

Teaching Atrocities: The Holocaust and Unit 731 in the Secondary School Curriculum

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EDUCATORS at the secondary school level who teach History, or Integrated Social Studies more broadly, may be expected to possess at least some passing knowledge of the Holocaust, the genocide perpetrated against European Jews by Nazi Germany in the 1930s and 1940s. The historical literature on the Holocaust today is vast. Testimonials of survivors are readily available and have been extensively filmed thanks to director Steven Spielberg and the Shoah Foundation. Moreover, Hollywood has produced numerous excellent documentaries and dramatic films exploring themes focusing on the Holocaust. Films such as Spielberg's *Schindler's List* have made this horrible chapter in human history accessible to mainstream audiences in a stark yet appropriate way. This film in particular, though graphic and not shying away from the brutality of the period, has been deemed appropriate for viewing in American high schools and, since its release in 1993, has even been incorporated into numerous secondary school curricula. Thus, it cannot be said that high school history curricula in the United States have ignored such atrocities. Yet, when it comes to the Pacific War and Japanese war crimes and atrocities committed in Asia, significantly less attention and coverage are given. Why has this been the case?

Any direct comparison of Japanese atrocities to the Holocaust is problematic. First, and perhaps foremost, the Holocaust was nothing

less than state-sponsored genocide, an industrial-scale mass murder targeting primarily the Jews of Europe, but including also other declared *untermenschen*, or so-called “lesser peoples,” such as the Roma (sometimes called “Gypsies”) and those considered to be mentally disabled or homosexual. The Nazis murdered an estimated six million people or more during the Holocaust. Nothing comparable to that scale was undertaken by the Japanese. An argument can be made, however, that the *scope* of Japanese brutality was no less atrocious than that of the Nazis. In particular, Japanese physicians and medical research scientists of the Imperial Japanese Army’s Unit 731 conducted gruesome and horrifying experiments on live human beings at a remote laboratory and death camp in China’s northeast. While some textbooks may contain brief passages mentioning the “Rape of Nanking” or the “Bataan Death March,” there can scarcely be found a mention of Unit 731, whose activities more closely resemble those that occurred during the Holocaust in Europe. Indeed, as likely as it is that most—if not all—secondary school teachers know something of the Holocaust, it is just as likely that they know nothing at all about Unit 731, even though it was responsible for the deaths of thousands of civilians, allegedly including Allied prisoners of war.¹

This essay attempts to explain why discussion of Unit 731 has been missing from the general coverage of World War II in the secondary school curriculum and makes an argument for its inclusion. The authors posit that the primary reason Unit 731 has not been part of the curriculum thus far is because of the lack of awareness of the subject among teachers and the general public. Moreover, teaching Unit 731 at the secondary school level presents significant challenges, including justifying inclusion given its relative importance to other subject matter when having to meet numerous, restrictive state standards; the question of the age-appropriateness of the subject matter; the paucity of suitable teaching materials; and the apparent reluctance of secondary school-level textbook publishers to incorporate such potentially controversial content.

Incorporating material on the Holocaust presented similar challenges that were overcome; therefore, the authors argue that Unit 731 subject matter may be taught within the same context and framework. Although the atrocities of the Holocaust and Unit 731 transpired in very different geographical and cultural settings, they were conducted during the same war under totalitarian Axis regimes and within comparable socio-medical contexts. Thus, when considered in tandem, rather than in isolation, a comparative study of the Holocaust and Unit 731 may provide opportunities to address a wide range of issues, including genocide and wartime atrocities in modern history; general patterns of violence in the twentieth century and especially during World War II; how notions of race informed government

policies and medical research; and the role of science and medicine in service to the state in totalitarian vs. democratic governments, among others. Also, the U.S. government's handling of the two subjects in the post-war period—facilitating exposure of the Holocaust while imposing secrecy and silence on the matter of Unit 731—suggest serious questions about state policy decisions made in the context of the Cold War.

The vile acts of Unit 731 personnel were no less horrific than those of their Nazi counterparts, nor were they any less evil in the broader historical context of humans' inhumanity to other humans. Therefore, a place for teaching about Unit 731 and Japan's wartime biological warfare research should also be made in an age-appropriate manner in American high school history textbooks. This is not to argue that Unit 731 material is necessarily *essential* curriculum; rather, given its scope of state-sponsored murder and the support it enjoyed from the Japanese medical community at the time, it offers a more logical point of comparison to the Holocaust than do other atrocities of the Second World War in Asia, such as the Rape of Nanking or the Bataan Death March, which are already currently addressed in some secondary school-level textbooks. Before proceeding to the difficult matters of curriculum revision, however, considering the relative lack of historical knowledge about Unit 731 among teachers and the general public, a short overview of its history and activities during World War II may be in order first.

A Brief History of Unit 731 and Japan's Biological Warfare Research

The driving force behind Japan's wartime biological warfare (BW) research program was Lieutenant General Ishii Shirō.² A graduate of the Kyoto Imperial University Medical Department, Ishii enlisted as an army surgeon in 1921 and was commissioned as an officer at the rank of surgeon-first lieutenant. In 1924, he was permitted to return to Kyoto Imperial University to pursue post-graduate studies in bacteriology, serology, pathology, and preventative medicine and, in August, was promoted to captain. Late in that year, the army dispatched Ishii to the island of Shikoku in southern Japan, where an outbreak of a new strain of encephalitis had become an epidemic. Ishii devised a filtration system to isolate the suspected virus, and from this point forward, much of his research focused on the link between water filtration and the prevention of epidemics.³

In 1926, Ishii took a doctorate in microbiology and was posted to the Army Medical Hospital in Kyoto. It was during his residence there that he obtained a copy of a report on chemical and biological warfare prepared

by Japan's delegate to the 1925 Geneva Conference. Ishii immediately recognized the potential of BW and began to lobby his superior officers to support research in this field, which they refused. Undeterred, he set out on a two-year world tour to investigate BW research programs in other countries, including the United States. Shortly after his return to Japan in 1930, Ishii was promoted to the rank of major and appointed professor of immunology in the Department of Epidemic Prevention at the Army Medical College in Tokyo, where he taught by day and conducted clandestine research by night. Again, he lobbied his superior officers to support a BW research program, now arguing that all other powerful nations were already engaged in such research despite restrictions imposed by the 1925 Geneva Protocols, and that Japan must follow suit or fall behind. This time, Ishii got their attention and support.

On September 18, 1931, radical elements within Japan's Kwantung Army stationed in China's northeast staged an act of sabotage, blowing up a stretch of track on the South Manchurian Railway, which they were ostensibly assigned to protect. Blaming the explosion on Chinese "bandits," the Kwantung Army used the event as a pretext to launch an invasion of the region, leading to what came to be known as the "Manchurian Incident." Within a year, Japanese military forces occupied and controlled the better part of China's northeastern provinces (then collectively called Manchuria) and, in March 1932, established the puppet state of Manchukuo with the collaboration of "Henry" Pu-Yi, the last nominal emperor of the former Qing Dynasty of China.

Like many other Japanese imperialists, Ishii saw great potential in the vast open spaces of Manchuria. In particular, he thought, more advanced BW research could be conducted there in secrecy under the protection of the military; whereas, in Japan, his research agenda remained constrained by limitations of space, security, and safety. Neither Tokyo nor Kyoto, with their large civilian populations, was an optimal site for a BW research facility. Manchuria offered much that Japan could not. In early 1933, Ishii began to move his BW research operations to the continent, establishing one laboratory for "defensive" or prophylactic research in the city of Harbin, and another for "offensive" research in a nearby village called Beiyinhe. To better facilitate Ishii's agenda, the Kwantung Army established a special detachment, the "Tōgō Unit," to operate under his authority.

Ishii probably experimented on human subjects at his laboratory in Tokyo, but the details of that research are hazy. Given the risks involved, it is likely that any such research remained minimal in scale and scope. At Beiyinhe, however, Ishii was much less constrained by concerns for security and safety. Moreover, Harbin, with a large cosmopolitan

population of Russian émigrés, various expatriates from Europe, and pockets of Koreans, Mongols, and Manchus mixed among the mostly ethnic Han Chinese population, offered a significant variety of “human materiel” from which to choose. The *Kempeitai*, a branch of the Imperial Japanese Army with police powers akin to the Nazi Gestapo, ruled the streets, and anyone was subject to arrest under arbitrary accusations of being a spy, communist sympathizer, anti-Japanese saboteur, or simply a “bandit.”⁴ The *Kempeitai* provided Ishii with as many subjects as he wanted.

At Beiyinhe, Ishii began research to test human resistance to various diseases and toxins. He injected subjects with active strains of viruses and bacteria and monitored the progress of their illnesses until the victims died, whereupon autopsies were conducted, and the bodies subsequently disposed of in a high-pressure electric furnace. Ishii allegedly even filmed these experiments, complete with dissections, and showed the films to his superior officers in Tokyo. The Ministry of War allocated additional funding for Ishii’s research and, in 1935, Ishii was promoted to lieutenant colonel. In August 1936, the ministry approved the formation of the Kwantung Army Epidemic Prevention and Water Supply Unit, also known as “Unit 731,” of which Ishii was appointed commander.⁵

As Ishii’s program and his authority over it grew, problems with the Beiyinhe facility also multiplied. In autumn 1934, a riot broke out at the prison compound there, and several captives escaped. A nearby ammunition dump was sabotaged shortly thereafter. Ishii moved operations temporarily to the military hospital in Harbin, but this facility was much too small and exposed for the expanded BW program Ishii envisioned. In 1936, Ishii went on the hunt for a more ideal site to relocate his research facility. Several miles outside Harbin, he discovered a small cluster of villages collectively known as Pingfang. Ishii confiscated this land under the authority of the Kwantung Army and set out to build what was to become one of the largest and most efficient BW research facilities of the war. Pingfang was also to become the largest death camp in all of East Asia during World War II.

With the assistance of Kwantung Army engineers and the brutal exploitation of a large number of Chinese laborers, the Pingfang facility was up and running within two years. When complete, the Pingfang site included over 150 buildings, including the central research facility and prison (the “Ro-block”), an administration building, a small airfield, a railway siding, several out-buildings for specific research purposes (including freezing experiments and breeding rats), and housing and infrastructure sufficient to maintain a garrison of 3,000 assorted military personnel. Pingfang was totally self-sufficient with its own power station, livestock, and farmland. Ishii also recruited the best medical research personnel he could get, including faculty and staff members from the medical school of Kyoto

Imperial University. Pingfang laboratories were capable of producing an estimated 21 million doses of various vaccines per year, and production of microbes was so great that output could be measured in kilograms.⁶ By 1939, an additional eighteen “water purification” units had been established, all of them scattered throughout the Japanese empire from Manchuria to Indonesia, and some 5,000 individuals were now affiliated with the BW research program under Ishii’s command.

During World War II, Unit 731 allegedly conducted BW combat operations on at least six occasions, and possibly as many as ten, beginning in 1939 with the Battle of Nomonhon and continuing into the early 1940s with attacks on Chinese civilian populations, which resulted in significant outbreaks of cholera and bubonic plague. Casualties and deaths from these attacks are estimated to range in the thousands. But the greatest atrocities committed by Unit 731 arguably occurred at the Pingfang compound itself. According to testimonies given by Unit 731 personnel after the war, as well as investigations conducted by both the U.S. and the Soviet Union, Ishii and his colleagues committed horrifying acts of torture and murder in the name of science. Not only did they continue the vaccination experiments on live subjects begun at Beiyinhe, but they also began experimenting with treatments for frostbite, which required the subjects’ limbs to be deliberately frozen. Gangrene often resulted, and subjects frequently had limbs amputated without anesthesia or were allowed to die from the infection. There were also pressure chamber experiments, similar to those conducted by Dr. Sigmund Rascher at Dachau, ostensibly to determine the levels of pressure humans can withstand at various altitudes or depths, which had potential military applications for the air services and the navy. To test the efficacy of bacteriological bombs, other victims were tied to posts and subjected to explosions at various distances. Shrapnel contaminated with various types of pathogens pierced the flesh, wounds were left to fester, and the progress of the disease was monitored in the Pingfang dispensary. Vivisections were frequently performed. Anesthesia was rarely given. Victims died on the operating table. At least 3,000 people are estimated to have been murdered at Pingfang alone, but the total number of deaths resulting from Unit 731 research and BW applications may be as high 200,000.⁷ The exact number will never be known.

Another compelling aspect of this story is the possibility that Unit 731 experiments may have involved Allied prisoners of war (POWs), including Americans. According to testimony given before United States Congress, as many as 1,300 Americans and 371 British, Australian, and Dutch soldiers were held captive in a POW camp at Mukden, China (today known as the city of Shenyang), where an unknown number were allegedly subjected to a variety of medical experiments beginning in November 1942. According

to one survivor of the camp, a liquid was sprayed into the faces of some of the POWs, and injections were given. No medication was provided to those who succumbed to illness. The dead were stored in a wooden shed during the winter, and when the ground began to thaw in the spring, remaining POWs were organized into burial details to dispose of the corpses. A team of Unit 731 doctors arrived and performed autopsies, in which one of the POWs assisted. The Japanese collected organs from the deceased, placed the specimens in marked containers, and took them away as they departed the camp.⁸

Ishii and his collaborators continued their work until the final days of the war. In early August 1945, with the Soviet declaration of war on Japan and the immediate encroachment of the Red Army on the Manchurian border, Ishii ordered the destruction of the Pingfang compound and all potentially incriminating evidence. All remaining captives at Pingfang were put to death, and their remains incinerated. The work of destroying the compound, however, could not be completed before Soviet troops approached. Ishii ordered his men to flee Manchuria, and swore them to a “life in the shadows” upon returning to Japan.⁹ Although the Soviets captured some of them, most of the Unit 731 personnel managed to escape and were living safely “underground” back in Japan shortly after the war ended on August 15, 1945.

While many of the Nazi perpetrators of the Holocaust faced judgment at Nuremberg or were subsequently hunted down and dealt justice, Ishii and most of his colleagues in Unit 731 escaped trial. In one of the worst miscarriages of justice from the war—if not in modern history—only those captured by the Soviet Red Army faced a war crimes tribunal.¹⁰ The rest were spared a trial in a post-war deal with the U.S. occupation authorities under General Douglas MacArthur, the Supreme Commander for the Allied Powers in the Pacific (SCAP), which granted immunity from prosecution in exchange for “valuable” research data. Central to the agreement was delivery of the data pertaining specifically to human experimentation, which one U.S. official described as being “of such importance to national security as to far outweigh the value accruing from ‘war crimes’ prosecution.”¹¹ General MacArthur and the U.S. government covered the deal with a shroud of secrecy thick enough to obscure it from the American public, despite Soviet outrage and attempts to make the incident known in the international press. None of the Unit 731 perpetrators were brought to justice during the Military Tribunal of the Far East (i.e., Tokyo Trials), nor was any mention made of Ishii or his collaborators. Although allegations of U.S. and Japanese collusion in BW research surfaced during the Korean War, both governments managed to keep their citizens ignorant of the matter for the next thirty years.¹²

It was only in the 1980s that the Unit 731 story came to be known among the general public, when a chance discovery of discarded Unit 731 research documents was found in a Tokyo bookstore.¹³ Journalists in Japan and the U.S. began to investigate, leading to requests for both governments to declassify wartime documents, finally bringing the story to light. Since then, journalists and historians throughout the world have been trying to reconstruct the story of Unit 731 and Pingfang. Unfortunately, no survivors remain: Ishii ordered all prisoners at Pingfang put to death in the last days of the war. Only the perpetrators themselves survive to reconstruct a historical narrative.¹⁴ Thus, while the atrocities of the Holocaust were well known and well publicized by this time, the holocaust Ishii perpetrated in northeast China was only beginning to gain attention among a few journalists and academics, mostly in Japan and the United States. Ishii and Unit 731 never captured international attention or public imagination quite the way in which the Holocaust and its perpetrators did toward the end of the twentieth century. Thus, it is quite understandable that few, if any, secondary school educators in the U.S. would be aware of or have any substantive knowledge of Unit 731 or its many wartime atrocities.

Teaching Wartime Atrocities: The State of the Field and State Standards

But to what extent are other atrocities committed by the Japanese military during World War II covered in high school history textbooks? In discussing the war in China, Elizabeth Ellis's edited volume, *World History: The Modern Era*, states: "Japanese invaders treated Chinese...and other conquered people with great brutality, killing and torturing civilians throughout East and Southeast Asia."¹⁵ The author of this passage clearly points out the violence to which Japanese soldiers subjected Chinese civilians, but no specifics are given. The author provides a photograph of Japanese soldiers forcibly loading Chinese civilians onto trucks headed for execution during the sack of Nanjing to illustrate this point, but provides a somewhat misleading caption that reads, "Since 1937, the Japanese had been trying to expand into Asia by taking over China."¹⁶ In one short phrase, the text glosses over the invasion of Manchuria in 1931 and the subsequent founding of Manchukuo in 1932, not to mention the violence committed against Chinese civilians in Shanghai and elsewhere prior to the outbreak of full-scale war in July 1937. Another textbook edited by the same author states, "war crimes trials were held in Japan. Many of those accused of war crimes were never captured or brought to trial."¹⁷ The text again makes a leading and provocative statement, but does not follow it up with a more detailed explanation.

Similar statements are repeated elsewhere. Yet another textbook contains no less than ten pages of narrative concerning Japan, but there is little-to-no discussion of Japanese wartime atrocities, not even a mention of the Bataan Death March or of the treatment of POWs in general.¹⁸ Another commonly used high school world history textbook states, “Japanese troops often treated soldiers and civilians alike with great brutality.”¹⁹ Here, again, the authors do not elaborate as to what constitutes brutality. But, to what extent are teachers at liberty to provide examples? And, what examples would a typical secondary school teacher be prepared to give? Understandably, textbooks written for grades five through eight contain even less information, but some may offer so little as to render most any reference nearly meaningless. One book’s entire comment on the Japanese treatment of civilians and POWs in conquered areas merely states, “Japanese rule proved to be as harsh as that of former colonial powers.”²⁰ In many cases, Japanese colonial rule was arguably *much harsher* than that of its predecessors, especially in China. One wonders why such historical facts are not stated more clearly and emphatically in these textbooks.

The paucity of information provided about Japan’s wartime atrocities in such texts can be explained, in part, as being the result of having to meet the requirements of specific standards that generally dictate content coverage. For example, in 2002, the state of Ohio adopted 139 distinct standards for high school history textbooks, most of which were mandated, thus significantly reducing the flexibility and amount of space that authors had to address each standard within a given subject. To illustrate the case in point, of the 139 standards adopted that year, only *one* might have plausibly applied directly to a discussion of Unit 731. It stated: “Analyze the results of political, economic, and social oppression and the violation of human rights including: a) The exploitation of indigenous peoples; and b) The Holocaust and other acts of genocide, including those that have occurred in Armenia, Rwanda, Bosnia, and Iraq.”²¹ Other standards were arguably relevant but were focused on broader, more encompassing issues such as imperialism, the causes and consequences of World War II, and the Holocaust.

In June 2010, the Ohio Board of Education revised the state’s Social Studies Model Curriculum and adopted proposed revisions in March 2011, some of which may have added opportunities for including discussions of Japanese wartime atrocities, biological warfare, and Unit 731 in particular. One of the new standards for Modern World History, Content Statement 13, states: “Advances in technology, communication, and transportation improved lives, but also had negative consequences.”²² Under the “Content Elaborations” rubric for Statement 13, which further defines acceptable and

relevant content, it states: “Battlefield weapons (e.g., machine gun, poison gas, hand grenades, tanks) and the atomic bomb increased the destructive power of war.”²³ Biological weapons are a logical fit, and their omission may simply have been a function of the members of the committee not being aware of their use by Japan in China during World War II. Other new standards may also apply. Content Statement 15 addresses themes of totalitarianism and “aggressive Axis expansion” in the broader context of the causes of World War II.²⁴ Here, discussions of Japanese atrocities such as the Rape of Nanking, the creation of “Comfort Stations,” and the establishment of the largest death camp in Asia would certainly qualify as examples of “aggressive Axis expansion.” Content Statement 17 addresses the general physical, social, and cultural devastation in Europe and Asia brought about by the war, with specific mention of refugees and casualties.²⁵

But it is the content standards established by the states of California and Texas, in particular, that may be most significant in affecting coverage of wartime atrocities in high school textbooks. Due to the large share of the textbook market these states command, their standards tend to disproportionately affect the content of textbooks nationwide. A recent article on the subject reveals that the textbook industry is “dominated by three major players—Pearson Education Inc., Houghton Mifflin Harcourt, and McGraw-Hill—which together serve about 80 percent of the U.S. K-12 market,” with California and Texas having the largest and second-largest market share of all states respectively.²⁶ From this statement, one might extrapolate that the majority of American K-12 schools are purchasing textbooks whose contents are largely focused on meeting the state standards of California and Texas, as any textbook publisher would want to be able to compete for sales in the two largest state markets. Therefore, if more detailed explanations of Japanese atrocities are not being included in the textbooks used in these two states, chances are, they are not being included elsewhere either.

So is there room in the California and Texas state standards for introducing a discussion of Japanese wartime atrocities and specifically Unit 731? The state of California has two history standards that may be considered relevant. The first, Standard 10.8.1, requires students to “Compare the German, Italian, and Japanese drives for empire in the 1930s, including the 1937 Rape of Nanking, *other atrocities in China* [emphasis added], and the Stalin-Hitler Pact of 1939.”²⁷ No further definition of what “other atrocities in China” might entail is given. The second, Standard 10.8.6, requires students to be able to “Discuss the human costs of the war, with particular attention to the civilian and military losses in Russia, Germany, Britain, the United States, China, and Japan.”²⁸ Both standards would seem to allow instructors an opportunity to introduce

information about Japanese atrocities and Unit 731 specifically to meet these requirements. Given the many other requirements stated for these standards, however, the instructor's time for doing so would be limited indeed.

The state standards for American history in Texas are a little more particular about what should be taught, but among Japan's many wartime atrocities, they mention only the Bataan Death March specifically. Standard 113.41 c-7-E states: "analyze major military events of World War II, including the Battle of Midway, the U.S. military advancement through the Pacific Islands, the Bataan Death March, the invasion of Normandy, fighting the war on multiple fronts, and the liberation of concentration camps."²⁹ There would appear to be even less leeway in these standards than in those of California. By comparison, the standard for American history content addressing the Holocaust states: "analyze major issues of World War II, including the Holocaust; the internment of German, Italian, and Japanese Americans and Executive Order 9066; and the development of conventional and atomic weapons," which would appear to give teachers considerable flexibility in materials they might choose to use in discussing the Holocaust.³⁰ The content components for *world* history in Texas are even more vague, stating: "explain the major causes and events of World War II, including the German invasions of Poland and the Soviet Union, the Holocaust, Japanese imperialism, the attack on Pearl Harbor, the Normandy landings, and the dropping of the atomic bombs."³¹

Additional Obstacles to Teaching Unit 731 at the Secondary School Level

Beyond the limitations imposed by various state standards, there are other apparent obstacles to incorporating information about Unit 731 into the secondary school-level curriculum. Perhaps the first and foremost is the question of the appropriateness or suitability of the subject itself. Introducing any violent and graphic material is always problematic, and while regulations may vary from state to state, all states impose rigid codes of ethical conduct that must be observed in the classroom. In the state of Ohio, for example, the "Ohio Standards for the Teaching Profession" stipulates that teachers will "create an environment that is physically and emotionally safe" and "maintain an environment that is conducive to learning for all students."³² Even in this age of media overexposure wherein many teenagers are subjected to graphic violence in movies and video games, what one student may find acceptable another may find traumatizing. Teachers must act as the filter of information and find age-appropriate and inoffensive materials to use in the classroom.

Age appropriateness, however, is subjective and is no clearer in definition than “general” appropriateness. As every student develops at a different pace, it is unlikely that any two students will be at precisely the same point in development at any given time. Teachers must determine their students’ Zone of Proximal Development (ZPD), which is defined as the “area between the [student’s] current level of development... and the level of development that the [student] could achieve.”³³ But, here, it is the *moral* development of the student that is particularly critical. According to Lawrence Kohlberg, a developmental psychologist specializing in moral development, it is a student’s “post-conventional moral reasoning” that enables her/him to understand that “good and right are matters of individual conscience and involve abstract concepts of justice, human dignity, and equality.”³⁴ Thus, in determining the “age-appropriate level” for introducing subject matter such as Unit 731 entails, teachers would have to assess whether students have acquired the basic post-conventional moral reasoning to be able to understand human experimentation and its ethical implications. While they may intuitively understand that human experimentation is morally wrong, they may not fully understand nor be able to articulate *why* it is wrong. This is especially true for younger student cohorts. In general, an eighteen-year-old high school senior should have developed a higher level of emotional intelligence than a fourteen-year-old freshman. But distinctions between juniors and seniors may be less clear. Given that each student develops differently, there is no guarantee that students will be able to grasp the many emotionally and intellectually challenging concepts associated with Unit 731 as a subject of study. That is why the selection of suitable teaching materials is also critical.

Teaching the Holocaust presents no lesser challenge; yet, it is commonly taught in high schools and is even introduced at the advanced primary school level. How, then, can a subject fraught with such difficult subject matter be taught at these levels at all? First, it is important to note that the Holocaust was not incorporated into secondary school curricula until well after the war. It took decades of scholarly research and teaching at the university level before protocols were developed for introducing the subject at an earlier age.³⁵ Secondly, far more effort has been given to developing the Holocaust as an area of study, and this effort began shortly after the war. Shocking details of concentration camps, death camps, and the Holocaust more broadly began to emerge as the war ended, and within a decade, some of the first substantive treatments by survivors and academics began to appear in print.³⁶ While the first studies to emerge focused mostly upon the genocide of European Jews, over time, Holocaust Studies became more inclusive and examined Nazi policies of genocide targeting the Roma, the

mentally and physically disabled, and homosexuals.³⁷ Other studies have focused more narrowly on medical experiments, sterilization policies, and so on.³⁸ Today, at the university level, various academic disciplines offer specializations on the Holocaust, numerous monograph-length studies have been published, and the Holocaust—and the teaching of it—continues to be the focus of intense academic inquiry.³⁹

But interest has also been generated among the broader, general public as well. The aforementioned Shoah Foundation, for example, has made survivors' testimonies available to all. The United States Holocaust Memorial Museum in Washington, D.C., dedicated in 1993, has received over thirty million visitors, no less than nine million of them school children.⁴⁰ The museum also assists educators in developing and offering age-appropriate materials for teaching about the Holocaust, as does the Holocaust Education Foundation. Both institutions' websites are readily accessible and facilitate easy access to a variety of educational materials and pedagogical strategies.⁴¹

In contrast, such resources do not exist for the teaching of Japan's wartime atrocities, and especially not for Unit 731. Unlike the Holocaust, studies of Unit 731 did not begin to appear until the 1980s after a box of documents was serendipitously discovered in a Japanese second-hand bookstore. Cold War imperatives of obtaining advantages in BW research led U.S. authorities to keep Japanese WWII data—and the doctors and scientists who produced them, such as Ishii and his collaborators—from falling into Soviet hands, and to keep it all secret. As a result, studies of this subject did not begin to appear until the 1980s, and the relevant literature—minimal by comparison to the literature on the Holocaust—remains contained within the sub-fields of the history of modern Japan, military history, and science history.⁴² Consequently, instructors wishing to teach the subject will find obtaining and developing their own resources far more difficult. The original primary documents were, of course, all written in Japanese, and most of these were deliberately destroyed by Unit 731 personnel toward the end of the war. The original documents that did survive—that is, whatever was turned over to U.S. officials after the war and whatever materials that surviving Unit 731 personnel have brought to light since—also remain problematic for the secondary school instructor.⁴³ Many of the original documents have not been translated, and primary materials in English are not widely available, although some are readily accessible at the U.S. National Archives in College Park, Maryland. Some of the original documents remain classified even today.⁴⁴

Survivors' testimonials are also lacking, as there are no known survivors of the Pingfang death camp. Those who might have survived to the end of the war were summarily gassed, and their bodies burned as the Soviet

Red Army began to advance across the border of Manchuria.⁴⁵ And, it is unknown how many of the 1,671 American, British, Australian, and Dutch men liberated from the POW camp at Mukden survive today. Few have given public testimony.⁴⁶ Government documents, military reports, and specialists' analyses comprise the lion's share of the primary literature on this subject in English, and the content of such materials does little to humanize or personalize the subject. There is nothing comparable to the Shoah Foundation, and there is certainly nothing as accessible to young readers and children as the *Diary of Anne Frank* to put a human face on the atrocities of Unit 731.⁴⁷ The list of television documentaries and films produced about the subject is also short, and these were made for more emotionally mature audiences. As such, they would have only very limited utility in a secondary school classroom setting.⁴⁸

Institutional support is also lacking, and Internet materials are highly problematic. Although there is a memorial museum at the Pingfang site today, public history remains an underdeveloped field in China, and the museum does far too little in the way of public outreach and education, especially abroad, despite significant government support and a fairly steady stream of international tourists.⁴⁹ Information available on the Internet is also problematic, as it is not uniformly reliable or accurate, and most all of the relevant websites contain extremely graphic and disturbing images. Many sites are also highly political, offering little more than charged polemics from Chinese nationals demanding official apologies or restitution from the government and people of Japan, while, on the other hand, others are apologia and denials in defense of Japan. Because of the medium, almost all of this is content that teachers will find difficult to edit. Nor can teachers necessarily control what students will seek out on their own. As yet, there is no single, credible, user-friendly site devoted to Unit 731 history that has the extensive professional and institutional support comparable to those provided by the U.S. Holocaust Memorial Museum and the Holocaust Education Foundation.

Without such resources, a teacher might consider creating her/his own website to facilitate, but limit, access to selected documents and images. But even this strategy may cause a teacher to violate state licensure codes inadvertently. In the "Licensure Code of Professional Conduct for Ohio Educators," for example, the state of Ohio prohibits using technology "to intentionally host or post improper or inappropriate material that could reasonably be accessed by the school community."⁵⁰ It is important to note that the terms "improper" and "inappropriate" are not defined in this context, which leaves them open to interpretation and, consequently, leaves the instructor vulnerable to those who would file a complaint or lawsuit over whether or not this tenet was violated.

Finally, secondary school-level textbook publishers have several reasons to avoid such potentially controversial subjects as Unit 731 and Japan's wartime BW program in general. In addition to issues of age appropriateness, the suitability of the topic, and problematic sources, these subjects remain very politically charged. For one, the Japanese government has never officially acknowledged the atrocities committed by Unit 731. Although a Japanese court ruled in 2002 that Japan had indeed engaged in biological warfare during WWII, no damages were awarded, and no official responsibility was declared. Subsequent court cases requesting compensation and an official apology from the government have been rejected.⁵¹ Similarly, the "Comfort Women" issue also remains unresolved, despite outcries from the international community, especially from Japan's neighbors, South Korea and the Philippines. In yet another program that involved wartime atrocities, the Japanese military enslaved Korean and Filipina women, among others, and forced them to serve as prostitutes for Japanese soldiers. Yet, this subject, too, goes without mention in American high school textbooks.⁵² In such cases, textbook publishers appear to err on the side of caution and are relatively conservative in their decisions to incorporate such difficult material.

It is altogether possible that a potentially negative public response can also affect what gets published in textbooks, which implies that the public also has significant influence upon what is taught. This point begs the question then as to who, exactly, creates and controls the curricula utilized by teachers. In 1979, authors Tyll van Geel and Arthur Block argued that that there were twelve groups that could assert influence in the creation of curricula. They included state legislators, state courts, state boards of education, state superintendents, local school boards, local superintendents, school administrators (principals, etc.), teachers, teachers' unions, parents, students, and taxpayers.⁵³ Since their study was published in 1979, that number has grown as the influence of educational councils, such as the National Association for the Education of Young Children (NAEYC) and the National Council for Social Studies (NCSS), has also increased in the curriculum design process.

That is not to imply that teachers have no say in what they teach. On the contrary, one study has shown that teachers have a relatively high degree of control over selecting the specific concepts they teach and the methods they use to teach them. However, data from this study also indicate that teachers have little control over *which* courses they are assigned to teach, which may lead to teachers being assigned to teach topics falling outside their range of expertise or preparation.⁵⁴ Thus, to a large extent, the freedom with which certain teachers are allowed to control their curricula is meaningless if they are assigned to teach courses and content with which they are not

particularly familiar. Other factors concerning the agency of teachers also must be taken into consideration. For instance, teachers may have control over what is taught in their classroom, but not necessarily over what is adopted as the overall school curriculum. This control is even further diminished in schools that choose to adopt a “teacher-proof” curriculum. In such a system, teachers are given “step-by-step course programs that are prescribed in such detail that... anyone could teach them.”⁵⁵ Whether or not a teacher will be given such a mandate depends largely on *where* they teach, as every district is different. And yet another consideration must be taken into account when defining who, or what, controls the curriculum. Class size can have a significant impact on limiting what a teacher can accomplish. Given a large class size, teachers may have “insufficient time to design and prepare new and innovative courses or to construct... supplements for their classes.”⁵⁶ In this case, trying to introduce subject matter related to Unit 731 would be particularly difficult, largely because of the paucity of appropriate materials available on the subject, among other issues, as previously discussed.

All of these issues lend themselves to creating one more, equally problematic hurdle for teachers. The time constraints that teachers face every day can be a deciding factor in whether or not they will introduce “supplemental” information. Ohio state law, for example, requires 182 school days, two of which may be parent-teacher conferences and two of which may be for professional development.⁵⁷ The remaining school days are split amongst introducing new material, discussing and reviewing, and evaluating students’ comprehension. Factoring in hours lost to inclement weather and special events such as school assemblies, this allows little extra time in a teacher’s schedule to develop lectures and assignments on topics not covered in the textbooks or explicitly suggested in the state standards.

Recommendations and Rationale for Inclusion

The teaching of Unit 731 and related subject matter certainly presents a great deal of difficulty, but the above-mentioned issues should not be absolute deterrents. As previously discussed, the Holocaust as a subject of study at the secondary school level presents no less of a challenge; nor was it readily and easily incorporated into the secondary school curriculum. For decades after World War II, the Holocaust remained a problematic subject for numerous reasons, and it was not widely taught in American classrooms until the late 1970s and early 1980s.⁵⁸ There was an “uneasy silence” surrounding the subject for nearly two decades after the war, and greater interest was not generated among the general public arguably until the trial and execution of Adolf Eichmann in Israel in 1962.⁵⁹ Holocaust

scholar Nurith Ben-Bassat argues that the prolonged silence following the war was due largely to survivors and liberators of the death camps suppressing their own memories in order to acclimate to a new normal in the post-war world.⁶⁰ In contrast, there were no survivors of the Pingfang death camp left to help construct the post-war narrative of the war in Asia. Only the perpetrators remained and, according to Ishii's dictate, they continued to live their lives "in the shadows" until exposed in the 1980s. Thus, the paths of the Holocaust and Unit 731 as subjects of study diverged wildly in the latter half of the twentieth century.

It is important to remember that when momentum began to build in support of teaching the Holocaust, there were few resources available to teachers, and appropriate materials had to be gathered and vetted before they could be accepted for wide use. This is arguably much the same situation that teachers who might wish to teach about Unit 731 would face today. The very path of development of Holocaust curricula provides a clear and plausible example for creating and incorporating curricula for the teaching of Unit 731 and Japan's BW research more broadly.⁶¹ In order to successfully introduce Unit 731 subject matter into the curriculum, the authors and administrators of state standards, and teachers themselves, need only to follow the guidelines that informed incorporation of the Holocaust and other atrocities, such as the Armenian genocide. The more gruesome details of Unit 731 activities need not be included, but the topic may be addressed from the perspective of more general concepts that such subject matter suggests. For example, like the Holocaust, the subject is relevant to a broader discussion of genocide in modern world history (including also the more recent examples of those in Cambodia and Rwanda); of morality and ethics in wartime; of ethical dimensions of medicine and science; and, more specific to Asian history, of the particular policies of Japanese colonialism and imperialism in China.

The subject matter also provides a platform for launching a discussion of the myriad aspects of the racism and dehumanization involved. For example, Unit 731 personnel dehumanized their Chinese "subjects" by referring to them as *maruta*, meaning "log," and treating them no better than the rats they bred for experimentation. This point alone provides material for discussion of the fragility of human identity and dignity. In schools today, where the problem of bullying has become so prevalent, a discussion of Unit 731 might even facilitate significant discussion about the power of words and ideas, not only in wartime, but in times of relative peace.⁶² As with the Holocaust, Unit 731 also lends itself to discussions of such topics as scapegoating, promoting hate speech and harmful stereotypes, as well as more advanced concepts such as medical authorities creating pseudo-scientific categories of sub-humans to rationalize research on live

human subjects.⁶³ All of these issues may be explored and discussed by students in a comparative context.

Such comparison might also help students realize that evil is not a monopoly of a single ethnicity or nation. This is an especially poignant discussion in regards to World War II and how it is taught in secondary school settings, where there is a tendency to portray Axis powers strictly as evil perpetrators of genocide and other atrocities and Allied powers strictly as a “morally just” party that set out to stop the Axis powers. But when one considers that Allied powers were willing to be lenient with, ignore, or actively grant immunity to the perpetrators of these atrocities, a gray area emerges between these concepts of perceived good and evil. While punishing all of the perpetrators may have been impossible given the numbers of people involved on all levels, granting immunity to Ishii and his men, and the leniency shown towards some Nazi doctors and scientists at Nuremberg, implies a certain Allied complicity in the atrocities they committed. A capacity for evil then, active or passive, potentially lies within all humankind, no matter the race, ethnicity, or country of origin.⁶⁴

Finally, the study of Unit 731 also provides another lens through which to view U.S. and Soviet behavior during the Cold War, and particularly our construction of historical memory and the narrative of that period. While the U.S. played a significant role in prosecuting war criminals during the trials held in Nuremberg and Tokyo, it was also culpable in permitting ostensible crimes against humanity to go unpunished by granting immunity to members of Unit 731. On the other hand, the Soviet Union insisted the perpetrators be tried, and when the U.S. refused to turn Ishii and his known collaborators over to the Russians, the U.S.S.R. conducted its own trial. Again, how this knowledge affects the perception specifically of the U.S. among the Allied powers as being the “morally just” party in World War II and the Cold War must be questioned. As is suggested on the U.S. Holocaust Memorial Museum website, it is important that students be made to understand “the use and abuse of power, and the roles and responsibilities of individuals, organizations, and nations when confronted with civil rights violations and/or policies of genocide.”⁶⁵ Such abuses were not solely the purview of Nazis and Imperialist Japanese in the war, but—by extension—arguably of Americans as well. This is not suggested to foster national guilt, but to prompt students to engage the nuances of moral and ethical conduct in times of war.⁶⁶

Conclusion

This essay has attempted to explain why the subject of Unit 731 has remained absent from the general coverage of World War II in the secondary

school-level curriculum and posited the following reasons for its omission: the relatively marginal significance that the subject might be considered to have in the context of meeting numerous state standards, the very difficult and violent nature of the subject matter, the paucity of suitable teaching materials, and the apparent reluctance of secondary school-level textbook publishers to incorporate such potentially controversial content. The authors have explained the significance of the topic and argued for its inclusion in the secondary school-level curriculum. The authors have also argued that the history of incorporating the Holocaust as a complex subject of study offers a path to inclusion for Unit 731-related material. That said, it should be emphasized that the authors do not make an argument for equivalency, and acknowledge that the Holocaust represents a *scale* of atrocity far beyond that of Unit 731 activities; however, the *scope* of atrocities committed by Japanese doctors and medical researchers at Pingfang were comparable and no less evil. Their work was conducted in similar environments of totalitarian oppression during World War II, people of certain races and ethnicities were targeted for human experimentation in which science was used to rationalize murder and torture, and a process of extreme dehumanization occurred in both instances. Therefore, it is recommended that room should be made in the secondary school curriculum at an age-appropriate level for including a comparative discussion of the Holocaust and Unit 731 activities in the context of teaching wartime atrocities, particularly because Unit 731 presents a more direct comparison of analogous wartime atrocities in the Pacific than do those examples sometimes already included, such as the Rape of Nanking or the Bataan Death March.

As Thomas Misco has noted, the views of history change as society changes its relationship with the past.⁶⁷ In time, it becomes possible to teach and discuss those things that still exist within society's memory, but were not able to be discussed before. To do so in reference to Unit 731 will require that teachers themselves become aware of the topic and begin to create quality curricula associated with it. It also requires that an authoritative source be developed to collect and store information to be used as educational resources by high school teachers. As one author stated, "once teachers have a list of resources for teaching the Holocaust, they can use it to create quality lesson plans."⁶⁸ The case of Unit 731 should be no different.

Notes

The authors wish to thank Professor Christopher J. Frey in the College of Education & Human Development at Bowling Green State University for reading and offering comments on an earlier draft of this essay.

1. For example, at a K-12 History teachers' workshop conducted at Bowling Green State University in April 2011, of the dozen or so participants informally queried, none had even heard of Unit 731 or knew anything about Japanese biological warfare experiments in China. While this evidence is only anecdotal and far from a structured, scientific survey, it nonetheless is suggestive of the general lack of awareness among typical U.S. educators about this subject. On the other hand, all had some level of direct teaching experience concerning the Holocaust.

2. Japanese names appear according to the East Asian convention of placing family names first and given names second.

3. This brief account of Ishii and Unit 731 is summarized mainly from Walter E. Grunden, *Secret Weapons and World War II: Japan in the Shadow of Big Science* (Lawrence, Kansas: University Press of Kansas, 2005), 183-191, but also borrows liberally from the few existing book-length treatments of this subject. See especially Peter Williams and David Wallace, *Unit 731: Japan's Secret Biological Warfare in World War II* (New York: The Free Press, 1989); Sheldon H. Harris, *Factories of Death: Japanese Biological Warfare 1932-45 and the American Cover-up* (New York: Routledge, 1994); and Daniel Barenblatt, *A Plague on Humanity: The Hidden History of Japan's Biological Warfare Program* (New York: Perennial/Harper Collins, 2005). See also Robert Harris and Jeremy Paxman, *A Higher Form of Killing: The Secret History of Chemical and Biological Warfare* (New York: Random House, 2002); and Tom Mangold and Jeff Goldberg, *Plague Wars: A True Story of Biological Warfare in World War II* (New York: St. Martin's Press, 2000).

4. Established in 1881, the *Kempeitai* had significant police authority and wide-ranging latitude in powers of military and civil law enforcement. During the war years (1937-1945), the *Kempeitai* assumed many of the duties of political oppression and "thought control" originally under the purview of the "Special Higher Police" (*Tokkō Keisatsu*). In its behavior as a state institution employing and extending totalitarian rule and terror in military guise throughout the Japanese empire, it was comparable to the Nazi Gestapo. For a history of the *Kempeitai*, see Raymond Lamont-Brown, *Kempeitai: Japan's Dreaded Military Police* (Sparkford, United Kingdom: Sutton Publishing, 1998).

5. Other BW-related units were also established at this time, including the Kwantung Army Hippo-Epzootic Administration, designated "Unit 100," under the command of Major General Wakamatsu Yujirō of the Veterinary Service. Unit 100 specialized in research on animal-related diseases such as anthrax and glanders.

6. Detailed information on the Pingfang complex is given in two often-cited primary sources, including: *Materials on the Trial of Former Servicemen of the Japanese Army Charged with Manufacturing and Employing Bacteriological Weapons* (Moscow, Russia: Foreign Languages Publishing House, 1950); and General Headquarters, United States Army Forces, Pacific, Scientific and Technical Advisory Section, "Report on Scientific Intelligence Survey in Japan: September and October 1945," 1 November 1945, vol. V, "Biological Warfare," Box 2056, RG 165, U.S. National Archives and Record Administration (hereafter abbreviated as NARA), College Park, MD.

7. "The Crimes of Unit 731" (opinion), *The New York Times*, 18 March 1992, 22.

8. Statement of Frank James, U.S. House of Representatives, Hearing before the Subcommittee on Compensation, Pension and Insurance, Committee on Veterans' Affairs,

99th Congress, Second Session, September 17, 1986, *Treatment Of American Prisoners Of War In Manchuria* (Washington, D.C.: Government Printing Office, 1986), 16-18.

9. Williams and Wallace, 85-86.

10. Some twelve or so members of Unit 731 were captured and tried by the Soviet Union in the city of Khabarovsk in 1949. A full record of the trial is given in the aforementioned source, *Materials on the Trial of Former Servicemen of the Japanese Army*, op. cit.

11. State-War-Navy Coordinating Subcommittee for the Far East, SFE 188/3, September 1947, Appendix A, War Department General and Special Staffs, Folder: SWNCC 351, RG 165, NARA.

12. Harris, 230-232.

13. Williams and Wallace, 3-4.

14. In recent years, several books have been published in Japanese and Chinese presenting testimonials of Unit 731 members concerning their wartime activities. Testimonies have also been recorded of Chinese civilians allegedly subjected to both biological and chemical warfare attacks conducted by Unit 731, although proving their accusations has remained problematic. None of the prisoners of Pingfang, however, survived to give testimony after the war. For a representative work on this subject, see Jin Chengmin and Nakano Masaru, *731 Bu-tai: Rōhei no kokuhaku* [Unit 731: Veterans' Confessions] (Harbin, China: Heilongjiang Publishing, 2003).

15. Elizabeth G. Ellis, ed., *World History: The Modern Era* (Boston, MA: Pearson/Prentice Hall, 2007), 575.

16. *Ibid.*, 574. This turn of phrase might be understood to mean that Japan was not part of Asia. It is more likely, rather, that the authors meant that the Japanese were trying to "expand their empire on the Asian continent" or "mainland" as it were.

17. *Ibid.*, 953.

18. Larry S. Krieger, Kenneth Neill, and Edward Reynolds, eds., *Perspectives on the Past* (Washington, D.C.: Heath & Company, 1997).

19. *World History: The Human Journey* (Chicago, IL: Holt, Rinehart, and Winston, 2003), 809.

20. *Asia and the Pacific*, Prentice Hall World Explorer Series (Needham, MA: Prentice Hall, 2003), 90. These are but a few of the World History textbooks recently and currently in use throughout the United States. Though not an exhaustive sampling, they may be considered generally representative for their content coverage of the subject at hand.

21. Ohio Department of Education, "Ohio's 2002 Academic Content Standards in Social Studies: Academic Content Standards: K-12 Social Studies" (Columbus, OH: Ohio Department of Education, 2002), 60.

22. Ohio Department of Education, "College and Career Ready (Ohio Revised) Standards in Social Studies," Modern World History: 2011 Model Curriculum: PK-12 Social Studies (Columbus, OH: Ohio Department of Education, 2002), 20.

23. *Ibid.*

24. *Ibid.*, 22.

25. *Ibid.*, 25.

26. "The Great Textbook Wars," *The Week*, 24 September 2010, <<http://theweek.com/article/index/207395/the-great-textbook-wars>>.

27. California State Board of Education, "History-Social Science Content Standards for California Public Schools, Kindergarten Through Grade Twelve" (Sacramento, CA: California Department of Education Press, 2000), 45, <<http://www.cde.ca.gov/be/st/ss/documents/histsocscistnd.pdf>>.

28. *Ibid.*

29. Texas State Board of Education, "Texas Essential Knowledge and Skills for Social Studies, Subchapter C. High School," §113.41: United States History Studies Since 1877, c-7-E, <<http://ritter.tea.state.tx.us/rules/tac/chapter113/ch113c.html>>.
30. Ibid., §113.41: United States History Studies Since 1877, c-7-D.
31. Ibid., §113.42: World History Studies, c-12-C.
32. Ohio Department of Education, "Section Two: Ohio Standards for the Teaching Profession, Standard 5: Learning Environment, 31, <https://education.ohio.gov/getattachment/Topics/Teaching/Educator-Equity/Ohio-s-Educator-Standards/Rev_TeachingProfession_aug10.pdf.aspx>.
33. Anita Woolfolk, *Educational Psychology: Active Learning Edition*, tenth ed. (New York: Pearson, 2008), 55.
34. Lawrence Kohlberg, "The Cognitive-Developmental Approach to Moral Education," *Phi Delta Kappan* 56, no. 10 (June 1975): 671.
35. Nurith Ben-Bassat, "Holocaust Awareness and Education in the United States," *Religious Education* 95, no. 4 (Fall 2000): 402-423.
36. See, for example, Eugen Kogon, *The Theory and Practice of Hell: The German Concentration Camps and the System behind Them*, trans. Heinz Norden (New York: Farrar Straus, 1950); Léon Poliakov, *Harvest of Hate: The Nazi Program for the Destruction of the Jews of Europe* (Syracuse, NY: Schocken Books, 1954); Christopher Browning, *Fateful Months: Essays on the Emergence of the Final Solution* (New York: Holmes and Meier, 1961); and Primo Levi, *Survival in Auschwitz* (New York: Collier MacMillan, 1969).
37. Some representative examples include Donald Kenrick and Grattan Puxon, *The Destiny of Europe's Gypsies* (New York: Basic Books, 1973); Guenter Lewy, *The Nazi Persecution of the Gypsies* (Cambridge, United Kingdom: Oxford University Press, 1999); Michael Burleigh, *Death and Deliverance: 'Euthanasia' in Germany, c. 1900-1945* (Cambridge, United Kingdom: Cambridge University Press, 1994); and Heinz Heger, *The Men with the Pink Triangle: The True, Life-and-Death Story of Homosexuals in the Nazi Death Camps*, trans. David Fernbach (Boston, MA: Alyson Publications, 1994).
38. See, for example, Robert Jay Lifton, *The Nazi Doctors: Medical Killing and the Psychology of Genocide* (New York: Basic Books, 1986); Robert Proctor, *Racial Hygiene: Medicine under the Nazis* (Cambridge, MA: Harvard University Press, 1988); and Götz Aly, Peter Chroust, and Christian Pross, *Cleansing the Fatherland: Nazi Medicine and Racial Hygiene*, trans. Belinda Cooper (Baltimore, MD: Johns Hopkins University Press, 1994).
39. See William Benedict Russell III, "Teaching About the Holocaust—A Resource Guide," *The Social Studies* 96, no. 2 (March-April 2005): 93-96; and Meghan McGlinn Manfra and Jeremy D. Stoddard, "Powerful and Authentic Digital Media and Strategies for Teaching about Genocide and the Holocaust," *The Social Studies* 99, no. 6 (November-December 2008): 260-264.
40. United States Holocaust Memorial Museum website: <<http://www.ushmm.org/museum/about/>>.
41. See Ibid. and the Holocaust Education Foundation's Holocaust Teacher Resource Center: <<http://www.holocaust-trc.org/>>.
42. American journalist John W. Powell was the first to break the story in the United States. See his exposé articles: "Japan's Germ Warfare: The U.S. Cover-Up of a War Crime," *Bulletin of Concerned Asian Scholars* 12, no. 4 (October-December 1980): 2-17; and "A Hidden Chapter in History," *Bulletin of the Atomic Scientists* 37, no. 8 (October 1981): 43-53. On the discovery of the documents that broke the story, see also Williams and Wallace, *Unit 731*, 3-4; for a longer treatment of the U.S. cover-up, see Harris, *Factories of Death*, 205-223.

43. Since the late 1980s, numerous Unit 731 and affiliated personnel have come forward to give testimony regarding their wartime activities. Japanese historians and journalists have been at the forefront of collecting their stories. Unfortunately, too little of their work is available in English translation. In addition to the aforementioned book by Jin, see also publications by Tsuneishi Keiichi, Tanaka Akira, Matsumura Takao, and the historical novels by Morimura Seiichi, to name only a few.

44. James, *Treatment of American Prisoners of War in Manchuria*, op. cit., 12. Indeed, some materials concerning BW have even been reclassified by the Central Intelligence Agency, as one of the authors discovered while conducting research at NARA.

45. Mangold and Goldberg, 24.

46. Very little information is available about individual, personal experiences in the POW camp at Mukden (Shenyang). The most extensive source is the transcript from the Congressional hearing cited above. See James, *Treatment of American Prisoners of War in Manchuria*, passim.

47. The authors wish to acknowledge their colleague, Ina Terry, for this observation.

48. See, for example, *731: Two Versions of Hell*, directed by James T. Hong (2007); *Riben Guizi* [Japanese Devils], directed by Minoru Matsui, in Japanese with English subtitles (2001); and the *Dateline NBC* production, "Unit 731," which originally aired August 15, 1995. Additional short titles can be found on new media sites, such as YouTube, but these tend to be far too graphic and inappropriate for classroom use.

49. The museum's official website was not particularly user friendly for those who cannot read Chinese, and is unfortunately now defunct.

50. Ohio Department of Education, "Licensure Code of Professional Conduct for Ohio Educators," 3, <<http://education.ohio.gov/Topics/Teaching/Educator-Conduct/Licensure-Code-of-Professional-Conduct-for-Ohio-Ed>>.

51. "Japanese Court Rejects Germ Warfare Damages," *The New York Times*, 20 July 2005, <http://www.nytimes.com/2005/07/19/world/asia/19iht-japan.html?_r=3&>.

52. On the Comfort Women issue, see George Hicks, *The Comfort Women: Japan's Brutal Regime of Enforced Prostitution in the Second World War* (New York: W. W. Norton & Company, 1997), among other recent, excellent studies.

53. Tyll van Geel and Arthur Block, *Authority to Control the School Curriculum: An Assessment of Rights in Conflict* (Washington, D.C.: National Institute of Education, 1979), 4.

54. Richard Ingersoll, *Who Controls Teachers' Work?* (Cambridge, MA: Harvard University Press, 2003), 75-77.

55. *Ibid.*, 75, 103.

56. *Ibid.*, 152.

57. State of Ohio, Ohio Revised Code 3313.48, "Free education to be provided; hours in a school year," 1 July 2014, <<http://codes.ohio.gov/orc/3313.48>>.

58. Ben-Bassat, 402-405.

59. The turmoil experienced by the nascent state of Israel on the international stage may be another factor in generating greater awareness. See Donald Schwartz, "Who Will Tell Them after We're Gone?: Reflections on Teaching the Holocaust," *The History Teacher* 23, no. 2 (February 1990): 95-110.

60. Geopolitics of the Cold War era also played a role, wherein West Germany became a critical ally in the containment of a Soviet-led communist bloc in Europe. See Ben-Bassat, 404.

61. This is not to argue that Holocaust education at the secondary school level is not without its own challenges. Holocaust scholar Donald Schwartz writes: "Textbooks used in American schools do little to enlighten students and clarify issues related to the

Holocaust. [One study] concluded that most...textbooks on the elementary school level make only passing reference to the Holocaust...The authors...found that while many American history textbooks contained some description of the Holocaust, they uniformly failed to contain any explanation on the causes of those events. Treatment of the topic in secondary world history texts was more extensive than contained in American history texts, but, again, there was little information about those factors responsible for bringing about the destruction of the European Jewry." See Schwartz, 99.

62. For an example, the etymology of the pejorative word "fag" for homosexuals has its origins in the word "faggot," meaning a bundle of sticks to be added to a fire, which was a fate many homosexuals in medieval Europe met at the hands of hateful mobs. In this sense, the words "maruta" and "faggot" are comparable in their use to dehumanize.

63. For articles that examine comparable teaching strategies concerning the Holocaust, see Norman L. Friedman, "Teaching about the Holocaust," *Teaching Sociology* 12, no. 4 (July 1985): 449-461; and Ben-Bassat, "Holocaust Awareness and Education in the United States," *passim*.

64. Mike Bottery, "Teaching of Evil," *Oxford Review of Education* 19, no. 3 (1993): 319-336.

65. United States Holocaust Memorial Museum, "Why Teach About the Holocaust?" <<http://www.ushmm.org/educators/teaching-about-the-holocaust/why-teach-about-the-holocaust>>.

66. Furthermore, it should be noted that it is not uncommon for perpetrators of what would qualify as war crimes to go unpunished after a war. In the case of World War II, it is well known that the U.S. and U.S.S.R. alike sought and captured hundreds of German scientists and engineers and exploited their knowledge and labor in the post-war arms race. The explicit point to be made here is that Ishii and his collaborators at Pingfang admitted to committing crimes against humanity, that these were forgiven in a secret deal to protect the scientists and their data, and that story was completely silenced for over thirty years coming to light only by accident in the early 1980s.

67. Thomas Misco, "Teaching the Holocaust through Case Study," *The Social Studies* 100, no. 1 (January-February 2009): 14-22.

68. Russell, 93.