

## The Moral Status of Chemical Weapons: Arguments from World War I

By John Mark Mattox

**E**ighteenth-century British poet Alexander Pope once famously mused, “Vice is a monster of so frightful mien / As, to be hated, needs but to be seen; / Yet seen too oft, familiar with her face, / We first endure, then pity, then embrace.”<sup>1</sup>

While the human condition affords countless examples of what Pope had in mind, perhaps no more striking wartime example can be found than that of the employment of chemical weapons in World War I. Chemical weapons—regarded as vicious and hated by all self-identified “civilized peoples”—were first endured, then pitied, then embraced by both sides, even as both sides held their noses, both literally and figuratively, for having chosen to employ weapons condemned throughout history. Then, in a turn so quick as to make the head of the body politic spin, the international community roundly condemned these weapons, even as individual states muttered under their breath—in the form of treaty reservations—their willingness to employ them again if an enemy did. At least some in Germany took all of this in stride, as evidenced in a now famous diary entry by army officer and author Rudolf Binding, written in the immediate aftermath of the gas attacks at Ypres, Belgium: “I am not pleased with the idea of poisoning men. Of course, the entire world will rage about it at first and then imitate us.”<sup>2</sup> Imitation did, indeed, follow, both in the attacks employing progressively

more lethal weapons and the amassing, over the course of the 20<sup>th</sup> century, of huge stockpiles of chemical weapons.

From the perspective of the 21<sup>st</sup> century, most would say that chemical weapons are immoral, but then again, that is what most were saying on the eve of World War I. This leads inexorably to a set of interrelated moral-philosophical questions:

- Is the employment of chemical weapons morally permissible or not?
- If so, what is all the fuss about?
- If not, why not?
- Finally, if their employment is immoral, what justifications, if any, could plausibly be offered to override their moral prohibition?

These questions, as they pertain to World War I, present themselves against the immediate backdrop of The Hague Peace Conferences, the first of which occurred in 1899 and included the following declaration: “The Contracting Powers agree to abstain from the use of projectiles the object of which is the diffusion of asphyxiating or deleterious gases.”

What followed were two “exit” clauses: “The present Declaration is only binding on the Contracting Powers in the case of a war between two or more of them. It shall cease to be binding from the time when, in a war between the Contracting Powers, one of the belligerents shall be joined by a non-Contracting Power.”<sup>3</sup> The declaration was ratified by all major powers except the United States and Japan.<sup>4</sup> However, both the 1899 and 1907 conferences include bans ratified by all major powers that expressly prohibit:

- employing poison or poisoned weapons
- killing or wounding treacherously
- employing arms, projectiles, or material calculated to cause unnecessary suffering.<sup>5</sup>

That the chemical weapons employed in World War I were “poison” in the relevant sense was hardly a point of dispute. However, the question of

whether clouds of gas creeping eerily along the ground and seeping down into the trenches was a case of “killing or wounding treacherously” was a matter of dispute—the answer to whether these chemical weapons were materials “calculated to cause *unnecessary* suffering” depended very much on whom one asked.

World War I was supposed to be a war from which the victorious German troops returned home “before the leaves [fell] from the trees,”<sup>6</sup> but of course it did not work out that way. Within months, German and Allied advances on the Western Front ground to a standstill as both sides took to the trenches,<sup>7</sup> where then over time, if not immediately, the living and operating conditions for the average soldier were simply ghastly. For both sides, the question became how to break what appeared to be an intractable stalemate, which recent improvements in the machine gun and rapid-fire artillery had helped promote. World War I was, perhaps more than any war that preceded it, a scientist’s war that also gave rise to significant technological improvements not only to the machine gun and artillery but also to the airship, airplane, dreadnaught, mine, and submarine.

So perhaps it should come as no surprise that some regarded “improvements” in poison gas weapons as part of a natural technological evolution. Perhaps neither should it be a surprise that *all* these technological improvements pressed up against some kind of moral boundary. Gas was just one of the things that the belligerent states of World War I were willing to “first endure, then pity, then embrace.” Moreover, during the war, gas, like all these other technologies, was expected by many to become a permanent feature of future warfare. After the war, German chemist Fritz Haber, on receiving the Nobel Prize for chemistry in 1919, stated, “In no future war will the military be able to ignore poison gas.”<sup>8</sup> For Haber, the embrace was complete. But why? Haber supplies his own answer: “It is a higher form of killing.”<sup>9</sup>

Whatever else World War I was about, it was, in some undeniable sense, about killing. As British II Corps commander Lieutenant General Sir Charles Ferguson stated:

[Gas] is a cowardly form of warfare which does not commend itself to me or other English soldiers, but it is clearly impossible to get the enemy to desist from this and other contraventions of previously recognized rules of warfare by holding up our hands with abhorrence at such unseemly conduct on his part. . . . We cannot win this war unless we kill or incapacitate more of our enemies than they do of us, and if this can only be done by our copying the enemy in his choice of weapons, we must not refuse to do so.<sup>10</sup>

General Erich von Falkenhayn, German imperial minister of war and later chief of the General Staff, reflectively argued that “the ordinary weapons of attack often failed completely” against trench warfare and, hence, against Germany’s ability to kill its way to the English Channel. “A weapon had, therefore, to be found which was superior to them. . . . Such a weapon,” he argued, “existed in gas.”<sup>11</sup>

The pragmatic argument that seems to have emerged—even if none wished to articulate it in polite company—was an all too simple syllogism applied by both the Central and Allied powers:

*Whoever breaks the stalemate (which as a practical matter meant whoever kills the most of the enemy) will win this war.*

*Gas will enable the killing of more of the enemy.*

*Therefore, gas will enable us to win the war.*

Actual outcomes falsified the argument but did little to prevent the expenditure of unimaginably large quantities of gas during World War I.

Falkenhayn’s reflection also reveals an economic argument for employing gas: Germany needed a weapon that “would not excessively tax the capacity of German war industry in its production.”<sup>12</sup> A similar selling point could be found on the Allied side. The developer of one British chemical weapon delivery device calculated that if it were “manufactured ‘on a large scale the cost of killing Germans would be reduced to only sixteen

shillings apiece.”<sup>13</sup> At that bargain price, who could afford *not* to fight with poison gas?

Next, we should note a patriotic argument that stretches back at least as far as Cicero and still made a great deal of sense to many in the imperial world as it existed at the beginning of World War I: “Death is not natural for a State as it is for a human being, for whom death is not only necessary, but frequently even desirable. On the other hand, there is some similarity, if we may compare small things with great, between the overthrow, destruction, and extinction of a State, and the decay and dissolution of the whole universe.”<sup>14</sup> States have often implicitly appealed to arguments such as this in order to employ extraordinary means of war-making under the banner of “military necessity.” When the disastrous confluence of events in August 1914 precipitated a war that, within months, became hopelessly bogged down, consuming critical resources with every passing day, the logical next step was to break the stalemate by whatever means necessary before the state’s war-making capacity was exhausted.

Germany’s chemical industry, by far the most advanced in the world at that time, was quick to do its “patriotic” duty, working to weaponize chemicals with progressively lethal effect (although it would not reach the apogee of its “patriotic” contribution until it developed Zyklon-B, the chemical pesticide that facilitated the “final solution” a generation later). On the other side of the channel, World War I Allied “patriots” were busy developing their own chemical killing mechanisms for not dissimilar reasons.

Early on, at least, Germany offered a hair-splitting legal argument to the effect that its gas attacks did not violate The Hague Conventions because the gas was released from canisters and not delivered by projectiles. Both sides later advanced the legal argument from negation: that the other side had employed it first and that existing international legal strictures were thereby superseded. (We should, of course, remind ourselves that the relationship between the “legal” and the “moral” is hardly a logical biconditional.)

Finally, we find attempts at moral argumentation: Gas, so the argument goes, “was actually the most *humane* of the weapons used in the First

World War, wounding far more than it killed.”<sup>15</sup> Of the roughly 1.29 million gas casualties of the war, the survival rate was about 93 percent, even though about 12 percent were permanently disabled.<sup>16</sup> At this juncture, we could put on our actuarial hats and dispute the statistics. To do so, however, would miss the larger moral-philosophical point. A weapon’s relative “humanity” depends far more on whether it causes gratuitous suffering to another person than it does on the number of persons it is used to kill or incapacitate. Moreover, the numbers of dead or wounded do not begin to capture the psychological damage done to those who experienced gas attacks themselves. The same soldier who became accustomed to shrugging his shoulders—that is to say, when a comrade-in-arms was blown to pieces by artillery as the soldier stood next to him in the trenches, or whose head was shattered into fragments by machine gun fire when he peered over the trenches—was enraged at the horrors he witnessed from the employment of gas. Consider, as one of many possible examples, the reaction of British Army Company Sergeant Major Ernest Shepard, who found himself on the frontlines during the first gas attack at Ypres and called what he experienced “the most barbarous act known in modern warfare”:

*[T]he enemy . . . started pumping out gas on us. This gas we were under the impression was to stupefy only. We soon found out at a terrible price that these gases were deadly poison. . . . The scene that followed was heart-breaking. Men were caught by fumes and in dreadful agony, coughing and vomiting, rolling on [the] ground in agony. . . . Hell could find no worse the groans of scores of dying and badly hurt men.*<sup>17</sup>

His diary entry the following day affords some small glimpse at the rage felt by those who survived: “Had we lost as heavily while actually fighting we would not have cared as much, but our dear boys died like rats in a trap, instead of heroes as they all were. The Dorset Regiment’s motto now is, ‘No prisoners.’ No quarter will be given when we again get to fighting.”<sup>18</sup>

The experience of Ypres does not appear to have produced in the Allies an aversion to gas warfare per se, but only to the awful suffering it induced. Take away the permanent effects of gas poisoning, and gas warfare became more palatable. As Winston Churchill characterized the moral problem a few months after the armistice:

*I do not understand this squeamishness about the use of gas. We have definitely adopted the position at the [Versailles] Peace Conference of arguing in favor of the retention of gas as a permanent method of warfare. It is sheer affectation to lacerate a man with the poisonous fragment of a bursting shell and to boggle at making his eyes water by means of lachrymatory [that is, tear-producing] gas.<sup>19</sup>*

In this telling statement, Churchill rather turns reality on its head, to wit: Shrapnel from bursting shells does not kill and maim by virtue of toxic properties. It kills it because the shrapnel, hurled at a great speed, is jagged, sharp, and searingly hot. Tear production is hardly the principal moral problem associated with gas warfare. Of much greater concern is the fact that gases, especially those produced after World War I, can, like shrapnel, have deleterious effects that linger in survivors long after the battle is over.

In the same 1919 memorandum, Churchill distinguishes between “civilized” and “uncivilized” peoples, apparently seeing no reason why any should pause over the employment of gas against the latter: “I am strongly in favor of using poisoned gas against uncivilised tribes. The moral effect would be so good that the loss of life should be reduced to a minimum.”<sup>20</sup> He then mercifully adds, “It is not necessary to use only the most deadly gases: gases can be used which cause great inconvenience and would spread a lively terror and yet would leave no serious permanent effects on most of those affected.”<sup>21</sup> The point in referencing this often *misquoted* memorandum is not to castigate Churchill but rather to identify some of the points of confusion that attended moral reasoning vis-à-vis chemical warfare against the backdrop of World War I.

Also against that backdrop, B.H. Liddell Hart and J.F.C. Fuller argued that:

- Gas was a weapon of the future that could be employed in both “offensive and defensive operations.”<sup>22</sup>
- Its versatility would enable its dispersion from “tanks, ships, and aircraft,”<sup>23</sup> thus producing an economy born of interoperability.
- It was relatively humane inasmuch “as it achieved effects without causing as many fatalities and permanent disabilities as high explosives.”<sup>24</sup>

Both Allied and German sources advanced arguments as to how the relative morality of a weapon should be assessed. On the Allied side, one of the best known arguments comes from U.S. Army Colonel Harry L. Gilchrist, who in 1928 wrote the Army’s official comparative study of casualties from the Great War: “The measure of humaneness for any form of warfare is the comparison of the degree of suffering at the time of injury by the different weapons, their permanent after effects, and the percentage of deaths to the total number injured by the particular methods of warfare under consideration.”<sup>25</sup> On the basis of this calculus, Gilchrist concludes:

*[T]he part played by chemical warfare in the maintenance of military morale is of extraordinary moment, especially in connection with the mortality. The large number of casualties produced by chemicals compared with the low death rate from them is striking and brings up the question as to the military importance of a weapon which wounds but does not kill. Naturally, the first impression would be that such a weapon would have no place in military armament, but when considering the great encumbrance to an enemy of a large number of wounded, together with the number required to care for them (estimated at from four to five persons for each wounded), it can readily be seen that the wound-producing weapon has a greater strategic value than the one which kills outright.<sup>26</sup>*



Germany's corresponding calculus, as reported by Gilchrist, featured a thoroughgoing pragmatism covered with a thin veneer of ethics:

*In the matter of making an end of the enemy's forces by violence it is an incontestable and self-evident rule that the right of killing and annihilating, in regard to hostile combatants is inherent in the war power, and its organs, that all means which modern inventions afford, including the fullest most dangerous and the most massive means of destruction, may be utilized. . . . These last, just because they attain the object of war as quickly as possible, are on that account to be regarded as indispensable, and, when closely considered, the most humane.<sup>27</sup>*

Alternatively stated, those weapons that enable the state to realize its war aims in the shortest possible time are, by definition, the most humane. If Germany did not intend this argument to apply to gas weapons, it is difficult to imagine what it did intend the argument to apply to. Gilchrist certainly thought it did.

Whatever the case, the experimentation with and stockpiling of vastly more lethal gases in the interwar years calls into question the genuineness of interest on the part of anyone in the prospect of employing gas in future wars out of truly humane considerations. This, however, should not surprise us. A century earlier, Carl von Clausewitz observed:

*Kind-hearted people might of course think there was some ingenious way to disarm or defeat an enemy without too much bloodshed, and might imagine this is the true goal of the art of war. Pleasant as it sounds, it is a fallacy that must be exposed. . . . To introduce the principle of moderation into the theory of war itself would always lead to a logical absurdity.<sup>28</sup>*

For the Clausewitzian realist, movement along the endure-pity-embrace continuum always tends toward the embrace, and subordination of moral questions simply signals recognition of reality. On the other hand, no

amount of realist argumentation will ever convince the likes of Company Sergeant Major Shepard that chemical weapons are morally permissible.

With respect to the question of whether the alleged moral prohibition against chemical weapons can be overridden, at least some from the World War I era would answer “yes, for purpose of reprisal.” In recent decades, when response-in-kind to a chemical attack has become infeasible, responses have included economic sanctions and massive cruise missile attacks—and the discussion of possible response options has at times even included nuclear weapons. Whether any of these methodologies represent an improvement over retaliation-in-kind to chemical weapons may require additional reflection.

In 1919 at the Versailles Peace Conference, the Allies decided that chemical weapons were so morally reprehensible that *Germany ought not to be allowed to have them*. (It was not until 1925 that the Allies disallowed their own employment of chemical weapons—an undertaking not ratified by the United States until 1975—and it was not until 1993 that the world at large formally foreswore chemical weapons altogether.)

Since World War I, it may be that most casual observers of war have neither endured nor pitied or embraced chemical weapons. Moreover, the number of chemical weapons attacks since World War I has not been zero, but it has been very small. Have moral scruples kept things in check? Perhaps, but that may not be the dominant reason. The argument can be made that the great powers have simply decided chemical weapons are more trouble than they are worth:

- Chemical weapons are not particularly effective in many, if not most, contemporary great power planning scenarios.
- The success of employment depends largely on the caprice of atmospheric conditions, and shifting winds can quickly make the weapons lethal for the originating side.
- Personal and collective protective equipment can significantly reduce the effect of a chemical weapon attack.

- Handling the weapons themselves is a dangerous task, and associated logistics are complicated.
- Finally, it may be argued that most military commanders would sooner avoid both the hassles and risks, leaving it to a handful of minor players in the international community to employ chemical weapons as the so-called poor man's nuke.

Decisions made based on these practicalities, however, will not keep the great powers from claiming the moral high ground.

Are chemical weapons inherently immoral? If so, then none of the World War I arguments in favor of them can carry the day. But technology has advanced in ways unimaginable in World War I. Consider the following questions:

- What if a chemical warfare agent could be developed that could be employed with acceptable discrimination?
- What if a nonlethal chemical warfare agent could simply cause one's enemy to lie down and take a nap while handcuffs are slapped on him or her?
- What if a lethal chemical warfare agent could cause instant death with no apparent suffering?

This is not the stuff of science fiction anymore. If the chemical weapons of the future were to make war less lethal than they did in the Great War, would that signal a moral improvement, or would it merely raise other troubling moral dilemmas? Would relatively pain-free incapacitation or death result in more humane war or simply in more war? (Recall General Robert E. Lee's remarkably candid observation: "It is well that war is so terrible, or we would grow too fond of it."<sup>29</sup>) Our future problem with chemical weapons may not be that they, à la World War I, make warfare torturous or death gruesome but rather that they could make both warfighting and killing too easy. If so, chemical warfare probably is not merely a relic of the past, the moral questions surrounding chemical weapons may not be as settled as

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one might wish, and Pope's dictum may serve as a timely warning against future perils neither easily anticipated nor easily remedied.



## Notes

<sup>1</sup> Alexander Pope, “An Essay on Man, Epistle II,” available at <[www.poets.org/poetsorg/poem/essay-man-epistle-ii](http://www.poets.org/poetsorg/poem/essay-man-epistle-ii)>.

<sup>2</sup> Stuart Robson, *The First World War* (London: Routledge, 2013), 122.

<sup>3</sup> “Laws of War Declaration on the Use of Projectiles the Object of Which Is the Diffusion of Asphyxiating or Deleterious Gases; July 29, 1899,” Lillian Goldman Law Library, Yale Law School, available at <[http://avalon.law.yale.edu/19th\\_century/dec99-02.asp](http://avalon.law.yale.edu/19th_century/dec99-02.asp)>.

<sup>4</sup> James Brown Scott, ed., *The Hague Conventions and Declarations of 1899 and 1907* (New York: Oxford University Press, 1915), 232.

<sup>5</sup> *Ibid.*, 116. The wording on the latter prohibition differs slightly between the two conventions but to no substantial effect. See also “Laws and Customs of War on Land (Hague, II),” *Treaties and Other International Agreements of the United States of America 1776–1949*, comp. Charles I. Bevans, vol. 1 *Multilateral 1776–1917*, Department of State Publication 8407 (Washington, DC: Government Printing Office, 1968).

<sup>6</sup> “Kaiser Wilhelm II, August 1914, Addressing German Troops Departing for the Front,” Google Arts and Culture, available at <<https://artsandculture.google.com/exhibit/AQPvqhFE>>.

<sup>7</sup> See “Trench Warfare,” *Encyclopedia Britannica*, available at <[www.britannica.com/topic/trench-warfare](http://www.britannica.com/topic/trench-warfare)>.

<sup>8</sup> Diana Preston, *A Higher Form of Killing: Six Weeks in World War I That Forever Changed the Nature of Warfare* (New York: Bloomsbury Press, 2015), 1.

<sup>9</sup> *Ibid.*

<sup>10</sup> Tim Cook, *No Place to Run: The Canadian Corps and Gas Warfare in the First World War* (Vancouver: UBC Press, 1999), 37.

<sup>11</sup> Erich von Falkenhayn, *General Headquarters 1914–1916 and Its Critical Decisions* (London: Hutchinson, 1919), 47, available at <<https://archive.org/stream/generalheadquart00falk#page/46/mode/2up>>.

<sup>12</sup> *Ibid.*

<sup>13</sup> Preston, *A Higher Form of Killing*, 234.

<sup>14</sup> Marcus Tullius Cicero, *De Re Publica* III.xxiii, in *De Re Publica and De Legibus*, trans. C.W. Keyes (Cambridge, MA: Harvard University Press, 1928), 211–213.

<sup>15</sup> Robert Harris and Jeremy Paxman, *A Higher Form of Killing: The Secret Story of Chemical and Biological Warfare* (New York: Hill and Wang, 1982), 16.

<sup>16</sup> John Lee, *The Gas Attacks, Ypres 1915* (South Yorkshire: Pen & Sword Books, Ltd., 2009), 148.

<sup>17</sup> Ibid., 77–78.

<sup>18</sup> Ibid., 78.

<sup>19</sup> “Churchill’s 1919 War Office Memorandum,” National Churchill Museum, available at <[www.nationalchurchillmuseum.org/churchills-1919-war-office-memorandum.html](http://www.nationalchurchillmuseum.org/churchills-1919-war-office-memorandum.html)>.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> Edward W. Spiers, *A History of Chemical and Biological Weapons* (London: Reaktion Books, Ltd., 2010), 43.

<sup>23</sup> Ibid.

<sup>24</sup> Ibid.

<sup>25</sup> Harry L. Gilchrist, *Comparative Study of World War Casualties from Gas and Other Weapons* (Washington, DC: Government Printing Office, 1928), 47.

<sup>26</sup> Ibid., 2.

<sup>27</sup> *The German War Book*, 1910, quoted in Gilchrist, *Comparative Study of World War Casualties from Gas and Other Weapons*, 3.

<sup>28</sup> Carl von Clausewitz, *On War*, ed. and trans. Michael Howard and Peter Paret (Princeton: Princeton University Press, 1976), 75–76.

<sup>29</sup> Edward Porter Alexander, *Military Memories of a Confederate: A Critical Narrative* (New York: Charles Scribner’s Sons, 1907), 302.