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## An Unending War: The Legacy of Agent Orange

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## **An Unending War: The Legacy of Agent Orange**

The Vietnam War was a long, violent conflict, resulting in the deaths of over three-million people. Its effects are still strongly felt today. Scholars continue to debate a wide range of opinions on American participation in the war, with those critical highlighting the conflict's fruitlessness and unnecessary cruelty, citing the United States military policy of attrition warfare, in which seven million tons of bombs were dropped on South Vietnam, leaving the country decimated.<sup>1</sup> They correctly criticize our duplicitous reasons for engaging in war in the first place, suggesting that the rhetorical slogan "fighting the spread of communism" was promoted by the federal government to maintain economic power in Southeast Asia. One of the most harmful aspects of the war, however, too often escapes critique. During the war, the United States dropped nineteen million gallons of chemical defoliants across Vietnam, in an effort to destroy the foliage that guerrilla-fighters were using for cover.<sup>2</sup> These chemicals, known as Agent Orange, not only destroyed the landscape, but left a lasting impact on the lives of American and Vietnamese citizens for generations to come. Today, over forty years after the end of the Vietnam War, over three million citizens are suffering from disabilities, cancers, birth defects, spina bifida, and countless other diseases, all linked to a poisonous dioxin found within the defoliant. Over 1.2 million of those suffering are young children. While many scholars and scientists are reluctant to acknowledge a definitive connection between Agent Orange and birth defects, it is nearly impossible to ignore the evidence; that *an inordinate amount of children have been born with birth defects in Vietnam in the direct aftermath of chemical warfare*. This paper seeks to establish a clear link between the two by demonstrating the cause and effects of the

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<sup>1</sup> Christian G. Appy, *Patriots: The Vietnam War Remembered from All Sides* (New York: Viking, 2003), 200.

<sup>2</sup> Edwin A. Martini, *Agent Orange: History, Science, and the Politics of Uncertainty* (Amherst: University of Massachusetts Press, 2012), 208.

toxin on the human body, the recourse that many victims have taken, as well as the impact of Agent Orange on prenatal testing and abortion rates in Vietnam.

Many books written about the Vietnam War include Agent Orange as a talking point, but very rarely do they delve fully into the issue of how these chemical defoliants impacted the people and environment of Vietnam in the years after the war's end. This essay examines many different kinds of sources including congressional transcripts, interviews, scientific and scholarly reviews, and newspapers, in order to understand the depth of this controversial issue. One of the most important secondary sources that I reference is Edwin Martini's *Agent Orange: History, Science, and the Politics of Uncertainty*. This book was peer-reviewed and edited by prominent Vietnam War historian Christian Appy, and provides an incredibly comprehensive look at many aspects of the legacy of Agent Orange both in the United States as well as in Vietnam. Other sources include research studies from prominent activist groups like The Vietnam Association of Victims of Agent Orange, Make Agent Orange History, and the Agent Orange Action Group. Scientific information comes from the World Health Organization, USAID, and the Alan Guttmacher Institute. Unfortunately, the discourse on this topic is often weak, and as a result, researchers are reluctant to make any strong claim one way or the other regarding this controversial issue. Many historians are ambivalent as well. Obviously, in order to make a statement, one needs to be able to back it up with facts, and since there is no way to definitively prove beyond a shadow of a doubt that Agent Orange has caused the suffering and deaths of over three million people, much of the scholarship on this topic is speculative. It is possible to test whether or not an individual has dioxin in their system, but the test is quite costly, and even if dioxin is present, there is still no current way to prove causation; that the dioxin and the disease are related. With the overwhelming amount of information all pointing towards a correlation,

however, it seems concerning that so few scholars are willing to argue in favor of a link. It may be a risky position to take on, but it is one that needs to be done. In order for the victims of these diseases to receive the compensation they deserve, more pressure must be placed on the U.S. government to acknowledge the connection.

The United States military first began using chemical defoliants in 1961, as a part of Operation Ranch Hand, designed to destroy foliage and crops in an effort to deprive the enemy of overhead cover and food. Chemicals were sprayed using a variety of methods, including helicopter airdrops and hand spraying.<sup>3</sup> Many soldiers assigned to Operation Ranch Hand adopted the slogan “Only You can Prevent a Forest,” as a clear parody of the Smokey Bear slogan created in the 1940s.<sup>4</sup> It was estimated that approximately twenty-percent of forests in Vietnam were destroyed by chemicals during the war. While the primary herbicide used in this effort was Agent Orange, several others were used as well, including Agent Pink, Purple, Green, Blue, and White, a group that came to be known as the “Devil’s Rainbow.”<sup>5</sup> They were all named for the colored stripe around the barrel that contained them. This colored stripe was the only distinguishing feature of these chemicals, and nobody, except for the companies that manufactured them, knew what was inside.<sup>6</sup> The United States Department of Defense paid \$57 million in contracts to eight U.S. chemical companies to produce these chemical defoliants from 1961 to 1971.<sup>7</sup> The chemicals were made up of two very potent acid herbicides and also contain the dioxin TCDD, which is considered to be one of the most deadly poisons known to man. If

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<sup>3</sup>Edwin A. Martini, *Agent Orange: History, Science, and the Politics of Uncertainty* (Amherst: University of Massachusetts Press, 2012), 27.

<sup>4</sup> Ibid.

<sup>5</sup> Marie-Hélène Lavallard, “A Chemical War without End: Agent Orange in Vietnam,” *Agent Orange Action Group*, April 10, 2012, <http://aoag.org/?p=1187>

<sup>6</sup> Ibid.

<sup>7</sup> Cathy Scott-Clark and Adrian Levy, “Spectre Orange,” *The Guardian*, March 28, 2003.

eighty grams of TCDD was concentrated, it could kill the entire population of New York City. Over the course of the war, it is estimated that 176,000 grams of TCDD were used in chemical herbicides dropped on Vietnam.<sup>8</sup>

While the intended goal of Operation Ranch Hand was to destroy forests that hid the enemy, the resultant damage of human life caused by the dioxin is immeasurable. Soldiers, both American and Vietnamese, had no knowledge of the dangers of the chemicals. When planes and helicopters flew overhead, many anticipated bombing and ran for cover. When they realized no bombs fell, they would come out of hiding. Ngo Luc, a North Vietnamese soldier, recalled,

We expected bombs, but a fine yellow mist descended, covering absolutely everything. We were soaked in it, but it didn't worry us, as it smelled good. We continued to crawl through the jungle. The next day the leaves wilted and within a week, the jungle was bald. We felt just fine at the time.<sup>9</sup>

Ngo Luc never developed any serious diseases, but both of his granddaughters were born paralyzed. This was a very common occurrence. Often, soldiers and civilians who had been completely exposed to the toxin during the war never exhibited any symptoms, dying of natural causes after a normal life span. When they reproduced, however, the dioxin appeared again. Politicians, arguing against a connection between Agent Orange and health problems, often use examples like Ngo Luc, for it is easier to ignore the issue and say that there is no correlation, particularly if these people never present any symptoms. Critics cite the healthy ones and fail to give thought to future generations who will suffer.

Dr. Nguyen Thi Ngoc Phuong was the first doctor to make the connection between Agent Orange and birth defects in children of veterans. A native of Vietnam and a physician at the Tu Du Hospital, Phuong worked as an obstetrician during the 1970s and 80s and noticed that an

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<sup>8</sup> Ibid.

<sup>9</sup> Cathy Scott-Clark and Adrian Levy, "Spectre Orange," *The Guardian*, March 28, 2003.

inordinate amount of children were born with birth defects. In 1982, she conducted a study in the Ben Tre province of the Mekong Delta in what was once South Vietnam. This area had been heavily targeted during Operation Ranch Hand. Phuong sampled over one-thousand households and calculated the rate of birth defects in the region. Her study concluded that the rate of birth defects were three-to-four-times as high as other, less heavily targeted regions. Phuong's findings were published by the 10-80 Committee of Hanoi, a government group in charge of chemical dioxin research in Vietnam, but many still refuse to acknowledge the link between the two.<sup>10</sup> As head of the Women's Health Department at the Ho Chi Minh University Medical Center, Vice President of the Vietnam Association of Victims of Agent Orange (VAVA), Vice President of the Vietnam Obstetricians and Gynecologists Association, and Chair of the Ho Chi Minh City Reproductive Endocrinology and Infertility Association, Dr. Phuong has worked tirelessly to ensure that her life's work is recognized and that this wartime link to birth defects is brought to light, so that victims receive the compensation that they are due.

While there is no conclusive proof that certain birth defects are a direct result of Agent Orange, scientists have tested a variety of factors, including how dioxin is stored within the body, and how it is passed to progeny. The dioxin can enter the body in a number of ways. Most commonly, it can be absorbed through the respiratory system or by breathing it in.<sup>11</sup> Another less obvious way is through the digestive system. As seen in Figure 1, certain areas of Vietnam were targeted far more heavily than others by Operation Ranch Hand. Of the more than twenty-thousand identified hamlets throughout Vietnam, over three-thousand were heavily saturated, and thus contaminated, by chemical warfare, because they were believed to be enemy

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<sup>10</sup> Wayne Dwernychuk, "Agent Orange and Dioxin Hot Spots in Vietnam," *Persistent Organic Pollutants (POPs) Toolkit*, May 6, 2015, <http://www.popstoolkit.com/about/articles/aodioxinhotspotsvietnam.aspx>

<sup>11</sup> Marie-Hélène Lavallard, "A Chemical War without End: Agent Orange in Vietnam," *Agent Orange Action Group*, April 10, 2012, <http://aoag.org/?p=1187>

strongholds.<sup>12</sup> These areas are known today as “hot spots.” Other areas of strong concentration include storage facilities for the U.S. Air Force, where barrels of dioxin were kept for the duration of the war. In these areas, the toxin would seep into the ground water and soil, contaminating the entire food chain. Crops grown in these “hot spot” areas were infected as well. Wildlife was prone to contamination, and consequently the consumption of fish and game became toxic. Anyone who consumed food or water from these sprayed areas diseased themselves.<sup>13</sup> The TCDD Dioxin is highly stable and is easily absorbed by fat tissue. Once absorbed, it can stay in the body for a long time.<sup>14</sup> The dioxin can latch onto DNA molecules, damaging these cells, altering the genetic makeup of a victim’s offspring. The toxin can also pass onto future generations through a process called elimination. Women in childbirth and those who are nursing, often exhibit lower levels of dioxin in their bodies because they are able to eliminate, or expel fluids (in this case, harmful toxins) during breastfeeding.<sup>15</sup>

To understand how harmful dioxin is, one must look at how it affects the long-term outcome of the family unit. For an analysis of the consequences of the toxin, I will refer to them as First Generation, and Second Generation, respectively. The dioxin often targets the First Generation in the form of leukemia, heart disease, Parkinson’s disease, asthma, various forms of prostate and respiratory cancer, and soft tissue sarcomas. The rate at which these diseases present themselves vary on a case by case basis. Some victims develop diseases months after coming

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<sup>12</sup> Edwin A. Martini, *Agent Orange: History, Science, and the Politics of Uncertainty* (Amherst: University of Massachusetts Press, 2012),

<sup>13</sup> Marie-Hélène Lavallard, “A Chemical War without End: Agent Orange in Vietnam,” *Agent Orange Action Group*, April 10, 2012, <http://aoag.org/?p=1187>

<sup>14</sup> Tine Gammeltoft, *Haunting Images: A Cultural Account of Selective Reproduction in Vietnam* (Los Angeles: University of California Press, 2014), 44.

<sup>15</sup> Marie-Hélène Lavallard, “A Chemical War without End: Agent Orange in Vietnam,” *Agent Orange Action Group*, April 10, 2012, <http://aoag.org/?p=1187> ; Unknown. *Dr. Nguyen Thi Ngoc Phuong with Handicapped Children*. 1960s. Photograph. From: <http://makeagentorangehistory.org/champion/dr-nguyen-thi-ngoc-phuong-u-s-vietnam-dialogue-group>

into contact with Agent Orange, while others take decades to exhibit any signs.<sup>16</sup> The dioxin impacts the Second Generations in the form of immediate birth defects, including cleft palate, congenital heart disease, Down's syndrome, neural tube defects, fused digits, spina bifida, and various other physical and mental disorders.<sup>17</sup> Children are born with birth defects all over the world every single day. It is not uncommon to see a small percentage of a country's population exhibit abnormalities. In Vietnam, the average rate of birth defects of children in uncontaminated areas is estimated to be as low as 0.74%. When measured against areas that are severely contaminated with chemical dioxin, however, the numbers are remarkable. 2.95% of children in contaminated areas are born with birth defects, nearly four-times higher than the average. This evidence is incontrovertible. The presence of toxin quadruples the rate of birth defects in these areas.<sup>18</sup>

While the evidence of the connection between Agent Orange and birth defects seems abundantly clear, the United States government still refuses to fully acknowledge its responsibility. Many victims in the United States suffer from the effects of Agent Orange, including veterans of the war, their families, and Vietnamese people who have resettled in the United States, and the government is doing very little to help them. Recent evidence indicates that the federal government was well aware of the toxicity of the chemicals it was spraying, and simply chose not to reveal this information to the public. It was more convenient and cost effective to leave soldiers in the field while spraying commenced, rather than waiting and withdrawing them from the area. By suggesting that the chemicals were harmless, spraying could

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<sup>16</sup> "Public Health: Agent Orange," *United States Department of Veterans Affairs*, Feb. 2, 2015, <http://www.publichealth.va.gov/exposures/agentorange/index.asp>

<sup>17</sup> Ibid.

<sup>18</sup> Tine Gammeltoft, *Haunting Images: A Cultural Account of Selective Reproduction in Vietnam* (Los Angeles: University of California Press, 2014), 45.



proceed without warning or concern for the well-being of those below.<sup>19</sup> According to the Military Rules of Engagement during Vietnam, the United States was only allowed to fire artillery on an area under certain specific circumstances, such to clear an area of civilians, or after giving warning of an incoming airstrike. To take such action, the military would drop a vague but threatening leaflet shortly before the action would commence.<sup>20</sup> It follows that spraying such a lethal chemical on Vietnam would have warranted a similar protocol, and yet, the U.S. government completely denied culpability. Instead, it relayed this message in informational videos to soldiers: “It should be noted that the chemicals, when used appropriately, are harmless to man and do not render the soil unfruitful beyond one agricultural season... The number of ambushes in sprayed areas has dropped to practically zero. Military worth has thus been established.”<sup>21</sup> Because the army was no longer experiencing ambushes in sprayed areas, Ranch Hand was trumped up as a successful military operation. Though federal officials may have known about the potentially deadly effects of the defoliants, the U.S. Army chose to proceed with the operation, because it was proving to be an effective means for fighting off the enemy. For this, and many other reasons, the United States decided to keep quiet about the poisonous dioxin in Agent Orange.

To this day, the U.S. government refuses to acknowledge all of the ways in which the chemicals have been harmful to individuals, even among American veterans of the war. The United States Department of Veterans Affairs (VA) website details the intricacies of dealing with Agent Orange and legal compensation. While the government fully acknowledges the link

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<sup>19</sup> Cathy Scott-Clark and Adrian Levy, “Spectre Orange,” *The Guardian*, March 28, 2003.

<sup>20</sup> Christian G. Appy, *Patriots: The Vietnam War Remembered from All Sides* (New York: Viking, 2003), 157.

<sup>21</sup> Edwin A. Martini, *Agent Orange: History, Science, and the Politics of Uncertainty* (Amherst: University of Massachusetts Press, 2012), 207.

between Agent Orange and certain cancers, they adamantly deny links to other diseases. The VA produces pamphlets that resemble modern day propaganda posters, with the heading “VA Cares for Vietnam and Other Veterans Exposed to Agent Orange.” One poster encourages you to “Ask about VA benefits!” treating veteran compensation for a deformity or disease like a windfall rather than a medical entitlement. While outwardly, the Department of Veterans Affairs seems very eager to help those affected by the dioxins in Agent Orange, it is quite difficult to actually qualify for help. There are fourteen diseases listed on the Veterans Affairs website that are acknowledged as being linked to Agent Orange in First Generation victims or veterans, granting potential eligibility for benefits. The website is riddled with disclaimers and dialogue about preventative measures for avoiding diseases like lung cancer or heart disease. The wording is cautionary, as if to say “you have cancer because you smoked cigarettes, not because of poisonous dioxin exposure,” releasing itself from any responsibility for the problem.<sup>22</sup> For subsequent generations, the United States’ “benefits” are even more diluted. The only officially accepted illness related to Agent Orange for children of veterans is spina bifida. All other birth defects are grouped into a category that refuses to acknowledge a link to chemical defoliants. The VA only acknowledges direct mother-to-child links when it comes to birth defects as a result of Agent Orange, meaning that there must be a direct link between the mother’s service in the military and the child being born with an abnormality. If the disease passes to the child as a result of the father’s contamination, there is no compensation given to the family. If the problem is determined to be genetic, there is no compensation. There are many other loopholes that

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<sup>22</sup> “Public Health: Agent Orange,” *United States Department of Veterans Affairs*, Feb. 2, 2015, <http://www.publichealth.va.gov/exposures/agentorange/index.asp>

expunge the U.S. government of responsibility when it comes to children of American veterans of the Vietnam War.<sup>23</sup>

As mentioned earlier, Dr. Phuong has spent many years working with the United States government to find a solution for the lingering effects of Agent Orange.<sup>24</sup> In 2010, Phuong spoke before Congress, detailing the situation in Vietnam, as well as the results of her research throughout the years, appealing to them to provide compensation for the millions of victims that have suffered and died as a result of U.S. military policy during the Vietnam War.<sup>25</sup> She challenged Congress to compensate American and Vietnamese veterans as well as Vietnamese citizens affected by the war—those who remained in Vietnam and those who immigrated to the United States. She encouraged Congress to reconsider policies regarding compensation for Second Generation victims of Agent Orange contamination. She advocated for the U.S. to clean up the remaining “hot spot” areas still actively contaminating parts of Vietnam. It was through her efforts that the United States Congress pledged to give three-hundred million dollars over a period of ten years in order to improve conditions for victims and rehabilitate the environment.<sup>26</sup> While this was an incredible step forward in the healing process, a lot of work still remains.

The Vietnamese population struggle in the aftermath of the Vietnam War on a much more severe level than people of the United States. Estimates suggest that as many as three-million people are suffering from severe health problems as a result of Agent Orange dioxin in Vietnam today, the same number of people who died during the long and brutal war. 1.2 million

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<sup>23</sup> Ibid.

<sup>24</sup> "A Woman's Fight Against the Pain of Agent Orange," *News VietNamNet*, Accessed May 6, 2015, <http://english.vietnamnet.vn/fms/society/91883/a-woman-s-fight-against-the-pain-of-agent-orange.html>

<sup>25</sup> U.S Congress, House of Representatives, Committee on Foreign Affairs, *Agent Orange in Vietnam: Recent Developments in Remediation: Hearing before the Subcommittee on Asia, the Pacific and the Global Environment, 111<sup>th</sup> Cong., 2<sup>nd</sup> sess., 2010.*

<sup>26</sup> "Progress Highlights," *USAID Vietnam*, May 4, 2015, <http://www.usaid.gov/vietnam/progress-reports-environmental-remediation-dioxin-contamination-danang-airport>

of those are children. Vietnam has the highest abortion rate of any country in the world, with up to forty percent of pregnancies ending in termination annually.<sup>27</sup> While the abortion rate can be attributed to many factors, it is critical to examine the role of the Vietnam War. In 1976, just a year after the official end of the war, abortion rates in Vietnam began to skyrocket, and have been climbing ever since.<sup>28</sup> While some may argue that this was the result of the legalization of abortion in 1975, I would argue that this was merely a technicality, as abortion was never really seen as *illegal* in Vietnam. Selective termination of a pregnancy had been available since the early 1960s.<sup>29</sup> Legalization was less about the decriminalization of abortion, and more a result of the end of war and the reunification of the government.

Beginning in the late 1980s, Vietnam adopted a two child model, whereby families would only be allowed two children. While this policy was never legally enforced, there was a societal trend towards the newly developed concept of the “happy family.” Similar to America’s “nuclear family” that was pushed in the aftermath of World War II, the two-child family ideal was widely encouraged. The rhetoric of this social campaign was “a happy family, a prosperous country.”<sup>30</sup> While the two-child model was the goal, in practice, there was shockingly little information on how to actually achieve it. Access and information regarding contraception and safe sex was very limited. Condoms were available, but they were incredibly expensive, and many couples believed they could avoid pregnancy with selective abstinence only.<sup>31</sup> This left many people floundering to find ways to avoid pregnancy. While family planning was certainly encouraged,

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<sup>27</sup> Mike Chinoy, “Vietnam’s Abortion Rate Rises,” *Cable News Network*, February 6, 1999.  
<http://www.cnn.com/WORLD/asiapcf/9902/06/vietnam.abortion>

<sup>28</sup> Jeannie Rosoff, *Sharing Responsibility Women, Society and Abortion Worldwide*, (New York: Alan Guttmacher Institute, 1999), 29.

<sup>29</sup> Tine Gammeltoft, *Haunting Images: A Cultural Account of Selective Reproduction in Vietnam* (Los Angeles: University of California Press, 2014), 96.

<sup>30</sup> *Ibid.*, 62.

<sup>31</sup> *Ibid.*, 38.

access to it was not as readily available. Often, the only recourse was prenatal testing after a pregnancy has occurred. The policy for family planning during this time in Vietnam seemed to be too little, too late. As a result, abortion rates began to climb.<sup>32</sup>

Lack of family planning and contraception certainly contributed to rates of selective termination, but one cannot overlook the link between toxin-related birth defects and Vietnam's growing abortion problem. After the war, prenatal screening for babies became almost mandatory, if not strongly encouraged. Dr. Durong Quoc Trong, the head of the Government Office for Population and Family Planning, said that in Vietnam, "Our principal goal for the future is to improve population quality... many children are still born with disabilities that could have been prevented during pregnancy" through the use of prenatal testing.<sup>33</sup> Once the link between Agent Orange and birth defects became well-known, prenatal screening rose dramatically in popularity.<sup>34</sup> Naturally, then, selective termination of a pregnancy would rise as well. This societal push for "population quality" is indicative of the fear that was widespread as well. In the years following the Vietnam War, the Vietnamese media was so saturated with images of victims of Agent Orange that childbirth became inextricably linked with birth defects. Whereas in the United States, sonograms and pregnancies are a huge source of excitement for expecting parents, in Vietnam, they became a constant source of anxiety and fear. It was nearly impossible for Vietnamese people to rid themselves of the mental images associated with disabled children. These images became known as "ám ảnh," which directly translates to being haunted. One woman described it this way, "It means pictures that stay on your mind. No matter

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<sup>32</sup> Mike Chinoy, "Vietnam's Abortion Rate Rises," *Cable News Network*, February 6, 1999. <http://www.cnn.com/WORLD/asiapcf/9902/06/vietnam.abortion>

<sup>33</sup> Tine Gammeltoft, *Haunting Images: A Cultural Account of Selective Reproduction in Vietnam* (Los Angeles: University of California Press, 2014), 59.

<sup>34</sup> *Ibid.*, 30.

what you do to get rid of them, you cannot.”<sup>35</sup> Childbirth quickly became something to fear. Women were much more likely to abort than risk giving birth to a child that would suffer all its life.

While many women of child-bearing age were confronted with childbirth decisions of extreme proportions, they also knew that if they kept the child they would have to deal with potentially enormous disabilities. Many factors needed to be considered: new parents worried about their ability to raise a child with disabilities and the financial burden that would bring. They were concerned with the limited financial compensation they would receive from the state. They were anxious about issues of medical legitimacy and whether or not they trusted their medical professionals or the information they were given. Perhaps the most important part of their decision, however, was the idea of personhood, and the belief of many Vietnamese people, that impaired or disabled people can never attain full personhood, which means that many disabled people are unable to fulfill certain obligations and responsibilities that are an expected part of being a member of society.<sup>36</sup> While abortion was a hard and painful decision to make, parents knew that the child would suffer its whole life if they did not terminate the pregnancy. Abortions under these circumstances were more socially acceptable because the effects of Agent Orange were so widespread, and selective termination was commonplace. It is simply impossible to overlook the connection between dioxin related birth defects and abortion rates skyrocketing in Vietnam.

Today, nearly forty years after the end of the Vietnam War, veterans and civilians are still reeling from the side effects from the nearly twenty-million gallons of chemical defoliants

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<sup>35</sup> *Ibid.*, 94.

<sup>36</sup> Tine Gammeltoft, *Haunting Images: A Cultural Account of Selective Reproduction in Vietnam* (Los Angeles: University of California Press, 2014), 5.

sprayed on the forests of Vietnam. The poisonous dioxin TCDD, found in these chemicals, has been responsible for the deaths of an estimated 500,000 individuals, causing debilitating diseases in over three million people, close to all the casualties from the war itself. The legacy of the brutal attrition warfare by the United States on Vietnam will be felt for generations to come, as more and more children are born with birth defects annually, and as the abortion rates in Vietnam continue to climb. In order to effectively move forward from this ongoing calamity, the United States needs to accept full responsibility for the actions that led to this outcome. There needs to be a better system in place for compensating veterans and their families suffering from disabilities as a result of Agent Orange, instead of edging around the issue and refusing to acknowledge the link to certain diseases. The government must own up to its actions without concern for liability. The U.S. needs to work with Vietnam more closely to clean up active Agent Orange hotspots, and to provide more effective means of compensating victims than just the occasional payout.<sup>37</sup> Family planning and access to birth control is only part of it. It is also critical to support families who decide to carry their pregnancies to term, which may result in the birth of a disabled child. Government support is needed for individual families, so that disabled children do not all get funneled into orphanages. There are countless ways in which support is needed both in the United States and in Vietnam. The denial of this issue simply comes down to an issue of correlation versus causation. If it is still at all possible to deny causation, the government believes it can waylay the responsibility for cleaning up this mess. However, if there were ever to be absolute proof of causation, there would be no way to avoid dealing with the repercussions. It is an issue of morality and whether or not the U.S. government wants to accept the blame. I argue that the link between Agent Orange and these illnesses is incredibly clear, and

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<sup>37</sup> Michael F. Martin, "Vietnamese Victims of Agent Orange and US-Vietnam Relations," *Congressional Research Service*, Aug. 29, 2012. <http://fas.org/sgp/crs/row/RL34761.pdf>

it is imperative that the United States do a better job of admitting guilt, and work to repair the damage. If the United States refuses to do this, we will be dealing with the aftermath of Agent Orange for generations to come.

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