

INTRODUCTORY ADDRESS PHD DEFENSE

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Introductory address given prior to the public defense of the dissertation entitled 'The Myth of the Poor Man's Atomic Bomb and the Politics of Proliferation' at Vrije Universiteit Amsterdam on April 7, 2021. During the address, also known as a 'lay talk', the candidate presents the central findings of the dissertation in plain language.

Rector, ladies and gentlemen,

A warm welcome to the public defense of my dissertation. In the next 10 minutes I will present the findings of my doctoral research project.

CHEMICAL AND BIOLOGICAL WEAPONS: A 'POOR MAN'S ATOMIC BOMB'?

My doctoral research project focuses on the spread of chemical, biological, and nuclear weapons. This topic has been a regular occurrence in the news in recent decades. You may, for instance, remember the invasion of Iraq in 2003 on the false charge that it possessed 'weapons of mass destruction'. And, more recently, one can think of the use of chemical weapons during the Syrian civil war.

My dissertation explores to what extent chemical and biological weapons have spread among states and why that has happened.

This raises the obvious question: why this topic? The short answer is that much of the accepted knowledge on this subject among policymakers and experts is inaccurate.

Chemical and biological weapons are commonly seen as a cheap and easy to acquire alternative to nuclear weapons. As a result, they are thought to have spread widely among states, especially so-called 'Third World' ones that are unable to acquire nuclear weapons due to financial and technological barriers. For this reason, chemical and biological weapons are often referred to a 'poor man's atomic bomb'.

In the 1960s, the 'poor man's atomic bomb' thesis became a popular frame among experts and policymakers. The idea, consequently, reached the broader public in the 1980s and 1990s as U.S. government officials began to issue regular warnings about the rapid spread of chemical and biological weapons among as many as dozens of 'Third World' countries.

But, is this view of the spread of chemical and biological weapons accurate. The simple answer is: no. Let me explain by briefly discussing four insights from my dissertation.

1. Inflated threat assessments

States often cover their military activities under a veil of secrecy and this makes challenging to acquire reliable information about weapons programs. Due to its vast size, the U.S. intelligence community is the leading collector and provider of information about chemical, biological, and nuclear weapons programs. In turn, this information is eagerly consumed by policymakers, experts, and journalists.

My research, however, shows that governmental threat assessments are vague, unverifiable, and exaggerated. Nevertheless, they are often uncritically repeated by policymakers, experts, and journalists, which creates and feeds the erroneous view that chemical, biological, and nuclear weapons have and will spread widely and fast.

2. Limited spread

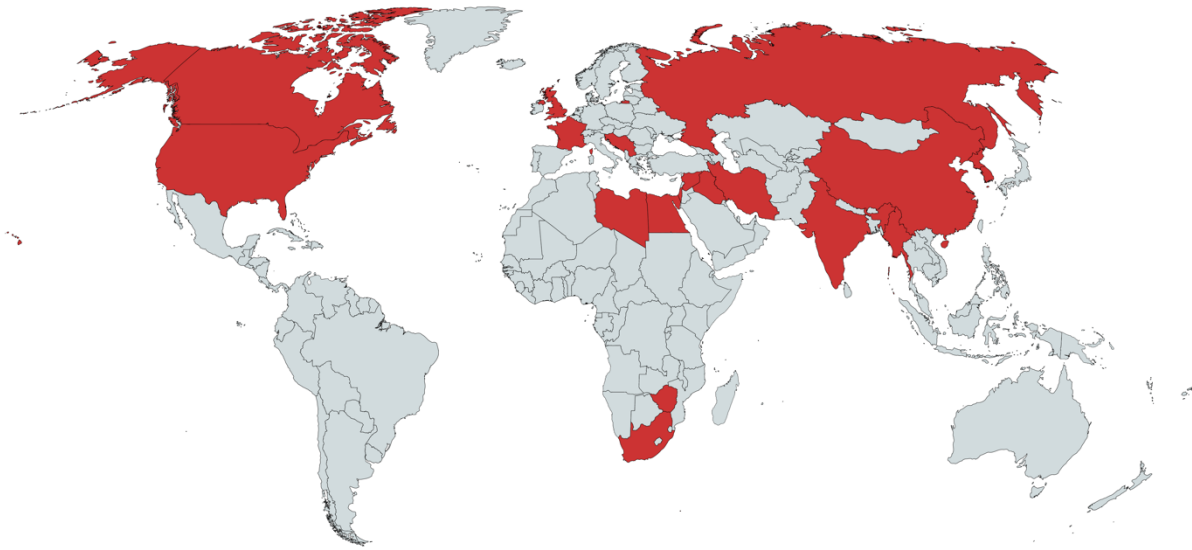
My research shows that the spread of chemical and biological weapons has actually been less prevalent than is often thought. Around half of the roughly 40 countries thought to have pursued or possessed chemical weapons and 20 countries thought to have pursued or possessed biological weapons in the period 1946-2010 have not actually done so. Moreover, the vast majority of countries that have pursued or possessed chemical and biological weapons have eventually reversed course and ended their programs.

3. No special disposition among 'Third World' countries

I also find that 'Third World' countries are not especially disposed towards chemical and biological weapons. In fact, a significant number of 'developing countries' have erroneously been accused of pursuing or possessing such weapons.

The world map in figure 1 shows that a diverse group of countries have possessed chemical and/or biological weapons after World War II, including states from North America, Europe, Asia, and Africa. Notably, the group is evenly divided between Western states and allies on the one hand and 'Third World' countries on the other. Furthermore, if the states that possessed chemical and biological weapons before 1946 (that is, before the time period this dissertation covers) were accounted for as well, then a substantial number of additional European states—for instance, Germany, Spain, and Italy—would be colored red as well.

Figure 1: CBW possessors 1946-2010



4. No replacement for nuclear weapons

Finally, there is no evidence that chemical and biological weapons function as replacements for nuclear weapons. My research shows that most chemical and biological weapons programs were small-scale and had limited objectives. With the exception of the biological weapons programs of the United States and the Soviet Union, these programs did not set out to develop ‘weapons of mass destruction’ that could create casualties in the same order of magnitude as nuclear weapons do. Most chemical and biological weapons programs had other objectives, such as creating weapons to assassinate political opponents, to quell insurgencies, or to use on the battle field against numerically superior opposing forces

THE MYTH OF THE ‘POOR MANS ATOMIC BOMB’

These four insights show that the view of a rapidly spreading ‘poor man’s atomic bomb’ is inaccurate. The persistence of this myth reflects how policymakers and experts think about these weapons: they largely see the history and future of chemical, biological and nuclear weapons as a story about inescapable spread.

This reference frame also has a racial component. Metaphors like the ‘poor man’s atomic bomb’—but also others such as ‘rogue states with weapons of mass destruction’ and ‘the axis of evil’—are highly effective rhetorical devices to construct threatening images.

STATE OF EXCEPTION FOR POWERFUL STATES

The continued emphasis on foreign threats that have yet to materialize, the existing threats posed by powerful countries that do possess chemical, biological, and nuclear weapons can be ignored. In fact, weapons possessors frequently cite these (imagined) threats as a reason to retain their own weapons arsenals. In other words, a state of exception is enforced for powerful states that do possess such weapons vis-à-vis those that do not. Let me illustrate this with two examples. Just before U.S. government officials began to issue frequent warnings in the 1980s about the threat of chemical weapons spread among 'Third World' countries, the United States had embarked on an ambitious chemical rearmament scheme. And, while Iran has been targeted with U.S. sanctions for years even though it does *not* possess (or pursue) nuclear weapons, the United States is modernizing and upgrading its own nuclear weapons arsenal at a cost that is estimated to exceed 1 billion U.S. dollar.

FORCIBLE MEASURES AND HUMANITARIAN CONSEQUENCES

The idea that the spread of chemical, biological, and nuclear weapons is the central and most pressing problem to be solved also shapes the belief that forcible measures are necessary to stop that supposed spread. These measures often come with disturbing humanitarian costs. Economic sanctions instated by the United States against Iran over its (civilian) nuclear program have put Iran's civilian population under immense pressure. An alleged Sudanese chemical weapons factory with supposed ties to Osama bin Laden turned out to be the country's most important pharmaceutical plant after it was destroyed by U.S. airstrikes in 1998. Moreover, 2003 the invasion of Iraq over its alleged 'weapons of mass destruction', which were never found, heralded two decades of war, instability, and human suffering.

RETHINKING HOW WE VIEW THE WORLD

The spread of fake news in recent years has reinforced the importance of maintaining a critical attitude towards the information we consume on a day-to-day basis. While disinformation campaigns have certainly occurred (and will continue to do so) around chemical, biological, and nuclear weapons, the *willful* spread of misinformation is not the only, or even the biggest, problem. My research shows that the core challenge manifests itself around our shared reference frames. These frames function as a lens through which we look at the world around us. This lens shapes how we process and make sense of information and which policies we deem possible and appropriate. My dissertation shows that policymakers and experts are presented with an inaccurate and biased view about

the history, present, and future of chemical, biological, and nuclear weapons. This view not only limits policy innovation but also justifies and legitimizes policies that have ironically made much of the world's population less secure. In order to work towards a safer, more just, and more sustainable world it is imperative that we not only question but also thoroughly revise these outdated ideas about chemical, biological, and nuclear weapons.

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