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Scientist or Soldier: The Patriarchal Sovereignty of Foreign Nations Over the Lives of Iranian Nuclear Scientists

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Abstract: Western nations have assassinated Iranian nuclear scientists to exert their sovereign authority over Iran's right to develop nuclear weapons, thus taking away their personhood as civilians with the right to be safe from direct attack.

INTRODUCTION

For the past century, nations have exerted their sovereignty on the global scale by developing their nuclear arsenal. While global superpowers such as the United States have amassed hundreds of nuclear warheads, several smaller nations, especially those with dictatorial regimes, have attempted to develop their own nuclear weaponry to assert their dominance. One particular country that has pursued this goal over the past several decades despite international scrutiny is the Islamic Republic of Iran. After the end of the Iran-Iraq war in the 1990s, the current Iranian regime, which has been in power since the 1979 Iranian Revolution, has been developing its own nuclear program with the assistance of global superpowers such as Russia and China after failing to collaborate with Western nations [1]; however, despite claiming that Iran's nuclear program would be solely applied to peaceful developments in energy and medical research [2], the Islamic Republic has been accused of using its nuclear facilities to develop weapons of mass destruction by Western powers, especially the U.S. and Israel, and international organizations such as the International Atomic Energy Agency since Iran's development of clandestine and undeclared nuclear facilities was uncovered in the early 2000s [1].

In order to deter Iran's alleged development of nuclear weaponry, the international community has imposed severe economic and scientific sanctions on Iran. Although the U.S. and the European Union attempted to diplomatically lift sanctions and prevent Iran from developing nuclear weaponry through the historic Joint Comprehensive Plan of Action (JCPOA), the Trump administration pulling out of this deal has resulted in the U.S. reimposing its harsh sanctions on Iran's biggest exports and increasing tension between the two nations [1, 2]. However, Israel, as well as the U.S., has been accused of or even more recently admitted to directly targeting and attacking Iranian nuclear scientists and facilities in order to stop Iran's development of nuclear weaponry [3, 4]. While several Iranian nuclear scientists were assassinated individually and secretly before 2025 [5, 6], this targeting of Iranian nuclear scientists has since escalated to the point where Israel, with the assistance of the U.S. [7], openly conducted air strikes on Iranian nuclear facilities and the scientists operating them [3, 4, 8].

Directly targeting and killing Iranian nuclear scientists, as Israel has been accused of and later openly conducted, comes in conflict with international law upheld by the International Committee of the Red Cross (ICRC), which states that nuclear scientists are considered civilians who are protected against direct attacks [9, 10]. This paper analyzes the extent to which the targeting of Iranian nuclear scientists by foreign powers, combined with their subjugation under the Iranian government, upholds the patriarchy by denying scientists of their personhood and legally-defined civilian status, as examined through the lens of standpoint theory. This work is in partial fulfillment of the ENGR184 course using the blueprint curriculum in Ref [11, 12] and captured in a collection [13].

METHODS

As Professor Imani Perry describes in [14], the modern patriarchy is constructed upon a triad of sovereign authority, property, and personhood. Within this framework, the sovereign authority is defined as the governing power who can grant or revoke the rights to own property and define one's personhood—not

just their humanity. In the context of this paper, the governments of the United States, Israel, and Iran all attempt to exert their sovereignty over Iranian nuclear scientists and over each other. Primarily, it can be argued that the U.S. and Israel have attempted to use their sovereign authority to revoke Iran's right to property in the form of its nuclear program and to strip away the personhood of Iranian nuclear scientists.

From 2007 to 2020, six Iranian nuclear physicists and engineers were individually killed and even more have been the victim of targeted attacks [5, 6]; most notably, the assassination of Iran's nuclear program Mohsen Fakhrizadeh just after 2020 election vastly strengthened the hostility of the Iranian government against diplomatic negotiations with the U.S. on its nuclear development, as Israel and the Trump administration feared the Biden administration would later attempt returning to [5, 15, 16]. Although Israel has never admitted or denied guilt, Iran has accused Israel of carrying out these individual attacks, and several reports indicate that these assassinations were likely conducted by Israeli intelligence [6, 15, 16, 17]. In 2018, Israeli prime minister Benjamin Netanyahu himself identified Fakhrizadeh as a target of his administration during a presentation in which he claimed Israel obtained secret Iranian files that alleged Iran was not abiding by the JCPOA [15]. It is clear why Israel would have carried out these killings covertly: their secrecy makes them easier for the Israeli government to deny and less provocative to the Iranian government [5]. However, June 2025 marked a turning point in the way Iranian nuclear scientists were targeted when Israel conducted direct airstrikes on Iranian nuclear facilities at Natanz and Fordow [3, 18]. Unlike the assassinations of the decade prior, Israel openly admitted to conducting these attacks and identified eleven top nuclear scientists that were killed, in addition to eight more scientists identified by Iranian media [4]. Many of these scientists were considered by the Israeli Defense Force to be senior figures in Iran's nuclear program who had a long history of working with and leading Iran's clandestine nuclear weapon development program, and their technical expertise in physics and engineering was also applied to their roles as top academics in Iran's most prestigious institutions [4]. Moreover, Israel employed social media posts to threaten more Iranian scientists and offer rewards for informants on Iran's nuclear program [4], and the U.S. notably joined this effort around a week after Israel's initial attack by sending stealth bombers to strike three Iranian nuclear facilities, albeit without causing any deaths [7].

Through the lens of the patriarchal triad, these efforts to cease Iran's nuclear development are clear examples of Israel and the U.S. attempting to exert their sovereign authority over Iran's right to own nuclear weaponry, as both nations consider Iran to be one of their greatest enemies threatening their national security. As academic and as 28-year-veteran of the Central Intelligence Agency Paul R. Pillar explains, both major political parties of the U.S. have placed intense focus on the Iranian threat through rhetoric that labels Iran as a member of the "axis of evil" that is controlled by religious radicals who would not be deterred from using nuclear weaponry even by the threat Western retaliation. In reality, the Iranian government has not openly decided to build a nuclear weapon according to U.S. intelligence and has made very slow progress in its nuclear program due to its heavily sanctioned economy and considerable lack of technical knowledge, and while the Iranian government may deter foreign existential threats if it were nuclear-armed, it is unlikely to actually use such an extreme force on its regional enemies as opposed to merely intimidating them, let alone its enemies across the globe [19]. One major influence on American alarmism against Iran's hypothetical nuclear threat is the Israeli government, which views Iran's hostile rhetoric against the nation as a threat against its very existence [19]. As such, both Israel and the U.S. believe that they have the sovereign authority to dictate whether or not Iran deserves a nuclear arsenal, and Israel believes that eliminating Iranian nuclear scientists is an act of self-defense, as it eliminates the expertise and management that is foundational and necessary to develop Iran's nuclear arsenal [4, 20]. However, by choosing to directly and violently take away Iran's nuclear capabilities rather than pursue morally favorable and even more effective diplomatic negotiations, Israel distinctly exerts its sovereign authority to take away Iran's right to a nuclear program [5, 17].

Another pillar of the patriarchal triad, personhood—or lack thereof—and standpoint theory can be applied to the viewpoint of Iranian nuclear scientists themselves. Personhood, as defined by Imani Perry,

is not to be confused with being a human being; rather, it is a legal recognition that one can exercise their human rights, with complete personhood granted to those who can exercise sovereign authority and own property [14]. In the context of international law, personhood is manifested by the right of civilians, who are defined to not directly participate in hostilities, to be protected from direct attacks [9, 10]. The general consensus of the ICRC since World War 2 is that nuclear scientists and industry employees are still considered civilians, even if their expertise is used to develop military technology, as their research can only maintain the capacity to cause harm rather than directly causing harm [9, 10]. Standpoint theory, as defined by feminist philosopher Sandra Harding, is an epistemological framework which proposes that understanding the lived experiences of marginalized communities is just as crucial as other methods of research in order to obtain the entire truth of a situation, because knowledge itself is enabled and limited by one's social position [21]. Understanding the immense amounts of pressure Iranian nuclear scientists face puts into question the extent to which they are even granted personhood.

Beyond the threat of assassination, Iranian physicists are already coerced by the Iranian government itself to participate in Iran's nuclear program. One young Iranian physicist, Omid Kokabee, was arrested by the Iranian government in 2011 while visiting his family in Iran during his graduate studies in the University of Texas, Austin; subsequently, he was sentenced to ten years in Iran's notorious Evin Prison, in which his health declined significantly [6, 22]. Despite being charged for the unsubstantiated claim of contact with enemy states, Kokabee claimed in a letter from prison that, "they threatened to send me to prison for 10 years if I refused to cooperate in nuclear projects with certain organizations...that work against the interests of Iran and the world" [22]. Similarly, retired Iranian chemist Mohammad Fanood was sentenced to six years in prison in 2015 for charges of "spreading propaganda," which simply was his vocal support for the JCPOA [23]. Meanwhile, American and European sanctions aimed at preventing Iran from developing nuclear weapons have not only harmed Iran's economy but also its scientific community. Not only have UN, EU, and American sanctions been directly placed on Iranian scientists and institutions for their alleged involvement with military research [24], but economic sanctions have also made it incredibly difficult for Iranian physicists and biomedical scientists uninvolved with the nuclear program to afford or be allowed to purchase necessary research equipment [25, 26]. Such researchers have also had issues with collaborating with the global scientific community because of the arduous process of obtaining visas for research conferences, having trouble with accessing the internet, or even having their work rejected by international research journals [25, 26].

RESULTS AND INTERPRETATION

In spite of the repressive nature of the Islamic Republic of Iran, Israel's and the United States' attempts to exert their sovereign authority over the Iranian nuclear program have become problematic through their targeted killing of Iranian nuclear scientists. The governments of these nations have already expressed this sovereignty through a plethora of alarmist rhetoric that villainizes Iran by exaggerating both the imminence and the threat of Iran developing a nuclear arsenal. However, both of these nations simultaneously overlook the massive nuclear arsenal that each of them already own, with Israel being the only country in the Middle East to own nuclear weapons [15, 19], as they have granted themselves the right to own weapons of mass destruction through their own sovereign authority. By villainizing Iran and opting to use violence instead of diplomacy, Israel and the United States simultaneously only provide a temporary solution to Iran's development of nuclear weapons and worsen the threat Iran poses against them.

While eliminating Iran's top nuclear scientists and facilities may significantly slow down its progress towards developing nuclear weaponry, Iran's nuclear program has become significantly large and complex, involving hundreds or possibly thousands of replaceable personnel, as a result of increasing pressure by the regime to develop it [3, 5]. After the Israeli-led attacks of June 2025, one Iran official even proclaimed that "hundreds of nuclear scientists can replace those who were martyred" [4], and this statement was reflected in the significant development of nuclear centrifuge technology after multiple assassinations of nuclear scientists in 2010 [6]. Counterintuitively, these attempts to eliminate the threat of Iran's nuclear program have only fueled the Iranian government's hostility towards Israel and the

United States and pressured it to develop Iran's nuclear program further. Killing nuclear scientists who are generally perceived as civilians simply produces martyrs that the Iranian government uses to garner more support for its cause within the country [3, 4]; and each of these killings weakens the trust required for Western countries to make diplomatic solutions with Iran such as the JCPOA by strengthening the arguments by conservative Iranian officials to no longer make negotiations with the West and—counterproductive to Western motives—to actively produce nuclear weapons for self-defense [5, 16, 20]. Nonetheless, the most notable adverse effect of these killings is the hostile environment that is upheld for the scientific community across the globe. By overlooking the rights of the nuclear scientists they target in Iran, Israel and the U.S. effectively set a dangerous precedent that scientific researchers in their own nations, as well as nations throughout the world, are equally at risk of being targeted by foreign rivals who perceive their research as a threat [8, 20]. Of course, through their perceived sovereign authority, Israel and the U.S. only believe that the work of Iranian scientists warrants the risk of being attacked and that their own nations have the right to conduct the same research.

By using their sovereign authority to take away the rights of Iranian nuclear scientists, Israel and the U.S. have taken away the little personhood that nuclear scientists have in Iran. As previously stated, nuclear scientists whose expertise can be used to develop nuclear weaponry are considered non-combatant civilians according to international law; even if such weaponry is being developed, there is no international law that forbids individuals from working for their government's nuclear programs and thus justifies the execution of Iranian nuclear scientists [17]. As such, directly attacking these scientists directly strips them of their personhood by taking away their rights as civilians to be safe from combat. As observed through a standpoint theory analysis, stories of Iranian scientists such as Omid Kokabee who were coerced into working for the state's nuclear program and threatened if they chose otherwise, all while having great difficulty with pursuing other scientific paths or connecting with the international scientific community as a result of heavy sanctions, reveal the very little personhood and freedom of choice that Iranian scientists are already granted under the current regime. Kokabee himself wrote in a letter from prison that he hopes for a world where all scientists can use their talent "free from intimidation and intellectual pressure" to work towards "peace and a world bereft of terror" [6], but by targeting these scientists, Israel and the United States only add to the intimidation that these scientists have to face and hold both our own scientists and Iran's back from our mutual goal of peace.

CONCLUSIONS

Through the lens of the patriarchal triad, Western nations, especially Israel and the United States, have attempted to use their sovereign authority to take away Iran's right to develop its nuclear program and possibly a nuclear arsenal. This sovereignty has been upheld through the view that Iran is an enemy state—a rivalry which has been fueled by villainizing rhetoric from government officials in both Iran and Western countries—and that the possibility of Iran owning nuclear weapons would be a threat to global safety. However, while many nations have used harsh sanctions or diplomatic ties to avert Iran from developing nuclear weapons, Israel and the United States have decided to directly eliminate the scientists behind Iran's nuclear program in order to achieve this goal. While these countries believe that attacking Iranian nuclear scientists is an act of self-defense, this action in reality strips Iranian nuclear scientists of their personhood by taking away their rights as non-combatant civilians who, according to international law, are protected from being directly attacked. By analyzing the standpoint of these nuclear scientists, it is clear that many physicists and engineers in Iran are already threatened by their own government if they do not wish to work for Iran's nuclear program, and harsh sanctions already make it difficult for Iranian scientists to pursue other scientific fields or go beyond the scientific community of their own country. Additionally, these attempts to exert sovereign authority often overlook the adverse effects of fueling greater hostility from the Iranian government against Western diplomacy and even counterproductively encouraging Iran to develop nuclear weapons for its own defense; and by putting the lives of Iranian scientists at risk, Israel and the United States set the precedent that their own researchers may be put at risk of attack by foreign rivals as well. Ultimately, in order to foster a peaceful international scientific community that allows for researchers to collaborate and freely work on technology that helps the world rather than harming it, it is imperative that our countries respect the

personhood and human rights of scientists, especially scientists in autocratic countries whose rights are already so limited.

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