Many have embraced the “black swan” label the way children embrace holiday gifts, which are often bobbles of little value, except to them. But the threat of inadvertent pandemics is not a “black swan” because its probability is not low. If one likes catchy labels, it better fits the term “gray rhino,” which, explains Michele Wucker, is a high-probability, high-impact event that people manage to ignore anyway for a raft of social-psychological reasons.2 A pandemic is a quintessential gray rhino, for it is no longer a matter of if but of when it will challenge us—and of how prepared we are to deal with it when it happens. We have certainly been warned. The curse we have created was understood as a possibility from the very outset, when seventy years ago Sir Alexander Fleming, the discoverer of penicillin, predicted antibiotic resistance. When interviewed for a 2015 article, “The Most Predictable Disaster in the History of the Human Race, ” Bill Gates pointed out that one of the costliest disasters of the 20th century, worse even than World War I, was the Spanish Flu pandemic of 1918-19. As the author of the article, Ezra Klein, put it: “No one can say we weren’t warned. And warned. And warned. A pandemic disease is the most predictable catastrophe in the history of the human race, if only because it has happened to the human race so many, many times before.”3 Even with effective new medicines, if we can devise them, we must contain outbreaks of bacterial disease fast, lest they get out of control. In other words, we have a social-organizational challenge before us as well as a strictly medical one. That means getting sufficient amounts of medicine into the right hands and in the right places, but it also means educating people and enabling them to communicate with each other to prevent any outbreak from spreading widely. Responsible governments and cooperative organizations have options in that regard, but even individuals can contribute something. To that end, as a medical doctor I have created a computer app that promises to be useful in that regard—of which more in a moment. But first let us review the situation, for while it has become well known to many people, there is a general resistance to acknowledging the severity and imminence of the danger. What Are the Problems? Bacteria are among the oldest living things on the planet. They are masters of survival and can be found everywhere. Billions of them live on and in every one of us, many of them helping our bodies to run smoothly and stay healthy. Most bacteria that are not helpful to us are at least harmless, but some are not. They invade our cells, spread quickly, and cause havoc that we refer to generically as disease. Millions of people used to die every year as a result of bacterial infections, until we developed antibiotics. These wonder drugs revolutionized medicine, but one can have too much of a good thing. Doctors have used antibiotics recklessly, prescribing them for just about everything, and in the process helped to create strains of bacteria that are resistant to the medicines we have. We even give antibiotics to cattle that are not sick and use them to fatten chickens. Companies large and small still mindlessly market antimicrobial products for hands and home, claiming that they kill bacteria and viruses. They do more harm than good because the low concentrations of antimicrobials that these products contain tend to kill friendly bacteria (not viruses at all), and so clear the way for the mass multiplication of surviving unfriendly bacteria. Perhaps even worse, hospitals have deployed antimicrobial products on an industrial scale for a long time now, the result being a sharp rise in iatrogenic bacterial illnesses. Overuse of antibiotics and commercial products containing them has helped superbugs to evolve. We now increasingly face microorganisms that cannot be killed by antibiotics, antifungals, antivirals, or any other chemical weapon we throw at them. Pandemics are the major risk we run as a result, but it is not the only one. Overuse of antibiotics by doctors, homemakers, and hospital managers could mean that, in the not-too-distant future, something as simple as a minor cut could again become life-threatening if it becomes infected. Few non-medical professionals are aware that antibiotics are the foundation on which nearly all of modern medicine rests. Cancer therapy, organ transplants, surgeries minor and major, and even childbirth all rely on antibiotics to prevent infections. If infections become untreatable we stand to lose most of the medical advances we have made over the past fifty years. And the problem is already here. In the summer of 2011, a 43-year-old woman with complications from a lung transplant was transferred from a New York City hospital to the Clinical Center at the National Institutes of Health (NIH), in Bethesda, Maryland. She had a highly resistant superbug known as Klebsiella pneumoniae carbapenemase (KPC). The patient was treated and eventually discharged after doctors concluded that they had contained the infection. A few weeks later, a 34-year-old man with a tumor and no known link to the woman contracted KPC while at the hospital. During the course of the next few months, several more NIH patients presented with KPC. Doctors attacked the outbreak with combinations of antibiotics, including a supposedly powerful experimental drug. A separate intensive care unit for KPC patients was set up and robots disinfected empty rooms, but the infection still spread beyond the intensive care area. Several patients died and then suddenly all was silent on the KPC front, with doctors convinced they had seen the last of the dangerous bacterium. They couldn’t have been more mistaken. A year later, a young man with complications from a bone marrow transplant arrived at NIH. He became infected with KPC and died. This superbug is now present in hospitals in most, if not all U.S. states. This is not good. This past year an outbreak of CRE (carbapenem-resistant enterobacteriaceae) linked to contaminated medical equipment infected 11 patients and killed two in Los Angeles area hospitals. This family of bacteria has evolved resistance to all antibiotics, including the powerful carbapenem antibiotics that are often used as a last resort against serious infections. They are now so resilient that it is virtually impossible to remove them from medical tools such as catheters and breathing tubes placed into the body, even after cleaning. Then we have gonorrhea, chlamydia, and other sexually transmitted diseases that we cannot treat and that are spreading all over the world. Anyone who has sex can catch these infections, and because most people may not exhibit any symptoms they spread infections without anyone knowing about it. Sexually transmitted diseases used to be treatable with antibiotics, but in recent years we have witnessed the rise of multi-drug resistant STDs. Untreated gonorrhea can lead to infertility in men and women and blindness and other congenital defect in babies. As is well known, too, we have witnessed many cases of drug-resistant pneumonia. These problems have arisen in part because of simple mistakes healthcare professionals repeatedly make. Let me explain. Neither superbugs nor common bacterial infections produce any special symptoms indicative of their cause. Rashes, fevers, sneezing, runny noses, ear pain, diarrhea, vomiting, coughing, fatigue, and weakness are signs of common and minor illnesses as well as uncommonly deadly ones. Therefore, the major problem for clinicians is to identify a common symptom that may potentially be an early sign of a major infection that could result in an epidemic. We know that dangerous infections in any given geographical area do not start at the same time. They start with one victim and gradually spread. But that victim is only one among hundreds of patients a doctor will typically see, so many doctors will miss patients presenting with infections that are serious. They will probably identify diseases that kill fast, but slow-spreading infections such as skin infections that can lead to septicemia are rarely diagnosed early. In addition, I have seen doctors treating eczema with antibiotic cream, even though they know that bacteria are resistant to the majority of these drugs. This sort of action encourages simple infections to spread locally, because patients are therefore not instructed to take other, more useful precautions. On top of that, some people are frivolous about infections and assume doctors are exaggerating the threat. And some people are selfish. Once I was called to see a passenger during a flight who had symptoms consistent with infection. He boarded the plane with these symptoms, but began to feel much worse during the flight. I was scared, knowing how infections such as Ebola can spread. This made me think about a way to screen passengers before they board a flight. Airlines could refund a traveler’s ticket, or issue a replacement, in case of sickness—which is not the policy now. We currently have no method to block infectious travelers from boarding flights, and there are no changes in the incentive system to enable conscientious passengers to avoid losing their money if they responsibly miss a flight because of illness. Speaking of selfishness, I once saw a mother drop her daughter off at school with a serious bout of impetigo on her face. When I asked her why she had brought her daughter to school with a contagious infection, she said she could not spare the time to keep her at home or take her to the doctor. By allowing this child to contact other children, a simple infection can become a major threat. Fortunately, I could see the rash on the girl’s face, but other kids in schools may have rashes we cannot see. Incorrect diagnosis of skin problems and mistaken use of antibiotics to treat them is common all over the world, and so we are continually creating superbugs in our communities. Similarly, chest infections, sore throats, and illnesses diagnosed as colds that unnecessarily treated with antibiotics are also a major threat. By prescribing antibiotics for viral infections, we are not only helping bacteria develop resistance, but we are also polluting the environment when these drugs are passed in urine and feces. All of this helps resistant bacteria to spread in the community and become an epidemic. Ebola is very difficult to transmit because people who are contagious have visible and unusual symptoms. However, the emerging infections and pandemics of the future may not have visible symptoms, and they could break out in highly populous countries such as India and China that send thousands of travelers all over the world every day. When a person is infected with a contagious disease, he or she can expect to pass the illness on to an average of two people. This is called the “reproduction number.” Two is not that high a number as these things go; some diseases have far greater rates of infection. The SARS virus had a reproduction number of four. Measles has a reproduction number of 18. One person traveling as an airplane passenger and carrying an infection similar to Ebola can infect three to five people sitting nearby, ten if he or she walks to the toilet. The study that highlighted this was published in a medical journal a few years ago, but the airline industry has not implemented any changes or introduced screening to prevent the spread of infections by air travel passengers, a major vehicle for the rapid spread of disease. It is scary to think that nobody knows what will happen when the world faces a lethal disease we’re not used to, perhaps with a reproduction number of five or eight or even ten. What if it starts in a megacity? What if, unlike Ebola, it’s contagious before patients show obvious symptoms? Past experience isn’t comforting. In 2009, H1N1 flu spread around the world before we even knew it existed. The Questions Remains Why do seemingly intelligent people repeatedly do such collectively stupid things? How did we allow this to happen? The answer is disarmingly simple. It is because people are incentivized to prioritize short-term benefits over long-term considerations. It is what social scientists have called a “logic of collective action” problem. Everyone has his or her specialized niche interest: doctors their patients’ approval, business and airline executives their shareholders’ earnings, hospitals their reputations for best-practice hygienics, homemakers their obligation to keep their own families from illness. But no one owns the longer-term consequences for hundreds of millions of people who are irrelevant to satisfying these short-term concerns. Here is an example. At a recent Superbug Super Drug conference in London that I attended, scientists, health agencies, and pharmaceutical companies were vastly more concerned with investing millions of dollars in efforts to invent another antibiotic, claiming that this has to be the way forward. Money was the most pressing issue because, as everyone at the conference knew, for many years pharmaceutical companies have been pulling back from antibiotics research because they can’t see a profit in it. Development costs run into billions of dollars, yet there is no guarantee that any new drug will successfully fight infections. At the same conference Dr. Lloyd Czaplewski spoke about alternatives to antibiotics, in case we cannot come up with new ones fast enough to outrun superbug evolution. But he omitted mention of preventive strategies that use the internet or communication software to help reduce the spread of infections among families, communities, and countries. It is madness that we don’t have a concrete second-best alternative to new antibiotics, because we need them and we need them quickly. Of course, this is why we have governments, which have been known occasionally in the past as commonwealths. Governments are supposed to look out for the wider, common interests of society that niche-interested professionals take no responsibility for, and that includes public health. It is why nearly every nation’s government has an official who is analogous to the U.S. Surgeon General, and nearly every one has a public health service of some kind. Alas, national governments do not always function as they should. Several years ago physician and former Republican Senator Bill Frist submitted a proposal to the Senate for a U.S. Medical Expeditionary Corps. This would have been a specialized organization that could coordinate and execute rapid responses to global health emergencies such as Ebola. Nothing came of it, because Dr. Frist’s fellow politicians were either too shortsighted or too dimwitted to understand why it was a good idea. Or perhaps they simply realized that they could not benefit politically from supporting it. Plenty of mistakes continue to be made. In 2015, a particularly infectious form of bird flu ripped through 14 U.S. states, leading farmers to preventively slaughter nearly 40 million birds. The result of such callous and unnecessary acts is that, instead of exhausting themselves in the host population of birds, the viruses quickly find alternative hosts in which to survive, and could therefore easily mutate into a form that can infect humans. Earlier, during the 1980s, AIDS garnered more public attention because a handful of rich and famous people were infected, and because the campaign to eradicate it dovetailed with and boosted the political campaign on behalf of homosexual rights. Methicillin resistant Staphylococcus aureus (MRSA) in hospitals, by far the bigger threat at the time, was virtually ignored. Some doctors knew that MRSA would bring us to our knees and kill millions of people worldwide, but pharmaceutical companies and device and equipment manufacturers ignored these doctors and the thousands of patients dying in hospitals as a result of MRSA. They prioritized the wrong thing, and government did not correct the error. And that is partly how antibiotic-resistant infection went from an obscure hospital problem to an incipient global pandemic. Politics well outside the United States plays several other roles in the budding problem that we are confronting. Countries often will not admit they have a problem and request help because of the possible financial implications in terms of investment and travel. Guinea did not declare the Ebola epidemic early on and Chinese leaders, worried about trade and tourism, lied for months in 2002 about the presence of the SARS virus. In 2004, when avian influenza first surfaced in Thailand, officials there displayed a similar reluctance to release information. Hospitals in some countries, including India, are managed and often owned by doctors. They refuse to share information about existing infections and often categorically deny they have a problem. Reporting infections to public health authorities is not mandatory, and so hospitals that fail to say anything are not penalized. Even now, the WHO and the CDC do not have accurate and up-to-date information about the spread of E. coli or other infections, and part of the reason is that for-profit hospitals are reluctant to do anything to diminish their bottom line. Syria and Yemen are among those countries that are so weak and fragmented that they cannot effectively coordinate public healthcare. But their governments are also hostile to external organizations that offer relief. Part of the reason is xenophobia, but part is that this makes the government look bad. Relatedly, most poor-nation governments do not trust the efficacy of international institutions, and think that cooperating with them amounts to a re-importation of imperialism. They would rather their own people suffer and die than ask for needed help. That brings us to the level of international public health governance. Alas, sometimes poor-country governments estimate the efficacy of international institutions accurately. The WHO’s Ebola response in 2014-15 was a disaster. The organization was slow to declare a public health emergency even after public warnings from Médecins Sans Frontières, some of whose doctors had already died on the front line. The outbreak killed more than 28,000 people, far more than would have been the case had it been quickly identified. This isn’t just an issue of bureaucratic incompetence. The WHO is under-resourced for the problems it is meant to solve. Funding comes from voluntary donations, and there is no mechanism by which it can quickly scale up its efforts during an emergency. The result is that its response to the next major disease outbreak is likely to be as inadequate as were its responses to Ebola, H1N1, and SARS. Stakeholders admit that we need another mechanism, and most experts agree that the world needs some kind of emergency response team for dangerous diseases. But no one knows how to set one up amid the dysfunctional global governance structures that presently exist. Maybe they should turn to Bill Frist, whose basic concept was sound; if the U.S. government will not act, perhaps some other governments will, and use the UN system to do so. But as things stand, we lack a health equivalent of the military reserve. Neither government leaders nor doctors can mobilize a team of experts to contain infections. People who want to volunteer, whether for government or NGO efforts, are not paid and the rules, if any, are sketchy about what we do with them when they return from a mission. Are employers going to take them back? What are the quarantine rules? It is all completely ad hoc, meaning that humanity lacks the tools it needs to protect itself. And note, by the way, the contrast between how governments prepare for facing pandemics and how they prepare for making war. War is not more deadly to the human race than pandemics, but national defense against armed aggression is much better planned for than defense against threats to public health. There is a wealth of rules regarding it, too. Human beings study and plan for war, which kills people both deliberately and accidentally, but they do not invest comparable effort planning for pandemics, which are liable to kill orders of magnitude more people. To the mind of a medical doctor, this is strange. Creating Conditions for Infections to Spread Superbug infections spread for several interlocking reasons. Some are medical-epidemiological. Most of the infections of the past thirty years have started in one place and in one family. As already noted, they spread because many infectious diseases are highly contagious before the onset of symptoms, and because it is difficult to prevent patients who know they are sick from going to hospitals, work, and school, or from traveling further afield. But again, one reason for the problem is political, not medical. Many governments have no strategies in place to prevent pandemics because they are unwilling to tell their people how infections spread. They don’t want to worry people with such talk; it will make them, they fear, unpopular. So governments may have mountains of bureaucracy with great heaps of rules and regulations concerning public health, but they are generally unwilling to trust their own citizens to use common sense on their own behalf. This, too, seems very strange. Until now, no one has come forward to help us develop strategies to educate people how to identify and prevent the spread of infection to their families and communities. The majority of stakeholders have also been oblivious to the use of new technologies to help reduce the spread of these infections. There are some exceptions. In a fun blog post called Preparedness 101: Zombie Apocalypse, the CDC uses the threat of a zombie outbreak as a metaphor to encourage people to prepare for emergencies, including pandemics. It is well meaning and insightful, yet when my colleagues and I try to discuss ways of scaling up the CDC’s example with doctors and nurses, they shut down. Nobody plans for an actual crisis partly because it is too scary and hence paralyzing to think about. But it is also because it is not most health professionals’ job; it is not what they are trained and paid to do. It is always someone else’s job, except that it has turned out to be nobody’s job. Worse, the situation is not static. While we sit paralyzed, superbugs are evolving. Epidemiological models now predict how an algorithmic process of disease spread will move through the modern world. All urban centers around the entire globe can become infected within sixty days because we move around and cross borders much more than our ancestors did, thanks to air travel. A new pandemic could start crossing borders before we even know it exists. A flu-like disease could kill more than 33 million people in 250 days.3