

Are nuclear weapons necessary to a nation's sovereign democracy/whatever they have?

In the wake of the Russia-Ukraine crisis, I decided to type out my thoughts on “nukes”(nuclear weapons). I have always had this half-baked idea that nukes are important for a country to develop, keep, and possibly even improve on. If their nuclear weapons can be blocked, systems sent haywire, then the nukes are worse than useless, they are a liability.

A nuclear weapon derives its explosive power from reactions involving fission, or fission with fusion. The “Tsar Bomba” developed and tested by the soviets in the 1960s, the most powerful bomb ever tested, had a capacity of 243 PJ. Small nuclear bombs, the size of a small bomb, like half of a small suitcase, can devastate entire cities. The Tsar Bomba’s capacity for explosion is three thousand times that of the bombs used by the USA against Japan at Hiroshima and Nagasaki. Please think and understand multiples- if you had one million dollars, and for whatever reason, divine power increased it 3,000 fold, would you be the richest person on Earth? Not even close. You would have a paltry 3 billion dollars- MacKenzie Bezos, no actually, MacKenzie Scott has given away double that amount to charities in 2020. I hope she made sure it made a huge impact. This example was both to illustrate the magnitude of destruction nuclear bombs can wreak, and to show you how the obscene wealth accumulated by some individuals is truly incomprehensible.

There exists something known as the stability-instability paradox. To put it simply, it states that the possibility of direct war between two nations with nuclear weapons greatly decreases, and the likelihood of smaller battles or proxy wars increases. Examples provided include the Cold war between the USSR and the USA, as well as India and Pakistan. There is a logic there- nuclear weapons have immense destructive capacity, and currently nations could likely fire some to destroy a couple of cities and surrounding areas from a targeted strike, with no mention of the cascading natural disasters and radioactive damage it would cause. When talking about nuclear weapons, terms like “minimal deterrence”, “minimal credible deterrence”, and “first-strike” come into play. We may have all heard the term “mutually assured destruction”, and while that may be applicable in many nuclear scenarios, it isn’t very applicable in some. That’s where minimal deterrence comes into play. Let’s take an example- The USA decides that it wants to attack India, with nuclear weapons. The doctrine of deterrence says that the decision makers would not do so, since the harmful retaliation from Indian weapons, while not “assuring destruction” of the USA, would certainly outweigh any benefits gained from attacking. Hence, even though mutual destruction would not be assured, a minimal stockpile of nuclear weapons can allow a country to be considered safe under rational circumstances.

So now we know a little more about nukes. My thought was- do nukes allow a country to be more sovereign than anything else might? Consider countries that are at risk of being invaded by their neighbours or by superpowers nearby. If they possessed nuclear weapons, through the

deterrence policy, wouldn't they not cause major attacks or wars, for fear of retaliation? As a thought experiment, consider this- President Zelensky (Ukraine's president) and Ukrainian intelligence officials were able to put together two-three nuclear projectiles in secret, perhaps with assistance from nations hostile to Ukraine's largest nearby power. Now, such a scenario is impossible or near impossible, but just for arguments' sake. After Russia's invasion, the president could sit on these projectiles till the world has reacted to Russia's aggression. Then, it could really open its options. The immediate knee-jerk response would be to threaten Russia or reveal the presence of their weapons, and take aim at Moscow. The situation would be unbelievably tense at that point- this would easily be the closest the world would have been to nuclear war, for in a number of situations, including one where President Zelensky is overthrown, the projectile could be unleashed by a small group against everyone, and even Ukraine's wishes. What if the projectiles were put squarely in the path of Russia's forces? In a way that any further advance on that front would trigger it? Again, same weapon, but certainly a very different situation. A self-destruct, that would murder its own nation and cast a pall on the ones around, and paint Russia as a villain like no other, and perhaps trigger greater global events. What if they aimed their projectiles at Western European nations instead? Now, they could demand that NATO and their western neighbours defend Ukraine, even pick certain lines where if Russia does cross pass them, Ukraine fires its nuclear weapons. Nuclear blackmail, if you will.

Iran's push into development of nuclear weapons has been part of US foreign policy for a while now. Iran has research sites, uranium mines, and uranium enrichment efforts, which are a step on the way to developing weaponry. Iran's nuclear program began in the 1950s, supported by the US, and Iran was part of the Non-Proliferation Treaty, and was amenable to inspection by the IAEA. After the 1979 revolution in Iran, however, cooperation was reduced, the NPT obligations were ignored and Iran endured sanctions for its continued nuclear development. There was a fatwa saying Iran will not develop nuclear weapons, but it often seems that they are on their way to doing so. Recently, Iranian officials have admitted that they have all the technical capability in place to build a weapon, though they speak nothing of plans to actually build one. Why might Iran want to develop nuclear weapons? A couple of reasons spring easily to mind. The USA interferes in the Middle East for a variety of muddled reasons. It supported the previous Iranian regime (before the revolution) and helped Iraq in its war against Iran. In an unstable region, which is flooded with foreign interests and interventions, and a predominantly Shia muslim population(other major islamic nations are typically Sunni muslim dominant), a nuclear deterrent can serve many purposes, especially the common one of " Think hard before you dare muck around with this nation's affairs". Iran is bordered on the west by Iraq, north and east by Turkmenistan, Afghanistan and Pakistan. Afghanistan is known to house terrorists and extremist groups, is currently controlled by the Taliban, and Pakistan has had nuclear capability and weapons for decades now. Further complicating matters, is that the subject of Iran's nuclear weapons are a big internal political issue as well. After insisting that Iran be afforded dignity and treated like a equal sovereign nation that can pursue its objectives as it sees fit, the right wing nationalism has evoked a sense of pride in the nuclear weapons issue, and even if Iran wanted

to back down on it, it would now be hard to, without admitting to some sort of international bullying.

Another case of nuclear weapons involved in international politics is North Korea, and they have over 5 nuclear warheads, and are engaged in increasing their stockpile.

Taking a more zoomed-out view again, the example of Iran shows how these weapons, when not even functional, or even made yet, serve as such an important issue in international relations.

I was listening to a podcast hosted by Sam Harris, and he spoke with his guest about the danger of nuclear weapons. In particular, they spoke about how such weapons are immensely dangerous, because a single fired nuclear warhead can wreak immense destruction, and set into motion a chain of events that could quickly prove catastrophic. They also hypothesized that, in our current age of digitization and the huge role advanced analytics and reports play in intelligence and wars, if a nuclear-capable country erroneously detects a warhead heading towards it, launched by the enemy, that might be enough to provoke action. As we know, such missiles can cause extreme harm, and lingering effects cannot be accurately quantified. Apart from evacuations and defensive maneuvers, the commanding officer has other decisions to make at this time. Can they wait to receive confirmatory data that this truly is a nuclear attack? Perhaps they have protocols in place that demand it. Perhaps the protocols state that the commanding officer of that station is best equipped to make the consequential decision. Does he fire one in response? Maybe that depends on which country it is- a smaller country with limited nuclear capability might be quicker to respond harshly, facing destruction; a large superpower could bear the assault, and then obliterate its aggressor, having a much superior "second-strike" capability. In any scenario, questions are raised about how much damage sophisticated, planned hacking attacks could have that take advantage of geopolitical tensions and public opinion. In 1983, during the Cold War, something of this nature came to pass. Around midnight, Stanislov Petrov saw that his bunker's computers reported an ICBM was heading towards the Soviet Union, but he considered it a computer error. He actually reasoned that the strike would have to be massive, and not the five missiles the system detected, since the US would want to obliterate the Soviet's ability to counterstrike. He did not report it to his superiors, and he turned out to be right. Whew.

A reason against nuclear armament often proposed is that having more fingers able to press more triggers greatly increases the chances that one will.

I'd like to consider another idea. In a nuclear powered country, could an autocrat eventually rule with an iron fist, and a substantially reduced chance of intervention from any other power?