

NUCLEAR PROLIFERATION AND SECURITY CONCERNS:

Accurately predicting future state proliferation by looking at various factors outside the security model.

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Why do states build nuclear weapons? This is the question that Scott Sagan attempts to answer by in his research by looking at three different theory models. In the past, the security concerns of the state were a positive prediction to whether or not they would develop nuclear weapons, but the same factors that pressured the states in the past, are no longer present today. Without these factors, would security still be a reliable indicator? Sagan argues that focusing only on the security considerations as the cause of proliferation is “dangerously inadequate”.¹ While the security model accurately explains past cases of nuclear proliferation by states, it would not be reliable in current times since the factors are no longer the same. Therefore, if we want to predict which countries might develop nuclear weapons in the future, underlying security concerns can not be the only area we pay attention to. Recent proliferation cases have demonstrated that we must take the other factors that play an important role in states decisions regarding proliferation. These factors, along with security concerns, may provide a much more accurate predictor of future proliferation.

First, let’s take a closer look at why the security model has worked for past cases. Sagan describes the security model as “any state that seeks to maintain its national security must balance against any rival state that develops nuclear weapons by gaining access to a nuclear deterrent itself.”² The overwhelming majority of nuclear programs were developed

¹ Sagan, Scott D. 2012. Why do states build nuclear weapons? Three models in search of a bomb. Pp.54

² Ibid. pp 56

around WWII and the Cold War. The security model is better at predicting these behaviors of superpowers such as Russia and the United States where there is an imminent threat to state's security. The nuclear arms race between the United States and the former Soviet Union provides a case example of this security model and how it explains behavior towards nuclear proliferation. On July 16, 1945, the first atomic bomb was tested in the New Mexico Desert.³ Less than a month later, an atomic bomb was dropped on Hiroshima, Japan. The United States gained military superiority and a need arose for other states to have acquire similar weaponry for security. "Stalin wanted to be able to threaten the United States with atomic weapons, just as the United States was able to threaten the Soviet Union"⁴ The Soviets tested their first atomic bomb in 1949 after blueprints were leaked to them by German physicist, Klaus Fuchs, who worked on the first United States bomb.⁵ Now that the Soviet Union had comparable weapons, the United States began tests on new types and designs of bombs in order to regain their superiority. Each side continued to add to their arsenals as the tensions rose. There was a verifiable need for the Soviets to gain a nuclear deterrent to prevent an attack by the United States, thus the security model accurately explains proliferation decisions by the state.

³ Davis, Watson. "Background of Atomic Bomb." *The Science News-Letter* 49.25 (1946): 394-395.

⁴ Zuberi, Matin. "Stalin and the bomb." *Strategic Analysis* 23.7 (1999): 1133-1153.

⁵ "Soviets explode atomic bomb - Aug 29, 1949 - HISTORY.com." 2010. 20 Sep. 2016
 <<http://www.history.com/this-day-in-history/soviets-explode-atomic-bomb>>

The Cold War gave birth to many nuclear programs around the world. South Africa, which is rich in Uranium deposits, “developed nuclear weapons to deter an overwhelming threat from combined Cuban and Soviet military forces”⁶ France and the United Kingdom also developed nuclear weapons in response to the growing Soviet threat.⁷ With the great threat to the states by the Soviet Union, many states felt the need to arm themselves with nuclear weapons for security. The fall of the Soviet Union, also brought about the dismantlement of many of the nuclear programs worldwide. The security model can explain previous cases of proliferation and dismantlement once the threat is removed, but does it provide us a reliable way of predicting future proliferation. The circumstances that fueled nuclear proliferation during the Cold War no longer survive in the current climate. The world’s superpowers currently all have established nuclear programs. We should turn our attention to smaller states who may be interested in developing nuclear programs of their own. The security model would not be appropriate to measure or help predict the actions of these states, since they would not face the same circumstances that led to proliferation in the past.

In order to better understand what would lead a state to proliferation, outside of the security model, we can look at recent cases such as India’s nuclear program. Sagan explains India’s case using the domestic politics

⁶ Du Preez, Jean, and Thomas Maettig. "From pariah to nuclear poster boy: how plausible is a reversal?." *Forecasting Nuclear Proliferation: the Role of Theory*, Palo Alto: Stanford University Press (forthcoming) (2010).

⁷ Sagan, Scott D. "Why do states build nuclear weapons? Three models in search of a bomb." (2012). Pp. 58

model. Under this model he states that nuclear weapons are, "...not obvious or inevitable solutions to international programs; instead, nuclear weapons programs are solutions looking for problems to attach themselves so as to justify their existence."⁸ Cases such as these would not fit under the traditional security model because the program exists outside of a security threat to the state. India developed their nuclear program and successfully tested their nuclear device in May 1974.⁹ India was vying for power and wanted to build a strong military to make their presence known as a powerful nation. In 1971, India signed a mutual defense treaty with the Soviet Union.¹⁰ The only possible security issue would have been with China, but instead India's nuclear proliferation was not in response to China, but more of a way to compete with China. India's nuclear program was in the works prior to Prime Minister Gandhi. Her father, Prime Minister Nehru envisioned an industrialized India, mirrored after the Soviet Union and implementing the latest sciences and technologies to break the perceived image of India the world had.¹¹ India obtained nuclear power plants from Canada, under the agreement that it would be used for energy sources. Ultimately, it was later determined that the reactor that Canada provided, was used to produce the plutonium for India's nuclear bombs. The quick

⁸ Sagan, Scott D. "The causes of nuclear weapons proliferation." *Annual Review of Political Science* 14 (2011): 225-244. Pp. 65

⁹ Ibid. 67

¹⁰ Van Praagh, David. "India's Bomb." *Asian Affairs: An American Review* 1.6 (1974): 357-370.

¹¹ Ibid. 360

repurposing of these energy facilities for nuclear proliferation could have been easily recognized as the western powers were already re-evaluating their positions on Indian aid, including the United States ending aid. "There was mounting evidences that India's rulers...were using resources collected at home and abroad primarily to strengthen the nation as a major military power"¹² while many of the people in the country were still starving. India's strong desire to become a superpower encouraged their proliferation. There was no outside threat to their security and no other realistic explanation to why they developed their nuclear program at that specific point that would fall under the security model. India bomb could not be viewed as nuclear deterrent since China previously tested and maintained nuclear weapons for almost a decade prior. As Sagan suggests, India's nuclear program suggests that it was created to address domestic political concerns. "It appears less like a calculated strategy of nuclear ambiguity and more like a political rationalization for latent military capabilities developed for other reasons."¹³ Many of those political concerns revolved around how India wanted to be perceived by the world. India's ambition to become recognized as a militarized and industrialized nation could explain their proliferation decisions.

In part, many of India's nuclear decisions could also be analyzed under Sagan's third model; the norm model. Sagan describes this model to explain

¹² Van Praagh, David. "India's Bomb." *Asian Affairs: An American Review* 1.6 (1974): 361

¹³ Sagan, Scott D. "Why do states build nuclear weapons? Three models in search of a bomb." (2012).pp. 68

states who view proliferation as “important symbolic functions—both shaping and reflecting a state’s identity.”¹⁴ Although little attention is given to this model when analyzing proliferation, this model, along with the domestic politics model, will give us the most reliable predictor of future proliferation by states. Taking a closer look of recent proliferation, North Korea’s decisions can be explained with the norm model.

Although North Korea’s interest in nuclear weapons began in the 1960’s,¹⁵ they didn’t officially test their first nuclear weapon until 2006. During the Korean War, the United States placed nuclear weapons in South Korea, under the security model, this would have provided North Korea with adequate justification for their nuclear program, yet no action was taken by North Korea to acquire a deterrent. The weapons were subsequently removed from South Korea in 1985, thus removing the existential threat.¹⁶ There was not an immediate threat to North Korea to justify proliferation at that time of the nuclear tests. North Korea instead views proliferation, not as a deterrent or need for a security standpoint, but as a prestige. North Korea is far behind the surrounding countries in the region in terms of technology, science, economy and political development. To overcome this, “the ruling elite regard the strategic weapon as essential to preserving their

¹⁴ Sagan, Scott D. "Why do states build nuclear weapons? Three models in search of a bomb." (2012).pp. 77

¹⁵ Pollack, Jonathan D. *No exit: North Korea, nuclear weapons, and international security*. International institute for strategic studies, 2011.

¹⁶ Fitzpatrick, Mark. "North Korea: Is Regime Change the Answer?." *Survival* 55.3 (2013): 7-20.

authority."¹⁷ Immediately after testing their first nuclear weapon, the government issued statements to the public promising the people that the bomb will "contribute to defending the peace and stability on the Korean peninsula" and it that it was necessary "to have a powerful self-reliant defense capability."¹⁸ North Korea did not need a nuclear deterrent for security, yet looked for it to boost their position and power. At times, North Korea can be seen as causing a crisis to justify their actions, often viewing sanctions and international involvement as declarations of war against them. Upon confirmation of the nuclear tests, the international community responded by placing more sanctions on North Korea, devastating the already fragile economy. To worsen the situation, China's relationship with North Korea is deteriorating now that their neighbor has developed nuclear weapons.¹⁹ What was once the largest source of legitimate trade for North Korea, is now finding increased sanctions with each advancement of their arsenal. North Korea seems to maintain the same attitude, despite pressures from the international community, and "refuses to trade away any of it's nuclear arsenal for economic or political benefits."²⁰ Examining North Korea's persistent desire to increase their nuclear programs and arsenal, despite increased sanctions and threats to their weakened economy. It appears that North Korea is more concerned with the prestige and power that it believes

¹⁷ Fitzpatrick, Mark. "North Korea: Is Regime Change the Answer?." *Survival* 55.3 (2013): pp. 8

¹⁸ "BBC NEWS | Asia-Pacific | Text of N Korea's announcement." 2006. 20 Sep. 2016

<<http://news.bbc.co.uk/2/hi/asia-pacific/6032597.stm>>

¹⁹ Fitzpatrick, Mark. "North Korea: Is Regime Change the Answer?." *Survival* 55.3 (2013): 7-20.

²⁰Ibid. pp. 8

nuclear weapons will provide them in negotiations with other countries. An indicator that North Korea would eventually develop and acquire nuclear weapons was their constant desire to increase their military powers.

When examining both India and North Korea's nuclear proliferation, there was a common indicator that appeared in both cases. In addition, this same indicator appeared in the security models cases in the past. We find that each country was actively increasing their military and technology to compete with the other nations. In India's case, it was to shed the old image and be seen as a technological and militarized nation that had capabilities of being the next superpower. North Korea increased military and eventually acquired nuclear weaponry believing it would ensure the survival of their regime. In both cases, it is apparent that "proliferation is a response...usually motivated by some deep perception of insecurity."²¹ If we want to predict which countries may develop nuclear programs in the future, we can not only look at their security concerns. As recent cases have proven, the circumstances of the environment of nuclear weapons has changed. Along with those changes, the prestige and policies of possessing nuclear weapons plays a larger role than in the past. During war and high conflict periods, it would be reliable to depend on the security model to determine which states will develop nuclear programs for deterrence and

²¹ Crawford, Timothy, and Michael J Mazarr. "North Korea and the Bomb: A Case Study in Nonproliferation." *Journal of International Affairs* 51.2 (1998): 702-706.

safety. During periods of non-world conflict, it would appear to be more reliable to examine other factors and models.