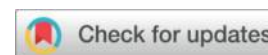




France's Violations of the Legal Protections Afforded to Algerian Prisoners of War during Its Military Nuclear Activities at Reggane (1960–1966)



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Abstract:

The rules and customs of international law contain binding provisions for all contracting parties. These provisions require respect for the protection regime governing prisoners of war. The Hague Law, the Geneva Law, and later international conventions and instruments provide prisoners with legal protection during armed conflicts.

Nevertheless, many colonial states failed to meet their treaty obligations. They committed serious violations of international and regional conventions that established legal protection for prisoners of war.

France was among those states. During its occupation of Algeria from 1830 to 1962, it committed atrocities against the Algerian people and detained members of the National Liberation Army. The gravest of these international crimes occurred during its military nuclear activities in the Algerian Sahara in the final phase of the occupation.

This study therefore asks: How serious were France's violations of the legal protection regime for Algerian prisoners during its nuclear detonations in the Algerian Sahara?

The two parts of this study address that question in detail.

Keywords: Violations; prisoners of war; wartime; nuclear detonations; France; Algerian Sahara.

Introduction:

International humanitarian law establishes a protection regime for prisoners of war and other combatants who are hors de combat during armed conflicts. Yet the French authorities violated the rules and customs of international law during their nuclear tests in the Algerian Sahara. They committed acts prohibited under international law and breached the protection regime embodied in regional and international instruments. Their purpose was to develop a lethal military nuclear arsenal. These activities caused human suffering and environmental and ecological disasters whose effects persist today.

The central question is therefore whether the French State and its authorities complied with their international obligations to protect prisoners of war. This question is especially relevant to France's military nuclear activities in the Algerian region of Reggane during the colonial period from 1960 to 1962.

The study addresses two main issues. The first concerns the humanitarian protection regime for prisoners of war during armed conflicts. The second examines crimes committed against Algerian prisoners of war during France's military nuclear activities in the Algerian Sahara.

PART ONE: THE HUMANITARIAN PROTECTION REGIME FOR PRISONERS OF WAR DURING ARMED CONFLICTS

International conventions adopted within the framework of international humanitarian law grant special protection to prisoners of war during armed conflicts. They confer on prisoners a legal status protected by binding international instruments. The Hague Law and the Geneva Law are particularly important. This part explains those protections in detail.

I. The Legal Status of Prisoners of War before the Hague Law

“A prisoner is anyone confined in restraints or a prison.... Captivity means restraining a combatant and limiting his freedom by immobilizing him so that he cannot return to the battlefield. He is not released until the war has ended.”¹

¹ Khaled Rouchou, *The Legal Status of Prisoners of War in International Humanitarian Law*, New University Publications, Tlemcen, Algeria, 2020, p. 44.

The Treaty of Münster, concluded in 1648, was the first international agreement to introduce new rules on the treatment of prisoners of war. Article 43 required belligerent parties to release prisoners without ransom and without any condition or exception. The jurists Vattel and Jean-Jacques Rousseau helped establish these principles. Rousseau wrote in *The Social Contract*: “Since the object of war is to destroy the enemy State, it is legitimate to kill its defenders while they bear arms. Once they lay down their arms and surrender, however, they become ordinary human beings. No one then has any authority or right over their lives.”²

During the American Civil War in the nineteenth century, the United States Government issued a code of humanitarian principles prepared by the jurist Lieber. Article 74 stated that prisoners of war were prisoners of the capturing government, not of the individuals who captured them. It also required humane treatment. The Geneva Convention of 22 August 1864 concerning wounded and sick members of armed forces was later concluded. It strengthened legal protection during armed conflicts.³

These humanitarian principles and rules of international law did not end serious violations of the laws and customs of war. This became clear during the Franco-Prussian War of 1870–1871. The conflict led the Prussian Emperor to call an international conference on the main rules governing hostilities during armed conflicts. The Brussels Conference met in 1874. Its participants provisionally signed a draft international declaration on the laws and customs of war. Article 54 stated that citizens in territory not yet occupied by the enemy who took up arms to defend their country should be regarded as belligerents. If captured, they were to be treated as prisoners of war. Article 9 also stated that the rights of belligerents were not limited to armies but extended to militias and volunteer corps. The draft was never finally ratified and did not enter into force. Even so, it became an important basis for later conventions on the laws and customs of war.⁴

II. The Legal Status of Prisoners of War under the Hague Law

The Institute of International Law prepared the first convention for the protection of prisoners of war. It was concluded at the First Hague Peace Conference in 1899.⁵ The instrument was amended several

² Abd Ali Muhammad Sawadi, *The Protection of Prisoners of War in International Law*, 1st ed., Arab Center for Scientific Studies and Research, Cairo, Egypt, 2017, pp. 24–25.

³ Abd Ali Muhammad Sawadi, *ibid.*, p. 25.

⁴ Khaled Rouchou, *op. cit.*, pp. 30–31.

⁵ The First Hague Peace Conference was held at The Hague from 18 May to 29 June 1899. The United States, China, Mexico, Japan, and the European states attended. See Khaled Rouchou, *op. cit.*, p. 31.

times. It was followed by the Convention of 27 July 1929, which defined the legal status of prisoners of war. The International Committee of the Red Cross later reviewed that framework. This process led to the Third Geneva Convention relative to the Treatment of Prisoners of War of 12 August 1949, which remains in force.⁶

The Second Hague Peace Conference met in 1907 and adopted eleven conventions.⁷ The Fourth Convention concerned the laws and customs of war on land and included annexed regulations. It restricted methods of warfare, prohibited weapons that caused excessive and unjustified suffering, and sought to mitigate the effects of war. It also defined the status of prisoners of war and provided safeguards for their dignity and lives.⁸

Chapter II of the Regulations concerning the Laws and Customs of War on Land of 18 October 1907 was entitled “Prisoners of War.” It required humane treatment and made the hostile government, as the Detaining Power, responsible for prisoners’ lives, dignity, and rights.⁹ It prohibited their employment in military operations against their own country and in excessively arduous work.¹⁰ The Detaining Power had to maintain prisoners and treat them on the same basis as its own troops with respect to food, quarters, and clothing.¹¹ It also had to establish an official information bureau for prisoners of war.¹² Parties to the conflict were required to facilitate relief by humanitarian societies and organizations and to permit visits to prisoner-of-war camps.¹³

⁶ Abd Ali Muhammad Sawadi, *op. cit.*, pp. 25–26.

⁷ The eleven conventions concluded at the Second Hague Peace Conference in 1907 were:

1. Convention for the Pacific Settlement of International Disputes.
2. Convention respecting the Limitation of the Employment of Force for the Recovery of Contract Debts.
3. Convention relative to the Opening of Hostilities.
4. Convention respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land.
5. Convention respecting the Laws and Customs of War on Land.
6. Convention relating to the Status of Enemy Merchant Ships at the Outbreak of Hostilities.
7. Convention relative to the Laying of Automatic Submarine Contact Mines.
8. Convention relative to the Conversion of Merchant Ships into Warships.
9. Convention for the Adaptation to Maritime Warfare of the Principles of the Geneva Convention.
10. Convention respecting Certain Restrictions on the Exercise of the Right of Capture in Maritime War.
11. Convention respecting the Rights and Duties of Neutral Powers in Naval War.

See Khaled Rouchou, *ibid.*, n. 2, p. 32.

⁸ Khaled Rouchou, *ibid.*, p. 33.

⁹ Article 5 of the Hague Regulations of 1907.

¹⁰ Article 6 of the Hague Regulations of 1907.

¹¹ Article 7 of the Hague Regulations of 1907.

¹² Article 14 of the Hague Regulations of 1907.

¹³ Article 15 of the Hague Regulations of 1907.

The Regulations also granted prisoners full freedom to practise their religion. They required prisoners to be released and repatriated as soon as military operations ended.¹⁴

They further prohibited the killing or wounding of an enemy who had laid down his arms or was no longer able to defend himself and had declared his intention to surrender.¹⁵

III. The Legal Status of Prisoners of War under the Geneva Law

The Geneva Law introduced rules that gave special protection to prisoners of war. Of particular importance were the 1929 Geneva Convention relative to the Treatment of Prisoners of War and the Third Geneva Convention of 1949.

1. The Status of Prisoners of War under the 1929 Geneva Convention

The Geneva Convention of 1864 addressed the condition of wounded military personnel in the field. It was followed by the 1906 Geneva Convention for the amelioration of the condition of wounded and sick members of armed forces in the field. A further Geneva Convention on wounded and sick military personnel was adopted in 1929. In the same year, a separate convention was concluded on the treatment of prisoners of war.¹⁶

The preamble to the 1929 Convention required belligerent parties to treat prisoners of war humanely, protect them, and preserve their dignity and honour. Its provisions prohibited the Detaining Power from killing, wounding, or insulting them.¹⁷

The Convention required soldiers and military units to transfer prisoners from their own control to the authority of the Detaining Power. That Power bore international responsibility for the prisoners' protection and fundamental rights.¹⁸

2. The Status of Prisoners of War under the Four Geneva Conventions of 1949

The 1949 Geneva Conventions defined prisoners of war. Article 4(A) of the Third Convention states that prisoners of war are persons who belong to one of the following categories and have fallen into the power of the enemy:

1. Members of the armed forces of a party to the conflict, including militias or volunteer corps forming part of those armed forces.

¹⁴ Articles 18 and 20 of the Hague Regulations of 1907.

¹⁵ Article 23(c) of the Hague Regulations of 1907.

¹⁶ Khaled Rouchou, op. cit., p. 35.

¹⁷ Omar Saadallah, *The Development of the Codification of International Humanitarian Law*, Dar Al-Gharb Al-Islami, 1st ed., 1997, p. 106.

¹⁸ Khaled Rouchou, op. cit., p. 36.

2. Members of other militias and volunteer corps, including members of organized resistance movements, who belong to a party to the conflict and operate inside or outside their own territory, even if it is occupied, provided that those militias or volunteer corps satisfy the specified conditions....
3. Members of regular armed forces who profess allegiance to a government or authority not recognized by the Detaining Power.
4. Persons who accompany the armed forces without actually being members of them.
5. Members of crews....
6. Inhabitants of non-occupied territory who spontaneously take up arms, as the enemy approaches, to resist the invading forces....¹⁹

Part II of the Third Geneva Convention of 1949 is entitled “General Protection of Prisoners of War.” It provides that prisoners are in the power of the hostile Detaining Power. That Power is responsible for ensuring their humane treatment. This does not exclude any individual responsibility borne by the persons or military units that captured them.²⁰

The Convention establishes the principle of humane treatment. It prohibits any unlawful act or omission by the Detaining Power that causes the death of a prisoner of war and treats such conduct as a serious breach. It also prohibits physical mutilation and medical or scientific experiments of any kind. At all times, prisoners must be protected against violence, intimidation, and reprisals.²¹

Prisoners of war are entitled to respect for their persons and honour, and they retain their full civil capacity.²² The Detaining Power must provide their maintenance and medical care free of charge.²³ It must also treat them equally, without adverse distinction based on race, religion, political opinion, or any similar criterion.²⁴

¹⁹ Abd Ali Muhammad Sawadi, *op. cit.*, p. 29.

²⁰ Article 12 of the Third Geneva Convention of 1949.

²¹ Article 13 of the Third Geneva Convention of 1949.

²² Article 14 of the Third Geneva Convention of 1949.

²³ Article 15 of the Third Geneva Convention of 1949.

²⁴ Article 16 of the Third Geneva Convention of 1949.

Section II of the Third Geneva Convention of 1949 is entitled “Internment of Prisoners of War.” It sets out the general grounds on which a Detaining Power may intern prisoners. It also limits that power and specifies the health conditions and medical care that the Detaining Power must provide.²⁵

The section therefore confirms that captivity is temporary. It is imposed for military reasons and must end when the circumstances justifying it no longer exist.²⁶

An important question is whether members of national liberation movements are entitled to prisoner-of-war status when they fall under the authority of an occupying Power. Article 4(A)(2) of the Third Geneva Convention of 1949 addresses this point expressly:

“A. Prisoners of war, in the sense of the present Convention, are persons belonging to one of the following categories, who have fallen into the power of the enemy:

2. Members of other militias and members of other volunteer corps, including those of organized resistance movements, belonging to a Party to the conflict and operating in or outside their own territory, even if this territory is occupied, provided that such militias or volunteer corps, including such organized resistance movements, fulfil the following conditions:
 - (a) being commanded by a person responsible for his subordinates;
 - (b) having a fixed distinctive sign recognizable at a distance;
 - (c) carrying arms openly;
 - (d) conducting their operations in accordance with the laws and customs of war.”

3. The Status of Prisoners of War under Additional Protocol I of 1977

Article 11 of Additional Protocol I of 1977 to the four Geneva Conventions of 1949 is entitled “Protection of Persons.” Paragraph 1 provides that the physical or mental health and integrity of persons in the power of the adverse party, or persons interned, detained, or otherwise deprived of liberty because of a situation referred to in Article 1, must not be endangered by any unjustified act or omission. Such persons may not be subjected to a medical procedure that is not indicated by their state of health or consistent with accepted medical standards....²⁷

²⁵ Articles 21–32 of the Third Geneva Convention of 1949.

²⁶ Khaled Rouchou, *op. cit.*, p. 37.

²⁷ Article 11(1) of Additional Protocol I of 1977.

The Protocol also protects persons who are hors de combat.²⁸ Article 44, entitled “Combatants and Prisoners of War,” provides that a combatant who falls into the power of an adverse party is a prisoner of war. The rules of international humanitarian law apply to that person. Article 44 gives prisoners special protection and the same safeguards established by the Third Geneva Convention of 1949.²⁹

PART TWO: VIOLATIONS COMMITTED AGAINST PRISONERS OF WAR DURING FRANCE’S NUCLEAR ACTIVITIES IN ALGERIA

The gravest violations committed by the French authorities during their military nuclear activities in the Algerian Sahara concerned Algerian prisoners from the National Liberation Army. They were subjected to particularly brutal criminal acts, including the following.

I. The Wilful Killing of Prisoners of War during French Nuclear Detonations in Algeria

The 1907 Hague Regulations concerning the Laws and Customs of War on Land, annexed to Hague Convention IV, prohibited the killing or wounding of an enemy who had laid down his arms or was no longer able to defend himself and had declared his intention to surrender.³⁰ Such conduct is a war crime and is contrary to international law.³¹

Because the wilful killing of prisoners of war is prohibited, persons who killed prisoners during the Second World War were prosecuted, tried, and punished after the conflict.³² The Geneva Law reaffirmed this prohibition. Common Article 3 of the four Geneva Conventions of 1949 prohibits murder of all kinds and violence to life and person against individuals who do not take an active part in hostilities. This protection includes members of armed forces who have laid down their arms.³³

Article 13 of the Third Geneva Convention of 1949 also requires the Detaining Power to treat prisoners of war humanely. It prohibits any unlawful act or omission that causes the death of a

²⁸ Article 41(1) of Additional Protocol I of 1977 provides: “A person who is recognized or who, in the circumstances, should be recognized to be hors de combat shall not be made the object of attack.”

²⁹ The Geneva Diplomatic Conference at which Additional Protocol I to the Geneva Conventions of 1949 was concluded met on 8 June 1977. Algeria acceded to the Protocol on 16 August 1989. Khaled Rouchou, op. cit., n. 1, p. 42.

³⁰ Article 23(c) of the Regulations annexed to Hague Convention IV of 1907 respecting the Laws and Customs of War on Land.

³¹ Abbas Hashem Al-Saad, *Individual Criminal Responsibility for International Crime*, University Publications House, Alexandria, Egypt, 2002, p. 142.

³² Mohammed Riche, op. cit., p. 101.

³³ Common Article 3(1)(a) of the four Geneva Conventions of 1949.

prisoner in its custody and treats such conduct as a serious breach. The Article also prohibits physical mutilation and medical or scientific experiments of any kind.³⁴

This body of treaty rules provided prisoners of war with substantial protection. Yet it did not protect the Algerians held by the French colonial authorities. Those authorities used them as human test subjects during the atmospheric nuclear tests at Reggane in 1960. The force of the blasts and direct radiation exposure burned their bodies and scattered their remains. Their files and identities were concealed. They remain part of the classified record of France's military nuclear activities in Algeria, held by the French military authorities in Paris.

“Two hundred prisoners who were mujahideen were brought from the Bossuet camp at Telagh. They were taken to the site and chained to posts erected specifically in front of the detonation area. They were used as human test subjects during the first explosion on 13 February 1960.”³⁵

It should be stressed that members of national liberation movements, including fighters of the National Liberation Front, had a recognized legal status. Those who fell under the authority of the occupying Power were to be treated as prisoners of war under the 1949 Geneva Conventions and subsequent United Nations resolutions.

Article 4(A)(2) of the Third Geneva Convention of 1949 set conditions for recognizing national liberation movements and protecting their members. Their legitimacy was later affirmed by United Nations General Assembly Resolution 1514 (XV) of 1960 on decolonization and Resolution 3103 (XXVIII) of 12 December 1973. The latter expressed concern about failures to comply with the 1949 Geneva Conventions and about the inhuman treatment of captured combatants struggling against colonial domination and racist regimes. It also stated core principles governing the legal status of members of national liberation movements. The most important were:

1. The struggle of peoples against colonial domination is legitimate.
2. The repression of struggles against colonial domination and racist regimes violates the Charter of the United Nations, the Universal Declaration of Human Rights, and the Declaration on the Granting of Independence to Colonial Countries and Peoples.³⁶

³⁴ Article 13(1) of the Third Geneva Convention relative to the Treatment of Prisoners of War of 1949.

³⁵ Amal Kabayli, “French Nuclear Detonations in the Algerian Sahara as an International Crime: The 1960 Atmospheric Tests at Reggane as a Case Study,” *Historical Issues Journal*, no. 1, March 2022, p. 65.

³⁶ Abd Ali Muhammad Sawadi, *op. cit.*, pp. 55–57.

II. Medical Experiments on Prisoners during French Nuclear Tests in Algeria

The Medical Research Council of Canada defined a medical experiment in its 1978 annual report, *Ethics and Rules for Experimentation on Humans*. It described it as direct research conducted according to sound scientific rules and principles. Under such research, a human being is subjected to methods or procedures that are not required by the person's condition, whether for disease prevention, preventive treatment, or therapy. The research may also interfere with private life.³⁷

The issue of medical experimentation on human beings was first formally raised during the trials of Second World War criminals before the Nuremberg Tribunal. Such experimentation was treated as a war crime. German military personnel were tried and punished for subjecting Allied prisoners of war to medical experiments.³⁸

The Tribunal adopted a set of rules for medical experiments on human beings. These became known as the Nuremberg Code and were endorsed by the United Nations General Assembly on 11 December 1946.³⁹ The rules included the following:

1. The person must voluntarily consent to the medical experiment, without coercion or deception.
The person must be informed of the experiment's purpose, duration, nature, methods, risks, potential harm, and likely effects on health.
2. The experiment must be based on prior results obtained from comparable animal experiments.
3. Experiments expected to cause serious harm, severe pain, death, or temporary or permanent disability must be avoided.
4. A medical experiment on a human being must offer substantial scientific benefit to humanity.
That benefit must be unobtainable by any other method.

The Geneva Conventions of 1949 prohibited medical experiments on human beings without their free consent.⁴⁰ Article 147 of the Fourth Geneva Convention of 1949, concerning the protection of

³⁷ La déontologie de l'expérimentation chez l'humain, Ottawa, 1978, p. 7. See also Mohammed Riche, *op. cit.*, p. 126.

³⁸ Abdelwahab Houmed, "Medical Criminal Liability," *Journal of Law and Sharia*, Faculty of Law and Sharia, Kuwait University, no. 2, June 1981, p. 189. See also Mohammed Riche, *op. cit.*, p. 127.

³⁹ Mohammed Riche, *Criminal Protection of Prisoners of War under International Humanitarian Law*, doctoral dissertation, Faculty of Law, University of Algiers, 2008–2009, pp. 127–128.

⁴⁰ Article 13(1) of the Third Geneva Convention relative to the Treatment of Prisoners of War of 1949 provides: "In particular, no prisoner of war may be subjected to physical mutilation or to medical or scientific experiments of any kind which are not justified by the medical, dental or hospital treatment of the prisoner concerned and carried out in his interest."

civilians in time of war, classifies biological experiments as grave breaches when committed against protected persons. The same applies to the wilful infliction of great suffering or serious injury to body or health.⁴¹

The International Covenant on Civil and Political Rights also prohibits medical or scientific experimentation on human beings without their free consent.⁴² Article 11(2) of Additional Protocol I of 1977 to the 1949 Geneva Conventions provides: “It is, in particular, prohibited to carry out on such persons, even with their consent: (a) physical mutilations; (b) medical or scientific experiments....”

Principle 22 of United Nations General Assembly Resolution 43/173, which contains the Body of Principles for the Protection of All Persons under Any Form of Detention or Imprisonment, was adopted on 9 December 1988. It prohibits medical or scientific experimentation that may harm a detained or imprisoned person’s health. Medical and scientific experimentation on human beings was also examined extensively at Helsinki in 1964, Tehran in 1968, and Tokyo in 1974.⁴³

The international prohibition of medical and scientific experimentation on human beings predated France’s military nuclear activities. It applied even when an experiment could offer a substantial benefit to humanity. Nevertheless, French civilian and military leaders deliberately subjected inhabitants of the Algerian Sahara and detained members of the National Liberation Army to scientific, medical, and radiological experiments during France’s nuclear activities, tests, and detonations in Algeria.

France treated residents of Reggane and Algerian workers at the Hammoudia test sites as test subjects for its military nuclear programme. It distributed 2,500 devices with pink strips to measure radiation on residents of Reggane’s ksour. It gave Algerian workers equipment marked with black strips and assigned them the most difficult tasks with the greatest radiation exposure, including excavation and levelling at the test sites.⁴⁴ It also subjected Algerian detainees who had struggled for self-

⁴¹ Article 147 of the Fourth Geneva Convention relative to the Protection of Civilian Persons in Time of War of 1949 provides that grave breaches include wilful killing; torture or inhuman treatment, including biological experiments; wilfully causing great suffering or serious injury to body or health; unlawful deportation, transfer, or confinement; compelling a protected person to serve in the forces of a hostile Power; wilfully depriving a protected person of the rights of fair and regular trial; taking hostages; and extensive unlawful and wanton destruction or appropriation of property not justified by military necessity.

⁴² Article 7 of the International Covenant on Civil and Political Rights of 1966 provides: “No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment. In particular, no one shall be subjected without his free consent to medical or scientific experimentation.”

⁴³ Mohammed Riche, *op. cit.*, p. 131.

⁴⁴ Asma Belmiyani, “Holding France Accountable for International Crimes Arising from the Nuclear Detonations in the Reggane Region: A Study in Light of International Humanitarian Law,” in *French Nuclear*

determination and independence to nuclear tests. These detainees had the status of prisoners of war. They were deliberately and directly exposed to nuclear radiation in violation of international rules and customs.⁴⁵

Medical, scientific, and biological experiments on prisoners of war are among the gravest violations of international law because they endanger detainees' health and lives. Early examples occurred in the prisoner-of-war camps at Dachau, Sachsenhausen, and Natzweiler during the Second World War (1939–1945). Prisoners were subjected to horrific scientific and biological experiments. Most died, while the survivors sustained lasting disabilities and disfigurement. During the 1973 war, Israel allegedly injected Egyptian prisoners with pathogens and viruses, including hepatitis C, and returned them to Egypt to spread infection. It also allegedly used organs taken from Egyptian bodies for medical study at Israeli colleges and universities. The Israeli historian Uri Milstein discussed these allegations in his 1994 book *Sayeret Shaked*. In July 1997, Knesset member and former chair of the parliamentary Science Committee Dalia Itzik also disclosed that one thousand trials of dangerous drugs were conducted each year on Palestinian prisoners.⁴⁶

III. The Torture of Prisoners of War during French Nuclear Tests in Algeria

Legal scholarship defines torture as “inhuman treatment involving mental or physical suffering inflicted to obtain information or confessions, or to impose punishment, and distinguished by particular severity and injustice.” It is also defined as “the deliberate infliction of physical or mental harm by one or more persons acting alone, with others, or on the order of a superior authority, for the purpose of compelling a person to provide information or a confession, or for any other purpose.”⁴⁷

In law, Article 1 of the 1984 Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment⁴⁸ defines torture as follows:

Detonations in the Algerian Sahara, collective work, 1st ed., Ahmed Draia University, Adrar, Algeria, 2020, p. 189.

⁴⁵ Mohamed Fayçal Sassi, “The Possibility of Prosecuting France for Its Colonial Crimes in Algeria under International Criminal Law,” *Journal of Politics and Law*, Kasdi Merbah University, no. 8, January 2013, p. 76. See also Asma Belmiyani, *op. cit.*, pp. 186–187.

⁴⁶ Mohammed Riche, *op. cit.*, pp. 135–136.

⁴⁷ Mohammed Riche, *ibid.*, p. 109.

⁴⁸ The Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment was adopted by the United Nations General Assembly and opened for signature, ratification, and accession through Resolution 39/46 of 10 December 1984. It entered into force on 26 June 1987 under Article 27. Website:

“1. For the purposes of this Convention, the term ‘torture’ means any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person. Its purposes may include obtaining information or a confession from that person or a third person; punishing that person for an act that the person or a third person committed or is suspected of having committed; or intimidating or coercing that person or a third person. The term also covers severe pain or suffering inflicted for any reason based on discrimination of any kind, when it is inflicted by, at the instigation of, or with the consent or acquiescence of a public official or another person acting in an official capacity. It does not include pain or suffering arising only from, inherent in, or incidental to lawful sanctions.

2. This Article is without prejudice to any international instrument or national legislation that contains or may contain provisions of wider application.”

Torture is therefore human conduct that causes severe physical or mental pain or psychological suffering. It can take many physical or psychological forms. Its purposes may include obtaining information, punishing, intimidating, or terrorizing a person, or pursuing racial discrimination. Torture by an occupying Power against residents of occupied territory is one example.⁴⁹

Article 1(1) of the draft Arab Convention for the Prevention of Torture and Inhuman or Degrading Treatment defines torture as “any act or omission that causes severe physical or mental pain or suffering and is intentionally committed by a public official or other person acting in an official capacity. Its purpose may be to compel a person to confess or provide information; to punish that person for an act committed or suspected of having been committed by that person or another; to intimidate that person or others; to compel that person or others to do something; or to pursue any other purpose.”⁵⁰

The Universal Declaration of Human Rights prohibits torture. Article 5 states: “No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.”⁵¹ Article 3 of the European Convention on Human Rights contains the same prohibition. Comparable provisions appear in Article 5 of the 1969 American Convention on Human Rights, Article 5 of the 1981 African Charter

<https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-against-torture-and-other-cruel-inhuman-or-degrading>. Accessed 8 November 2022 at 11:11.

⁴⁹ Mohammed Riche, *op. cit.*, pp. 110–111.

⁵⁰ Mohammed Riche, *ibid.*, pp. 107–108.

⁵¹ Fatima Zahra Jeddo, *op. cit.*, p. 52.

on Human and Peoples' Rights, and Article 7 of the 1966 International Covenant on Civil and Political Rights.⁵²

The four Geneva Conventions of 1949 prohibit every form of torture. Articles 13, 17, and 130 of the Third Geneva Convention are particularly relevant. The prohibition also appears in Article 2 of the 1929 Geneva Convention relative to the Treatment of Prisoners of War and Article 11 of Additional Protocol I of 1977.⁵³

On that basis, the French authorities committed acts constituting torture against Algerian civilians and prisoners of war during their nuclear tests in the Algerian Sahara. Algerians at the test sites and in nearby residential settlements, or ksour, were deliberately subjected to inhuman treatment. They experienced psychological suffering, physical pain and injury, and mental disorders. They were exposed at very close range to nuclear ground zero and to the radiological and thermal effects of the explosions. This exposure caused fatal and severe harm to their health, bodies, and minds. They were threatened with collective elimination, compelled to work in radioactive areas, and used as human subjects in biological experiments. The French authorities also failed to take preventive measures against the immediate and long-term dangers of the nuclear explosions. The consequences appeared in the victims' physical and mental health and in later generations.

The treatment of detained members of the National Liberation Army on 13 February 1960, during the first French atomic detonation at Hammoudia near Reggane, was among the most brutal forms of physical and psychological torture. The detainees were chained and secured, blindfolded, to metal posts near ground zero. They were deprived of sleep, food, water, and all social contact. They were subjected to terror and fear and were ultimately killed by the nuclear explosion. Their remains were scattered, their identities concealed, and their detention and medical files suppressed. Even their given names and surnames were erased. They can therefore be remembered only as "the martyrs of the French nuclear executions on Algerian soil."⁵⁴

Finally, despite the human and environmental devastation caused by France's nuclear detonations in the Algerian Sahara, the National Liberation Front, the National Liberation Army, and the Provisional Government of the Algerian Republic continued to respect international humanitarian law and the rules governing military operations during the November Revolution. They used only methods and means of warfare permitted under international law. They protected French civilians and civilian and

⁵² Mohammed Riche, *op. cit.*, p. 108.

⁵³ Khaled Rouchou, *op. cit.*, p. 107 et seq.

⁵⁴ For further detail on methods used to torture prisoners of war, see Mohammed Riche, *op. cit.*, pp. 114–122.

cultural property. Fighters of the Algerian Revolution observed the four Geneva Conventions of 1949 and allowed delegates of the International Committee of the Red Cross to visit French prisoners. The delegates confirmed that the prisoners' essential needs were met and their dignity preserved.⁵⁵

Conclusion:

This study demonstrates that the French occupation committed serious violations of the humanitarian protection regime for Algerian prisoners of war during France's military nuclear activities in the Algerian Sahara, especially at Reggane in 1960 and 1961.

The French Government breached its treaty obligations under international humanitarian law and international human rights law. It pursued a criminal policy against the Algerian people, including prisoners of war, and committed a series of internationally prohibited crimes against them.

France did more than contaminate the Algerian Sahara with radiation and nuclear waste. Its crimes targeted human beings. It killed, tortured, and threatened prisoners; caused severe pain and suffering; and used them in biological and scientific experiments to measure the radiological effects and explosive force of nuclear detonations on human bodies and lives.

France's military nuclear activities in Algeria were among the gravest human tragedies experienced by the African region.

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