## 1NC – T

#### Interpretation: appropriation is a generic bare plural. The aff may not defend that a subset of appropriation is unjust.

Nebel 19 Jake Nebel [Jake Nebel is an assistant professor of philosophy at the University of Southern California and executive director of Victory Briefs.] , 8-12-2019, "Genericity on the Standardized Tests Resolution," Briefly, https://www.vbriefly.com/2019/08/12/genericity-on-the-standardized-tests-resolution/ SM

Both distinctions are important. Generic resolutions can’t be affirmed by specifying particular instances. But, since generics tolerate exceptions, plan-inclusive counterplans (PICs) do not negate generic resolutions. Bare plurals are typically used to express generic generalizations. But there are two important things to keep in mind. First, generic generalizations are also often expressed via other means (e.g., definite singulars, indefinite singulars, and bare singulars). Second, and more importantly for present purposes, bare plurals can also be used to express existential generalizations. For example, “Birds are singing outside my window” is true just in case there are some birds singing outside my window; it doesn’t require birds in general to be singing outside my window. So, what about “colleges and universities,” “standardized tests,” and “undergraduate admissions decisions”? Are they generic or existential bare plurals? On other topics I have taken great pains to point out that their bare plurals are generic—because, well, they are. On this topic, though, I think the answer is a bit more nuanced. Let’s see why. 1.1 “Colleges and Universities” “Colleges and universities” is a generic bare plural. I don’t think this claim should require any argument, when you think about it, but here are a few reasons. First, ask yourself, honestly, whether the following speech sounds good to you: “Eight colleges and universities—namely, those in the Ivy League—ought not consider standardized tests in undergraduate admissions decisions. Maybe other colleges and universities ought to consider them, but not the Ivies. Therefore, in the United States, colleges and universities ought not consider standardized tests in undergraduate admissions decisions.” That is obviously not a valid argument: the conclusion does not follow. Anyone who sincerely believes that it is valid argument is, to be charitable, deeply confused. But the inference above would be good if “colleges and universities” in the resolution were existential. By way of contrast: “Eight birds are singing outside my window. Maybe lots of birds aren’t singing outside my window, but eight birds are. Therefore, birds are singing outside my window.” Since the bare plural “birds” in the conclusion gets an existential reading, the conclusion follows from the premise that eight birds are singing outside my window: “eight” entails “some.” If the resolution were existential with respect to “colleges and universities,” then the Ivy League argument above would be a valid inference. Since it’s not a valid inference, “colleges and universities” must be a generic bare plural. Second, “colleges and universities” fails the upward-entailment test for existential uses of bare plurals. Consider the sentence, “Lima beans are on my plate.” This sentence expresses an existential statement that is true just in case there are some lima beans on my plate. One test of this is that it entails the more general sentence, “Beans are on my plate.” Now consider the sentence, “Colleges and universities ought not consider the SAT.” (To isolate “colleges and universities,” I’ve eliminated the other bare plurals in the resolution; it cannot plausibly be generic in the isolated case but existential in the resolution.) This sentence does not entail the more general statement that educational institutions ought not consider the SAT. This shows that “colleges and universities” is generic, because it fails the upward-entailment test for existential bare plurals. Third, “colleges and universities” fails the adverb of quantification test for existential bare plurals. Consider the sentence, “Dogs are barking outside my window.” This sentence expresses an existential statement that is true just in case there are some dogs barking outside my window. One test of this appeals to the drastic change of meaning caused by inserting any adverb of quantification (e.g., always, sometimes, generally, often, seldom, never, ever). You cannot add any such adverb into the sentence without drastically changing its meaning. To apply this test to the resolution, let’s again isolate the bare plural subject: “Colleges and universities ought not consider the SAT.” Adding generally (“Colleges and universities generally ought not consider the SAT”) or ever (“Colleges and universities ought not ever consider the SAT”) result in comparatively minor changes of meaning. (Note that this test doesn’t require there to be no change of meaning and doesn’t have to work for every adverb of quantification.) This strongly suggests what we already know: that “colleges and universities” is generic rather than existential in the resolution. Fourth, it is extremely unlikely that the topic committee would have written the resolution with the existential interpretation of “colleges and universities” in mind. If they intended the existential interpretation, they would have added explicit existential quantifiers like “some.” No such addition would be necessary or expected for the generic interpretation since generics lack explicit quantifiers by default. The topic committee’s likely intentions are not decisive, but they strongly suggest that the generic interpretation is correct, since it’s prima facie unlikely that a committee charged with writing a sentence to be debated would be so badly mistaken about what their sentence means (which they would be if they intended the existential interpretation). The committee, moreover, does not write resolutions for the 0.1 percent of debaters who debate on the national circuit; they write resolutions, at least in large part, to be debated by the vast majority of students on the vast majority of circuits, who would take the resolution to be (pretty obviously, I’d imagine) generic with respect to “colleges and universities,” given its face-value meaning and standard expectations about what LD resolutions tend to mean.

#### It applies to appropriation:

#### Upward entailment test – spec fails the upward entailment test because saying that appropriating space for mining is unjust doesn’t entail that appropriating space for colonization is unjust

#### Adverb test – adding “usually” to the res doesn’t substantially change its meaning because appropriation is universal and lasting

#### Violation: they defend appropriation in the PRC – host of other actors like the US, India, Russia, plus individual companies and permutations

#### Vote neg:

#### Limits – there are countless affs accounting for every subset of space actors, like nations and companies – unlimited topics incentivize obscure affs that negs won’t have prep on – limits are key to reciprocal prep burden – potential abuse doesn’t justify foregoing the topic and 1AR theory checks PICs

#### Ground – spec guts core generics like space col good, the heg DA, and the NewSpace econ DA, because the link is premised on reducing space privatization across the board – also means there is no universal DA to spec affs

#### TVA solves – read as an advantage to whole rez

#### Paradigm issues:

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

#### Comes before 1AR theory – NC abuse is responsive to them not being topical

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

#### No RVIs – fairness and education are a priori burdens – and encourages baiting – outweighs because if T is frivolous, they can beat it quickly

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

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

## 1NC – CP

#### CP: The Republic of Korea should ban the appropriation of outer space by private entities except for 6G satellites. The Republic of Korea should fund the appropriation of outer space for 6G satellites from asteroids by private entities.

#### South Korea is looking into 6G programs now but continued private sector investment is key.

Fletcher 7/1 [(Bevin, editor of FierceWireless. She previously served as senior reporter for Wireless Week and CED Magazine, covering the wireless industry on a variety of topics including regulation, technology, and business. She has also worked as a journalist at biotech and finance trade publications. Bevin has a bachelor's degree in journalism from West Virginia University.) “South Korea kickstarts 6G plans,” Fierce Wireless, 7/1/21. <https://www.fiercewireless.com/tech/south-korea-kickstarts-6g-plans>] RR

South Korea’s Ministry of Science and ICT this week established a 6G R&D implementation plan that calls for investing around $194 million by 2025 in six focus areas.

The plan targets government investment totaling KRW 17.9 billion ($15.78 million) in 2021 across 10 strategic technologies, including Low Earth Orbit (LEO) satellites, with KRW 220 billion within four years.

The technologies correlate with the focus areas, including performance, Terahertz bands, space communications, ultra-precision; artificial intelligence; and reliability.

Specifically MSIT outlined strategic technologies that include Tbps-capable wireless and optical communication for maximum 1 Tbps speeds; Terahertz RF components and spectrum model for bands between 100-300 GHz; space mobile and satellite communications to help expand support altitude to 10 km above ground; end-to-end ultra-precision networking for 1/10 latency compared to 5G; intelligent wireless access and network with a focus on applying AI to all sections of the network; and technology for constant network quality monitoring for 5G focused on embedded security.

This year the focus is on laying the groundwork for technologies and identifying technical requirements for key areas of the 6G network. The government is also establishing 6G research centers at three universities in 2021, including KAIST, Sungkyunkwan University and Korea University.

South Korea is also targeting leadership in international standards and patents, with an emphasis on active public-private cooperation in the early stages of 6G.

“As next-generation communications network lays foundation for digital innovation, the public and private sector should work together to take challenges in leading global market in 6G era based on our experiences and knowhow in network,” said Minister Lim Hyesook of Science and ICT. “Furthermore, as both countries have solid foundation for collaboration thanks to Korea-U.S. Summit, we will work together in the early stage of 6G deployment based on such cooperation. We will continue to closely cooperate with relevant ministries, large companies and small and medium-sized enterprises to secure competitiveness in the future and further strengthen Korea’s position as a digital powerhouse.”

In May U.S. and South Korea agreed to encourage joint R&D on emerging technology including 6G.

South Korea and the U.S. signed a Memorandum of Understanding (MoU) through the National Science Foundation (NSF) and the South Korean Institute of Information & Communications Technology Planning & Evaluation (IITP) for collaborative research opportunities, including 6G.

South Korea plans to promote joint studies on core 6G technologies and spectrum, including 11 studies with the U.S., one study with China and two studies with Finland. The country’s 5G Forum will sign MoUs for 6G collaboration with organizations in the private sector, like the Next G Alliance in the U.S.

While 5G deployments are still largely in early phases, industry and governments are turning an eye toward 6G. Europe started a flagship program called Hexa-X, targeting 6G leadership. Groups like ATIS’ Next G Alliance in North America are looking to form next steps and roadmaps for 6G. China has indicated the start of 6G efforts as well.

The U.S. and U.K. earlier this month announced plans to create a detailed science and technology partnership agreement, including collaboration on 6G.

Executives from Qualcomm and Ericsson testified on Wednesday before the U.S. House Committee on Energy and Commerce Subcommittee on Communications and Technology for a legislative hearing focused on securing U.S. wireless networks and supply chain.

Qualcomm SVP of Spectrum Strategy & Tech Policy Dean Brenner said at the hearing that 5G still has a long runway, but the company has started early work on 6G. He emphasized that there won’t be 6G without spectrum, allocated by the FCC, and that spectrum and technology interactions need to take place at a very early stage.

Jason Boswell, head of security and network product solutions for Ericsson North America, said before the subcommittee that if they had not already started on the race to 6G, “we would already be behind.”

In addition to the vendor’s own R&D, he noted it’s important to show collaborations including public-private partnerships. Boswell cited involvement with the NSF RINGS (Resilient & Intelligent NextG Systems) program, noting a focus on potentially significantly impactful technologies such as artificial intelligence, quantum computing, kilohertz spectrum. There will be many different things needed to take advantage of 6G – “not just make it go faster,” he added.

#### A strong South Korean space sector is key to launching 6G networks.

Clarke 10/24 [(Carrington, he ABC's Seoul Correspondent, covering East Asia for the network. He works across digital, television and radio) “Asia is in the midst of a space race, but it's not just about exploration. It's also a military flex,” ABC Net News, 10/24/21. <https://www.abc.net.au/news/carrington-clarke/8042208>] RR

South Korea may not yet have its own dedicated 'Space Force' like the US, but it has made clear that space is crucial to its defence.

However, there are also legitimate civilian and scientific motivations for its ambitions for a space industry.

South Korea's capacity to launch its own rockets is a critical step for reaching goals like a national 6G cellular network and a sovereign radio navigation system like the American GPS.

Lee Hyung-mok, who is a professor emeritus in physics and astronomy at Korea National University, said he and his fellow scientists were excited about the opportunity to use these rockets.

He said they will help transport observation equipment outside the earth's atmosphere, allowing them to better understand our universe.

#### 1AC Clarke proves our link – inserted in green

South Korea may not yet have its own dedicated 'Space Force' like the US, but it has made clear that **space** is **crucial** **to** its **defence**. However, there are also legitimate civilian and scientific motivations for its ambitions for a space industry. South Korea's capacity to launch its own rockets is a critical step for reaching goals like a national 6G cellular network and a sovereign radio navigation system like the American GPS. Lee Hyung-mok, who is a professor emeritus in physics and astronomy at Korea National University, said he and his fellow scientists were excited about the opportunity to use these rockets. He said they will help transport observation equipment outside the earth's atmosphere, allowing them to better understand our universe. Such a discovery doesn't come cheap and Professor Lee said he recognises that space travel can be expensive. He also said he knows that national defence is often an easier way to get the government to loosen the public purse strings. "Maybe the government decided to spend a huge amount of money because of the military importance," he said. Although competition might be spurring further investment in space, he still worries about where it might lead. "What I really hope is that instead of competing too much, it's better to collaborate," he said. "So in many areas, they try to work together." But he said within Asia, no-one is in that "mood" yet.

#### South Korea is a global leader in 6G development— encourages other countries to adopt 6G networks.

Castro 20 [(Caio, Journalist since eight years old, when I would read the newspaper out loud and pretend it was a radio show. Based in São Paulo, I have worked for Brazilian websites as reporter and editor before joining 6GWorld) “Korea lays out plan to become the first country to launch 6G,” 6G World, 11/5/20. <https://www.6gworld.com/exclusives/korea-lays-out-plan-to-become-the-first-country-to-launch-6g/>] RR

Pushing for 6G at the United Nations

Patents and standardization are two other areas where Korea wants to become a leader. And the push for that has already begun.

On September 24 2020, Korea’s delegation at the International Telecommunication Union (ITU) – the UN body responsible, among others, for global communications standards – filed a proposal for ITU members to start developing a 6G vision.

This is part of an articulated attempt to put Korea at the centre of discussions on the next generation of networks before other well-established countries do the same.

According to the MSIT’s strategy, the effort comes as a “pre-emptive response to global hegemony battle,” and the two core actions in this field are “applying to 3GPP, ITU Standards of 6G core technology.”

Still, the plan also envisions mutual collaboration with other nations regarding research and training specialized workforce.

Setting the environment

Besides establishing the R&D committee, the provisional strategy also has an eye on network development’s educational aspect.

The idea includes building four Network Research Centres by 2022, plus an investment in a platform for knowledge exchange, featuring Massive Open Online Courses about 6G technology evolution and “real-time sharing of best ideas.”

Another effort planned by the MSIT regards how to combine the private sector and academia. The plan states that universities could support companies’ R&D while they act on retraining the workforce. On the other hand, it would be the industry’s role to ” support field training of university students and [offer] student mentoring.”

The document to which 6GWorld has had access envisions 6G commercialization starting in 2028. In August, the Korean government published a provisional timetable including details for each phase of the process:

#### 6G is key to cyber security – turns scenario 1

Ziegler et al. 10/14 [(Volker, (Senior Member, IEEE) received the Dipl.-Ing. (M.Sc.) and Dr.-Ing. (Ph.D.) degrees from the Department of Electrical Engineering, Universität (TH) Karlsruhe, Germany.) “Security and trust in the 6G era,” Nokia Bell Labs, 10/14/21. Graphs/Figures Omitted <https://d1p0gxnqcu0lvz.cloudfront.net/documents/Nokia_Security_and_trust_in_the_6G_era_White_Paper_EN.pdf>] RR

In our 6G security vision, we cluster security technology enablers into domains of cyber-resilience, privacy and trust, and their respective intersection as shown in Figure 3. Our approach emphasizes the need to extend cyber-resilience technologies by privacy-preserving technologies and on top of that, trust-creating technologies in order to achieve the ultimate goal of trustworthy 6G networks. We consider resilience against all kinds of cyber-attacks as the core element and indispensable foundation — a network that lacks these attributes of

## 1NC – Case

### Noko

#### They don’t solve – their uniqueness evidence is from this year, but 1AC Davis proves Noko aggression in space has existed for years separately – inserted in green

North Korean nukes and space war

North Korea’s launch of a Hwasong-12 IRBM over Japan on 28 August, a second launch on 15 September (once again overflying Japan), and its test of what is either a boosted fission weapon or an early generation thermonuclear weapon on 3 September have accelerated the rush towards a major military crisis on the Korean peninsula. One aspect of North Korea’s nuclear developments that warrants closer attention is its ability to use nuclear weapons to generate electromagnetic pulse (EMP) attacks, or threaten low-Earth orbiting satellites in space.

The testing of higher yield nuclear weapons gives North Korea the ability to attack electrical and electronic systems over a wide area. Detonating a nuclear weapon at high altitude, such as in low-Earth orbit (LEO), would generate EMP, which would fry electrical and electronic circuits over a large geographic area.

EMP isn’t new; we’ve known about it since the Cold War, as a result of high-altitude nuclear testing such as the ‘Starfish Prime’ test in 1962. The effects of that test on terrestrial electrical systems generated concerns that the Soviet Union could blanket the US or NATO with sufficient EMP to burn out critical command and control networks and disrupt Washington’s nuclear retaliatory capability in the opening stages of a nuclear first strike. Such an attack would have had an even more devastating effect on non-hardened civilian infrastructure.

Earlier this year, North Korea’s testing of ICBMs included trajectories lofted to very high altitudes, which allowed Pyongyang to test warhead re-entry survivability, and minimised the risk of US military retaliation.

#### Nonunique – host of other areas in which Noko is treated as unequal, like their nukes going unrecognized and devastating sanctions

#### Grossman has no terminal impact – it also assumes Noko stationing nukes in space, but they haven’t read ev about the feasibility of that

If North Korea could detonate a nuclear weapon in space,

### Debris

#### Debris creates existential deterrence by raising the bar for conflict – international norms fail

Miller 7/31 [(Gregory, Chair of the Department of Space Power at the Air Command and Staff College, Ph.D. in Political Science from The Ohio State University) “Deterrence by Debris: The Downside to Cleaning up Space,” Space Policy, 7/31/2021] JL

The danger of kinetic strikes increasing orbital debris is a common theme in the literature, but the positive deterrent effects of some debris are often overlooked. The debris resulting from destroyed satellites, or other space objects, creates a deterrent effect on actors who might otherwise violate international norms and strike at objects in space, either to test their capabilities or as an act of hostilities. This is not deterrence in the traditional sense, of one actor publicly threatening punishment in response to another actor’s unwanted actions. It is not deterrence by denial since the attacker is not damaged and may even achieve its objective. Nor is it deterrence by punishment because the debris itself does not threaten to punish the attacker’s country. But debris can increase the future costs to the aggressor, even if their initial attack succeeds, and thus it has a similar restraining effect on certain behavior. Like the automated response of the U.S. tripwire in West Germany, the threat that debris can pose to state interests acts as a form of deterrence, at least to prevent some actors from taking certain types of actions. Removing the danger of debris will weaken that restraint and thus weaken deterrence, making ASAT tests and hostile actions in space more likely.

Several factors may deter a state from launching kinetic tests or striking against an adversary’s interests in space. For one thing, if a state’s adversary has similar capabilities to destroy objects in space, deterrence would be a function of not wanting to escalate tensions. Although international law only explicitly prohibits states from placing weapons of mass destruction in orbit, international space law, like the Outer Space Treaty [30], does provide a framework for addressing the activities of one state that lead to the damage of another state’s property. Likewise, there are international norms (informal but expected rules of behavior) against the weaponization of space. But these norms seem to be in decline [31], and such norms only deter a state from engaging in certain types of behavior if the state cares about following norms, if it cares about how states perceive its behavior, or if it believes other states are willing to enforce the norms. The beauty of debris as a deterrent is that it does not rely on the enforcement of norms or the credibility of states to succeed.