### 1NC – DA

#### Global tech innovation high now.

Mercury News et al 6/4 [Mercury News and East Bay Times Editorial Boards, June 4, 2021, “Editorial: How America can Win the Global Tech War” <https://www.mercurynews.com/2021/06/04/editorial-why-silicon-valley-needs-endless-frontier-bill/> //gord0]

The nation that wins the global tech race will dominate the 21st century. This has been true since the 1800s. Given the rapid pace of innovation and tech’s impact on our economy and defense capabilities in the last decade, there is ample evidence to suggest that the need for investment in tech research and development has never been greater. China has been closing the tech gap in recent years by making bold investments in tech with the intent of overtaking the United States. This is a tech war we cannot afford to lose. It’s imperative that Congress pass the Endless Frontier Act and authorize the biggest R&D tech investment in the United States since the Apollo years. Rep. Ro Khanna, D-Santa Clara, made a massive increase in science and technology investment a major part of his platform while campaigning for a seat in Congress in 2016. Now the co-author of the 600-page legislation is on the cusp of pushing through a bipartisan effort that has been years in the making. Khanna and his co-authors, Senate Majority Leader Chuck Schumer, D-N.Y., Sen. Todd Young, R-Ind., and Rep. Mike Gallagher, R-Wisc., are shepherding the bill through the Senate, which is expected to approve it sometime later this month. That would set up a reconciliation debate between the House and Senate that would determine the bill’s final language. The ultimate size of the investment is still very much up in the air. Khanna would like Congress to authorize $100 billion over a five-year period for critical advancements in artificial intelligence, biotechnology, cybersecurity, semiconductors and other cutting-edge technologies. The Senate is talking of knocking that number down to $50 billion or $75 billion. They should be reminded of China Premier Li Keqiang’s March announcement that China would increase its research and development spending by an additional 7% per year between 2021 and 2025. The United States still outspends China in R&D, spending $612 billion on research and development in 2019, compared to China’s $514 billion. But the gap is narrowing. At the turn of the century, China was only spending $33 billion a year on R&D, while the United States was spending nearly 10 times that amount. The bill would authorize 10 technology hubs throughout the nation designed to help build the infrastructure, manufacturing facilities and workforce needed to help meet the nation’s tech goals. Building tech centers throughout the United States should also create more support for the industry across the country. Tech’s image has taken a beating in recent years — the emergence of the term “Big Tech” is hardly a positive development — and the industry will need all the support it can muster in Congress. The United States continues to have a crucial tech edge over its competitors, most notably China. The only way we can hope to win the 21st century is to make significant investments in research and development that will spark the next wave of innovation.

#### Violent strike efforts are increasing – they slow innovation, specifically in the tech sector.

Hanasoge 16 [Chaithra; Senior Research Analyst, Market Researcher, Consumer Insights, Strategy Consulting; “The Union Strikes: The Good, the Bad and the Ugly,” Supply Wisdom; April/June 2016 (Doesn’t specifically say but this is the most recent event is cites); https://www.supplywisdom.com/resources/the-union-strikes-the-good-the-bad-and-the-ugly/]//SJWen

The result: Verizon conceded to several of the workers’ demands including hiring union workers, protection against outsourcing of call-center jobs, and employee benefits such as salary hikes and higher pension contributions, among others and thus bringing an end to the strike in June.

The repercussion: The strike witnessed several instances of social disorder, violence and clashes, ultimately calling for third party intervention (Secretary of Labor – Thomas Perez) to initiate negotiations between the parties. Also, as a result of the strike, Verizon reported lower than expected revenues in the second quarter of 2016.

Trade unions/ labor unions aren’t just this millennia’s product and has been in vogue since times immemorial. Unions, to ensure fairness to the working class, have gone on strike for better working conditions and employee benefits since the industrial revolution and are as strong today as they were last century. With the advent of technology and advancement in artificial intelligence, machines are grabbing the jobs which were once the bastion of the humans. So, questions that arise here are, what relevance do unions have in today’s work scenario? And, are the strikes organized by them avoidable?

As long as the concept of labor exists and employees feel that they are not receiving their fair share of dues, unions will exist and thrive. Union protests in most cases cause work stoppages, and in certain cases, disruption of law and order. Like in March 2016, public servants at Federal Government departments across Australia went on a series of strikes over failed pay negotiations, disrupting operations of many government departments for a few days.  Besides such direct effects, there are many indirect effects as well such as strained employee relations, slower work processes, lesser productivity and unnecessary legal hassles.

Also, union strikes can never be taken too lightly as they have prompted major overturn of decisions, on a few occasions. Besides the Verizon incident that was a crucial example of this, nationwide strikes were witnessed in India in March and April this year when the national government introduced reforms related to the withdrawal regulations and interest rate of employee provident fund, terming it as ‘anti-working class’. This compelled the government to withhold the reform for further review. In France, strike against labor law reforms in May turned violent, resulting in riots and significant damage to property. The incident prompted the government to consider modifications to the proposed reforms.

However, aside from employee concerns, such incidents are also determined by a number of other factors such as the country’s political scenario, economy, size of the overall workforce and the unions, history of unionization, labor laws, and culture. For example, it is a popular saying that the French are always on strike as per tradition (although recent statistics indicate a decline in frequency). In a communist government like China, strikes have steadily risen in number. In 2015, China Labor Bulletin (CLB), a Hong Kong-based workers’ rights group recorded 2,700 incidents of strikes and protests, compared to 1,300 incidents in 2014. Most of them have stemmed out of failure by the government to respect the basic rights of employees and address labor concerns.

Interestingly, unions have not been able to gain a strong foothold in the IT-BPO industry. While many countries do have a separate union to represent workers from the sector, incidents of strikes like Verizon have been relatively low.  However, workplace regulations, in addition to other factors mentioned could be a trigger for such incidents, even if on a smaller scale. For example, a recent survey that interviewed several BPO employees in India revealed that while forming a union in the BPO sector was difficult, irksome workplace regulations such as constant surveillance, irregular timings and incentives have prompted employees to express their resentment in smaller ways such as corruption of internal servers and so on.  Such risks are further enhanced in a city like Kolkata, which carries a strong trade union culture.

#### Victories like the aff mobilizes unions in the IT sector.

Vynck et al 21 [Gerrit De; Carleton University, BA in Journalism and Global Politics, tech reporter for The Washington Post. He writes about Google and the algorithms that increasingly shape society. He previously covered tech for seven years at Bloomberg News; Nitashu Tiku; Columbia University, BA in English, New York University, MA in Journalism, Washington Post's tech culture reporter based in San Francisco; Macalester College, BA in English, Columbia University, MS in Journalism, reporter for The Washington Post who is focused on technology coverage in the Pacific Northwest; “Six things to know about the latest efforts to bring unions to Big Tech,” The Washington Post; https://www.washingtonpost.com/technology/2021/01/26/tech-unions-explainer/]//SJWen

In response to tech company crackdowns and lobbying, gig workers have shifted their strategy to emphasize building worker-led movements and increasing their ranks, rather than focusing on employment status as the primary goal, says Veena Dubal, a law professor at the University of California Hastings College of the Law in San Francisco. The hope is that with President Biden in the White House and an even split in the Senate, legislators will mobilize at the federal level, through the NLRA or bills such as the PRO Act, to recognize gig worker collectives as real unions.

#### Technological innovation solves every existential threat – which outweighs.

Matthews 18 Dylan. Co-founder of Vox, citing Nick Beckstead @ Rutgers University. 10-26-2018. "How to help people millions of years from now." Vox. https://www.vox.com/future-perfect/2018/10/26/18023366/far-future-effective-altruism-existential-risk-doing-good

If you care about improving human lives, you should overwhelmingly care about those quadrillions of lives rather than the comparatively small number of people alive today. The 7.6 billion people now living, after all, amount to less than 0.003 percent of the population that will live in the future. It’s reasonable to suggest that those quadrillions of future people have, accordingly, hundreds of thousands of times more moral weight than those of us living here today do. That’s the basic argument behind Nick Beckstead’s 2013 Rutgers philosophy dissertation, “On the overwhelming importance of shaping the far future.” It’s a glorious mindfuck of a thesis, not least because Beckstead shows very convincingly that this is a conclusion any plausible moral view would reach. It’s not just something that weird utilitarians have to deal with. And Beckstead, to his considerable credit, walks the walk on this. He works at the Open Philanthropy Project on grants relating to the far future and runs a charitable fund for donors who want to prioritize the far future. And arguments from him and others have turned “long-termism” into a very vibrant, important strand of the effective altruism community. But what does prioritizing the far future even mean? The most literal thing it could mean is preventing human extinction, to ensure that the species persists as long as possible. For the long-term-focused effective altruists I know, that typically means identifying concrete threats to humanity’s continued existence — like unfriendly artificial intelligence, or a pandemic, or global warming/out of control geoengineering — and engaging in activities to prevent that specific eventuality. But in a set of slides he made in 2013, Beckstead makes a compelling case that while that’s certainly part of what caring about the far future entails, approaches that address specific threats to humanity (which he calls “targeted” approaches to the far future) have to complement “broad” approaches, where instead of trying to predict what’s going to kill us all, you just generally try to keep civilization running as best it can, so that it is, as a whole, well-equipped to deal with potential extinction events in the future, not just in 2030 or 2040 but in 3500 or 95000 or even 37 million. In other words, caring about the far future doesn’t mean just paying attention to low-probability risks of total annihilation; it also means acting on pressing needs now. For example: We’re going to be better prepared to prevent extinction from AI or a supervirus or global warming if society as a whole makes a lot of scientific progress. And a significant bottleneck there is that the vast majority of humanity doesn’t get high-enough-quality education to engage in scientific research, if they want to, which reduces the odds that we have enough trained scientists to come up with the breakthroughs we need as a civilization to survive and thrive. So maybe one of the best things we can do for the far future is to improve school systems — here and now — to harness the group economist Raj Chetty calls “lost Einsteins” (potential innovators who are thwarted by poverty and inequality in rich countries) and, more importantly, the hundreds of millions of kids in developing countries dealing with even worse education systems than those in depressed communities in the rich world. What if living ethically for the far future means living ethically now? Beckstead mentions some other broad, or very broad, ideas (these are all his descriptions): Help make computers faster so that people everywhere can work more efficiently Change intellectual property law so that technological innovation can happen more quickly Advocate for open borders so that people from poorly governed countries can move to better-governed countries and be more productive Meta-research: improve incentives and norms in academic work to better advance human knowledge Improve education Advocate for political party X to make future people have values more like political party X ”If you look at these areas (economic growth and technological progress, access to information, individual capability, social coordination, motives) a lot of everyday good works contribute,” Beckstead writes. “An implication of this is that a lot of everyday good works are good from a broad perspective, even though hardly anyone thinks explicitly in terms of far future standards.” Look at those examples again: It’s just a list of what normal altruistically motivated people, not effective altruism folks, generally do. Charities in the US love talking about the lost opportunities for innovation that poverty creates. Lots of smart people who want to make a difference become scientists, or try to work as teachers or on improving education policy, and lord knows there are plenty of people who become political party operatives out of a conviction that the moral consequences of the party’s platform are good. All of which is to say: Maybe effective altruists aren’t that special, or at least maybe we don’t have access to that many specific and weird conclusions about how best to help the world. If the far future is what matters, and generally trying to make the world work better is among the best ways to help the far future, then effective altruism just becomes plain ol’ do-goodery.

### PIC

#### Counterplan text: A just government ought to recognize a conditional right of workers to strike. The right to strike ought to be conditional upon one’s profession, with all workers except healthcare workers being guaranteed an unconditional right to strike.

#### It’s competitive – a] the CP offers a conditional right, meaning it only applies in some instances, so it’s necessarily competitive and b] the plan defends all workers – 1ar clarification causes shiftiness that means we lose every time since we can’t generate new links in the 2nr.

#### Nurse strikes devastates hospitals

Wright 10 Sarah H. Wright July 2010 "Evidence on the Effects of Nurses' Strikes" <https://www.nber.org/digest/jul10/evidence-effects-nurses-strikes> (Researcher at National Bureau of Economic Research)

U.S. hospitals were excluded from collective bargaining laws for three decades longer than other sectors because of fears **that strikes by nurses might imperil patients' health**. Today, while unionization has been declining in general, it is growing rapidly in hospitals, with the number of unionized workers rising from 679,000 in 1990 to nearly one million in 2008. In Do Strikes Kill? Evidence from New York State (NBER Working Paper No. 15855), co-authors Jonathan Gruber and Samuel Kleiner carefully examine the effects of nursing strikes on patient care and outcomes. The researchers match data on nurses' strikes in New York State from 1984 to 2004 to data on hospital discharges, including information on treatment intensity, patient mortality, and hospital readmission. They conclude that nurses' strikes were **costly to hospital patients**: in-hospital mortality **increased by 19.4 percent** and hospital readmissions **increased by 6.5 percen**t for patients admitted during a strike. Among their sample of 38,228 such patients, an estimated **138 more individuals died than would have without a stri**ke, and 344 more patients were readmitted to the hospital than if there had been no strike. "Hospitals functioning during nurses' strikes **do so at a lower quality of patient care,"** they write. Still, at hospitals experiencing strikes, the measures of treatment intensity -- that is, the length of hospital stay and the number of procedures performed during the patient's stay -- show no significant differences between striking and non-striking periods. Patients appear to receive the same intensity of care during union work stoppages as during normal hospital operations. Thus, the poor outcomes associated with strikes suggest that they might reduce hospital productivity. These poor health outcomes increased for both emergency and non-emergency hospital patients, even as admissions of both groups decreased by about 28 percent at hospitals with strikes. The poor health outcomes were not apparent either before or after the strike in the striking hospitals, suggesting that they are attributable to the strike itself. And, the poor health outcomes do not appear to do be due to different types of patients being admitted during strike periods, because patients admitted during a strike are very similar to those admitted during other periods. Hiring replacement workers apparently does not help: hospitals that hired replacement workers **performed no better** during strikes than those that did not hire substitute employees. In each case, patients with conditions that required intensive nursing were more likely to fare worse in the presence of nurses' strikes.

#### Hospitals are the critical internal link for pandemic preparedness.

Al Thobaity 20, Abdullelah, and Farhan Alshammari. "Nurses on the frontline against the COVID-19 pandemic: an Integrative review." Dubai Medical Journal 3.3 (2020): 87-92. (Associate Professor of Nursing at Taif University)

The majority of infected or symptomatic people seek medical treatment in medical facilities, particularly hospitals, as a high number of cases, especially those in critical condition, will have an impact on hospitals [4]. The concept of hospital resilience in disaster situations is defined as the ability to recover from the damage caused by huge disturbances quickly [2]. The resilience of hospitals to pandemic cases depends on the preparedness of the institutions, and not all hospitals have the same resilience. A lower resilience will affect the **sustainability of the health services**. This also affects healthcare providers such as doctors, nurses, and allied health professionals [5, 6]. Despite the impact on healthcare providers, excellent management of a pandemic depends on the level of **preparedness of healthcare providers, including nurses**. This means that if it was impossible to be ready before a crisis or disaster, responsible people will do all but the impossible to save lives.

#### Independently, profit motive is key to solving pandemics.

Jackson 16 Kerry Jackson 12-19-2016 “Free Market Policies Needed To Incentivize Creation Of New Life-Saving Treatments” <https://www.pacificresearch.org/article/free-market-policies-needed-to-incentivize-creation-of-new-life-saving-treatments/> (Researcher at the Pacific Research Institute)

“Our strongest antibiotics don’t work and patients are left with potentially untreatable infections,” Director Dr. Tom Frieden said when the CDC issued its warning. He asked doctors, hospitals and public health officials to “work together” to “stop these infections from spreading.” The 2014 Report to the President expressed a similar concern: “The evolution of antibiotic resistance is now occurring at an alarming rate and is outpacing the development of new countermeasures capable of thwarting infections in humans. This situation threatens patient care, economic growth, public health, agriculture, economic security and national security.” For those thinking this sort of thing shouldn’t be happening when medical science is more advanced than can almost be conceived, be assured that it is. And unless there are public policy interventions, it’s likely to get worse. “More and more microorganisms will continue to gain resistance to the current drug therapies because (antimicrobial resistance, or AMR) is basic evolution,” Wayne Winegarden writes in the Pacific Research Institute’s newly-released report “Incenting the Development of Antimicrobial Medicines to Address the Problem of Drug-Resistant Infections.” The International Federation of Pharmaceutical Manufacturers says the problem is caused by “a dearth of new antibiotic medicines.” At the same time that there’s been an increase in AMR, there has been “a sharp decline in the development of new antibiotic medicines.” The group reports that only two new classes of antibiotics have been discovered in the last three decades compared to 11 in the previous 50 years. The answers to many medical problems are still not within reach of researchers. But the hazards of AMR can be diminished. Winegarden suggests we begin with public health campaigns that encourage handwashing, which he calls a highly effective and low-cost way to reduce the spread of infection. He further recommends policy that would address the problem of antibiotic overuse and greater use of vaccines to cut the incidents of infection. But Winegarden’s primary concern is establishing the correct incentives for developing new antimicrobial medicines that would be effective against AMR microorganisms. He’s specifically referring to policies “based on a thorough understanding of the disincentives that are currently inhibiting their development.” “These disincentives are well-recognized,” he writes. “Despite the medical need, and despite the generally strong return on investment for many other drug classes, the return on investment for developing new antimicrobial medicines (particularly antibiotics) is too low.” Producing a new drug is a grinding and expensive endeavor. It can take 10 to 15 years to develop a single prescription drug that is introduced to the market, and a company can spend as much as $5.5 billion on research and development for each medication that is eventually approved and prescribed. Less than 2 percent of all projects launched to create new drugs succeed. This is not an environment in which pharmaceutical companies can get too amped up about pursuing new treatments. Yet new drug approvals increased over the last decade. Don’t look for a surge of antimicrobial drugs in that pipeline, though. Winegarden says that particular drug class is among several that “face unique impediments” that serve as disincentives for innovation. To overcome the steep hill that impedes the development of new AMR drugs, lawmakers must implement policies that unleash the incentives of the free market. Policymakers also should look at the 1983 federal Orphan Drug Act and its market-oriented reforms that increased the number of drugs developed to treat rare diseases. More than 400 have been introduced to the market since the law was enacted, compared to fewer than 10 in the 1970s. Put another way, government needs to remove its anchors from the process and let the market do what it does so well. In this case, that’s restoring patients’ health, enriching innovative companies that create jobs, and inspiring biotech start-ups such as the group of Stanford undergraduates that has been capitalized to develop new antibiotics. If the proper incentives are in place, the needed treatments will follow.

#### New Pandemics are deadlier and faster are coming – COVID is just the beginning

Antonelli 20 Ashley Fuoco Antonelli 5-15-2020 <https://www.advisory.com/daily-briefing/2020/05/15/weekly-line> "Weekly line: Why deadly disease outbreaks could become more common—even after Covid-19" (Associate Editor — American Health Line)

While the new coronavirus pandemic suddenly took the world by storm, the truth is public health experts for years have warned that a virus similar to the new coronavirus would cause the next pandemic—and they say **deadly infectious disease outbreaks could become more common**. Infectious disease experts are always on the lookout for the next pandemic, and in a report published two years ago, researchers from the Johns Hopkins Bloomberg School of Public Health **predicted that the pathogen most likely to cause the next pandemic would be a virus similar to the common cold**. Specifically, the researchers predicted that the pathogen at fault for the next pandemic would be: A microbe for which people have not yet **developed immunities**, meaning that a large portion of the human population would be susceptible to infection; Contagious during the so-called "incubation period"—the time when people are infected with a pathogen but are not yet showing symptoms of the infection or are showing only mild symptoms; and Resistant to any known prevention or treatment methods. The researchers also concluded that such a pathogen would have a "low but significant" fatality rate, meaning the pathogen wouldn't kill human hosts fast enough to inhibit its spread. As **Amesh Adalja**—a senior scholar at the Johns Hopkins Center for Health Security, who led the report—told Live Science's Rachael Rettner at the time, "**It just has to make a lot of people sick" to disrupt society**. The researchers said RNA viruses—which include the common cold, influenza, and severe acute respiratory syndrome (or SARS, which is caused by a type of coronavirus)—fit that bill. And even though we had a good bit of experience dealing with common RNA viruses like the flu, Adalja at the time told Rettner that there were "a whole host of viral families that get very little attention when it comes to pandemic preparedness." Not even two years later, the new coronavirus, which causes Covid-19, emerged and quickly spread throughout the world, reaching pandemic status in just a few months. To date, officials have reported more than 4.4 million cases of Covid-19 and 302,160 deaths tied to the new coronavirus globally. In the United States, the number of reported Covid-19 cases has reached more than 1.4 million and the number of reported deaths tied to the new coronavirus has risen to nearly 86,000 in just over three months. Although public health experts had warned about the likelihood of a respiratory-borne RNA virus causing the next global pandemic, many say the world was largely unprepared to handle this type of infectious disease outbreak. And as concerning as that revelation may be on its own, **perhaps even more worrisome is that public health experts predict life-threatening infectious disease outbreaks are likely to become more common—meaning we could be susceptible to another pandemic in the future**. Why experts think deadly infectious disease outbreaks could become more common As the Los Angeles Times's Joshua Emerson Smith notes, infectious disease experts for more than ten years now have noted that "[o]utbreaks of dangerous new diseases with the potential to become pandemics have been on the rise—from HIV to swine flu to SARS to Ebola." For instance, a report published in Nature in 2008 found that **the number of emerging infectious disease events that occurred in the 1990s was more than three times higher than it was in the 1940s**. Many experts believe the recent increase in infectious disease outbreaks is tied to human behaviors that disrupt the environment, "such as **deforestation and poaching**," which have led "to increased contact between highly mobile, urbanized human populations and wild animals," Emerson Smith writes. In the 2008 report, for example, researchers noted that about 60% of 355 emerging infectious disease events that occurred over a 50-year period could be largely linked to wild animals, livestock, and, to a lesser extent, pets. Now, researchers believe the new coronavirus first jumped to humans from animals at a wildlife market in Wuhan, China. Along those same lines, some experts have argued that global climate change has driven an increase in infectious diseases—and could continue to do so. A federally mandated report released by the U.S. Global Change Research Program in 2018 warned that warmer temperatures could expand the geographic range covered by disease-carrying insects and pests, which could result in more Americans being exposed to ticks carrying Lyme disease and mosquitos carrying the dengue, West Nile, and Zika viruses. And experts now say continued warming in global temperatures, deforestation, and other environmentally disruptive behaviors have broadened that risk by bringing more people into contact with disease-carrying animals. Further, experts note that infectious diseases today are able to spread much faster and farther than they could decades ago because of increasing globalization and travel. While some have suggested the Covid-19 pandemic could stifle that trend, others argue globalization is likely to continue—meaning so could infectious diseases' far spread.

#### Future pandemics will cause extinction – it only takes one ‘super-spreader’ – US prevention is key

Bar-Yam 16 Yaneer Bar-Yam 7-3-2016 “Transition to extinction: Pandemics in a connected world” <http://necsi.edu/research/social/pandemics/transition> (Professor and President, New England Complex System Institute; PhD in Physics, MIT)

Watch as one of the more aggressive—brighter red — strains rapidly expands. After a time it goes extinct leaving a black region. Why does it go extinct? The answer is that it spreads so rapidly that it kills the hosts around it. Without new hosts to infect it then dies out itself. That the rapidly spreading pathogens die out has important implications for evolutionary research which we have talked about elsewhere [1–7]. In the research I want to discuss here, what we were interested in is the effect of adding long range transportation [8]. This includes natural means of dispersal as well as unintentional dispersal by humans, like adding airplane routes, which is being done by real world airlines (Figure 2). When we introduce long range transportation into the model, the success of more aggressive strains changes. They can use the long range transportation to find new hosts and escape local extinction. Figure 3 shows that the more transportation routes introduced into the model, the more higher aggressive pathogens are able to survive and spread. As we add more long range transportation, there is a critical point at which pathogens become so aggressive that the entire host population dies. The pathogens die at the same time, but that is not exactly a consolation to the hosts. We call this the phase transition to extinction (Figure 4). With increasing levels of global transportation, human civilization may be approaching such a critical threshold. In the paper we wrote in 2006 about the dangers of global transportation for pathogen evolution and pandemics [8], we mentioned the risk from Ebola. Ebola is a horrendous disease that was present only in isolated villages in Africa. It was far away from the rest of the world only because of that isolation. Since Africa was developing, it was only a matter of time before it reached population centers and airports. While the model is about evolution, it is really about which pathogens will be found in a system that is highly connected, and Ebola can spread in a highly connected world. The traditional approach to public health uses historical evidence analyzed statistically to assess the potential impacts of a disease. As a result, many were surprised by the spread of Ebola through West Africa in 2014. As the connectivity of the world increases, past experience is not a good guide to future events. A key point about the phase transition to extinction is its suddenness. Even a system that seems stable, can be destabilized by a few more long-range connections, and connectivity is continuing to increase. So how close are we to the tipping point? We don’t know but it would be good to find out before it happens. While Ebola ravaged three countries in West Africa, it only resulted in a handful of cases outside that region. One possible reason is that many of the airlines that fly to west Africa stopped or reduced flights during the epidemic [9]. In the absence of a clear connection, public health authorities who downplayed the dangers of the epidemic spreading to the West might seem to be vindicated. As with the choice of airlines to stop flying to west Africa, our analysis didn’t take into consideration how people respond to epidemics. It does tell us what the outcome will be unless we respond fast enough and well enough to stop the spread of future diseases, which may not be the same as the ones we saw in the past. As the world becomes more connected, the dangers increase. Are people in western countries safe because of higher quality health systems? Countries like the U.S. have highly skewed networks of social interactions with some very highly connected individuals that can be “superspreaders.” The chances of such an individual becoming infected may be low but events like a mass outbreak pose a much greater risk if they do happen. If a sick food service worker in an airport infects 100 passengers, or a contagion event happens in mass transportation, an outbreak could very well prove unstoppable.

## 2

#### Interpretation: The affirmative debater must specify and separately delineate the types of laborers who will be guaranteed the unconditional right to strike in the text of the 1AC.

#### Strikers’ jobs are a core question of the topic, and there’s no consensus on normal means.

#### Mason, 18 Elinor Mason, Open Democracy, “On Striking, and the Recognition that Ethics are a Collective Affair” (April 3, 2018), <https://www.opendemocracy.net/en/opendemocracyuk/on-striking-and-recognition-that-ethics-are-collective-affair/>

#### The primary aim of a strike is to harm the interests of the employer. Public Sector workers, will, inevitably end up harming the public too. In the public sector, the work we do is a public good, and if we withdraw our labour, we hurt the public. How much harm there is depends on what area, and what sort of public good we are talking about – the potential harm from doctors striking is greater than the potential harm [professors] do here. The harm we do to our students in striking is nonetheless significant, and it needs to be defended.

#### Violation: they don’t

#### Standards:

#### 1] Shiftiness – They can redefine the jobs defended by the 1AC in the 1AR which allows them to recontextualize their enforcement mechanism to wriggle out of DA’s.

#### 2] Real World – Policy makers will always specify about the mandates of the plan. It also means zero solvency, since vague affs get rolled back or circumvented.

#### The shell isn’t regressive or arbitrary – it’s an active part of drafting bills and is central to any advocacy.

#### Paradigms – Fairness – debate is a competitive activity that requires fairness for objective evaluation. Education – it’s why schools fund debate. Drop the debater – a] indicts the aff so drop the arg is drop the debater b] deter future abuse Competing interps – a] reasonability is arbitrary and encourages judge intervention since there’s no clear norm b] it creates a race to the top where we create the best possible norms for debate. No RVIs – a] illogical, you don’t win for proving that you meet the burden of being fair, logic outweighs since it’s a prerequisite for evaluating any other argument b] RVIs incentivize baiting theory and prepping it out which leads to maximally abusive practices. c] Getting faster solves. CX doesn’t check since it moots all prep time. 1NC theory first – a] If I was abusive it was because the 1AC was b] We have more speeches to norm over whether it’s a good idea. Neg abuse o/w aff abuse – we both have 13 minutes but you have persuasive advantages in the 2AR on top of infinite prep time.

## Case

### UV

#### Reasonability on 1AR shells – 1AR theory is crazy aff-biased because the 2AR gets to line-by-line every 2NR standard with new answers that never get responded to– reasonability checks 2AR sandbagging by preventing crazy abusive 1NCs while still giving the 2N a chance.

#### DTA on 1AR shells - They can blow up a blippy 20 second shell to 3 min of the 2AR while I have to split my time and can’t preempt 2AR spin which necessitates judge intervention and means 1AR theory is irresolvable so you shouldn’t stake the round on it.

#### RVIs on 1AR theory – 1AR being able to spend 20 seconds on a shell and still win forces the 2N to allocate at least 2:30 on the shell which means RVIs check back time skew – o/w on quantifiability.

No 1ar theory – allows them to run infinitely abusive shells and dump in the 2ar to win – makes being neg impossible

PICs:

### FW

#### The standard is maximizing pleasure and minimizing pain:

#### Pleasure and pain have intrinsic evolutionary value – neuroscience studies prove

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**Pleasure** is not only one of the three primary reward functions but it also **defines reward.** As homeostasis explains the functions of only a limited number of rewards, the principal reason why particular stimuli, objects, events, situations, and activities are rewarding may be due to pleasure. This applies first of all to sex and to the primary homeostatic rewards of food and liquid and extends to money, taste, beauty, social encounters and nonmaterial, internally set, and intrinsic rewards. Pleasure, as the primary effect of rewards, drives the prime reward functions of learning, approach behavior, and decision making and provides the **basis for hedonic theories** of reward function. We are attracted by most rewards and exert intense efforts to obtain them, just because they are enjoyable [10].

Pleasure is a passive reaction that derives from the experience or prediction of reward and may lead to a long-lasting state of happiness. The word happiness is difficult to define. In fact, just obtaining physical pleasure may not be enough. One key to happiness involves a network of good friends. However, it is not obvious how the higher forms of satisfaction and pleasure are related to an ice cream cone, or to your team winning a sporting event. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure [14].

Pleasure as a hallmark of reward is sufficient for defining a reward, but it may not be necessary. A reward may generate positive learning and approach behavior simply because it contains substances that are essential for body function. When we are hungry, we may eat bad and unpleasant meals. A monkey who receives hundreds of small drops of water every morning in the laboratory is unlikely to feel a rush of pleasure every time it gets the 0.1 ml. Nevertheless, with these precautions in mind, we may define any stimulus, object, event, activity, or situation that has the potential to produce pleasure as a reward. In the context of reward deficiency or for disorders of addiction, homeostasis pursues pharmacological treatments: drugs to treat drug addiction, obesity, and other compulsive behaviors. The theory of allostasis suggests broader approaches - such as re-expanding the range of possible pleasures and providing opportunities to expend effort in their pursuit. [15]. It is noteworthy, the first animal studies eliciting approach behavior by electrical brain stimulation interpreted their findings as a discovery of the brain’s pleasure centers [16] which were later partly associated with midbrain dopamine neurons [17–19] despite the notorious difficulties of identifying emotions in animals.

Evolutionary theories of pleasure: The love connection BO:D

Charles Darwin and other biological scientists that have examined the biological evolution and its basic principles found various mechanisms that steer behavior and biological development. Besides their theory on natural selection, it was particularly the sexual selection process that gained significance in the latter context over the last century, especially when it comes to the question of what makes us “what we are,” i.e., human. However, the capacity to sexually select and evolve is not at all a human accomplishment alone or a sign of our uniqueness; yet, we humans, as it seems, are ingenious in fooling ourselves and others–when we are in love or desperately search for it.

It is well established that modern biological theory conjectures that **organisms are** the **result of evolutionary competition.** In fact, Richard Dawkins stresses gene survival and propagation as the basic mechanism of life [20]. Only genes that lead to the fittest phenotype will make it. It is noteworthy that the phenotype is selected based on behavior that maximizes gene propagation. To do so, the phenotype must survive and generate offspring, and be better at it than its competitors. Thus, the ultimate, distal function of rewards is to increase evolutionary fitness by ensuring the survival of the organism and reproduction. It is agreed that learning, approach, economic decisions, and positive emotions are the proximal functions through which phenotypes obtain other necessary nutrients for survival, mating, and care for offspring.

Behavioral reward functions have evolved to help individuals to survive and propagate their genes. Apparently, people need to live well and long enough to reproduce. Most would agree that homo-sapiens do so by ingesting the substances that make their bodies function properly. For this reason, foods and drinks are rewards. Additional rewards, including those used for economic exchanges, ensure sufficient palatable food and drink supply. Mating and gene propagation is supported by powerful sexual attraction. Additional properties, like body form, augment the chance to mate and nourish and defend offspring and are therefore also rewards. Care for offspring until they can reproduce themselves helps gene propagation and is rewarding; otherwise, many believe mating is useless. According to David E Comings, as any small edge will ultimately result in evolutionary advantage [21], additional reward mechanisms like novelty seeking and exploration widen the spectrum of available rewards and thus enhance the chance for survival, reproduction, and ultimate gene propagation. These functions may help us to obtain the benefits of distant rewards that are determined by our own interests and not immediately available in the environment. Thus the distal reward function in gene propagation and evolutionary fitness defines the proximal reward functions that we see in everyday behavior. That is why foods, drinks, mates, and offspring are rewarding.

There have been theories linking pleasure as a required component of health benefits salutogenesis, (salugenesis). In essence, under these terms, pleasure is described as a state or feeling of happiness and satisfaction resulting from an experience that one enjoys. Regarding pleasure, it is a double-edged sword, on the one hand, it promotes positive feelings (like mindfulness) and even better cognition, possibly through the release of dopamine [22]. But on the other hand, pleasure simultaneously encourages addiction and other negative behaviors, i.e., motivational toxicity. It is a complex neurobiological phenomenon, relying on reward circuitry or limbic activity. It is important to realize that through the “Brain Reward Cascade” (BRC) endorphin and endogenous morphinergic mechanisms may play a role [23]. While natural rewards are essential for survival and appetitive motivation leading to beneficial biological behaviors like eating, sex, and reproduction, crucial social interactions seem to further facilitate the positive effects exerted by pleasurable experiences. Indeed, experimentation with addictive drugs is capable of directly acting on reward pathways and causing deterioration of these systems promoting hypodopaminergia [24]. Most would agree that pleasurable activities can stimulate personal growth and may help to induce healthy behavioral changes, including stress management [25]. The work of Esch and Stefano [26] concerning the link between compassion and love implicate the brain reward system, and pleasure induction suggests that social contact in general, i.e., love, attachment, and compassion, can be highly effective in stress reduction, survival, and overall health.

Understanding the role of neurotransmission and pleasurable states both positive and negative have been adequately studied over many decades [26–37], but comparative anatomical and neurobiological function between animals and homo sapiens appear to be required and seem to be in an infancy stage.

Finding happiness is different between apes and humans

As stated earlier in this expert opinion one key to happiness involves a network of good friends [38]. However, it is not entirely clear exactly how the higher forms of satisfaction and pleasure are related to a sugar rush, winning a sports event or even sky diving, all of which augment dopamine release at the reward brain site. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure.

Remarkably, there are pathways for ordinary liking and pleasure, which are limited in scope as described above in this commentary. However, there are **many brain regions**, often termed hot and cold spots, that significantly **modulate** (increase or decrease) our **pleasure or** even produce **the opposite** of pleasure— that is disgust and fear [39]. One specific region of the nucleus accumbens is organized like a computer keyboard, with particular stimulus triggers in rows— producing an increase and decrease of pleasure and disgust. Moreover, the cortex has unique roles in the cognitive evaluation of our feelings of pleasure [40]. Importantly, the interplay of these multiple triggers and the higher brain centers in the prefrontal cortex are very intricate and are just being uncovered.

Desire and reward centers

It is surprising that many different sources of pleasure activate the same circuits between the mesocorticolimbic regions (Figure 1). Reward and desire are two aspects pleasure induction and have a very widespread, large circuit. Some part of this circuit distinguishes between desire and dread. The so-called pleasure circuitry called “REWARD” involves a well-known dopamine pathway in the mesolimbic system that can influence both pleasure and motivation.

In simplest terms, the well-established mesolimbic system is a dopamine circuit for reward. It starts in the ventral tegmental area (VTA) of the midbrain and travels to the nucleus accumbens (Figure 2). It is the cornerstone target to all addictions. The VTA is encompassed with neurons using glutamate, GABA, and dopamine. The nucleus accumbens (NAc) is located within the ventral striatum and is divided into two sub-regions—the motor and limbic regions associated with its core and shell, respectively. The NAc has spiny neurons that receive dopamine from the VTA and glutamate (a dopamine driver) from the hippocampus, amygdala and medial prefrontal cortex. Subsequently, the NAc projects GABA signals to an area termed the ventral pallidum (VP). The region is a relay station in the limbic loop of the basal ganglia, critical for motivation, behavior, emotions and the “Feel Good” response. This defined system of the brain is involved in all addictions –substance, and non –substance related. In 1995, our laboratory coined the term “Reward Deficiency Syndrome” (RDS) to describe genetic and epigenetic induced hypodopaminergia in the “Brain Reward Cascade” that contribute to addiction and compulsive behaviors [3,6,41].

Furthermore, ordinary “liking” of something, or pure pleasure, is represented by small regions mainly in the limbic system (old reptilian part of the brain). These may be part of larger neural circuits. In Latin, hedus is the term for “sweet”; and in Greek, hodone is the term for “pleasure.” Thus, the word Hedonic is now referring to various subcomponents of pleasure: some associated with purely sensory and others with more complex emotions involving morals, aesthetics, and social interactions. The capacity to have pleasure is part of being healthy and may even extend life, especially if linked to optimism as a dopaminergic response [42].

Psychiatric illness often includes symptoms of an abnormal inability to experience pleasure, referred to as anhedonia. A negative feeling state is called dysphoria, which can consist of many emotions such as pain, depression, anxiety, fear, and disgust. Previously many scientists used animal research to uncover the complex mechanisms of pleasure, liking, motivation and even emotions like panic and fear, as discussed above [43]. However, as a significant amount of related research about the specific brain regions of pleasure/reward circuitry has been derived from invasive studies of animals, these cannot be directly compared with subjective states experienced by humans.

In an attempt to resolve the controversy regarding the causal contributions of mesolimbic dopamine systems to reward, we have previously evaluated the three-main competing explanatory categories: “liking,” “learning,” and “wanting” [3]. That is, dopamine may mediate (a) liking: the hedonic impact of reward, (b) learning: learned predictions about rewarding effects, or (c) wanting: the pursuit of rewards by attributing incentive salience to reward-related stimuli [44]. We have evaluated these hypotheses, especially as they relate to the RDS, and we find that the incentive salience or “wanting” hypothesis of dopaminergic functioning is supported by a majority of the scientific evidence. Various neuroimaging studies have shown that anticipated behaviors such as sex and gaming, delicious foods and drugs of abuse all affect brain regions associated with reward networks, and may not be unidirectional. Drugs of abuse enhance dopamine signaling which sensitizes mesolimbic brain mechanisms that apparently evolved explicitly to attribute incentive salience to various rewards [45].

Addictive substances are voluntarily self-administered, and they enhance (directly or indirectly) dopaminergic synaptic function in the NAc. This activation of the brain reward networks (producing the ecstatic “high” that users seek). Although these circuits were initially thought to encode a set point of hedonic tone, it is now being considered to be far more complicated in function, also encoding attention, reward expectancy, disconfirmation of reward expectancy, and incentive motivation [46]. The argument about addiction as a disease may be confused with a predisposition to substance and nonsubstance rewards relative to the extreme effect of drugs of abuse on brain neurochemistry. The former sets up an individual to be at high risk through both genetic polymorphisms in reward genes as well as harmful epigenetic insult. Some Psychologists, even with all the data, still infer that addiction is not a disease [47]. Elevated stress levels, together with polymorphisms (genetic variations) of various dopaminergic genes and the genes related to other neurotransmitters (and their genetic variants), and may have an additive effect on vulnerability to various addictions [48]. In this regard, Vanyukov, et al. [48] suggested based on review that whereas the gateway hypothesis does not specify mechanistic connections between “stages,” and does not extend to the risks for addictions the concept of common liability to addictions may be more parsimonious. The latter theory is grounded in genetic theory and supported by data identifying common sources of variation in the risk for specific addictions (e.g., RDS). This commonality has identifiable neurobiological substrate and plausible evolutionary explanations.

Over many years the controversy of dopamine involvement in especially “pleasure” has led to confusion concerning separating motivation from actual pleasure (wanting versus liking) [49]. We take the position that animal studies cannot provide real clinical information as described by self-reports in humans. As mentioned earlier and in the abstract, on November 23rd, 2017, evidence for our concerns was discovered [50]

In essence, although nonhuman primate brains are similar to our own, the disparity between other primates and those of human cognitive abilities tells us that surface similarity is not the whole story. Sousa et al. [50] small case found various differentially expressed genes, to associate with pleasure related systems. Furthermore, the dopaminergic interneurons located in the human neocortex were absent from the neocortex of nonhuman African apes. Such differences in neuronal transcriptional programs may underlie a variety of neurodevelopmental disorders.

In simpler terms, the system controls the production of dopamine, a chemical messenger that plays a significant role in pleasure and rewards. The senior author, Dr. Nenad Sestan from Yale, stated: “Humans have evolved a dopamine system that is different than the one in chimpanzees.” This may explain why the behavior of humans is so unique from that of non-human primates, even though our brains are so surprisingly similar, Sestan said: “It might also shed light on why people are vulnerable to mental disorders such as autism (possibly even addiction).” Remarkably, this research finding emerged from an extensive, multicenter collaboration to compare the brains across several species. These researchers examined 247 specimens of neural tissue from six humans, five chimpanzees, and five macaque monkeys. Moreover, these investigators analyzed which genes were turned on or off in 16 regions of the brain. While the differences among species were subtle, **there was** a **remarkable contrast in** the **neocortices**, specifically in an area of the brain that is much more developed in humans than in chimpanzees. In fact, these researchers found that a gene called tyrosine hydroxylase (TH) for the enzyme, responsible for the production of dopamine, was expressed in the neocortex of humans, but not chimpanzees. As discussed earlier, dopamine is best known for its essential role within the brain’s reward system; the very system that responds to everything from sex, to gambling, to food, and to addictive drugs. However, dopamine also assists in regulating emotional responses, memory, and movement. Notably, abnormal dopamine levels have been linked to disorders including Parkinson’s, schizophrenia and spectrum disorders such as autism and addiction or RDS.

Nora Volkow, the director of NIDA, pointed out that one alluring possibility is that the neurotransmitter dopamine plays a substantial role in humans’ ability to pursue various rewards that are perhaps months or even years away in the future. This same idea has been suggested by Dr. Robert Sapolsky, a professor of biology and neurology at Stanford University. Dr. Sapolsky cited evidence that dopamine levels rise dramatically in humans when we anticipate potential rewards that are uncertain and even far off in our futures, such as retirement or even the possible alterlife. This may explain what often motivates people to work for things that have no apparent short-term benefit [51]. In similar work, Volkow and Bale [52] proposed a model in which dopamine can favor NOW processes through phasic signaling in reward circuits or LATER processes through tonic signaling in control circuits. Specifically, they suggest that through its modulation of the orbitofrontal cortex, which processes salience attribution, dopamine also enables shilting from NOW to LATER, while its modulation of the insula, which processes interoceptive information, influences the probability of selecting NOW versus LATER actions based on an individual’s physiological state. This hypothesis further supports the concept that disruptions along these circuits contribute to diverse pathologies, including obesity and addiction or RDS.

#### 3) Actor specificity: states don’t have intent, they can’t take action that benefits everyone equally so they have to use util to decide on the best mode of action

#### 4) Extinction first:

a) philosophers have been debating about morality for centuries and they’re still inconclusive, life is a pre-requisite in order to continue pondering about morality

b) precludes any form of progress in the future

c) causes immense suffering, which is still bad under their FW

d) cognitive biases cause you to underestimate the extent of extinction, which means you should overcompensate to make up for it

#### e) biological life is a prerequisite to any alternative advocacy

#### **No scientific basis for affect---psychological orientations are a result of social surroundings which means the judge should evaluate material consequences before rhetorical ones.**

Emily **Martin 13**. Professor in the Department of Anthropology @ New York University. 2013. “The Potentiality of Ethnography and the Limits of Affect Theory,” Current Anthropology: Vol. 54, No. S7

Many scholars in the humanities have recently engaged with research in neuroscience to posit a view of a precognitive, preindividual stage of human perception that promises unrealized dimensions of potentiality. Here are some descriptions of affect in the words of two theorists from quite different disciplines. Nigel Thrift, a geographer, writes, In this paper I want to think about affect in cities and about affective cities … and, above all, about what the political consequences of thinking more explicitly about these topics might be—once it is accepted that the political decision is itself produced by a series of inhuman or pre-subjective forces and intensities. (Thrift 2004:58) Eric Shouse, a cultural critic, states, An affect is a non-conscious experience of intensity; it is a moment of unformed and unstructured potential. … Affect is always prior to and/or outside of consciousness. (Shouse 2005) There are a number of importantly different varieties of affect theory. Some are indebted to Silvan Tomkins’s (2008) writing and others to Francisco Varela’s work on open systems, often in the style of Deleuze and Guatarri (1987; Varela 1999). But taking into account their differences, historian Ruth Leys (2011) summarizes some of the main assumptions they hold in common: “For the theorists in question, affects are ‘inhuman,’ ‘pre-subjective,’ ‘visceral’ forces and intensities that influence our thinking and judgments but are separate from these. Whatever else may be meant by the terms affect and emotion … the affects must be non-cognitive, corporeal processes or states” (437).7 For such theorists, affect is, as Brian Massumi (2002) asserts, “irreducibly bodily and autonomic” (28). Other enthusiastic contributors to affect theory from a wide range of fields, include Eve Sedgwick, Patricia Clough, Lauren Berlant, Elizabeth Grosz, Rosie Braidotti, Kathleen Stewart, Lawrence Grossberg, Elizabeth Wilson, and Antonio Damasio.8 This work relates directly to the theme of potentiality. Massumi, one of the most widely read writers on affect theory, stresses its connection with “potential” in a chapter called “Autonomy of Affect.” Something that happens too quickly to have happened, actually, is virtual. The body is as immediately virtual as it is actual. The virtual, the pressing crowd of incipiencies and tendencies, is a realm of potential. In potential is where futurity combines, unmediated, with pastness, where outsides are infolded and sadness is happy (happy because the press to action and expression is life). (Massumi 2002:30–31; italics in original) The definition Massumi gives to the concept of potential here seems to be “unlimited.” In particular, the affective realm is not limited by what he sees as the constraints of sociolinguistic meaning. What motivates these scholars? They do not all agree on every point, and I will be glossing over their differences here, but Leys identifies some common motivations. Centrally, they claim that the role of reason and rationality in politics, ethics, and aesthetics has been overvalued. It is too disembodied and “unlayered” an account of the way people actually form opinions (Leys 2011:436). Given this, they adopt the position that humans are corporeal creatures with important subliminal affective intensities and resonances that are decisive in the way we form opinions and beliefs. They share an insistence that we ignore affects at our peril because they can be manipulated deliberately and because they contain the potential for creativity and transformation. In sum, the affects are independent of and before language. They are before “intentions, meanings, reasons, and beliefs”; they are “non-signifying, autonomic processes that take place below the level of conscious awareness and meaning”; they are “‘inhuman,’ ‘pre-subjective,’ ‘visceral’ forces that influence our thinking and judgments” even though they are noncognitive and corporeal (Leys 2011:437, 443). Among the affects, at the physiological level, categories that are cognitively separate (such as sad or pleasant) get connected, and this is one way the affects are thought to open up new and creative potential (Massumi 2002:29). Massumi—following Deleuze—considers that the affects are characterized by “intensity” rather than content. Affective states, characterized by intensity, are nonsemantic, nonlinear, autonomous, vital, singular, indeterminate, and disruptive of fixed (conventional) meanings. Hence the affects provide a rich reservoir of unpredictable potentiality. All this means there is a gap between the signifying order (content, meaning, convention) and the affective order. What exactly is the gap? According to Leys (2011), there is “a constitutive disjunction between our emotions on the one hand and our knowledge of what causes and maintains them on the other, because … affect and cognition are two separate systems” (437). These theorists generally argue that affect is independent of meaning and signification; they deny the role of intentionality and meaning at the affective level (Leys 2011:450). There is a gap or “radical dichotomy between the ‘real’ causes of affect and the individual’s own interpretation of these causes” (Tomkins, quoted in Leys 2011:437). In Tomkins’s view, affects are “phylogenetically old, automatic responses of the organism that have evolved for survival purposes and lack the cognitive characteristics of the higher-order mental processes and are separate from them” (Leys 2011:437). The affects are located subcortically in the brain, in the part of the brain that processes universal, natural kinds (such as the so-called basic emotions). The “basic emotions” or “affect programs” are genetically hardwired responses, products of human evolution, that are expressed in autonomic behavioral patterns (such as characteristic facial expressions for fear or disgust) (Damasio 1994; Leys 2011:438–439; Sedgwick 2003). There is one part of affect theory that relates directly to the theme of potentiality. This is the supposition that there is no way to include both mind and body in an account of meaning, making it necessary to posit a level below the gap where bodily aspects of affect go on; it is the unformed, precognitive aspects of the lower level of the affects that make them seem filled with potential. This move separates intentionality or meaning from affect and assumes that intentionality and meaning are purely mental or cognitive. There are many points at which this argument can be criticized.9 Some critics have shown in detail how the psychological evidence that is the basis for the tenets of affect theory is questionable and out of date (Leys 2010). Others have detailed the ways affect theorists sometimes misread biological and psychological research (Papoulias and Callard 2010). For example, in a 1985 experiment by Benjamin Libet, subjects were asked to decide to flex a finger at will and to note the exact time they made the decision. The experimenters also measured the exact time of any rise in the subject’s brain activity and the exact time of the subject’s finger flexing. The results showed that there was a 0.2-second delay between the brain’s activity spike and the subject’s decision, then a 0.3-second delay between the subject’s decision and his finger flexing. In all, there seemed to be a half-second delay between the subject’s brain’s initial activity and the subject’s finger actually flexing (Libet 1985). This half-second gap provides Massumi (2002:29) with the evidence of a gap between (lower) brain activity and (higher) decision, intentionality and action. He concludes that material processes of the brain generate our thoughts; conscious thoughts, decisions, and intentions come too late to be very significant. At most they are reflections after the fact. No one would doubt that the brain is necessary for thought and action. But Massumi and other affect theorists place too much weight on this experimental evidence. Other studies have shown that Libet’s evidence is open to contrary interpretations from its publication in 1985 up until the present (Banks and Isham 2009, 2010; Gomes 1998). At the very least, before drawing such far-reaching conclusions, one would hope scholars of cultural phenomena would consider the experimental structures that generate psychological data. As I noted earlier, the psychological subject becomes a particular kind of stripped down entity, a data-emitting being whose subjective experience is outside the frame of the experiment. Perhaps this is not the most adequate model for understanding human intentionality. The mistakes and confusions in this position are laid bare by the approach pioneered in the Cambridge Expedition and later pursued in Wittgenstein’s account of intention, remembering, and other psychological terms. That account argues that our criteria for whether they have happened are normative and conventional. These criteria are located in use, not in the interior psyche. Saying that criteria for meaning are normative and conventional does not mean that everyone must agree, that there is harmony, or that there is not conflict or change. It means that criteria for meaning cannot arise from the mind of a single, isolated individual or from a primitive part of the brain. Drawing on Wittgenstein, Elizabeth Anscombe argued for a social account of intentional actions. Anscombe was arguing against the common-sense view of an intention as composed of an action plus an interior mental state. Looking at the ways we speak of an action as done “intentionally,” she concluded that “intention” in everyday language means something done as an action of a whole person, a moral agent, “under a description.” The relevant description would include the past and present social contexts relevant to the person as much as his or her interior states (Anscombe 1957). What is at stake is whether we understand intentional human action as gaining its meaning in an interior, hidden, and thus socially inaccessible space instead of in the light of social experience. Anscombe worked in a Wittgensteinian mode to move intentionality away from the private interiority of the mind into the space of social interaction, where meaning in language is constituted. Wittgenstein conveyed this message through many homely examples: I tell someone: “I’m going to whistle you the theme …” It is my intention to whistle it, and I already know what I am going to whistle. It is my intention to whistle this theme: have I then already, in some sense, whistled it in thought? (Wittgenstein 1967:2e) One would like to ask: “Would someone who could look into your mind have been able to see that you meant to say that?” Suppose I had written my intention down on a slip of paper, then someone else could have read it there. And can I imagine that he might in some way have found it out more surely than that? Certainly not. (Wittgenstein 1967:8e; italics in original) The point is that intentionality emerges from the whole structure of events from the inception of the notion to the execution of the action. We decide whether someone had a certain intention not by referring to an event or template in the mind but by whether his or her gestures, postures, words, and actions fit with a socially defined notion of being about to whistle a tune or meaning to say something. Sometimes a mental event (whistling the tune or saying the words in one’s head) might precede the action and sometimes not, but in any case, that interior event could not constitute a usable criterion for whether someone was intending to whistle or meaning to speak. Removing any interest in intentionality—conceived as a social process, as affect theory does—removes socially produced contexts of use as a necessary and sufficient basis for what actions and words mean to people. Tackling mathematics, the realm of symbolic life perhaps most difficult to regard as contingent on social norms, Wittgenstein commented that people found the idea that numbers rested on conventional social understandings “unbearable” (Rhees 1970). Why is there resistance to allowing the meaning of human acts to rest on social understandings all the way down? Why such an idea is unbearable returns us to the Cambridge Expedition. Rivers and the others thought that plunging into a different social and physical environment would make them different people, comparable in many ways to the islanders. In this view there is a vast reservoir of potential for change and creative adaption. But this view also entails that there are limits to human experience set by whatever social contexts are relevant. It does not compare with Massumi’s (2002) virtual realm, the “pressing crowd of incipiencies and tendencies” (30). Perhaps it is any limitation that seems unbearable in the present era, where the drumbeat of the necessity for constant growth is heard and felt everywhere. Saying that social context limits what is relevant does not close off experiences that are unconscious, inchoate, or unspeakable. Anthropologists and sociolinguists have long found ways to address the entirely social meanings of things that are repressed from speech or action but nonetheless contain powerful kinds of potentiality. Years ago Gayle Rubin (1975) analyzed the “sex/gender system” as a “set of arrangements by which a society transforms biological sexuality into products of human activity” (159). More recently, in Brainstorm, Jordan-Young (2010) rephrases this: “Gender … is a social effect, rather than the result of human biology. Sex in this regard is conceived as the remainder—the material body, and those bodily interactions that are necessary to reproduce it” (13). Borrowing from this way of putting it, we could say that like the sex/gender system, the affect/intentionality system is a set of arrangements by which a society transforms neurological processes into products of human activity. Affects are a social effect rather than the result of human biology. Intentions in this regard are conceived as the remainder—the material brain and those neurological interactions that are necessary to reproduce it.