OLIVIA BAUER is a graduating Political Science major who greatly enjoyed her time at Cal Poly San Luis Obispo. She is constantly impressed by the caliber of both professors and students within the Political Science department. She believes that Cal Poly has provided her with all of the skills necessary to be extremely successful in the future. After graduation, she plans to move back to the San Francisco Bay Area and begin her career.
Real World Observation
On September 10, 2014, The New York Times reported a stabbing that took place in the airport in Lagos, Nigeria. The article continues to say that a federal air marshal was stabbed with a syringe, “an incident that is raising concerns about whether the deadly Ebola virus could be harvested from the widespread outbreak in West Africa and used as a bioweapon.”¹ The initial tests done on the contents of the syringe do not detect Ebola or any other dangerous biological agent, and the air marshal was examined and released from a hospital in Houston with no sign of sickness. While “experts say it would be extremely hard for a group to grow large amounts of the virus and turn it into a weapon that could be dispersed over a wide area, [...] it is harder to completely discount

Ebola is not a particularly contagious virus, but it is has a high mortality rate once contracted. Its fatality is clearly seen in the most heavily affected areas of the Ebola outbreak. As of September 25, 2014 “at least 2,909 people have died in Guinea, Liberia and Sierra Leone, with 6,242 reported Ebola cases over all, according to the latest report of the United Nations’ health body. Nigeria and Senegal have recorded a total of eight deaths and 21 cases of infection.” The United States government has responded quite dramatically to the Ebola outbreak in Africa with an unprecedented commitment of military forces. Dan Lamothe with The Washington Post reported that President Obama “framed the ongoing Ebola epidemic in western Africa as a potential threat to global security, a two-star Army general and his staff were already on the ground in Liberia, preparing for a mission that is expected to include about 3,000 service members and has no end in sight.” While the reaction on the part of the United States is unprecedented, the threat of biological agents and their potential use as biological weapons has existed for some time.

In recent years, biological agents have been assessed with increasing frequency as having a dangerous and pressing potential for use as weapons. A recent example occurred in April of 2013, when The New York Times reported, “a letter sent to a U.S. Senator from Mississippi tested positive for the poison ricin.” While the letters were successfully intercepted and analyzed, the existence of an attack like this one serves to show the progress that still needs to be made in eliminating the potential for biological agents to be used against citizens, and even states. These domestic attacks are only evidence of the terrifying possibility of an interstate biological weapons attack. Historically, when it became clear that biological weapons were a threat to state actors, the Biological Weapons Convention (BWC) was written and signed in 1972. In 1975, the

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2 Ibid.
United States ratified the BWC, and today, there are 165 signatory states. The State Department defines “the BWC [as being] critical to international efforts to address the threat posed by biological weapons—whether in the hands of governments or non-state actors—and to remain effective it must continue to adapt to the wider range of biological threats we face in the 21st century.” However, in the years since its ratification, the BWC has not been updated or given teeth, despite the increased threat of a biological weapons attack. This leads to the following research question: Why is there a lack of political will to update the Biological Weapons Convention?

**Theoretical Paradigm**

International Legal Realism is the theoretical paradigm that best frames the research question and its potential answers. International Legal Realism assumes that states wield power through rules and laws that govern behavior between nations. This paradigm also assumes that change occurs on the international stage when prompted by a state with relative power. The three main proponents and founders of International Legal Realism are Hans Morgenthau, Harold Lasswell, and Myres McDougal. Hans Morgenthau explains that international laws need “to be seen within the sociological context of economic interests, social tensions, and aspirations for power, which are the motivating forces in the international field, and which give rise to the factual situations forming the raw material for regulation by international law.” Relating to the core assumptions, this standard for international laws explains that relative power is what controls and drives outcomes on the international level. Similarly, Lasswell “defined politics as the adversarial process of decision about the distribution of values in society.” Furthermore, Lasswell and McDougal together “defined law as the subset of the flow of decisions that could be said to be both ‘authoritative’ and ‘effective.’” Effective in this case is defined as controlling with power. Clearly, from the definitions given by the three founders of the paradigm, relative

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9 Ibid.
power is crucial to interstate behavior and outcomes on the international stage. These assumptions are the reason why International Legal Realism best frames this research question and its answer. Lasswell and McDougal, in their “Criteria For a Theory About Law,” state that “an emphasis explicitly focused upon the institutions of the modern state […], unable to observe in the world arena either appropriate centralized institutions or an identifiable monopoly of force, has insoluble difficulty in accounting for the patterns of authority and control transcending nation-state lines.”

The BWC can certainly be classified as an institution of the modern state, but more specifically, it lacks verification or centralization. Without teeth or hard international law, there can be no concrete authority or enforcement on an issue such as biological weapons. This aspect of the theoretical paradigm relates to the first case study, which focuses on the Biological Weapons Convention Verification Protocol. The paradigm also frames the threat inflation case study through its assumptions about interaction between states and the role of power. Threat inflation in the case of biological weapons reflects the more abstract concept that is the shift to a unipolar international system. Lasswell and McDougal “emphasize that law as an on-going process is located in a larger social context [… ] and legal problems are generally attributable to the broader social setting,” described as the big blooming ongoing confusion, “in which they always occur.”

Finally, as it applies to the final case study, the decline in arms control, International Legal Realism explains that the state with the most power drives change. Change in this final case study is a shift from arms control to nonproliferation, or the prevention of the spread of weapons like biological weapons. The United States set the precedent for other nations to adopt a defeatist policy when it comes to biological weapons control. However, this assumption of International Legal Realism also applies to the larger picture of the research question. “The Lasswell-McDougal approach was designed to develop social policies through careful and rigorously organized theoretical deliberation.” While a shift in outlook on biological weapons can be standardized by the United States, the

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development of a solution to the BWC issue can as well.

Failure to Implement the Biological Weapons Convention

The Biological Weapons Convention’s failed Verification Protocol and other similar attempts serve as empirical instances that represent a broader and more abstract concept. In the exploration of a reason for lack of political will to update the BWC, an important idea that often comes up is the concept of sovereignty and the desire of states to keep their relative power unchecked. The Verification Protocol and its failed ratification by the United States is an excellent representation of this independent variable, which may be causing a lack of political will among states to redo the BWC in a way that gives it teeth, which the Verification Protocol would have accomplished. The BWC was written and negotiated from 1969 to 1971, opened for signing in 1972, and was ratified by 43 countries by the time that the United States ratified it in 1975. The biological weapons treaty “prohibits the development, production, stockpiling or acquisition by other means or retention of microbial or other biological agents, or toxins.”  

However, dating back to the creation of the BWC, efforts to strengthen its policies and give it some force have been fairly unsuccessful and, some say, even half-hearted. A couple of fairly obvious barriers became apparent when the BWC entered its negotiation phase. One such obstacle “lies in the dual-use nature of the materials, equipment, and know-how fundamental to legitimate research laboratories and multinational industries. Avenues to biological weapons cannot be completely closed off without sacrificing the beneficial science […] that depend on these dual-use items.”  

The more troublesome impediment is the effect that enforcement would have on states’ sovereignty. From this obstacle stems a long history of paradoxical statements and actions in the United States.

Even in the process of its negotiation, the BWC proved difficult for the two world superpowers at the time—the United States and the Soviet Union—to agree to under certain provisions that would leave them vulnerable to sovereignty infringement. The dichotomy between support of the BWC and desire to

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maintain control over defense and military research and development surfaced in the negotiation period of the convention. In a memorandum to President Richard Nixon, Henry Kissinger informed the President “we have supported negotiation of a prohibition on biological weapons and toxins along the lines of the 1969 UK draft convention.”15 Later in the same memorandum, Kissinger implied that intrusive investigations into states’ activities involving biological weapons programs should be avoided.16 According to Jonathan B. Tucker of the Arms Control Association, “by the time the Cold War superpowers finished reworking the BWC, they had dropped all formal verification provisions, […] enabling Moscow and Washington to use their veto power to block inquiries into their own activities or those of their allies.”17 Though a formal verification protocol was yet to be established, the United States and Soviet Union both clearly opposed intrusive investigations by the BWC even at the risk of crippling the convention.

In the first few years after the ratification of the BWC, “the participating states tried to strengthen the convention by establishing several politically binding confidence-building measures (CBMs), including annual declarations of high-containment biological facilities designed for work with dangerous microorganisms, and reports of unusual disease outbreaks.”18 However, the lack of penalty for abiding by these CBMs led to a ridiculously low number of states that upheld them. Similarly, “Article IV of the treaty requires member states to pass domestic legislation that would penalize bioterrorists operating within their borders by outlawing offensive biological weapons activities.”19 A similarly low number of states adhered to this policy. Finally, “at the Third BWC Review Conference, European countries sought a rigorous and intrusive on-site inspection regime analogous to the one then being elaborated for the Chemical Weapons Convention (CWC).”20 In response, the United States

16 Ibid.
18 Op. Cit., fn. 14
19 Op. Cit., fn. 15
along with Iran, Russia, and others opposed this proposed protocol due to its potential infringement on these states’ ability to research biological defense. “The American negotiating position on a verification protocol had been driven by restrictions desired by the Department of Defense, [...] apparently trying to prevent the exposure of biodefense activities taking place in the United States.”

Following the United States’ adamantly refusal of on-site investigations, it became clear that the BWC was going to deteriorate without any hard law to support it.

From this point on, a pattern among Presidents of the United States appeared in which their public statements on the BWC expressed clear support and steadfast commitment to its strengthening, while their archival documents revealed serious hesitation about allowing any form of verification that may give teeth to the treaty. In a report to the National Security Council in 1970, the Interdepartmental Political-Military Group asked, “Should the U.S. maintain an option to develop capabilities to retaliate with toxins against chemical or biological attack?” Presidents, advisors, and other officials have continually asked this question throughout the years since the creation and ratification of the BWC, and it seems that their actions answer in the affirmative. On February 16, 1995, President Bill Clinton sent a message to Congress saying, “The United States was an active participant in the Special Conference of States Parties [and] the Special Conference produced a mandate to establish an Ad Hoc Group whose objective is to develop a legally binding instrument to strengthen the effectiveness and improve the implementation of the BWC.” In actuality, the Ad Hoc Group, also known as verification experts or VEREX, only encouraged off-site surveillance that did little beyond create suspicion among party states. While President George W. Bush made a similar statement supporting the strengthening of the BWC in November of 2001, in July of 2001, he “decided

21 Ibid.
24 Op. Cit., fn. 20
not to sign the protocol to strengthen the Biological Weapons Convention by providing monitoring and compliance provisions, citing the administration’s doubts about the ability to verify compliance with the treaty and its concerns about [its] impact.”26 Bush’s policy has bled over into the Obama administration, which has done nothing to further the verification process of the BWC. It is clear from this string of presidential decisions and statements that sovereignty plays a large role in the lack of political will to update the Biological Weapons Convention. With that said, other factors are also very influential in hindering political will and action regarding the convention.

Threat Inflation of Bioterrorism
This second case study aims to represent the shift to a unipolar world in the international system. The rise of the United States and the fall of the Soviet Union after the Cold War brought about the shift from a bipolar to unipolar world. As Detlev F. Vagts stated in his piece on Hegemonic International Law, “America is in a position to reshape norms, alter expectations and create new realities.”27 America’s unique position is due to its role as the hegemon on the global stage. Yet, this ability also comes with responsibilities and, perhaps more importantly, risks. As the political and military leader of the world, the United States constantly runs the risk of being targeted or seen as being too powerful. For this reason, the United States government must constantly be concerned with the threat of attack while simultaneously working to avoid a security dilemma, in which an adversary state becomes threatened by the United States’ increase in military capabilities, and in turn, increases its own capabilities, creating a cycle of paranoia and security expansion.

In regards to biological weapons, American citizens and officials alike see the threat of bioterrorism as a menacing possibility. The intuitive assumption regarding the connection between threat inflation and action to update the BWC is that due to the expanded threat, the United States should be more inclined to promote the restraint of biological weapons development elsewhere in the world. It also seems quite possible that as a result of the threat, the United

States would want to maintain its own biological capabilities. In an article on arms control, Jack Beard explains, “a state actor is unlikely to forgo a particular class of weapons permanently unless it receives assurances that adversary states are reciprocally so committed and an effective monitoring regime is in place to ensure against a ‘surprise defection,’ that is, cheating.”\footnote{Jack M. Beard, “The Shortcomings of Indeterminacy in Arms Control Regimes: The Case of the Biological Weapons Convention,” *American Society of International Law*, Vol. 101, no. 2 (April 2007): 271-321.} If this is the case, then the threat inflation of bioterrorism certainly could be affecting the lack of political will to update the BWC. Before that can be determined, it is important to analyze the perceived threat.

First, the presidential archives show that the threat of biological weapons has been a pressing matter since the development of such weapons. However, over the years, presidents became increasingly worried and behaved more cautiously on the matter. President George Bush Sr. stated, “On November 16, 1990, in Executive Order No. 12735, I declared a national emergency under the International Emergency Economic Powers Act […] to deal with the threat to the national security and foreign policy of the United States caused by the proliferation of chemical and biological weapons.”\footnote{George Bush, “Message to the Congress Reporting on the National Emergency With Respect to Chemical and Biological Weapons Proliferation,” (The American Presidency Project, June 21, 1991), http://www.presidency.ucsb.edu/ws/index.php?pid=19716&st=biological+weapons+convention&st1=.} In November of 1993, President Bill Clinton “extended the national emergency on the basis that the proliferation of chemical and biological weapons [continued] to pose an unusual and extraordinary threat to the national security and foreign policy of the United States.”\footnote{William J. Clinton, “Message to the Congress Reporting on Chemical and Biological Weapons Proliferation,” (The American Presidency Project, May 23, 1994), http://www.presidency.ucsb.edu/ws/index.php?pid=50230&st=biological+weapons+convention&st1=.} At this point in time, the major terrorist attacks of 2001, which include the anthrax attacks and September 11th attacks, had not yet occurred. This implies that the threat was inflated before there was any real tangible cause for concern.

More recently, in 2002, *Defense Horizons* published a piece explaining that “the current state of U.S. knowledge tells us that: almost any potential U.S. military adversary either has biological weapons or has a program to get
them [, and] technology is changing rapidly and [...] offering more state and non-state actors the means to exploit biological processes for military ends.”

Similarly, an article on biological warfare from The National Security Archive from 2001 warns that terrorists may have access to even eradicated biological agents, such as smallpox. In 2011, the Assistant Secretary of the Bureau of International Security and Nonproliferation stated, “We fully recognize that a major biological attack on one of the world’s major cities could cause as much death and economic and psychological damage as a nuclear attack.” From this history of threat inflation, it is evident that the threat has at least remained constant, if not increased, over time.

A good portion of this expanded threat comes from the uncertainty and suspicion about the activities of other states. The National Security Council released a document stating, “Distinguishing illicit intent within the expanse of legitimate activity presents a unique challenge. It is quite possible that we would not obtain specific warning of an imminent threat or impending attack in time to stop it.” In reaction to this fear, the United States has taken more aggressive strategies in the past. “Justification for the 2003 invasion of Iraq included the immediate threat posed by Iraq’s purportedly resurgent weapons programs.” Of course, the United States cannot simply invade every nation suspected of expanding their biological weapons programs. Unfortunately, government officials do not see verification of the BWC as a potential solution. A National Security Council official stated, “The [verification] protocol does not stop the threat posed by the spread of biological weapons [...] but the protocol’s requirement that states declare facilities in which weapons are made and permit them to be inspected does put our bio-defense activities [...] at risk.” This statement clearly sums up the entirety of threat inflation’s effect on lack of political will to redo the BWC. Without the ability to protect

32 Op. Cit., fn. 26
35 Op. Cit., fn. 14
36 Op. Cit., fn. 20
itself, the United States sees the risks as being too high to chance a last minute withdrawal from a renewed and enforced Biological Weapons Convention by an adversary state.

**Decline in Arms Control**

This third case study considers the concept of a paradigm shift between international relations theorists and government officials, in which nonproliferation replaces arms control. Arms control is considered a form of hard law, whereas nonproliferation is considered a form of soft law, also known as a gentleman’s agreement. This shift represents a type of defeatist attitude towards control of state and non-state actors with access to biological weapons. Biological weapons proliferation and the likelihood for their use has been deemed “too intractable” to be easily fixed.\(^\text{37}\) The overall decline in arms control, and its replacement with nonproliferation strategies, has affected the lack of political will to update the BWC because strengthening the convention would be following a hard law and thus, the arms control approach. Just as with threat inflation, evidence of the decline of arms control is apparent in archival documents as well as scholarly works.

In pieces written on and about the Verification Protocol, many references were made to the effect that the protocol would utilize an arms control approach. In September of 2000, Dr. Susan Koch of the Department of Defense stated, “we do not believe that the Protocol being negotiated will be able to provide the kind of effective verification that exists in other arms control treaties.”\(^\text{38}\) However, the Verification Protocol would have used more of an arms control strategy than has ever been applied regarding the BWC. Such a statement by the Secretary of Defense seems to signal a turning point in the recent history of arms control decline. More recently, “between 2007 and 2010, the Biological Weapons Convention Work Program resumed its focus on biosafety and pathogen security, national implementation and codes of conduct for scientists, and also focused on disease surveillance capacity building and assistance in the event of a suspicious outbreak or alleged use of BW.”\(^\text{39}\) Interestingly, the majority of these

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\(^{38}\) *Op. Cit.*, fn. 20

\(^{39}\) *Op. Cit.*, fn. 33
new goals for the BWC are domestic, and only “surveillance capacity building” would have any effect on foreign states. In the new biosecurity strategy revealed after the Seventh Review of the Biological Weapons Convention, the Obama Administration “views the role of the government as supporting this organic, bottom-up process by conducting outreach to raise awareness, promoting dialogue among the various stakeholders, [...] supporting community-based approaches to identifying and addressing irresponsible conduct,” and essentially establishing a new set of ethics around the issue.\(^\text{40}\) Again, there is a huge gap between this new policy’s strategy and the arms control strategies of the Nixon era, when biological weapons and research first affected national security.\(^\text{41}\)

The decline in arms control that is evident from the recent history of records and scholarly works certainly is affecting the lack of political will to update the BWC. Even in the formation and negotiating of the BWC, there was a clear lacking of hard law that would have allowed for nations like the United States to enforce violations of the treaty. In addition to avoiding intrusive development investigations, the United States and other world powers chose to form the final draft of the BWC with “soft structure” as opposed to “hard legally binding obligation.”\(^\text{42}\) States adhered to these weak policies even when blatant violations occurred, such as the anthrax outbreak at a research facility in Sverdlovsk, Russia in 1979.\(^\text{43}\) Seeing as no intervention or real arms control was required by the BWC, the United States did nothing more than make a statement on the matter. In a speech to the United Nations General Assembly in 1982, President Ronald Reagan stated, “The Soviet Union and their allies are violating the Geneva Protocol of 1925, related rules of international law, and the 1972 Biological Weapons Convention.”\(^\text{44}\) Without the obligation to intervene, the United States was able to take a much less costly route in “dealing”


\(^{42}\) *Op. Cit.* , fn. 28

\(^{43}\) *Op. Cit.* , fn. 37

with the issue. For this reason, the decline in arms control is influencing political will in regards to the Biological Weapons Convention. If states like the United States have a choice to do nothing, thereby saving resources, time, money, and protecting their sovereignty, they would have no reason to attempt to change this reality.

On the other hand, some theorists argue that soft law can be just as effective as hard law in negotiating and deterring states. In the case of biological weapons, this means that nonproliferation should, in theory, be as effective as arms control. As is evident by past violations of the BWC, this is not the case. “In spite of the many proponents and purported advantages of soft law in other contexts, its indeterminate dimension appears to be a dangerous choice for a design element in multilateral disarmament regimes, particularly when member states face acute security dilemmas and effective transparency measures are not available.”

While this is playing out to be true, the United States government continues to follow this policy of anti-arms control. Brad Roberts and Michael Moodie of Defense Horizons stated, “When deterrence strategies prove unreliable in dissuading a U.S. adversary from preparing or conducting BW attacks on its forces or interests, the focus of U.S. efforts must shift to prevention.” It seems as though hard law and arms control are a thing of the past, specifically in relation to biological weapons. In its place, soft law and talk of prevention and influence aim to get the job done.

Implications

There is no doubt that political will is seriously lacking on the issue of biological weapons and the Biological Weapons Convention. However, it is not without reason. The United States, along with the other world powers at this moment in history, have a few prominent obstacles to overcome before any serious changes can be made to foreign policy. The research discussed demonstrates that avoidance of verification measures, threat inflation of bioterrorism, and the decline in arms control strategy are affecting political will on this topic. Something must change for the safety of not only the United States, but also the nations of the world. With swiftly advancing technologies in the biotechnological field,
the threat of biological warfare, while inflated, remains serious and frightening. The prospect of a biological attack on any nation is a horrifying and fearsome image that must be prevented from turning into a reality. Unfortunately, without compromise by powerful nations on the international stage, bioterrorism and interstate attacks could become an actuality.

In order to overcome these obstacles, powerful states will need to set a precedent for the rest of the international community. While The Independent variables examined are evident and do affect political will on the issue of biological weapons and the BWC, there are ways of influencing and overcoming them for the greater good of the world. For example, desire for full sovereignty and for maximization of capabilities must be decreased in order to give the BWC some form of validation and enforcement. This means that nations like the United States will need to take risks and forgo some of their sovereignty for the safety of the global population. In regards to threat inflation, the United States will probably remain hegemonic in a unipolar international system for the foreseeable future. However, by cooperating and compromising with other world powers, the United States can diminish the perceived threat of bioterrorism and biological attacks to a reasonable level, allowing for the further development and strengthening of the BWC. Finally, the United States must return to an arms control strategy. It is clear from recent efforts and policy changes that soft law alone cannot change and restrain the dangers that threaten the international stage and its actors. A combination of nonproliferation and arms control could potentially reduce the threat. Since the emergence of biological weapons as a viable form of warfare and weaponry, technologies have changed rapidly and so, too, should the laws used to restrain them.