# R3 – 1NC – TFA

## 1

#### Interpretation: The affirmative debater must articulate a distinct ROB in the form of a delineated text in the 1AC speech.

#### Violation:

#### Standards:

#### 1 - Strat Skew – Absent a text in the 1AC, they can read multiple pieces of offense under different ROBs and then read a new one in the 1AR so they never substantively lose debates under the ROB. They can warrant things like condo logic, consequentialist policy-making offense for their aff, or kritikal impacts that deviate from their plan and then read an incredibly nuanced ROB in the 1ar that makes it so only the conceded or under-covered offense matters. Stable advocacies are key to fairness since otherwise you aren’t bound by anything you say. Infinite abuse – Reading a new ROB in the 1AR makes it so all you have to do is dump on the 1N ROB and marginally extend your warrants in the 2ar and the neg can’t do anything about it since there is no 3NR to answer the 2ar weighing or extrapolations, you already have conceded offense, all you need is the ROB.

#### 2 - Reciprocity –

#### A - restarting the ROB debate in the 1ar puts you at a 7-6 advantage on the framing debate since I have to propose one in the 1N since 2N arguments are new – putting it in the aff makes it 13-13

#### B - you have one more speech to contest my ROB and weigh, I can only possibly answer your ROB in the 2n but you can do comparative weighing in the 2ar

#### C - I can only read a ROB in the 1N so you should read it in your first speech as well – that’s definitionally an equal burden.

#### Paradigm:

#### Fairness – Debate is a competitive activity governed by rules. You can’t evaluate who did better debating if the round is structurally skewed, so fairness is a gateway to substantive debate.

#### DTD – Time spent on theory cant be compensated for, the 1nc was already skewed, and its key to deterring abuse.

#### Prefer Competing interps -

#### 1. reasonability is arbitrary and invites judge intervention.

#### 2. it Causes a race to the bottom where debaters push the limit as to how reasonably abusive, they can be.

#### No RVI’s -

#### 1. Chills some debaters from reading theory against abusive postions.

#### 2. incentivizes theory baiting where you can just bait theory to win.

#### NC theory first - 1] Abuse was self-inflicted- They started the chain of abuse and forced me down this strategy 2] Norming- We have more speeches to norm over whether it’s a good idea

## 2

#### Interpretation: The affirmative must define “free press” in a delineated line in the 1AC.

#### Multiple types of press that fit into the definition- explicit clarification needed.

Cambridge Dictionary, ND, "free press," No Publication, https://dictionary.cambridge.org/us/dictionary/english/free-press

If a country has a [free](https://dictionary.cambridge.org/us/dictionary/english/free) pres[s](https://dictionary.cambridge.org/us/dictionary/english/press), [its](https://dictionary.cambridge.org/us/dictionary/english/its) newspapers, magazines, and [television](https://dictionary.cambridge.org/us/dictionary/english/television) and [radio](https://dictionary.cambridge.org/us/dictionary/english/radio) stations are [able](https://dictionary.cambridge.org/us/dictionary/english/able) to express any opinions they want, even if these [criticize](https://dictionary.cambridge.org/us/dictionary/english/criticize) the government and other organizations:

#### Violation: They didn’t

#### Negate:

#### 1 – Shiftiness - they can redefine what free press the 1ac defends in the 1ar which decks strategy and allows them to wriggle out of negative positions which strips the neg of social media DAs, specific news stations DAs, and case answers. They will always win on specificity weighing.

#### CX can’t resolve this and is bad because

#### A – judges don’t flow it

#### B – still skews our prep

#### C - They can lie and no way to check

#### 2 - Real World- policy makers will always specify who the actor of change is. That outweighs since debate has no value without portable application.

#### This spec shell isn’t regressive- it literally determines who the affirmative implements the aff through.

## 3

#### Interpretation: Debaters may not justify 1ar theory is dtd, no rvi, competing interps, no 2n theory paradigm issues , and it’s the highest layer

#### Violation: its all in the underview

#### Standard:

#### 1. Infinite Abuse - their norm justifies the affirmative auto winning every round since they can read infinite risk free 1AR shells with DTD and Competing interp. And since I don’t have 2n paradigm issues I can’t contest it. Even if I uplayer I can’t win since your shell is the highest layer. Answering the argument doesn’t solve because you can read infinite of these paradigm issues in the 1ac making it impossible. Norming is an independent voter since justifying the value of debate necessarily justifies the norms of the activity being good in order for debate to be valuable.

## 4

#### Interpretation: Debaters may not read theoretically justified frameworks.

#### Violation:

#### Standards:

#### 1. Phil Ed – best happens with clash of justifications for theories because we clash over warrants, reading a TJF kills by decentralizing clash over framework arguments. It enables debaters to read generic justifications because they’re able to ignore constraints like actor specificity which changes based on the res, which enables them to ignore the nuances of different philosophies in different contexts. Clash is key to phil ed cuz if we don’t know how to justify different ethics normatively, it defeats the point of debating offense under those ethics if we don’t actually know why the ethic is logical in a real world context.

## 5

#### The role of the ballot is to determine whether the resolution is a true or false statement – anything else moots 7 minutes of the nc – their framing collapses since you must say it is true that a world is better than another before you adopt it.

#### They justify substantive skews since there will always be a more correct side of the issue but we compensate for flaws in the lit.

#### Scalar methods like comparison increases intervention – the persuasion of certain DA or advantages sway decisions – T/F binary is descriptive and technical.

#### a priori’s 1st – even worlds framing requires ethics that begin from a priori principles like reason or pleasure so we control the internal link to functional debates.

#### The ballot says vote aff or neg based on a topic – five dictionaries[[1]](#footnote-1) define to negate as to deny the truth of and affirm[[2]](#footnote-2) as to prove true which means it’s constitutive and jurisdictional. I denied the truth of the resolution by disagreeing with the aff which means I’ve met my burden.

#### 1] In[[3]](#footnote-3) used as a function word to indicate means, medium, or instrumentality but the rez doesn’t specify so vote neg on presumption

#### 2] a[[4]](#footnote-4) “used when expressing rates or ratios; in, to, or for each; per” but there are no numbers in the rez

#### 3] democracy[[5]](#footnote-5) The practice or principles of social equality but its logically impossible to be inside principles.

#### 4] free[[6]](#footnote-6) conveying only the broad sense; not literal, so literal objectivity is impossible, vote neg on presumption

#### 5] press[[7]](#footnote-7) Move or cause to move into a position of contact with something by exerting continuous physical force, but theres no movement in the rez

#### 6] to[[8]](#footnote-8) means “expressing motion in the direction of (a particular location)” but the rez doesn’t have direction or location

#### 7] objectivity[[9]](#footnote-9) means the state or quality of being objective and fair, but news has to have one correct literature base

#### 8] over[[10]](#footnote-10) means above or higher than something else, sometimes so that one thing covers the other; above, but theres no positions in the resolution

#### 9] advocacy[[11]](#footnote-11) means the work of defending people in court, but there are no courts in the resolution.

## 6

#### Ukraine war is optimistic, but maintaining outside support and low Russian morale’s key.

* Ukraine getting outside help from west
* Kyiv’s history in soviet union and ties to Russia lowers morale
* Low morale destroys new conscriptions which is key for Russia
* Gives example of Ukrainian propaganda dissolving Russian army

Knispel interviewing Goemans 22 [Sandra Knispel, (Hein Goemans, a professor of political science at the University of Rochester, is an expert on international conflicts—on how they begin and end.) 3-9-2022, "How to end the war in Ukraine," NewsCenter, https://www.rochester.edu/newscenter/how-to-end-the-ukraine-war-514522/]

Q&A with Hein Goemans One or both sides must change their demands as a precursor to ending the war. What’s likely to happen in the current scenario? Putin made a big mistake by committing himself to total victory in Ukraine. Goemans: It depends on the performance on the battlefield, and a country’s expectations of outside help. Russia should have become more pessimistic in the last few days because Ukraine has shown its ability to inflict far greater costs on Russia than the Kremlin had anticipated. One would expect Russia therefore to lower its demands but we’ve seen very little evidence of that so far—only the demand of denazification seems to have been dropped. Overall, Putin still maintains that everything is going according to plan. If this continues, Ukrainian sovereignty may be at stake, which is dangerous and perhaps even stupid of Putin, who seems to be committing himself to total victory. If he can’t get it, he’ll be responsible and that makes a coup against him more likely. How has the situation changed for Ukraine and its demands for ending the war? Ukraine right now is not likely to accept anything less than full independence as a nation. Goemans: Ukraine must have gotten a lot more optimistic in recent days. Not just because its army has been doing reasonably well but because of the demonstrated incompetence of the Russian army. Yes, the Russians are still much stronger and much bigger, but there are problems with morale in the Russian army, and you see the remarkable level of Ukrainian support from the West. Ukrainians are still fighting for independence of their homeland and may maintain their claims to Luhansk and Donetsk in the Donbas region in south-eastern Ukraine. I don’t know whether they’d willing to give up Crimea at this point. One avenue worth exploring in peace negotiations might be true plebiscites, overseen by international observers. Can Putin credibly commit not to go beyond the invasion of Ukraine? In his February 21 speech, he expressed his aim to reconstitute the Russian Empire. Goemans: No, he cannot. Nobody would believe him if he said he’d stop at Ukraine. People are pointing to the failed attempt to appease Hitler with the Munich Agreement in 1938. So that’s a non-starter, especially with Putin’s February 21st speech in which he said he wants to reconstitute greater Russia or the Russian Empire. Western nations can no longer say, ‘Oh, he doesn’t mean that. We can still do business there and we can have gas if we give him just a little bit, maybe two Ukrainian towns or so.’ He made that impossible. Yes, the analogy is overused, but it really is like Hitler in 1938. People heard the speech and the appeasement alarm bells went off. Global view of Russia and former Soviet satellite countries labeled. (University of Rochester illustration / Michael Osadciw) A deciding factor in this war is going to happen in the next couple of weeks. Can you explain the role of Russian conscripts in this context? The question is how many new conscripts will actually show up because it’ll determine the strength of the Russian army on the ground in Ukraine. Goemans: There are two things to keep in mind: First, the new Russian conscription class is going to be drafted in April. It’ll be very informative to see how many people do not show up. Secondly, are the Russians really going to bomb Kyiv, a so-called “hero city of the Soviet Union,” into rubble like they did with Chechnya’s capital Grosny? Are they willing to kill tens of thousands of people? Those two benchmarks will happen in the next few weeks. How precarious is the situation for Putin’s own survival? He may keep fighting, even if he knows he’s losing, because the alternative may mean signing his own death warrant. Goemans: Putin may count on the fact that Ukrainians will give in if Kyiv is bombed. But if they don’t, that should make him more pessimistic. One would think that he’d have to lower his demands, and that at that point, some kind of deal would be possible. But Putin must come home with some kind of victory because otherwise he’s literally dead. That means he may keep fighting, even if he knows he’s losing, because the alternative is signing his own death warrant. That’s what happened in the First World War. Germany kept fighting for years, even though the leadership knew that they were losing within the first weeks of the war. You’re not hyperbolic when you say Putin is signing his own death warrant with a defeat? History has plenty of examples here. Goemans: No, I’m not. In a regime like Russia—which is clearly not a democracy, but also not quite a dictatorship—if you win a war, you’re the great hero; if you lose a war, you have shown your incompetence and you’ll be removed, which I have explored in my own research. You’ll be held as what’s known as a “culpable leader”—culpable for the fact that the gains of the war do not outweigh the losses. Historically such leaders have been removed from office, and they either have gone into exile, or have been jailed or killed. A recent example is the former Yugoslav President Slobodan Milosevic. What’s frightening, and there are already signs of this, is that Putin is moving towards a dictatorship because only full repression will prevent a coup against him. In that case, both the Russian and the Ukrainian people will suffer horribly. What do you think would happen with the war if Putin’s regime were to be overthrown? “Most likely, Ukraine would strengthen its demands and now want Crimea back.” Goemans: It’s possible that the entire Russian superstructure would be wiped out—not just Putin, but all his cronies, his security advisers, the oligarchs. That whole top layer could be removed. So the question is, if there’s a coup against Putin, what would the new Russian government insist on? They’re not necessarily all going to say, “Okay, sorry Ukraine, we made a mistake. Please excuse us.” And Ukrainians would not necessarily accept that anyway. Most likely, Ukraine would strengthen its demands and want Crimea back. Putin has said he wants to effect regime change in Ukraine—would a new government even have any credibility with Ukrainians? Ukrainians have become unified against Russia. Goemans: I don’t think so. There’s a new serious form of unity among the Ukrainian people and Ukrainian identity, and it’s in direct opposition to the Russians. It would be very dangerous for any Ukrainian government to be seen as colluding with Russia. Any such attempt would likely result in the formation of independent fighting units that would keep going to get the Russians out of Ukraine. What are the minimum terms the West can accept? The West cannot accept Putin’s winning in Ukraine, but they might we willing to accept concessions on the Luhansk and Donetsk regions, if Ukraine is willing to entertain that. Goemans: That’s an important question. The West—that is Western Democracies—cannot, in my opinion, accept a victorious Putin. The West is genuinely and correctly afraid of “salami tactics”—if he takes Ukraine, he will next take Georgia, and then he will go to the Baltics. Annexation wouldn’t end, so it has to stop now. Particularly because Putin so unmistakably declared his intentions in that speech on February 21st. Would the West accept Crimea as being Russian? I don’t know. Would the West accept Luhansk along the provincial administrative borders (which is not the same as the current line of control, which is currently roughly half of the of the provinces)? I doubt that. I think the West may demand a return to the status quo ante. I don’t know if they can get that. Maybe Ukraine would have to give up the entire administrative region of Luhansk and Donetsk. But the West will want to go back to the status quo. When do you think the war will end? Either in the next month and a half, or it’ll be years. Goemans: Either in the next month and a half, or it’ll be years. Months, if the new class of Russian conscripts in April fails to turn up. Otherwise I’m not optimistic. It’ll be ongoing bloodshed, pulverizing of Ukrainian cities, coupled with insurgencies, and Russia will never have full control of Ukraine. But going back to the video of the captured Russian soldier who was ashamed of taking part in the invasion of Ukraine: If he returns to Russia, he’ll most likely be killed. Yet, he’s speaking up and he’s hoping that he affects another guy, and then maybe two other guys, and it spreads like that. That’s how an army dissolves. On the other hand, that’s also how a Ukrainian army becomes more determined.

#### Ukrainian propaganda and advocacy is key to the war effort and defeating Russia.

Stuart A. Thompson 22 (reporter in the technology department covering misinformation and disinformation.) and Davey Alba (technology reporter covering disinformation. In 2019, she won a Livingston Award for excellence in international reporting and a Mirror Award) 3/3/2022, nytimes, Fact and Mythmaking Blend in Ukraine’s Information War, https://www.nytimes.com/2022/03/03/technology/ukraine-war-misinfo.html

Just days into the Russian invasion of Ukraine, a pilot with a mysterious nickname was quickly becoming the conflict’s first wartime hero. Named the Ghost of Kyiv, the ace fighter had apparently single-handedly shot down several Russian fighter jets. The story was shared by the official Ukraine Twitter account on Sunday in a thrilling montage video set to thumping music, showing the fighter swooping through the Ukrainian skies as enemy planes exploded around him. The Security Service of Ukraine, the country’s main security agency, also relayed the tale on its official Telegram channel, which has over 700,000 subscribers. The story of a single pilot’s beating the superior Russian air force found wide appeal online, thanks to the official Ukraine accounts and many others. Videos of the so-called Ghost of Kyiv had more than 9.3 million views on Twitter, and the flier was mentioned in thousands of Facebook groups reaching up to 717 million followers. On YouTube, videos promoting the Ukrainian fighter collected 6.5 million views, while TikTok videos with the hashtag #ghostofkyiv reached 200 million views. There was just one problem: The Ghost of Kyiv may be a myth. While there are reports of some Russian planes that were destroyed in combat, there is no information linking them to a single Ukrainian pilot. One of the first videos that went viral, which was included in the montage shared by the official Ukraine Twitter account, was a computer rendering from a combat flight simulator originally uploaded by a YouTube user with just 3,000 subscribers. And a photo supposedly confirming the fighter’s existence, shared by a former president of Ukraine, Petro Poroshenko, was from a 2019 Twitter post by the Ukrainian defense ministry. When the fact-checking website Snopes published an article debunking the video, some social media users pushed back. “Why can’t we just let people believe some things?” one Twitter user replied. “If the Russians believe it, it brings fear. If the Ukrainians believe it, it gives them hope.” **In the information war over the invasion of Ukraine, some of the country’s official accounts have pushed stories with questionable veracity, spreading anecdotes, gripping on-the-ground accounts and even some unverified information that was later proved false, in a rapid jumble of fact and myth.** The claims by Ukraine do not compare to the falsehoods being spread by Russia, which laid the groundwork for a “false flag” operation in the lead-up to the invasion, which the Biden administration sought to derail. As the invasion neared, Russia falsely claimed that it was responding to Ukrainian aggression and liberating citizens from fascists and neo-Nazis. And since the assault began, Russia made baseless claims that Ukrainians had indiscriminately bombed hospitals and killed civilians. **Instead, Ukraine’s online propaganda is largely focused on its heroes and martyrs, characters who help dramatize tales of Ukrainian fortitude and Russian aggression.** But the Ukrainian claims on social media have also raised thorny questions about how false and unproven content should be handled during war — when lives are at stake and a Western ally is fighting for its survival against a powerful invading force. **“Ukraine is involved in pretty classic propaganda,” said Laura Edelson, a computer scientist studying misinformation at New York University. “They are telling stories that support their narrative. Sometimes false information is making its way in there, too, and more of it is getting through because of the overall environment.” Anecdotes detailing Ukrainian bravery or Russian brutality are crucial to the country’s war plan, according to experts, and they are part of established war doctrine that values winning not just individual skirmishes but also the hearts and minds of citizens and international observers. That is especially important during this conflict, as Ukrainians try to keep morale high among the fighters and marshal global support for their cause. “If Ukraine had no messages of the righteousness of its cause, the popularity of its cause, the valor of its heroes, the suffering of its populace, then it would lose,” said Peter W. Singer, a strategist and senior fellow at New America, a think tank in Washington. “Not just the information war, but it would lose the overall war.”** In previous wars, combatants would try to sabotage enemy communication and limit the spread of wartime propaganda, even cutting physical communication lines like telegraph cables. **But there are fewer such cables in the internet age, so in addition to downing communication towers and disrupting pockets of internet access, the modern strategy involves flooding the internet with viral messages that drown out opposing narratives. That digital battle moved at startling speed, experts noted, using an array of social media accounts, official websites and news conferences streamed online to spread Ukraine’s message. “You have to have the message that goes the most viral,” Mr. Singer said.** That was the case with another report from Ukraine involving a remarkable confrontation on Snake Island, an outpost in the Black Sea. According to an audio recording released by Pravda, a Ukrainian newspaper, and later verified by Ukraine officials, 13 border guards were offered a frightening ultimatum by an advancing Russian military unit: Surrender or face an attack. The Ukrainians responded instead with an expletive, before apparently being killed. Audio of the exchange went viral on social media, and the clip posted on Feb. 24 by Pravda received more than 3.5 million views on YouTube. President Volodymyr Zelensky of Ukraine personally announced the deaths in a video, saying each guard would be awarded the title Hero of Ukraine. But just days later, Ukrainian officials confirmed in a Facebook post that the men were still alive, taken prisoner by Russian forces. Social media has become the main conduit for pushing the information, verified or not, giving tech companies a role in the information war, too. The fake Ghost of Kyiv video, for instance, was flagged as “out of context” by Twitter, but the montage posted to Ukraine’s official Twitter account received no such flag. The false photo posted by Mr. Poroshenko, the former Ukrainian president, also had no flag. While Twitter monitors its service for harmful content, including manipulated or mislabeled videos, it said tweets simply mentioning the Ghost of Kyiv did not violate its rules. “When we identify content and accounts that violate the Twitter Rules, we’ll take enforcement action,” the company said. In exercising discretion over how unverified or false content is moderated, social media companies have decided to “pick a side,” said Alex Stamos, the director of the Stanford Internet Observatory and a former head of security at Facebook. **“I think this demonstrates the limits of ‘fact-checking’ in a fast-moving battle with real lives at stake,” Mr. Stamos said. He added that technology platforms never created rules against misinformation overall, instead targeting specific behaviors, actors and content. That leaves the truth behind some wartime narratives, like an apparent assassination plot against Mr. Zelensky or simply the number of troops killed in battle, fairly elusive, even as official accounts and news media share the information.** Those narratives have continued as the war marches on, revealing the contours of an information war aimed not just at Western audiences but also at Russian citizens. At the United Nations on Monday, the Ukrainian ambassador, Sergiy Kyslytsya, shared a series of text messages that he said had been retrieved from the phone of a dead Russian soldier. **“Mama, I’m in Ukraine. There is a real war raging here. I’m afraid,” the Russian soldier apparently wrote, according to Mr. Kyslytsya’s account, which he read in Russian. The tale seemed to evoke a narrative advanced by officials and shared extensively on social media that Russian soldiers are poorly trained and too young, and don’t want to be fighting their Ukrainian neighbors. “We are bombing all of the cities together, even targeting civilians.” The story, whether true or not, appears tailor-made for Russian civilians — particularly parents fretting over the fate of their enlisted children, experts said. “This is an age-old tactic that the Ukrainians are trying to use, and that is to draw the attention of the mothers and the families in Russia away from the more grandiose aims for war onto, instead, the human costs of war,” said Ian Garner, a historian focusing on Russia who has followed Russian-language propaganda during the conflict. “We know that this is really effective.”** Official Ukrainian accounts have also uploaded dozens of videos purportedly showing Russian prisoners of war, some with bloody bandages covering their arms or face. In the videos, the prisoners are heard denouncing the invasion. The videos may raise questions about whether Ukraine is violating the Geneva Conventions, which has rules about sharing images of war prisoners. Russia has also engaged in its own form of mythmaking, but experts say it has been far less effective. Rather than targeting international observers with emotional appeals, Russia has focused on swaying its own population to build support for the battle, Dr. Garner said. Since Russian state media is still calling the conflict a “special military operation” and not a war — in line with the description used by President Vladimir V. Putin — state broadcasters are left “trying to talk about a war that is apparently not happening,” Dr. Garner said. **The Russian government “can’t play to its strongest narratives of individual sacrifice,” he added, instead relying on stories of Ukrainians bombing hospitals and civilians, providing no evidence. Ukraine’s efforts to amplify its own messages also leave little room for Russia to dominate the conversation, said Mr. Singer, the strategist from New America.** “A key to information warfare in the age of social media is to recognize that the audience is both target of and participant in it,” he said. He added that social media users were “hopefully sharing out those messages, which makes them combatants of a sort as well.”

#### Ukraine’s info war is key to demoralization, foreign assistance, and defeating Russia.

Sinan Aral 22 (director of the MIT Initiative on the Digital Economy and author of "The Hype Machine) 3/1/2022, Ukraine is winning the information war, Washington Post, <https://www.washingtonpost.com/outlook/2022/03/01/information-war-zelensky-ukraine-putin-russia/>

**Today, the information war in Ukraine is more intense, more tightly contested and arguably more important than ever because motivating volunteer fighters at home and encouraging foreign support abroad are critical to success. And this time, it seems, Russia is losing. Reports abound on social media of more than 4,000 Russian casualties, images of crippled Russian helicopters and armored vehicles and cellphone videos of savage Russian missile attacks on civilian targets. This mix of official Ukrainian war statistics combined with videos (both verified and unverified), posted by Ukrainian citizens and sympathizers from the front lines, is painting a vivid picture of a homegrown resistance successfully slowing the advance of a much larger and ostensibly better organized military machine. Facebook posts showing Ukrainians kneeling in front of tanks to stop their progress and Twitter images of women and children sheltering in subways and basements set the emotional backdrop of senseless aggression against a peaceful nation. Viral videos and audio clips evoke a defiant optimism impossible to ignore: Ukrainian President Volodymyr Zelensky appearing via his cellphone walking the streets of Kyiv, unharmed, in a “proof of life” demonstration emphasizing his willingness to stay and fight for his country, despite a U.S. offer to evacuate him, for example, or the recording of soldiers in an isolated Ukrainian outpost on Snake Island, in the Black Sea, cursing and telling off the Russian Black Sea Fleet. These stories are spreading rapidly on social media and subsequently echoing through official news channels in a media feedback loop that amplifies the information war and broadcasts it on television sets all over the world.** Zelensky, in particular, is deftly outmaneuvering Putin in this information war. He rallied Ukrainian men to defend their homeland, used the encrypted messaging platform [Telegram to speak directly to the Russian people](https://www.youtube.com/watch?v=OMTeSsnNCw0) to counter Putin’s narrative, urged the West to step up its assistance in defense of law, order and peace, and even [pleaded with foreigners](https://www.nbcnews.com/news/world/live-blog/russia-ukraine-live-updates-n1290057/ncrd1290087#liveBlogCards) to cross the border into Ukraine to defend Western democracy. While misinformation exists on both sides, Zelensky gives the impression that he’s more committed to truth and transparency. In contrast, Russia has been secretive, obfuscating the true extent of its incursion into Ukraine, and out of touch, airing the rambling addresses of its leader. It’s as if Putin has forgotten that social media transitioned from text to real-time video around the time of the Crimean annexation. In today’s information war, Russian news claiming Zelensky had turned tail and fled was swiftly countered by a video selfie of the Ukrainian president in Kyiv, vowing to defend his homeland. The symbolic contrast between Zelensky striding through war-torn streets, confident even under fire, and Putin, seated, hunched over a large wooden desk in the safety of a secure office hundreds of miles away from the fighting, is stark. This time, Facebook, YouTube, Twitter and Google are also proactively engaged in the information war. During the Crimean annexation, they were reactive and struggled to keep up with misinformation and false abuse reports. Today, in Ukraine, they have [banned Russian state-owned media from advertising on their platforms](https://www.axios.com/youtube-meta-twitter-restrict-russian-state-media-323d966f-531e-40f5-aa06-3b82998589df.html) and [defiantly fact-checked](https://www.theverge.com/2022/2/25/22950874/russia-facebook-blocked-roskomnadzor-media-censorship) Putin’s propaganda despite Russia’s protests and a full ban of Twitter and a partial ban of Facebook in Russia. Facebook has spun up a special operations center, staffed with native Russian and Ukrainian speakers, to monitor misinformation posted about the war, added warning labels to war-related images that its software detects are more than a year old, and restricted access to content from the state-affiliated Russian media outlets RT and Sputnik. YouTube is restricting access to Russian state-owned media outlets for users in Ukraine, removing Russian state-owned channels from recommendations, and limiting their content’s reach across the platform. Twitter has temporarily banned all ads in Ukraine and Russia, added labels to tweets with links to Russian state-affiliated media and downranked their content in algorithmic timelines. While numerous fake videos are circulating on TikTok about Ukraine, the Chinese-owned platform has no comprehensive policy on policing information about the conflict. Despite blocking state-owned Russian media in the European Union, this information flows freely in Ukraine and Russia on the platform, now dubbed “WarTok” by some observers, in part because it is organizing such videos into a convenient discover playlist by the same name. **The information war is critical to what happens next in Ukraine for several reasons. It motivates the resistance by inspiring Ukrainian citizens to take up arms in defense of their country and motivating them with social proof that they are united and not fighting alone. It encourages foreign assistance, pressuring Europe and the United States to step up their efforts to end the conflict. It fans the flames of protest in Russia, mobilizing the antiwar movement in Moscow and elsewhere in defiance of Putin’s aggression. And it may even eventually demoralize Russian troops, who must be wondering what on earth they are doing in Ukraine if the motivation for the intervention has been a lie all along. When Russia struck a Ukrainian television tower on Tuesday, it seemed to confirm Moscow’s keen awareness of the need to counter Ukraine’s information war and to highlight the importance of information in modern conflicts. Information campaigns are difficult to quantify during the fog of war. But while it is hard to pinpoint the extent to which the information war is contributing to the overwhelming international unity against Putin’s aggression, one thing is clear: Social media, mainstream media and the narrative framing of the invasion of Ukraine undoubtedly will play an important role in how this conflict ends. Now, vigilance and fortitude are not only needed on the battlefield, where lives and territory will be won and lost, but also will be essential online, where the hearts and minds of the world will be won or lost.**

#### Russian win would lead to escalation in multiple forums – goes global.

LIANA Fix 22 (Resident Fellow at the German Marshall Fund, in Washington, D.C). MICHAEL KIMMAGE (Professor of History at the Catholic University of America and a Visiting Fellow at the German Marshall Fund. )2/18/22, What If Russia Wins? A Kremlin-Controlled Ukraine Would Transform Europe, Foreign Affairs, <https://www.foreignaffairs.com/articles/ukraine/2022-02-18/what-if-russia-wins>

If Russia gains control of Ukraine or manages to destabilize it on a major scale, a new era for the United States and for Europe will begin. U.S. and European leaders would face the dual challenge of rethinking European security and of not being drawn into a larger war with Russia. All sides would have to consider the potential of nuclear-armed adversaries in direct confrontation. These two responsibilities—robustly defending European peace and prudently avoiding military escalation with Russia—will not necessarily be compatible. The United States and its allies could find themselves deeply unprepared for the task of having to create a new European security order as a result of Russia’s military actions in Ukraine. MANY WAYS TO WIN For Russia, victory in Ukraine could take various forms. As in [Syria](https://www.foreignaffairs.com/articles/syria/2016-03-20/russias-pyrrhic-victory-syria), victory does not have to result in a sustainable settlement. It could involve the installation of a compliant government in Kyiv or the partition of the country. Alternatively, the defeat of the Ukrainian military and the negotiation of a Ukrainian surrender could effectively transform Ukraine into a failed state. Russia could also employ devastating cyberattacks and disinformation tools, backed by the threat of force, to cripple the country and induce regime change. With any of these outcomes, Ukraine will have been effectively detached from the West. If Russia achieves its political aims in Ukraine by military means, Europe will not be what it was before the war. Not only will U.S. primacy in Europe have been qualified; any sense that the European Union or NATO can ensure peace on the continent will be the artifact of a lost age. Instead, security in Europe will have to be reduced to defending the core members of the EU and NATO. Everyone outside the clubs will stand alone, with the exception of Finland and Sweden. This may not necessarily be a conscious decision to end enlargement or association policies; but it will be de facto policy. Under a perceived siege by Russia, the EU and NATO will no longer have the capacity for ambitious policies beyond their own borders. The United States and Europe will also be in a state of permanent economic war with Russia. The West will seek to enforce sweeping sanctions, which Russia is likely to parry with cyber-measures and energy blackmailing, given the economic asymmetries. China might well stand on Russia’s side in this economic tit for tat. Meanwhile, domestic politics in European countries will resemble a twenty-first-century great game, in which Russia will be studying Europe for any breakdown in the commitment to NATO and to the transatlantic relationship. Through methods fair and foul, Russia will take whatever opportunity comes its way to influence public opinion and elections in European countries. Russia will be an anarchic presence—sometimes real, sometimes imagined—in every instance of European political instability. Cold War analogies will not be helpful in a world with a Russianized Ukraine. The Cold War border in Europe had its flash points, but it was stabilized in a mutually acceptable fashion in the Helsinki Final Act of 1975. By contrast, Russian suzerainty over Ukraine would open a vast zone of destabilization and insecurity from Estonia to Poland to Romania to Turkey. For as long as it lasts, Russia’s presence in Ukraine will be perceived by Ukraine’s neighbors as provocative and unacceptable and, for some, as a threat to their own security. Amid this shifting dynamic, order in Europe will have to be conceived of in primarily military terms—which, since Russia has a stronger hand in the military than in the economic realm, will be in the Kremlin’s interest—sidelining nonmilitary institutions such as the European Union. Russia has Europe’s largest conventional military, which it is more than ready to use. The EU’s defense policy—in contrast to NATO’s—is far from being able to provide security for its members. Thus will military reassurance, especially of the EU’s eastern members, be key. Responding to a revanchist Russia with sanctions and with the rhetorical proclamation of a rules-based international order will not be sufficient. IMPERILING EUROPE'S EAST In the event of a Russian victory in Ukraine, Germany‘s position in Europe will be severely challenged. Germany is a marginal military power that has based its postwar political identity on the rejection of war. The ring of friends it has surrounded itself with, especially in the east with Poland and the Baltic states, risks being destabilized by Russia. France and the United Kingdom will assume leading roles in European affairs by virtue of their comparatively strong militaries and long tradition of military interventions. The key factor in Europe, however, will remain the United States. NATO will depend on U.S. support as will the anxious and imperiled countries of Europe’s east, the frontline nations arrayed along a now very large, expanded, and uncertain line of contact with Russia, including Belarus and the Russian-controlled parts of Ukraine. Eastern member states, including Estonia, Latvia, Lithuania, Poland, and Romania, will likely have substantial numbers of NATO troops permanently stationed on their soil. A request from Finland and Sweden to gain an Article 5 commitment and to join NATO would be impossible to reject. In Ukraine, EU and NATO countries will never recognize a new Russian-backed regime created by Moscow. But they will face the same challenge they do with Belarus: wielding sanctions without punishing the population and supporting those in need without having access to them. Some NATO members will bolster a Ukrainian insurgency, to which Russia will respond by threatening NATO members. Ukraine’s predicament will be very great. Refugees will flee in multiple directions, quite possibly in the millions. And those parts of the Ukrainian military that are not directly defeated will continue fighting, echoing the partisan warfare that tore apart this whole region of Europe during and after World War II. The permanent state of escalation between Russia and Europe may stay cold from a military perspective. It is likely, though, to be economically hot. The sanctions put on Russia in 2014, which were connected to formal diplomacy (often referred to as the “Minsk” process, after the city in which the negotiations were held), were not draconian. They were reversible as well as conditional. Following a Russian invasion of Ukraine, new sanctions on banking and on technology transfer would be significant and permanent. They would come in the wake of failed diplomacy and would start at “the top of the ladder,” according to the U.S. administration. In response, Russia will retaliate, quite possibly in the cyber-domain as well as in the energy sector. Moscow will limit access to critical goods such as titanium, of which Russia has been the world’s second-largest exporter. This war of attrition will test both sides. Russia will be ruthless in trying to get one or several European states to back away from economic conflict by linking a relaxation in tension to these countries’ self-interest, thus undermining consensus in the EU and NATO. Europe’s strong suit is its economic leverage. Russia’s asset will be any source of domestic division or disruption in Europe or in Europe’s transatlantic partners. Here Russia will be proactive and opportunistic. If a pro-Russian movement or candidate shows up, that candidate can be encouraged directly or indirectly. If an economic or political sore point diminishes the foreign policy efficacy of the United States and its allies, it will be a weapon for Russian propaganda efforts and for Russian espionage. Much of this is already happening. But a war in Ukraine will up the ante. Russia will use more resources and be unchained in its choice of instruments. The massive refugee flows arriving in Europe will exacerbate the EU’s unresolved refugee policy and provide fertile ground for populists. The holy grail of these informational, political, and cyberbattles will be the 2024 presidential election in the United States. Europe’s future will depend on this election. The election of Donald Trump or of a Trumpian candidate might destroy the transatlantic relationship at Europe’s hour of maximum peril, putting into question NATO’s position and its security guarantees for Europe. TURNING NATO INWARD For the United States, a Russian victory would have profound effects on its grand strategy in Europe, Asia, and the Middle East. First, Russian success in Ukraine would require Washington to pivot to Europe. No ambiguity about NATO’s Article 5 (of the kind experienced under Trump) will be permissible. Only a strong U.S. commitment to European security will prevent Russia from dividing European countries from one another. This will be difficult in light of competing priorities, especially those that confront the United States in a deteriorating relationship with China. But the interests at stake are fundamental. The United States has very large commercial equities in Europe. The European Union and the United States are each other’s largest trade and investment partners, with trade in goods and services totaling $1.1 trillion in 2019. A well-functioning, peaceful Europe augments American foreign policy—on climate change, on nonproliferation, on global public health, and on the management of tensions with China or Russia. If Europe is destabilized, then the United States will be much more alone in the world. NATO is the logical means by which the United States can provide security reassurance to Europe and deter Russia. A war in Ukraine would revive NATO not as a democracy-building enterprise or as a tool for out-of-area expeditions like the war in Afghanistan but as the unsurpassed defensive military alliance that it was designed to be. Although Europeans will be demanding a greater military commitment to Europe from the United States, a broader Russian invasion of Ukraine should drive every NATO member to increase its defense spending. For Europeans, this would be the final call to improve Europe’s defensive capabilities—in tandem with the United States—in order to help the United States manage the Russian-Chinese dilemma. For a Moscow now in permanent confrontation with the West, Beijing could serve as an economic backstop and a partner in opposing U.S. hegemony. In the worst case for U.S. grand strategy, China might be emboldened by Russia’s assertiveness and threaten confrontation over Taiwan. But there is no guarantee that an escalation in Ukraine will benefit the Sino-Russian relationship. China’s ambition to become the central node of the Eurasian economy will be damaged by war in Europe, because of the brutal uncertainties war brings. Chinese irritation with a Russia on the march will not enable a rapprochement between Washington and [Beijing](https://www.foreignaffairs.com/articles/china/competition-with-china-without-catastrophe), but it may initiate new conversations.

#### Nuke war causes extinction AND outweighs other existential risks.

PND 16. internally citing Zbigniew Brzezinski, Council of Foreign Relations and former national security adviser to President Carter, Toon and Robock’s 2012 study on nuclear winter in the Bulletin of Atomic Scientists, Gareth Evans’ International Commission on Nuclear Non-proliferation and Disarmament Report, Congressional EMP studies, studies on nuclear winter by Seth Baum of the Global Catastrophic Risk Institute and Martin Hellman of Stanford University, and U.S. and Russian former Defense Secretaries and former heads of nuclear missile forces, brief submitted to the United Nations General Assembly, Open-Ended Working Group on nuclear risks. A/AC.286/NGO/13. 05-03-2016. <http://www.reachingcriticalwill.org/images/documents/Disarmament-fora/OEWG/2016/Documents/NGO13.pdf> //Re-cut by Elmer

Consequences human survival 12. Even if the 'other' side does NOT launch in response the smoke from 'their' burning cities (incinerated by 'us') will still make 'our' country (and the rest of the world) uninhabitable, potentially inducing global famine lasting up to decades. Toon and Robock note in ‘Self Assured Destruction’, in the Bulletin of Atomic Scientists 68/5, 2012, that: 13. “A nuclear war between Russia and the United States, even after the arsenal reductions planned under New START, could produce a nuclear winter. Hence, an attack by either side could be suicidal, resulting in self assured destruction. Even a 'small' nuclear war between India and Pakistan, with each country detonating 50 Hiroshima-size atom bombs--only about 0.03 percent of the global nuclear arsenal's explosive power--as air bursts in urban areas, could produce so much smoke that temperatures would fall below those of the Little Ice Age of the fourteenth to nineteenth centuries, shortening the growing season around the world and threatening the global food supply. Furthermore, there would be massive ozone depletion, allowing more ultraviolet radiation to reach Earth's surface. Recent studies predict that agricultural production in parts of the United States and China would decline by about **20 percent** for four years, and by 10 percent for a decade.” 14. A conflagration involving USA/NATO forces and those of Russian federation would most likely cause the deaths of most/nearly all/all humans (and severely impact/extinguish other species) as well as destroying the delicate interwoven techno-structure on which latter-day 'civilization' has come to depend. Temperatures would drop to below those of the last ice-age for up to 30 years as a result of the lofting of up to 180 million tonnes of very black soot into the stratosphere where it would remain for decades. 15. Though human ingenuity and resilience shouldn't be underestimated, human survival itself is arguably problematic, to put it mildly, under a 2000+ warhead USA/Russian federation scenario. 16. The Joint Statement on Catastrophic Humanitarian Consequences signed October 2013 by 146 governments mentioned 'Human Survival' no less than 5 times. The most recent (December 2014) one gives it a highly prominent place. Gareth Evans’ ICNND (International Commission on Nuclear Non-proliferation and Disarmament) Report made it clear that it saw the threat posed by nuclear weapons use as one that at least threatens what we now call 'civilization' and that potentially threatens human survival with an immediacy that even climate change does not, though we can see the results of climate change here and now and of course the immediate post-nuclear results for Hiroshima and Nagasaki as well.

## Case

“Negative positions that do not defend advocacy over objectivity affirm.”

1] no – neg ground stops lit like ks which k2 ed

2] stops theory which is key 2 check back against abuse k2 fairness

### 1NC – UV

#### Reject 1ar theory on face:

#### a. They get a 7-6 time advantage which is worse later in the debate since there's less arguments they have to cover and they can blow individual arguments up.

#### b. They get 2 speeches versus my one, which makes the 2NR super unfair since I have to do ridiculous amounts of weighing and pre-empting which forces me to over-allocate on theory but the 2AR can choose not to go for theory and moot the entire 2N.

#### c. 2AR kills me on theory—they can get away with new weighing and they have the perceptual advantage. They can prioritize all their impacts and moot the entire 2NR because 2AR moves are impossible to predict. Also means reject new 2AR weighing, even if it's in response to mine—they should've done it in the 1AR.

#### d. Deters the 1NC from checking abuse out of fear for 1AR meta-theory, which destroys me since it's also preclusive. Turns their infinite abuse args.

#### e. Reject infinite abuse claims— 1 - there's only finite speech time, 2 - if I win I can't engage in 1AR theory then you could never check infinite abuse since we can't use your shells to determine what's abusive.

presumption does not affirm

A] we start strands of reasoning from things that are false all the time

B] more things are false than true - this desk is a desk and that is true but there are infinitely many things it can’t be

c] aff gets first and last speech - sets the parameters for the debate round and influences judge psych at the end

d] the active role of the neg is to prove the aff false - doesn’t make it true in any ways

### 1NC – Disease

#### Burnout and counter-measures solve disease.

Dr. Amesh A. Adaljia 16. Clinical Assistant Professor of Medicine, University of Pittsburgh; Affiliated Scholar, John Hopkins Center for Health Security; former Senior Associate, UPMC Center for Health Security; member of the American College of Emergency Physicians EMS & Terrorism and Disaster Preparedness Committee; and, Associate Editor of the Health Security journal. “Why Hasn’t Disease Wiped out the Human Race?” *The Atlantic*. June 17. <https://www.theatlantic.com/health/archive/2016/06/infectious-diseases-extinction/487514/>.

In other words, no, I wasn’t worried—and not because I have a rosy outlook on infectious diseases. I’m well-aware of the damage these diseases are causing around the world: HIV, malaria, tuberculosis; the influenza pandemic that took the world by surprise in 2009; the anti-vaccine movement bumping cases of measles to an all-time post-vaccine-era high; antibiotic-resistant bacteria threatening to collapse the entire structure of modern medicine—all these, like Ebola, are continuously placing an enormous number of lives at risk. But when people ask me if I’m worried about infectious diseases, they’re often not asking about the threat to human lives; they’re asking about the threat to human life. With each outbreak of a headline-grabbing emerging infectious disease comes a fear of extinction itself. The fear envisions a large proportion of humans succumbing to infection, leaving no survivors or so few that the species can’t be sustained. I’m not afraid of this apocalyptic scenario, but I do understand the impulse. Worry about the end is a quintessentially human trait. Thankfully, so is our resilience. For most of mankind’s history, infectious diseases were the existential threat to humanity—and for good reason. They were quite successful at killing people: The 6th century’s Plague of Justinian knocked out an estimated 17 percent of the world’s population; the 14th century Black Death decimated a third of Europe; the 1918 influenza pandemic killed 5 percent of the world; malaria is estimated to have killed half of all humans who have ever lived. Any yet, of course, humanity continued to flourish. Our species’ recent explosion in lifespan is almost exclusively the result of the control of infectious diseases through sanitation, vaccination, and antimicrobial therapies. Only in the modern era, in which many infectious diseases have been tamed in the industrial world, do people have the luxury of death from cancer, heart disease, or stroke in the 8th decade of life. Childhoods are free from watching siblings and friends die from outbreaks of typhoid, scarlet fever, smallpox, measles, and the like. So what would it take for a disease to wipe out humanity now? In Michael Crichton’s The Andromeda Strain, the canonical book in the disease-outbreak genre, an alien microbe threatens the human race with extinction, and humanity’s best minds are marshaled to combat the enemy organism. Fortunately, outside of fiction, there’s no reason to expect alien pathogens to wage war on the human race any time soon, and my analysis suggests that any real-life domestic microbe reaching an extinction level of threat probably is just as unlikely. When humans began to focus their minds on the problems posed by infectious disease, human life ceased being nasty, brutish, and short. Any apocalyptic pathogen would need to possess a very special combination of two attributes. First, it would have to be so unfamiliar that no existing therapy or vaccine could be applied to it. Second, it would need to have a high and surreptitious transmissibility before symptoms occur. The first is essential because any microbe from a known class of pathogens would, by definition, have family members that could serve as models for containment and countermeasures. The second would allow the hypothetical disease to spread without being detected by even the most astute clinicians. The three infectious diseases most likely to be considered extinction-level threats in the world today—influenza, HIV, and Ebola—don’t meet these two requirements. Influenza, for instance, despite its well-established ability to kill on a large scale, its contagiousness, and its unrivaled ability to shift and drift away from our vaccines, is still what I would call a “known unknown.” While there are many mysteries about how new flu strains emerge, from at least the time of Hippocrates, humans have been attuned to its risk. And in the modern era, a full-fledged industry of influenza preparedness exists, with effective vaccine strategies and antiviral therapies. HIV, which has killed 39 million people over several decades, is similarly limited due to several factors. Most importantly, HIV’s dependency on blood and body fluid for transmission (similar to Ebola) requires intimate human-to-human contact, which limits contagion. Highly potent antiviral therapy allows most people to live normally with the disease, and a substantial group of the population has genetic mutations that render them impervious to infection in the first place. Lastly, simple prevention strategies such as needle exchange for injection drug users and barrier contraceptives—when available—can curtail transmission risk. Ebola, for many of the same reasons as HIV as well as several others, also falls short of the mark. This is especially due to the fact that it spreads almost exclusively through people with easily recognizable symptoms, plus the taming of its once unfathomable 90 percent mortality rate by simple supportive care. Beyond those three, every other known disease falls short of what seems required to wipe out humans—which is, of course, why we’re still here. And it’s not that diseases are ineffective. On the contrary, diseases’ failure to knock us out is a testament to just how resilient humans are. Part of our evolutionary heritage is our immune system, one of the most complex on the planet, even without the benefit of vaccines or the helping hand of antimicrobial drugs. This system, when viewed at a species level, can adapt to almost any enemy imaginable. Coupled to genetic variations amongst humans—which open up the possibility for a range of advantages, from imperviousness to infection to a tendency for mild symptoms—this adaptability ensures that almost any infectious disease onslaught will leave a large proportion of the population alive to rebuild, in contrast to the fictional Hollywood versions.

#### No extinction from pandemics

* Death rates as high as 50% didn’t collapse civilization
* Fossil fuel record caps risk at .1% per century
* health, sanitation, medicine, science, public health bodies, solve
* viruses can’t survive in all locations
* refugee populations like tribes, remote researchers, submarine crews, solve

Ord 20 Ord, Toby. Toby David Godfrey Ord (born 18 July 1979) is an Australian philosopher. He founded Giving What We Can, an international society whose members pledge to donate at least 10% of their income to effective charities and is a key figure in the effective altruism movement, which promotes using reason and evidence to help the lives of others as much as possible.[3] He is a Senior Research Fellow at the University of Oxford's Future of Humanity Institute, where his work is focused on existential risk. BA in Phil and Comp Sci from Melbourne, BPhil in Phil from Oxford, PhD in Phil from Oxford. The precipice: existential risk and the future of humanity. Hachette Books, 2020.

Are we safe now from events like this? Or are we more vulnerable? Could a pandemic threaten humanity’s future?10 The Black Death was not the only biological disaster to scar human history. It was not even the only great bubonic plague. In 541 CE the Plague of Justinian struck the Byzantine Empire. Over three years it took the lives of roughly 3 percent of the world’s people.11 When Europeans reached the Americas in 1492, the two populations exposed each other to completely novel diseases. Over thousands of years each population had built up resistance to their own set of diseases, but were extremely susceptible to the others. The American peoples got by far the worse end of exchange, through diseases such as measles, influenza and especially smallpox. During the next hundred years a combination of invasion and disease took an immense toll—one whose scale may never be known, due to great uncertainty about the size of the pre-existing population. We can’t rule out the loss of more than 90 percent of the population of the Americas during that century, though the number could also be much lower.12 And it is very difficult to tease out how much of this should be attributed to war and occupation, rather than disease. As a rough upper bound, the Columbian exchange may have killed as many as 10 percent of the world’s people.13 Centuries later, the world had become so interconnected that a truly global pandemic was possible. Near the end of the First World War, a devastating strain of influenza (known as the 1918 flu or Spanish Flu) spread to six continents, and even remote Pacific islands. At least a third of the world’s population were infected and 3 to 6 percent were killed.14 This death toll outstripped that of the First World War, and possibly both World Wars combined. Yet even events like these fall short of being a threat to humanity’s longterm potential.15 In the great bubonic plagues we saw civilization in the affected areas falter, but recover. The regional 25 to 50 percent death rate was not enough to precipitate a continent-wide collapse of civilization. It changed the relative fortunes of empires, and may have altered the course of history substantially, but if anything, it gives us reason to believe that human civilization is likely to make it through future events with similar death rates, even if they were global in scale. The 1918 flu pandemic was remarkable in having very little apparent effect on the world’s development despite its global reach. It looks like it was lost in the wake of the First World War, which despite a smaller death toll, seems to have had a much larger effect on the course of history.16 It is less clear what lesson to draw from the Columbian exchange due to our lack of good records and its mix of causes. Pandemics were clearly a part of what led to a regional collapse of civilization, but we don’t know whether this would have occurred had it not been for the accompanying violence and imperial rule. The strongest case against existential risk from natural pandemics is the fossil record argument from Chapter 3. Extinction risk from natural causes above 0.1 percent per century is incompatible with the evidence of how long humanity and similar species have lasted. But this argument only works where the risk to humanity now is similar or lower than the longterm levels. For most risks this is clearly true, but not for pandemics. We have done many things to exacerbate the risk: some that could make pandemics more likely to occur, and some that could increase their damage. Thus even “natural” pandemics should be seen as a partly anthropogenic risk. Our population now is a thousand times greater than over most of human history, so there are vastly more opportunities for new human diseases to originate.17 And our farming practices have created vast numbers of animals living in unhealthy conditions within close proximity to humans. This increases the risk, as many major diseases originate in animals before crossing over to humans. Examples include HIV (chimpanzees), Ebola (bats), SARS (probably bats) and influenza (usually pigs or birds).18 Evidence suggests that diseases are crossing over into human populations from animals at an increasing rate.19 Modern civilization may also make it much easier for a pandemic to spread. The higher density of people living together in cities increases the number of people each of us may infect. Rapid long-distance transport greatly increases the distance pathogens can spread, reducing the degrees of separation between any two people. Moreover, we are no longer divided into isolated populations as we were for most of the last 10,000 years.20 Together these effects suggest that we might expect more new pandemics, for them to spread more quickly, and to reach a higher percentage of the world’s people. But we have also changed the world in ways that offer protection. We have a healthier population; improved sanitation and hygiene; preventative and curative medicine; and a scientific understanding of disease. Perhaps most importantly, we have public health bodies to facilitate global communication and coordination in the face of new outbreaks. We have seen the benefits of this protection through the dramatic decline of endemic infectious disease over the last century (though we can’t be sure pandemics will obey the same trend). Finally, we have spread to a range of locations and environments unprecedented for any mammalian species. This offers special protection from extinction events, because it requires the pathogen to be able to flourish in a vast range of environments and to reach exceptionally isolated populations such as uncontacted tribes, Antarctic researchers and nuclear submarine crews. 21 It is hard to know whether these combined effects have increased or decreased the existential risk from pandemics. This uncertainty is ultimately bad news: we were previously sitting on a powerful argument that the risk was tiny; now we are not. But note that we are not merely interested in the direction of the change, but also in the size of the change. If we take the fossil record as evidence that the risk was less than one in 2,000 per century, then to reach 1 percent per century the pandemic risk would need to be at least 20 times larger. This seems unlikely. In my view, the fossil record still provides a strong case against there being a high extinction risk from “natural” pandemics. So most of the remaining existential risk would come from the threat of permanent collapse: a pandemic severe enough to collapse civilization globally, combined with civilization turning out to be hard to re-establish or bad luck in our attempts to do so.

### 1NC – Warming

#### Best science proves no warming impact.

Idso et al.18 (Craig, Geography@ArizonaState, David Legates, Climatology@Delaware, ProfClimatology@Deleware, Fred Singer, Physics@Princeton, ProfEnviroScience@Virginia, Climate Change Reconsidered II: Fossil Fuels, NIPCC, Ch.2, p. 108-109, Chapter Contributors: Joseph Bast, FormerPresident@HeartlandInstitute, Patrick Frank, PhD Chemistry@Stanford, Kenneth Haapala, MS Econ, President@Science+EnvironmentalPolicyProject, Jay Lehr, PhD Hyrdrology@Arizona, Patrick Moore, Co-Founder@Greenpeace, PhD Ecology@UniversityBrittishColumbia, Willie Soon, PhD AerospaceEngineering@USC, Chapter Reviewers: Charles Anderson, PhD Biology@Stanford, AssocProfBiolofy@PennState, Dennis Avery, DirectorFoodSecurity@Hudson, FormerUSDeptAg, Timothy Ball, PhD Climatology@QueenMary, FormerProfGeography@Winnipeg, David Bowen, PhD Geology@UCBoulder, ProfGeology@MontanaState, David Burton, MA CompSci@UTAustin, Mark Campbell, PhD Chemistry@JohnsHopkins, ProfChemistry@USNavalAcademy, David Deming, PhD PublicPolicy@Harvard, ProfPublicPolicy@Harvard, Rex Fleming, PhD AtmosphericScience@Michigan, Lee Gerhard, PhD Geology@Kansas, François Gervais, PhD Physics@UniversityNewOreleans, ProfPhysics@FrançoisRabelaisUniversity, Laurence Gould, ProfPhysics@UniversityHatford, PhD Physics@Temple, Kesten Green, PhD Managment@VictoriaManagmentSchool, Hermann Harde, PhD Engineering@UniversityOfKaiserslautern, Howard Hayden, PhD Physics@DenverUniversity, Ole Humlum, PhD GlacialGeomorphology@UniversityCopenhagen, ProfGeography@Oslo, Richard Keen, PhD Climatology@Colorado, ProfAtmosphericScience@Colorado, William Kininmonth, MSc@Colorado, FormerHead@AustralianBureauOfMeteorologyNationalClimateCenter, Anthony Lupo, PhD AtmosphericScience@Purdue, ProfAtmosphericScience@Missouri, Robert Murphy, PhD Chemistry@MIT, ProfPharmacology@Colorado, David Nebert, MD@UniversityOregon, ProfEnvironmentalHealth@Cincinati, Norman Page, PhD Geology@Illinois, Frederick Palmer, JD@Arizona, Gath Paltridge, PhD AtmosphericPhysics@UniversityMelbourne, ChiefResearchScientist@CSIRODivisionAtmosphericResearch, Jim Petch, PhD Geography@KingsCollegeLondon, Jan-Erik Solheim, MA PoliSci@Oslo, FormerExecDirectorUNEnvironmentProgram, Peter Stilbs, PhD Chemistry@RoyalInstituteTechnology, Roger Tattersol, BA History+PhilosophyOfScience@Leeds, Frank Tipler, PhD Physics@Maryland, ProfPhysics@Tulane, Ftitz Vahrenholt, PhD Chemistry@Munster, Art Viterito, PhD Climatology@Denver, ProfGeography@Maryland, Lance Wallace, PhD Physics@CUNY)

Methodology The Scientific Method is a series of requirements imposed on scientists to ensure the integrity of their work. The IPCC has not followed established rules that guide scientific research. Appealing to consensus may have a place in science, but not as a means of shutting down debate. Uncertainty in science is unavoidable but must be acknowledged. Many declaratory and predictive statements about the global climate are not warranted by science. Observations Surface air temperature is governed by energy flow from the Sun to Earth and from Earth back into space. Whatever diminishes or intensifies this energy flow can change air temperature. Levels of carbon dioxide and methane in the atmosphere are governed by processes of the carbon cycle. Exchange rates and other climatological processes are poorly understood. The geological record shows temperatures and CO2 levels in the atmosphere have not been stable, making untenable the IPCC’s assumption that they would be stable in the future in the absence of human emissions. Water vapor is the dominant greenhouse gas owing to its abundance in the atmosphere and the wide range of spectra in which it absorbs radiation. Carbon dioxide (CO2) absorbs energy only in a very narrow range of the longwave infrared spectrum. Controversies Reconstructions of average global surface temperature differ depending on the methodology used. The warming of the twentieth and early twenty-first centuries has not been shown to be beyond the bounds of natural variability. General circulation models (GCMs) are unable to accurately depict complex climate processes. They do not accurately hindcast or forecast the climate effects of human-related greenhouse gas emissions. Estimates of equilibrium climate sensitivity (the amount of warming that would occur following a doubling of atmospheric CO2 level) range widely. The IPCC’s estimate is higher than many recent estimates. Solar irradiance, magnetic fields, UV fluxes, and cosmic rays are poorly understood and may have greater influence on climate than general circulation models currently assume. Climate Impacts There is little evidence that the warming of the twentieth and early twenty-first centuries has caused a general increase in severe weather events. Meteorological science suggests a warmer world will see milder weather patterns. Arctic ice is losing mass, but melting commenced before there was a human impact on climate and is not unprecedented. Antarctica is either gaining ice mass or is unchanged. Best available data show sea-level rise is not accelerating. Local and regional sea levels continue to exhibit typical natural variability. The link between warming and drought is weak, and by some measures drought decreased over the twentieth century. Changes in the hydrosphere of this type are regionally highly variable and show a closer correlation with multidecadal climate rhythmicity than they do with global temperature. Plants have responded positively to rising temperatures and carbon dioxide levels in the atmosphere, a trend that is likely to continue beyond the twenty-first century. Why Scientists Disagree Climate is an interdisciplinary subject requiring insights from many fields of study. Very few scholars have mastery of more than one or two of these disciplines. Fundamental uncertainties arise from insufficient observational evidence and disagreements over how to interpret data and how to set the parameters of models. Many scientists trust the Intergovernmental Panel on Climate Change (IPCC) to objectively report the latest scientific findings on climate change, but it has failed to produce balanced reports and has allowed its findings to be misrepresented to the public. Climate scientists, like all humans, can have tunnel vision. Bias, even or especially if unconscious, can be especially pernicious when data are equivocal and allow multiple interpretations, as in climatology. Appeals to Consensus Surveys and abstract-counting exercises that are said to show a “scientific consensus” on the causes and consequences of climate change invariably ask the wrong questions or the wrong people. No survey data exist that support claims of consensus on important scientific questions. Some survey data, petitions, and peer-reviewed research show deep disagreement among scientists on issues that must be resolved before the man-made global warming hypothesis can be accepted. Some 31,000 scientists have signed a petition saying “there is no convincing scientific evidence that human release of carbon dioxide, methane, or other greenhouse gases is causing or will, in the foreseeable future, cause catastrophic heating of the Earth’s atmosphere and disruption of the Earth’s climate.” Prominent climate scientists have said repeatedly that there is no consensus on the most important issues in climate science.

#### No extinction – assumes 45 degrees celcius.

Alexey Turchin 19, Researcher at the Foundation Science for Life Extension in Moscow, Brian P. Green, director of technology ethics at the Markkula Center for Applied Ethics at Santa Clara University, 3/11/19, “Islands as refuges for surviving global catastrophes,” https://www.emerald.com/insight/content/doi/10.1108/FS-04-2018-0031/full/html

Different types of possible catastrophes suggest different scenarios for how survival could happen on an island. What is important is that the island should have properties which protect against the specific dangers of particular global catastrophic risks. Specifically different islands will provide protection against different risks, and their natural diversity will contribute to a higher total level of protection: - Quarantined island survives pandemic. An island could impose effective quarantine if it is sufficiently remote and simultaneously able to protect itself, possibly using military ships and air defense. - Far northern aboriginal people survive an ice age. Many far northern people have adapted to survive in extremely cold and dangerous environments, and under the right circumstances could potentially survive the return of an ice age. However, their cultures are endangered by globalization. If these people become dependent on the products of modern civilization, such as rifles and motor boats, and lose their native survival skills, then their likelihood of surviving the collapse of the outside world would decrease. Therefore, preservation of their survival skills may be important as a defense against the risks connected with extreme cooling. - Remote polar island with high mountains survives brief global warming of median surface temperatures, up to 50˚C. There is a theory that the climates of planets similar to the Earth could have several semi-stable temperature levels (Popp et al., 2016). If so, because of climate change, the Earth could transition to a second semi-stable state with a median global temperature of around 330 K, about 60˚C, or about 45˚C above current global mean temperatures. But even in this climate, some regions of Earth could still be survivable for humans, such as the Himalayan plateau at elevations above 4,000 m, but below 6,000 (where oxygen deficiency becomes a problem), or on polar islands with mountains (however, global warming affects polar regions more than equatorial regions, and northern island will experience more effects of climate change, including thawing permafrost and possible landslides because of wetter weather). In the tropics, the combination of increased humidity and temperature may increase the wet bulb temperature above 36˚C, especially on islands, where sea moisture is readily available. In such conditions, proper human perspiration becomes impossible (Sherwood and Huber, 2010), and there will likely be increased mortality and morbidity because of tropical diseases. If temperatures later returned to normal – either naturally or through climate engineering – the rest of the Earth could be repopulated.

#### Co2 key to food, biodiversity, and halting land conversion.

Carter et al. 14 (Dr. Robert M. Carter, Emeritus Fellow, Institute of Public Affairs, Dr. S. Fred Singer, Science and Environmental Policy Project, Dr. Craig D. Idso, Dr. Sherwood B. Idso, Center for the Study of Carbon Dioxide and Global Change, and, CLIMATE CHANGE RECONSIDERED II: BIOLOGICAL IMPACTS, Nongovernmental International Panel on Climate Change, 2014, p. 473-475. Gender edited

The key findings of this chapter are listed below. • Rising atmospheric CO2 and warming temperatures, both of which IPCC claims constitute a significant threat to the biosphere, benefited agriculture in the ancient past and in the twentieth century. • Empirical studies suggest a future warming of the climate coupled with rising atmospheric CO2 levels will boost global agricultural production and help meet the food needs of the planet’s growing population. • When model-based studies fully account for the growth-enhancing and water-conserving benefits of atmospheric CO2 enrichment, they project significant gains for future agricultural production. • The vigor of the terrestrial biosphere has been increasing with time, revealing a great greening of the planet that extends across the globe. • Satellite-based analyses of net terrestrial primary productivity (NPP) reveal an increase of around 6– 13% since the 1980s. • There is no empirical evidence to support the model-based claim that future carbon uptake will diminish on a global scale due to rising temperatures. • Earth’s land surfaces were a net source of CO2- carbon to the atmosphere until about 1940. From 1940 onward, the terrestrial biosphere has become, in the mean, an increasingly greater sink for CO2- carbon. • Over the past 50 years, global carbon uptake has doubled from 2.4 ± 0.8 billion tons in 1960 to 5.0 ± 0.9 billion tons in 2010. • The observed greening of the Earth has occurred in spite of the many real and imagined assaults on the planet’s vegetation over this time period, including fires, disease, outbreaks of pests, deforestation, and climatic changes (primarily in temperature and precipitation). • The atmosphere’s rising CO2 content—which IPCC considers to be the chief culprit behind its concerns about the future of the biosphere—is most likely the primary cause of the observed greening trends. • In the future, plants should be able to adjust their physiology to accommodate a warming of the magnitude and rate of rise typically predicted by climate models to accompany the projected future increase in atmospheric CO2 content. • The rise in the air’s CO2 concentration and its antitranspiration effect, which improves plant wateruse efficiency, are enhancing and will continue to enhance the vegetative productivity of Africa. • The rise of the air’s CO2 concentration and temperature to their highest values of the past century enhanced the terrestrial vegetative productivity of all parts of Asia, including deserts, forests, grasslands, and the Tibetan Plateau. • Evergreen vegetation, woody plants, and other plant life have increased across Australia over the past 200 years as a result of CO2 enrichment. • Over the last two decades of the twentieth century, Europe as a whole became greener and much of it is seeing an increase in woodlands due to the recent rise in atmospheric CO2, which has tended to offset the detrimental effects of climate change in the region. • Opposite the forecasts promulgated by the models used by IPCC, land-based plants of the Arctic and near-Arctic regions of North America are thriving, thanks in large part to the ongoing rise in the atmosphere’s CO2 concentration and global warming. • Late twentieth-century increases in air temperature and atmospheric CO2 concentration did not negatively affect plant communities in the eastern United States. Rather, the temperature and CO2 increases significantly enhanced local and regional productivity, and there is little reason to think such enhancements will not continue throughout the foreseeable future. • The late twentieth-century rise in temperature and atmospheric CO2 concentrations improved the productivity of plant communities in the central region of the United States, notwithstanding model-based concerns to the contrary. • The late twentieth-century rise in temperature and atmospheric CO2 improved the productivity of plant communities in the western region of the United States, notwithstanding model-based projections of unprecedented ecological disaster due to rising temperatures and drought. • Warmer temperatures and higher CO2 concentrations are resulting in net primary productivity increasing across tropical South America, overcoming the effects of deforestation, forest fires, and incursions by human civilization into natural areas. • It is likely the greening of the planet will continue in the future, even if the largest temperature increases predicted by the models occur, because the optimum temperature for plant growth and development typically rises with increasing levels of atmospheric CO2. This response, coupled with expected increases in plant photosynthetic rates from the rise in the air’s CO2 concentration, is more than enough to compensate for any temperature-induced plant stress caused by global warming. • Real-world observations reveal plants have many ways of adjusting to changes in climate in addition to their ability to spread from places of rising warmth to cooler habitats, and these observations suggest the planet’s current assemblage of plants is likely to be around a good deal longer than many theoretical models have predicted. • A major cause of biodiversity reductions is not rising atmospheric CO2 concentrations, but instead the direct encroachment of [hu]man[s] upon the world of nature. Anthropogenic global warming, to whatever extent it exists, is helping plants overcome these assaults and thrive despite the growing human presence. • As good as things currently are for world agriculture, and as much better as they are expected to become as the atmospheric CO2 content continues to rise, there may be additional substantial room for both natural selection and bioengineering to remove the constraints of low CO2 adaptation in several important agricultural crops and thereby create novel genotypes able to exploit high CO2 conditions to their—and our— advantage. • The ongoing rise in atmospheric CO2 content is likely exerting significant selection pressure on Earth’s naturally occurring terrestrial plants, which should improve their performance in the face of various environmental stressors via the process of microevolution. Plants may be much better prepared than most scientists once thought to meet whatever climatic challenges, including global warming, the future may pose for them. • Evidence continues to accumulate for substantial heritable variation of ecologically important plant traits, including root allocation, drought tolerance, and nutrient plasticity, which suggests rapid evolution based on epigenetic variation alone should be possible.

#### Causes nuclear war and chemical weapons – the risk is high and it causes extinction.

Cribb 21 [Julian Cribb, distinguished science writer with more than thirty awards for journalism, October 3, 2019. “Food or War.” Cambridge University Press. https://www.cambridge.org/core/books/food-or-war/2D6F728A71C0BFEA0CEC85897066DCAF]

Although actual numbers of warheads have continued to fall from its peak of 70,000 weapons in the mid 1980s, scientists argue the danger of nuclear conflict in fact increased in the first two decades of the twenty first century. This was due to the modernisation of existing stockpiles, the adoption of dangerous new technologies such as robot delivery systems, hypersonic missiles, artificial intelligence and electronic warfare, and the continuing leakage of nuclear materials and knowhow to nonnuclear nations and potential terrorist organisations. In early 2018 the hands of the ‘ Doomsday Clock ’ , maintained by the Bulletin of the Atomic Scientists, were re-set at two minutes to midnight, the highest risk to humanity that it has ever shown since the clock was introduced in 1953. This was due not only to the state of the world ’s nuclear arsenal, but also to irresponsible language by world leaders, the growing use of social media to destabilise rival regimes, and to the rising threat of uncontrolled climate change (see below). 12 In an historic moment on 17 July 2017, 122 nations voted in the UN for the first time ever in favour of a treaty banning all nuclear weapons. This called for comprehensive prohibition of “ a full range of nuclear-weapon-related activities, such as undertaking to develop, test, produce, manufacture, acquire, possess or stockpile nuclear weapons or other nuclear explosive devices, as well as the use or threat of use of these weapons. ” 13 However, 71 other countries– including all the nuclear states– either opposed the ban, abstained or declined to vote. The Treaty vote was nonetheless interpreted by some as a promising first step towards abolishing the nuclear nightmare that hangs over the entire human species. In contrast, 192 countries had signed up to the Chemical Weapons Convention to ban the use of chemical weapons, and 180 to the Biological Weapons Convention. As of 2018, 96 per cent of previous world stocks of chemical weapons had been destroyed– but their continued use in the Syrian conflict and in alleged assassination attempts by Russia indicated the world remains at risk. 14 As things stand, the only entities that can afford to own nuclear weapons are nations– and if humanity is to be wiped out, it will most likely be as a result of an atomic conflict between nations. It follows from this that, if the world is to be made safe from such a fate it will need to get rid of nations as a structure of human self-organisation and replace them with wiser, less aggressive forms of self-governance. After all, the nation state really only began in the early nineteenth century and is by no means a permanent feature of self-governance, any more than monarchies, feudal systems or priest states. Although many people still tend to assume it is. Between them, nations have butchered more than 200 million people in the past 150 years and it is increasingly clear the world would be a far safer, more peaceable place without either nations or nationalism. The question is what to replace them with. Although there may at first glance appear to be no close linkage between weapons of mass destruction and food, in the twenty first century with world resources of food, land and water under growing stress, nothing can be ruled out. Indeed, chemical weapons have frequently been deployed in the Syrian civil war, which had drought, agricultural failure and hunger among its early drivers. And nuclear conflict remains a distinct possibility in South Asia and the Middle East, especially, as these regions are already stressed in terms of food, land and water, and their nuclear firepower or access to nuclear materials is multiplying. It remains an open question whether panicking regimes in Russia, the USA or even France would be ruthless enough to deploy atomic weapons in an attempt to quell invasion by tens of millions of desperate refugees, fleeing famine and climate chaos in their own homelands– but the possibility ought not to be ignored. That nuclear war is at least a possible outcome of food and climate crises was first flagged in the report The Age of Consequences by Kurt Campbell and the US-based Centre for Strategic and International Studies, which stated ‘ it is clear that even nuclear war cannot be excluded as a political consequence of global warming ’ . 15 Food insecurity is therefore a driver in the preconditions for the use of nuclear weapons, whether limited or unlimited.

#### Ice age coming but warming stops it – most recent ev.

Martin 2/7 [Sean Martin, 2-7-2020, "Ice age shock: ‘Timing is right for the next ice age to come around soon’," Express.co.uk, https://www.express.co.uk/news/science/1239246/ice-age-long-range-weather-forecast-climate-change-weather-warning, accessed 9-5-2020]LHSBC

Over millions of years, Earth goes through ice ages and then warm periods depending on the planet’s rotation around the Sun. Currently, it is in a warmer period – although it is important to note that it is exacerbated by global warming and not an explanation for the unnaturally [warming planet](https://www.express.co.uk/latest/climate-change).∂ However, a climate scientist has said Earth should be gearing up to go through another ice age soon.∂ There have been at least five major ice ages on Earth throughout its history, with the last one ending roughly 12,800 years ago.∂ These ice ages lasted for hundreds of thousands of years and saw temperatures drop sharply across the globe – cold enough to stop snow from melting and causing glaciers to form.∂ Professor James Renwick from the School of Geography, Environment, and Earth Sciences at the University of Wellington has said the planet should be going through a cooler period in due time.∂ He wrote in an article for the Conversation: “The timing is right for the next ice age to come around soon.∂ “For the past two and a half million years, the Earth has experienced regular ice ages, related to slow changes to earth’s orbit around the sun and changes in the earth’s axis of rotation (Milankovitch cycles).∂ “We are currently in one of the warm periods (interglacials) between ice ages and the present interglacial should be ending about now.”∂ However, Prof Renwick added: “There is a catch”.∂ Due to human activity and the pumping of greenhouse gasses into the atmosphere, the next ice age has been seriously delayed.∂ Carbon dioxide traps heat within the atmosphere, which is preventing the planet from going into another cooling cycle.∂ This is yet further evidence that human activity is destroying the fragile ecosystem of the planet.∂ Prof Renwick said: “Ice ages didn’t happen for millions of years because there was too much carbon dioxide in the air.∂ “The change in sunlight associated with the ice age cycles is quite subtle and takes thousands of years to make a difference to temperatures and to ice gain or loss.∂ “When atmospheric carbon dioxide is above about 300 parts per million, the infrared warming effect is so strong it drowns out the more subtle Milankovitch cycles and there are no ice ages.∂ “Coming out of the Pliocene period just under three million years ago, carbon dioxide levels dropped low enough for the ice age cycles to commence.∂ “Now, carbon dioxide levels are over 400 parts per million and are likely to stay there for thousands of years, so the next ice age is postponed for a very long time.

#### Ice age causes extinction.

Chapman 08 (Phil, geophysicist and astronautical engineer, bachelor of science degree in Physics and Mathematics from Sydney University, a master of science degree in Aeronautics and Astronautics from the Massachusetts Institute of Technology, “Sorry to ruin the fun, but an ice age cometh,” 4/23/08, The Australian, <http://www.theaustralian.com.au/news/sorry-to-ruin-the-fun-but-an-ice-age-cometh/story-e6frg73o-1111116134873>)

What is scary about the picture is that there is only one tiny sunspot. Disconcerting as it may be to true believers in global warming, the average temperature on Earth has remained steady or slowly declined during the past decade, despite the continued increase in the atmospheric concentration of carbon dioxide, and now the global temperature is falling precipitously. All four agencies that track Earth's temperature (the Hadley Climate Research Unit in Britain, the NASA Goddard Institute for Space Studies in New York, the Christy group at the University of Alabama, and Remote Sensing Systems Inc in California) report that it cooled by about 0.7C in 2007. This is the fastest temperature change in the instrumental record and it puts us back where we were in 1930. If the temperature does not soon recover, we will have to conclude that global warming is over. There is also plenty of anecdotal evidence that 2007 was exceptionally cold. It snowed in Baghdad for the first time in centuries, the winter in China was simply terrible and the extent of Antarctic sea ice in the austral winter was the greatest on record since James Cook discovered the place in 1770. It is generally not possible to draw conclusions about climatic trends from events in a single year, so I would normally dismiss this cold snap as transient, pending what happens in the next few years. This is where SOHO comes in. The sunspot number follows a cycle of somewhat variable length, averaging 11 years. The most recent minimum was in March last year. The new cycle, No.24, was supposed to start soon after that, with a gradual build-up in sunspot numbers. It didn't happen. The first sunspot appeared in January this year and lasted only two days. A tiny spot appeared last Monday but vanished within 24 hours. Another little spot appeared this Monday. Pray that there will be many more, and soon. The reason this matters is that there is a close correlation between variations in the sunspot cycle and Earth's climate. The previous time a cycle was delayed like this was in the Dalton Minimum, an especially cold period that lasted several decades from 1790. Northern winters became ferocious: in particular, the rout of Napoleon's Grand Army during the retreat from Moscow in 1812 was at least partly due to the lack of sunspots. That the rapid temperature decline in 2007 coincided with the failure of cycle No.24 to begin on schedule is not proof of a causal connection but it is cause for concern. It is time to put aside the global warming dogma, at least to begin contingency planning about what to do if we are moving into another little ice age, similar to the one that lasted from 1100 to 1850. There is no doubt that **the next little ice age would be much worse than the previous one and much more harmful than anything warming may do.** There are many more people now and we have become dependent on a few temperate agricultural areas, especially in the US and Canada. Global warming would increase agricultural output, but global cooling will decrease it. Millions will starve if we do nothing to prepare for it (such as planning changes in agriculture to compensate), and millions more will die from cold-related diseases. There is also another possibility, remote but much more serious. The Greenland and Antarctic ice cores and other evidence show that for the past several million years, severe glaciation has almost always afflicted our planet. The bleak truth is that, under normal conditions, most of North America and Europe are buried under about 1.5km of ice. This bitterly frigid climate is interrupted occasionally by brief warm interglacials, typically lasting less than 10,000 years. The interglacial we have enjoyed throughout recorded human history, called the Holocene, began 11,000 years ago, so the ice is overdue. We also know that glaciation can occur quickly: the required decline in global temperature is about 12C and it can happen in 20 years. The next descent into an ice age is inevitable but may not happen for another 1000 years. On the other hand, it must be noted that the cooling in 2007 was even faster than in typical glacial transitions. If it continued for 20 years, the temperature would be 14C cooler in 2027. By then, most of the advanced nations would have ceased to exist, vanishing under the ice, and the rest of the world would be faced with a catastrophe beyond imagining. Australia may escape total annihilation but would surely be overrun by millions of refugees. Once the glaciation starts, it will last 1000 centuries, an incomprehensible stretch of time. If the ice age is coming, there is a small chance that we could prevent or at least delay the transition, if we are prepared to take action soon enough and on a large enough scale. For example: We could gather all the bulldozers in the world and use them to dirty the snow in Canada and Siberia in the hope of reducing the reflectance so as to absorb more warmth from the sun. We also may be able to release enormous floods of methane (a potent greenhouse gas) from the hydrates under the Arctic permafrost and on the continental shelves, perhaps using nuclear weapons to destabilise the deposits. We cannot really know, but my guess is that the odds are at least 50-50 that we will see significant cooling rather than warming in coming decades. The probability that we are witnessing the onset of a real ice age is much less, perhaps one in 500, but not totally negligible. All those urging action to curb global warming need to take off the blinkers and give some thought to what we should do if we are facing global cooling instead. It will be difficult for people to face the truth when their reputations, careers, government grants or hopes for social change depend on global warming, but the fate of civilisation may be at stake. In the famous words of Oliver Cromwell, "I beseech you, in the bowels of Christ, think it possible you may be mistaken."

#### Warming solves rare earth mineral shortages.

McGinnis 12 (Paul E. McGinnis is a contributing writer to EcoWatch. He has interviewed a stellar array of change makers including Sylvia Earle, Dean Kamen, Ray Kurzweil, Fabien Cousteau and Josh Fox. Paul is also a New York based real estate broker, and green building and renovation consultant. He is a member of the U.S. Green Building Council, the Northeast Sustainable Energy Association, and the New York State Association of Realtors. McGinnis, P. E. “Greenland’s Ice Melt Ignites Race for Rare Earth Metals,” 11/12/2012, http://ecowatch.com/2012/11/12/greenlands-rare-earth-metals//ghs-kw)

Greenland’s vast, pristine, virtually-untouched terrain is becoming a hotbed for resource extraction. The Arctic is melting at an unprecedented rate, making Greenland’s natural resources, including high demand commodities such as oil, gas, gold, iron, copper and rare earth metals, more accessible. Insatiable international oil, gas and mining conglomerates are now aggressively vying to control access to the riches glaciers once denied. “This is not just a region of ice and polar bears,” Prime Minister of Greenland, Kuupik Kleist, told Reuters in the capital Nuuk, formerly known by its Danish name Godthab. “Developing countries are interested in a more political role in opening up of the Arctic. Greenland could serve as a stepping stone.” Greenland has less than 60,000 people living in an 836,109 square mile area. Comparatively, Greenland is almost a quarter the size of the continental U.S. Until recently, the country was regarded by strategists as barren wasteland with little political or economic import. But now this once overlooked arctic island is being targeted by government and politically connected entities, anxious to extract what lies beneath the glacier ice sheet. The powerful and deep-pocketed interests include China, the U.S., Russia and the European Union. Many in Greenland are excited about the attention the remote island nation is attracting and are happy to have world powers courting Greenland looking to strike it rich. Greenlanders are hoping they too will get rich along with the foreign investors. Henrik Stendal, head of the geology department at Greenland’s Bureau of Minerals and Petroleum, a Dane who has worked in Greenland since 1970, told the U.K. Guardian in July: “We have shown that we have huge potential—it has been an eye-opener for the mining industry. The EU has shown a lot of interest and that’s been very good—we believe this could be very valuable for Greenland. There could be benefits for everyone—at present most of our income is from fishing and a little bit of tourism, so the government really wants another income.” In addition to oil and gas, and perhaps even more attractive to industry, are rare earth metals that lie beneath the ground in Greenland that are essential components in new technologies, including computer hard drives, cell phones and flat screen devices. The world is consuming these rare earth metals at a voracious rate. For instance, in the first weekend of sales, the 4G iPad mini sold four million units. Our appetite for these devices and the rare metals required seems unending. Rare earth metals are also essential elements to military guidance systems and other defense related technology. Most of the rare earth metals are currently sourced in China. Now, the world’s nations are considering Greenland’s resources not just from an economic point of view, but, perhaps more importantly, a strategic perspective. There is a national security imperative when looking at availability of these resources and who controls them. The New York Times reported in September: “Western nations have been particularly anxious about Chinese overtures to this poor and sparsely populated island, a self-governing state within the Kingdom of Denmark, because the retreat of its ice cap has unveiled coveted mineral deposits, including rare earth metals that are crucial for new technologies like cellphones and military guidance systems. A European Union vice president, Antonio Tajani, rushed here to Greenland’s capital in June, offering hundreds of millions in development aid in exchange for guarantees that Greenland would not give China exclusive access to its rare earth metals, calling his trip ‘raw mineral diplomacy.'” “In the past 18 months, Secretary of State Hillary Rodham Clinton and President Lee Myung-bak of South Korea have made debut visits here, and Greenland’s prime minister, Kuupik Kleist, was welcomed by President José Manuel Barroso of the European Commission in Brussels.”

#### Uranium shortages are coming – triggers nuclear resource wars over uranium and REMs.

Konstantiov 12 (Mihail Konstantiov, Professor of Mathematics with the University of Architecture, Civil Engineering and Geodesy (UACEG), Bulgaria, Vice-Chancellor of UACEG (1999-2003), Member of scientific councils and commissions, Member of the Board of IICREST. He has authored 30 books and over 500 scientific papers. He has participated in international scientific projects of EU and NATO and realized research and lecturing visits in British, German and French universities. Prof. Konstantinov has been Member and Vice Chair of the Central Election Commission of Bulgaria and Voting coordinator of OSCE (1997-) as well as the Bulgarian representative at the Council of Europe on electronic voting. In addition to his scientific publications, he has authored more than 300 articles in Bulgarian editions devoted to social and political issues with emphasis on election practice and legislation., “Uranium time bomb ticking”, Europost, 2-11-2012, http://www.europost.bg/article?id=3763)

In 1945, the US had three nucle­ar bombs - two plu­to­ni­um-based devi­ces and a ura­ni­um-based one. The first one was det­o­nat­ed on a test site in New Mex­i­co, and the sec­ond and third ones over Jap­a­nese ter­ri­to­ry. On 6 August 1945, the then-only ura­ni­um-based bomb was thrown over the Jap­a­nese city of Hiro­shi­ma. What hap­pened is well known and I will not re-tell it. More­over, this sto­ry deals with nucle­ar weap­ons but they are not the main char­ac­ters. Almost 20 years ago, an agree­ment was inked under which the US under­took to help dis­man­tle Rus­sian nucle­ar war­heads and con­vert the ura­ni­um from them into fuel for nucle­ar reac­tors. The rea­son is sim­ple - the pro­ce­dure is expen­sive, Rus­sia was weak and poor at the time, and in addi­tion, Amer­i­can tech­nol­o­gy back then was sig­nif­i­cant­ly ahead of the Rus­sian one. The amounts of con­vert­ed ura­ni­um are mas­sive - more than 500 ton­nes. Thus Rus­sian ura­ni­um turns into fuel for US nucle­ar pow­er plants. At present, this fuel is used to pro­duce 10% of the elec­tri­cal pow­er in the US. This is more than the ener­gy pro­duced from renew­a­ble sour­ces, such as sun, wind and water, there. This idyll, how­e­ver, is com­ing to its end. First, the US-Rus­sia agree­ment for Rus­sian war­heads con­ver­sion expires next year and Rus­sia is high­ly unlike­ly to extend it. More­over, Rus­sians now have good tech­nol­o­gy for that pur­pose and will prob­a­bly want to leave their ura­ni­um for them­selves. And sec­ond, if the agree­ment is extend­ed, the amounts of war­heads sub­ject to dis­man­tling will soon be exhaust­ed any­way as the agreed lim­its are reached. Glob­al mar­kets have already start­ed sus­pect­ing what is going to hap­pen with the expir­ing US-Rus­sia agree­mentth for war­head ura­ni­um. And not only with it. Indeed, ura­ni­um oxide pri­ces have gone wild sur­ging to almost $70/lb (1lb is 454 gr.) in Jan­u­ary this year from $40/lb in Sep­tem­ber 2011. Such a 70% ral­ly in ura­ni­um price over just 3-4- mons is not sus­tain­a­ble and even a cer­tain edg­ing down can be expect­ed. Still, the trend is clear - ura­ni­um dearth is loom­ing, as well as dearth of oth­er stra­te­gic nat­u­ral resour­ces. We have repeat­ed­ly stat­ed this but let us under­score it again. The glob­al cri­sis is most of all a resource cri­sis. It is finan­cial inso­far as it has became clear that the sys­tem allow­ing some peo­ple to print mon­ey while oth­ers work and bring them oil and oth­er goods will not last for good. The antic­i­pat­ed ura­ni­um short­age in the com­ing dec­ade is tru­ly strik­ing and is esti­mat­ed at 500m lb! One of the rea­sons is the fast devel­op­ing econ­o­mies of Chi­na and India, along with oth­er coun­tries like Bra­zil and Tur­key. It is where the bulk of the 147 reac­tors expect­ed to become oper­a­tion­al in these 10 years will be locat­ed. A major con­sum­er of ura­ni­um, the US cur­rent­ly has a demand for 60m lb a year but pro­du­ces only 3m lb. Still, this is the way things are at present. And what will hap­pen aft­er the US Nucle­ar Reg­u­la­to­ry Com­mis­sion reviews and poten­tial­ly approves new nucle­ar reac­tor pro­pos­als? They are 26 or so. And more are in the pipe­line. The sit­u­a­tion in India is even more dra­mat­ic - an increase in the share of nucle­ar ener­gy in elec­tric­i­ty pro­duc­tion is expect­ed from 2.5% at present to 25%. In oth­er words, India will need 10 times as much ura­ni­um as it does now if the far-reach­ing plan is put to prac­tice. Chi­na has more hum­ble aspi­ra­tions and is gear­ing to raise the share of nucle­ar facil­i­ties in elec­tric­i­ty pro­duc­tion only ...three times. And Chi­na, much like the US, does not have suf­fi­cient domes­tic sup­ply. We can con­tin­ue with sta­tis­tics, but things are evi­dent any­way. A war is around the cor­ner. In the best-case sce­nar­io, this will be a price war over ura­ni­um and in par­tic­u­lar ura­ni­um oxide. Pri­ces in the order of $100 or even $200/lb no longer seem far-fetched. Price lev­els of $500-$1000-$2000/lb have even been men­tioned and this will have its swift and dras­tic impli­ca­tions. Still, if a reac­tor costs $4bn, why not pay $1000/lb of ura­ni­um? Or else, the 4-bil­lion invest­ment will go down the drain. Anoth­er explod­ing glob­al mar­ket is the one for rare earth ele­ments with hard-to-pro­nounce Lat­in names such as Neo­dym­i­um, Ceri­um, Lan­tha­num, Gal­li­um, Gado­lin­i­um, Thu­li­um… If we have a look at Men­de­leev's peri­od­ic table, they are squeezed some­where at the bot­tom. But then, all the elec­tron­ics around us, all com­put­ers, fibre optics, all sat­el­lites and in gen­er­al every­thing under­ly­ing our high-tech civ­il­i­za­tion would be utter­ly impos­si­ble but for these exot­ic hard-to-extract ele­ments. The price of each of them has dou­bled and tri­pled in a year alone. And the pri­ces of some of them have soared six­fold in the same peri­od. Com­pared with rare earth ele­ments, gold and plat­i­num are like a tame kit­ten. It nat­u­ral­ly eats and swells but at a rate of only up to 40% a year. And what about the lith­i­um under­ly­ing the idea of elec­tric vehi­cles stag­ing a mass entrance into our dai­ly life and econ­o­my if and when oil is exhaust­ed? But it is in rare ele­ments where the secret of future skir­mish­es over resour­ces lies. Because across the world, they are real­ly hard to extract but Chi­na holds 97% of their glob­al pro­duc­tion! No mis­take, Chi­na pro­du­ces 33 times as much rare met­als as the rest of the world. This may as well be changed some day as cur­rent­ly huge efforts and mon­ey are put into look­ing for rare met­als around the globe. Hypo­thet­i­cal­ly, only a third of the res­erves is in Chi­na with the oth­er two thirds lying some­where else. Too bad it is any­one's guess where, although Cana­da, South Afri­ca and some Afri­can coun­tries are con­sid­ered prom­is­ing in this regard. Still, for the time being this is how things are: Chi­na has almost every­thing and the rest of the world hard­ly any­thing. Does any­one have any doubts why Chi­na has the ambi­tion to become the top dog? Of course, the world is by no means tread­ing water in one oth­er respect: sub­sti­tute tech­nol­o­gies are sought for that would not be so crit­i­cal­ly depend­ent on rare earth ele­ments, yet, more in the long rath­er than short run. By the way, why are we dis­cuss­ing ura­ni­um pri­ces along with all oth­er sorts of pri­ces in US dol­lars? The answer is clear: because the dol­lar is the glob­al reserve cur­ren­cy. The rea­son for this, though, is more com­pli­cat­ed. True, the US is the larg­est econ­o­my for the time being. But it is also among the mosft indebt­ed coun­tries in the world. And its debt is increas­ing­ly sur­ging. Still, this is not the most impor­tant. The most impor­tant thing is that the US has the most pow­er­ful, most mobile and one of the most effect­ive armies in the world. Lit­tle like­ly is it for some­one to reject the US dol­lar as a reserve cur­ren­cy while the 82nd Air­borne Divi­sion of the US Army, based at Fort Bragg North Car­o­li­na, is the holy ter­ror it is at the moment. And there is much more to it than the 82nd Divi­sion. So the time bomb of ura­ni­um and rare earth ele­ments dearth is tick­ing. And lit­tle idea do we have of the time it is set for. Or wheth­er, when it final­ly goes off, some­body might remem­ber the first mas­sive appli­ca­tion of ura­ni­um, which turned thou­sands into ash­es some 67 years ago. And be temp­ted to use it again. For 67 years now, we have been show­ing rea­son and sur­viv­ing. Let us hope fierce defi­cien­cy of nat­u­ral resour­ces, food and water that is loom­ing will not take it away from us.

#### Renewables are a more unreliable source of energy than the grid.

Smith 13 – [(Rebecca Smith, National Energy Reporter for the Wall Street Journal.) “California Girds for Electricity Woes: Increased Reliance on Wind, Solar Power Means Power Production Fluctuates.” Feb 26. 2013. <https://www.wsj.com/articles/SB10001424127887323699704578328581251122150?mod=googlenews_wsj> ] SJDI

SAN FRANCISCO—California is weighing how to avoid a looming electricity crisis that could be brought on by its growing reliance on wind and solar power. Regulators and energy companies met Tuesday, hoping to hash out a solution to the peculiar stresses placed on the state's network by sharp increases in wind and solar energy. Power production from renewable sources fluctuates wildly, depending on wind speeds and weather. California has encouraged growth in solar and wind power to help reduce greenhouse-gas emissions. At the same time, the state is running low on conventional plants, such as those fueled by natural gas, that can adjust their output to keep the electric system stable. The amount of electricity being put on the grid must precisely match the amount being consumed or voltages sag, which could result in rolling blackouts. At Tuesday's meeting, experts cautioned that the state could begin seeing problems with reliability as soon as 2015. California isn't the only state having trouble coping with a growing share of renewables. Texas also needs more resources, such as gas-fired power plants, that can adjust output in response to unpredictable production from wind farms. Renewable power has seen a boom in both states. On Feb. 9, wind farms in Texas set a record for output, providing nearly 28% of the state's supply for the day. Production hasn't hit that level yet in California, but the state's goal is to get one-third of its electricity from renewable resources by 2020. "I think we're going to end up closer to 40%," said Robert Weisenmiller, chairman of the California Energy Commission, the state's policy and planning agency for electricity. A decade ago, California was hit by an electricity crisis marked by price surges and rolling blackouts, stemming from market manipulation and tightening electricity supplies in a newly deregulated market. To prevent a recurrence, state regulators passed rules requiring utilities to line up enough energy to meet even high power demand, with a special emphasis on in-state renewable resources. "California has been well served by the procurement process since the crisis," said Steve Berberich, chief executive of the California Independent System Operator, which runs the state's grid. "The problem is we have a system now that needs flexibility, not capacity." Changes in California's market have attracted lots of new generation; the state expects to have 44% more generating capacity than it needs next year. Grid officials say they expect the surplus to fall to 20% by 2022, though it will remain high for about a decade. However, the surplus generating capacity doesn't guarantee steady power flow. Even though California has a lot of plants, it doesn't have the right mix: Many of the solar and wind sources added in recent years have actually made the system more fragile, because they provide power intermittently. Electricity systems need some surplus, so they can cover unexpected generator outages or transmission-line failures, but having too much can depress the prices generators can charge for electricity. In part because of low power prices, many gas-fired generation units aren't profitable enough to justify refurbishments required by pending federal regulations under the Clean Water Act. That means they are likely to be shut by 2020, adding to the state's power woes. By July, state officials hope to have a plan in place addressing the problem. Turf issues among state and federal regulators could complicate the process. Michael Peevey, president of the California Public Utilities Commission, which regulates utilities, said action is clearly needed, but he isn't sure whether the market needs "small adjustments or a major overhaul." Utility executives are calling for immediate action, pointing to the risk of rolling blackouts. "We see the issue hitting as soon as 2013, 2014, 2015," said Todd Strauss, the head of planning and analysis for PG&E Corp., a big utility serving Northern California, who attended Tuesday's meeting. "If we thought it was far out, we wouldn't be here."

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