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The theory of risk as a new basis for international responsibility in the face of environmental damage

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Abstract---This paper argues that the "theory of risk" (objective/strict responsibility) offers a practical modern basis for international responsibility for environmental damage caused by hazardous activities that are lawful under international law. Because proving fault and illegality is often difficult in transboundary pollution and technologically complex harm, the paper explains how liability can be grounded primarily in the occurrence of damage and a causal link, aiming to secure compensation and restore balance between the acting state's interests and the injured state's rights. It also reviews the main doctrinal debate over transferring risk-based liability into international law and surveys its expression in international practice through treaty regimes (notably space liability, oil pollution, and hazardous waste) and selected judicial/arbitral examples involving transboundary harm.
Keywords---risk theory; international environmental responsibility; strict (objective) liability; transboundary.

Introduction

The international community has recently witnessed significant scientific and technological advancements, particularly in major industrialized nations. This has led to a remarkable surge in scientific innovation and subsequent rapid progress in modern technology.

This reality has resulted in the practice of hazardous international activities, not prohibited by international law, which have reached their peak and whose risks and serious damages have multiplied to such an extent that it has become difficult to determine the causes and prove the fault attributed to an international legal entity. Furthermore, traditional legal frameworks have proven inadequate and incapable of addressing environmental problems due to their inability to keep pace with scientific progress.

This prompted international jurisprudence and courts to seek new foundations that keep pace with the evolving circumstances, thus international jurisprudence settled on the theory of risk[1] . As a modern basis for redressing environmental damage.

Jurisprudence has concluded that international responsibility cannot be established based on previous theories, given that these uses are not prohibited by international law, and, moreover, they are described as …Because these are hazardous activities,

[1] Some legal scholars address this theory under various names, sometimes calling it absolute liability, other times objective liability, and still others liability without fault, and yet others the theory of bearing responsibility. All these terms express the same reality. For example, in Anglo-Saxon countries, the term "Common Law" carries the phrase:
"Strict Liability" or "Liability Without Fault," which is called objective liability.

proving the resulting harm is achieved based on the theory of risk [2] .Without needing to prove wrongdoing or an unlawful act ،[3] Therefore, it is necessary to address the content of this theory (first point) and then the extent to which it is suitable as a basis for establishing responsibility in international practices (second point.(

First point: The Theory of Risk

The concept of risk is based on the idea that whoever engages in risky activities must bear responsibility for the risks arising from them, without having to prove fault or breach of an international obligation .[4].Therefore, we will address the concept of the theory of risk (firstly), and the position of international legal jurisprudence regarding it (secondly.(

Section One: The Concept of the Theory

Firstly: Definition of the Theory

It is impossible to give a precise definition of the theory of risk, because the theory evolves alongside the development of the international community and international law. Even legal opinions vary regarding the definition of this modern theory, especially since it coincided with developments in the international community. Furthermore, it arose as a result of criticisms leveled against the theory of wrongful acts, which cannot be relied upon as a basis for compensating for environmental damage.

The prevailing legal opinion is that the theory of risk aims to establish liability on the part of the state for damages resulting from legitimate activities, but which involve numerous risks—regardless of whether there is negligence, omission, or error on the part of that state or the operator of the source of the risk ،[5].Proponents of this theory emphasize that risk is based on the idea of bearing the consequences of risky activities, not on the basis of fault .[6] .

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[2]The theory of risk emerged in France in the late 19th century, and among the most prominent figures who adopted it were the jurist "Saly" and the jurist "Josserand," who considered the idea of error to be a legacy of the past.

[3]Hajar Maidi, Jurisdiction in Disputes for Compensation for Transboundary Pollution Damages, PhD Thesis, Environmental Law Specialization, Faculty of Law, University of Youssef Ben Khedda, Algeria 1, 2020/2021, p. 173.

[4]Al-Sharif bin Tali, Responsibility based on risks in international environmental law, PhD thesis in science, specialization in law, Faculty of Law and Political Science, Hassiba Ben Bouali University, Chlef, Algeria, 2020/2021, p. 12.

[5]Abdul Aziz bin Saud bin Salem Al-Maamari, "The Legal Regulation of International Responsibility for Environmental Damage", Arab Journal of Arts and Humanities, Arab Foundation for Education, Science and Arts, Egypt, Volume 6, Issue 21, January 2022, pp. 146-163.

[6]Islam Muhammad Abd Al-Samad, International Protection of the Environment from Pollution, Dar Al-Jami'a Al-Jadeeda, Alexandria, Egypt, n.d., 2016, p. 224.

Therefore, the concept of this theory is the possibility of holding an international legal person accountable if they engage in an activity that is legitimate under international law to a degree of seriousness that results in damage to the neighboring state. The key in this modern theory is the occurrence of the damage that entails international responsibility for states that carry out legitimate international activity (such as owning companies and factories, nuclear weapons, and launching ships, vehicles and satellites for the purpose of exploiting and exploring outer space ،[7].(... The existence of this theory was therefore of paramount importance within the context of research into international responsibility, which, according to the theory of risk, rests on the availability of two essential elements: harm and a causal link between the harm and the defendant's act.

Responsibility for the consequences of acts not prohibited by law found acceptance in the case of environmental harm, since fault is not considered an element of it. Any act or deed that causes harm to another obligates its perpetrator to provide compensation ،[8].Furthermore, this theory rests on a fundamental pillar: compensatory justice. This justifies its existence, and whether this justice is based on the principle of created danger or the application of the principle of reciprocity, anyone who introduces a dangerous element into the international community and causes it harm is liable for damages, even if no fault or negligence is attributed to them, and regardless of whether the act was in accordance with or contrary to the law.[9].
Undoubtedly, it aims to achieve an important principle in international relations, which is the principle of balance between the interests of the state concerned, which carries out legitimate activities that caused the harm, and the state harmed by the exercise of these activities. Compensation in the case of transboundary damages will be in the form of restoring balance between the states concerned with the problem . .[10]

Second: The Foundations of the Theory

Bearing responsibility and distributing the benefits of exploiting environmental resources. The legal basis for strict liability lies in the concept of liability or the

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[7]Ismail Hammad Zakaria Hussein, The Legal System of International Responsibility for Environmental Damage, Master's Thesis in Law, Faculty of Law, Graduate Studies College, Nilein University, Sudan, 2018/2019, p. 35.

[8]Ahmed Abdel Karim Salama, Environmental Protection Law (Combating Pollution - Developing Natural Resources), previous reference, p. 472.

[9]Ghazi Hassan Sabarini, A Concise Guide to the Principles of Public International Law, Dar Al-Thaqafa, Jordan, n.d., 2007, p. 317.

[10]Assem Ahmed Salah El-Din, "Environmental Protection During Armed Conflicts at Sea", Egyptian Journal of International Law, Cairo, Egypt, Volume 49, Issue 3, 1993, pp. 1-44. See more details in: Waad Al-Ashawi, Environmental Protection During Armed Conflicts, PhD Thesis in Public Law, Faculty of Law and Political Science, University of Sousse, Tunisia, 2022/2023, p. 35.

principle of shared responsibility ‘[11] .This is expressed in the specific, restricted form, such that the wording of this rule removes any burden on the injured party to prove their entitlement to compensation. Therefore, whoever profits from operating an activity must pay when they cause damage to others, following the rule of "whoever causes harm pays [12]."Compensating the injured party for the harm suffered is the responsibility of the one who benefits, according to the principle of "no harm, no foul.[13] ".

This principle is based on the fact that the specific nature of modern industrial and commercial activities that generate environmental pollution makes it difficult to attribute responsibility to the polluter according to the general rules of liability. Therefore, the blame and profit should be placed on the responsible party who carries out this activity, regardless of any fault.[14].

The legality of harmful actions. Modern scientific and technological developments have amplified the harmful consequences of some activities that are legal under international law, but addressing them remains ambiguous in terms of proving their illegality and characterization, requiring greater international cooperation to safeguard the rights and interests of states that may face such harm.[15].

In this regard, we note the efforts of the International Law Commission, which addressed the issue of international responsibility for harmful consequences of acts not prohibited by international law in a more specific and serious manner. The United Nations General Assembly endorsed these efforts and called upon the Commission to include this issue in Resolution 32/151 of 19 December 1977. The Commission responded to the recommendations of the General Assembly at its thirtieth session in 1978.[16].

Acts permitted by law that cause harm to others also give rise to liability and necessitate compensation for the resulting damages under the theory of risk.

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[11]Qwaider Shaashou, "Applying the Theory of Risks to Establish International Environmental Responsibility", Journal of Law and Humanities, Ziane Achour University, Djelfa, Algeria, Volume 14, Issue 2, June 2021, p. 15.

[12]Rahj Rasoul Hamad, Civil Liability for Environmental Pollution, Dar Al-Jami'a Al-Jadeeda, Alexandria, Egypt, n.d., 2016, p. 69.

[13]Samir Hamed Al-Jamal, Legal Protection of the Environment, Dar Al-Nahda Al-Arabiya, Cairo, n.d., 2007, pp. 313-314.

[14]Mohamed Ali Hassouna, The State's Responsibility for Environmental Pollution Damage, Dar Al-Fikr Al-Jami'i, Alexandria, Egypt, 1st Edition, 2015, p. 61.

[15]Muhammad Ali Hassouna, State Responsibility for Environmental Pollution Damage, previous reference, p. 62.

[16]See Decision A/RES/32/151 available at:
https://www.legal-tools.org/doc/7282a7, accessed on 12/12/2023 at 17:15.

The burden of proving fault lies with the party causing the harm. According to proponents of this theory, states or entities that cause environmental damage through activities involving significant risks are liable, even if they have taken all necessary precautions, regardless of whether fault was committed.

Undoubtedly, the legal basis for strict liability for damages is perfectly suited to the field of damages resulting from environmental pollution, where the injured party bears a heavy burden of proving the presumed fault. Therefore, strict liability has become a legal safeguard that guarantees the rights of individuals and facilitates compensation for damages resulting from environmental pollution in cases where they are unable to prove fault against the perpetrator .[17].

Objective responsibility is also based on the principle of territorial sovereignty, which grants states exclusive rights to their citizens within their territory and prevents others from violating this sovereignty. Therefore, it has been recognized that provisions must be established to define the sovereign rights of neighboring states. Consequently, no state can rely on its territorial sovereignty without respecting its neighbors.[18].

This expanded to include responsibility for activities not carried out by the state within its borders and under its control, but for which it bears responsibility for the harmful consequences arising from them.[19] .

Section Two: The Jurisprudential Debate Regarding the Adoption of the Risk Theory

First: Opinions Opposing the Application of the Risk Theory to Establish International Environmental Responsibility [20]

Some argue that the concept of risk, as adopted by many national systems and legislations, cannot be transferred to international law. This is because international responsibility always requires the existence of a fault or an act contrary to the provisions and rules of international law, whereas risk alone does not warrant such responsibility. The Russian judge Krylov, in his unique opinion in the Corfu Channel case, argued that the responsibility of states arising from an internationally wrongful act presupposes, at the very least, the existence of a fault on the part of the state. The theory of risk, as established by domestic legislation, cannot be transferred to

[17]Salah Abdul Rahman Abdul Hadithi, The International Legal System for Environmental Protection, Al-Halabi Legal Publications, Beirut, Lebanon, 1st Edition, 2010, p. 223.

[18]Qwaider Shaashou, "Applying the theory of risks to establish international environmental responsibility," previous reference, p. 60.

[19]Salah Abdul Rahman Abdul Hadithi, The International Legal System for Environmental Protection, previous reference, p. 224.

[20]Qwaider Shaashou, "Applying the theory of risks to establish international environmental responsibility," previous reference, p. 58.

the field of international law. Similarly, the Egyptian judge Abdel Hamid Badawi, in his unique opinion in the same case, argued that "international law does not recognize absolute responsibility, which is based on the concept of risk adopted by some national legislations. In fact, the development and growth of international law do not allow for the assessment that international law has surpassed this stage or is about to surpass it.[21]".

The jurist Dupuy also opposed the application of the risk theory in international relations, arguing that, with the exception of the 1972 United Nations Convention on International Liability for Launching Space Objects, this type of liability does not exist in customary international law, whether for environmental damage or other types of damage.[22].

Among the opposing jurists is Professor Hamed Sultan, who believes that: "A distinction must be made between fault as a basis for international responsibility and risks that serve as a basis for responsibility in some domestic legislations. Fault is a fundamental condition for establishing international responsibility, while risks do not necessitate international responsibility.[23]".

Dr. Mohamed Talaat El-Ghoneimy believes that the theory of risk is not without its flaws, as it exaggerates in guaranteeing absolute insurance for the injured party and goes beyond current international practice—which is still characterized by individualism—that is, it is linked to the idea of fault.[24].

Along the same lines, Dr. Tounsi Ben Amer opposed this theory, arguing that: "If some domestic legal systems have stipulated similar rules, this does not necessarily mean that they are transferred to international law. Their transfer to the international sphere depends on international practices and the extent to which the parties accept them, which has not been the case with the theory of absolute responsibility. Indeed, even though some states refused to recognize international responsibility accordingly, the compensation they granted was merely based on humanitarian considerations .[25]". As for the jurist Raefrath, he believes that the theory of risk does not exist as a fact in international law, and he emphasizes that it has no basis in customary law.[26] .

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[21]Mohammed Bouat, International Responsibility for Environmental Damage, previous reference, p. 41

[22]Pierre-Marie Dupuy, droit international public, op.cit, p.337.

[23]Hamed Sultan, Public International Law, Dar Al Nahda Al Arabiya, Cairo, Egypt, 4th edition, 1999, p. 320.

[24]Muhammad Talaat Al-Ghunaimi, The Mediator in the Law of Peace, Al-Maaref Establishment, Alexandria, Egypt, n.d., 1982, p. 245.

[25] Ben Amer Tounsi, The Basis of State Responsibility During Peace, PhD Thesis, Faculty of Law, Cairo University, Egypt, 1994/1995, p. 101.

[26]Bernhard Graefrath, «Responsibility and Damages Caused: Relationship Between Responsibility and Damages», (R.C.A.D.I), 1984, p.110.

Second: Views supporting the application of the risk theory to establish international environmental responsibility

The previous approach appears weak and hinders international law from keeping pace with modern changes in international relations. Therefore, some argue that, under modern principles and as a result of the activities of various states based on advanced scientific methods, many problems and damages arise that have been addressed by the national legal systems of states, and that international law cannot remain ignorant of these problems and this progress.[27].

The jurist Charles Rousseau supported the application of this theory in the field of international relations, based on the idea of guarantee and moving away from the subjective concept of fault. He considered this theory to have an objective dimension, preferring it to the fault theory in establishing responsibility in international law[28]..

As Rosalyn Higgins, President of the International Court of Justice, stated: "If the requirement for something to fall under the law of state responsibility is that it results from an internationally wrongful act, then it is internationally wrongful to allow the harm to occur." She considered the occurrence of the harm, which is the basis of substantive responsibility, to be an wrongful act that warrants the establishment of international responsibility.[29].

The jurist Jenks argued that the dominance of new technological and scientific means calls for the development of traditional concepts of the theory of international responsibility, especially in areas of hazardous activities. He added: "Responsibility for damage resulting from highly hazardous activities or those associated with the use of modern means of progress should be established without the need to prove the existence of a specific fault.[30]".

The jurist George Sale, however, believes that "the idea of liability begins with harm and ends with compensation... and there is no necessary link between the starting point and the ending point.[31] ".

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[27]Mohammed Bouat, International Responsibility for Environmental Damage, previous reference, p. 42.

[28]Charles Rousseau, Droit internationale public, Les Rapports Conflictuels, Tome V, Siry, Paris, France; 1983, p.22.

[29]Rosalyn Higgins, Problems and Process: International Law and How We Use It, clarendon press, Oxford , 2003, p 165. It is provision is" If what is required for something to fall within the law of state responsibility is an internationally wrongful act, then what is internationally wrongful is alloving the harm to occur".

[30]Muammar Rateeb Abdel Hafez, International Responsibility for the Transport and Storage of Hazardous Waste, previous reference, p. 355.

[31] Muhammad Tawfiq Saudi, Marine Pollution and the Extent of the Shipowner's Responsibility for It, Dar Al-Amin, Cairo, Egypt, 1st ed., 2001, p. 92 et seq. Also cited by: Ahmad Abdul Karim Salama, Environmental Protection Law, op. cit., p. 434.

Dr. Nabil Bashir also believes that "harm is the decisive element in determining international responsibility, because its result harmed another international legal person. An example of this is the atomic tests that a state conducts on its territory and whose harmful effect then extends to neighboring countries, which leads to the determination of international responsibility.[32]".

Both the jurist Jean Salmon and the jurist Karl Zemanek argue that, according to the concept of international responsibility based on the theory of risk, the state's responsibility for compensating damage is absolute, without the need to prove its fault.[33] .

It goes without saying that, after presenting the various jurisprudential opinions, which in general supported and favored the necessity of adopting the theory of risk in the field of international relations, especially with regard to damages arising from modern industrial and technological activities, which cannot be described as illegal or wrongful, this theory is considered the most appropriate for establishing international responsibility towards the international legal entity, and aims to achieve the principle of balance between the interests of the states concerned.[34].

The second requirement: Applying the theory of risk in international practices

Despite the jurisprudential differences regarding the adoption of the theory of risk in the field of international relations, the international community affirms its acceptance through international practices, by including it in international agreements (firstly) and international judicial rulings (secondly.(

Section One: Risk Theory in International Agreements

First: The Outer Space Treaty of 1967

This treaty is considered one of the most important agreements in the field of risk theory and is of particular importance in the field of scientific progress. It established the absolute responsibility of the state, without requiring any error or wrongful act on its part, for all damages caused to third parties as a result of launching spacecraft .[35].Therefore, the principle of absolute responsibility provides an important basis for certain situations of international responsibility, especially in the area of environmental damage resulting from the use of hazardous activities such as nuclear explosions in ship propulsion and the resulting environmental damage.[36] .

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[32]Nabil Bashir, International Responsibility in a Changing World, Dar Al Nahda Al Arabiya, Cairo, Egypt, 1st edition, 1998, p. 125.

[33]Karl Zemanek, Jean Salmon, Responsabilité international, Pedone, Paris, France, 1988, p.26.

[34]Saleh Muhammad Mahmoud Badr Al-Din, Objective Responsibility in International Law, Dar Al-Nahda Al-Arabiya, Cairo, 1st edition, 2005, p. 41.

[35]Salah El-Din Amer, Introduction to the Study of Public International Law, Dar Al-Nahda Al-Arabiya, Cairo, Egypt, 11th edition, 2020, p. 481.

[36]Ahmed Al-Aidi, Ahmed Talal, The International Responsibility of the American Occupation of Iraq, Institute of Arab Research and Studies, League of Arab States, Cairo, Egypt, 2010, p. 100.

Given the seriousness of accidents caused by nuclear and atomic facilities and ships, and the severity of the damage that may affect individuals and countries and extend beyond borders, many international treaties have been concluded [37] .To protect the environment and resolve disputes that may arise between countries, these agreements included fundamental rules stipulating that it is not necessary to prove the operator's fault to establish liability, nor can the operator be relieved of responsibility by proving that the fault did not originate from them or by proving that the fault was caused by a third party. Therefore, under no circumstances can liability be assigned to anyone other than the operator.

Second: The Convention on Pollution of the Seas by Petroleum Products

The widespread use of petroleum has led to successive accidents resulting from leaks of enormous quantities of oil, causing serious pollution of the marine environment. This necessitated a radical change in the traditional foundations of civil liability related to maritime transport, as confirmed by the 1969 International Convention on Civil Liability for Oil Pollution Damage .[38].The agreement stipulated a compensation amount of £14 million per incident, with the Compensation Fund covering additional payments up to £30 million if repair costs exceeded the compensation amount.

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes also adopted the theory of strict liability. In September 1993, legal experts met to review a draft protocol to the Basel Convention to provide compensation to victims of harm caused by the transboundary movement of hazardous wastes. Articles 8 and 9 were added to the proposed protocol to address this liability.[39].

Third: The 1972 Convention on International Liability for Damage Caused by Space Objects

This convention stipulates that the state launching a space object bears absolute responsibility for paying compensation for damage caused by the object on Earth's

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[37] See: Paris Agreement of 29/07/1960 on liability in the nuclear field, Brussels Agreement of 31/05/1963 which is a supplementary agreement to the Paris Agreement, Brussels Agreement of 25/05/1963 on civil liability in the field of maritime transport of atomic materials (Article 2/1), Vienna Agreement of 19/05/1963 (Article 4/1.(

[38]Article Three stipulates that the oil tanker is responsible for damages caused to the state or individuals due to oil leakage or discharge resulting from accidents that the tanker may experience during the transport process.

[39]Sean David Murphy, Prospective Liability Regimes for the Trans boundary Movement of Hazardous Wastes, The American Journal of International Law, Vol. 88, N°1, Jan 1994, Disponiblesur le sit: https://www.cambridge.org/core/journals/american-journal-of-international-law/article/abs/prospective-liability-regimes-for-the-transboundary-movement-of-hazardous-wastes/1E1899F2A634F6BACF80196027136541, date de visualisation: 01/11/2023, à L'heure: 21^{h}:45.

surface or during aircraft flight. Therefore, absolute international responsibility is established in three exceptional cases[40]:
Damage caused by: space objects; the peaceful use of nuclear energy; and marine pollution from hydrosulfur pollutants.

In this regard, there is a near-consensus among legal scholars that the theory of risk has become the basis for international responsibility in cases of hazardous but legitimate activities necessitated by the vital nature of modern life, such as the peaceful use of nuclear energy and oil exploration. Therefore, responsibility should be established for any resulting damage, in accordance with the principle of shared responsibility .[41].

Section Two: Applying the Principle of Risk-Based Liability in International Judicial and Arbitral Awards

Legal jurisprudence points to numerous applications of the risk-based theory in international judicial rulings and arbitral awards.

First: Within International Judicial Rulings

The 1973 French nuclear weapons tests case, which took place on islands in the Pacific Ocean such as Mururoa IslandMoruroa" [42]"Between 1966 and 1996, France conducted nuclear tests, sparking widespread international condemnation and raising concerns among countries like New Zealand and Australia about the potential release of harmful nuclear radiation. These countries demanded that France cease these tests, and when France refused, Australia filed a lawsuit against France at the International Court of Justice.

May 9 ،[43]1973 It requested that the case be considered on the basis of the illegality of these tests due to the damage they cause, and that France be prevented from continuing its tests in the South Pacific Ocean as they violate international law, and that the court issue an order to cease nuclear testing ،[44]".Following Australia's

[40]Ben Amer Tounsi, The Basis of International Responsibility in Light of Contemporary International Law, Dahlab Publications, Algeria, 1st Edition, 1995, p. 125.
[41]Qwaider Shaashou, "Applying the theory of risks to establish international environmental responsibility," previous reference, p. 65.
[42]Rabah Ajami, The International Legal System for the Possession and Use of Nuclear Energy for Peaceful Purposes, Master's Thesis in Law, International Law and International Relations Branch, Faculty of Law, Ben Aknoun, University of Ben Youssef Ben Khedda, Algeria, 2009/2010, pp. 134-135.
[43]Walid Zarqan, "Risk Theory as a Basis for State Responsibility for its Peaceful Nuclear Activities - Between Theory and International Practice," Journal of Law and Political Science, Setif 2, Algeria, Volume 3, Issue 2, June 15, 2016, p. 419.
[44]Khadija Ben Qatas, The Role of International Mechanisms in Combating Radioactive Pollution of the Air, Master's Thesis in Law, Branch of International Law and International Relations, Faculty of Law, University of Ben Youssef Ben Khedda, Algeria, 2013/2014, p. 63.

request, the court ordered provisional protective measures to be taken pending a ruling, pursuant to Article 41 of its Statute.[45] .

The French side argued that the court lacked jurisdiction to hear the case, based on the French government's declaration of May 20, 1966, accepting the jurisdiction of the International Court of Justice ،[46] .However, France refused to appear before the court, and therefore the hearings proceeded without its presence. The court issued its order in this case on June 22, 1973, by a majority of 8 votes to 6, stating: "The French government shall temporarily cease conducting atomic tests that cause dust to fall on the territory of Australia, pending a final judgment in the case.[47]".

The court issued its ruling on December 20, 1974 [48]The court stated that Australia's case was no longer relevant, as the ultimate goal of its claim had been achieved after France declared on several occasions—particularly the June 1974 declaration—that it would cease conducting such tests in the atmosphere. The court considered this a unilateral declaration to the international community, including Australia, and that this declaration was binding on France. Its ruling leaned towards adopting the risk theory in the field of nuclear testing.[49].

A case concerning the legality of the use of nuclear weapons or the threat of their use. On May 14, 1993, the World Health Organization adopted a resolution requesting an advisory opinion from the Court on the following question: "With regard to the effects of nuclear weapons on the environment and health, does their use by States during war or armed conflict constitute a breach of their obligations under international law, including the establishment of the World Health Organization.[50]"؟
The court ruled that it could not provide an advisory opinion on this request, stating that the World Health Organization (WHO) has the right to address the health

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[45] Article 41 of Chapter III of the Statute of the International Court of Justice states:
The Court may decide on provisional measures to be taken to preserve the rights of all parties whenever it deems the circumstances so require.
Pending the final judgment, the Court shall promptly inform the parties to the case and the Security Council of the measures it deems necessary.

[46] According to Article 36, paragraph 2 of Chapter II of the Statute of the International Court of Justice, which in paragraph 3 excludes the acceptance of the Court's jurisdiction with respect to special cases concerning activities related to national defense, which applies to this special case concerning French experiments in the Pacific.

[47]C.I.J: «Affaires des essais nucléaires (Australie C/ France et Nouvelle Zélande C/France)», Recueil, 1973, p.106.

[48]Summary of Judgments, Advisory Opinions and Orders of the International Court of Justice 1948-1991, United Nations, p. 128.

[49]Youssef Maalem, International Responsibility Without Harm - The Case of Environmental Damage - PhD Thesis in Public Law, International Law Branch, Faculty of Law and Political Science, Mentouri University 1, Constantine, Algeria, 2011/2012, p. 29.

[50]Youssef Moallem, International Responsibility Without Harm - The Case of Environmental Damage - Previous Reference, p. 195.

effects of these weapons and to take the necessary measures and precautions in the event of their use, given their impact on health and the environment. The jurisdiction of international organizations is specialized, and since the WHO's role is limited to global health, issues of the use of force and arms control fall under the purview of the United Nations ‹[51].This decision was passed by a majority of 11 votes to 3. Judge Ranjiva, in a separate opinion, stated in favor of the decision, while Judge Koroma stated that this rejection was completely inconsistent with the judges of the International Court of Justice and that it had misinterpreted the question of the issue, removing it from its jurisdiction, reminding everyone that health is a cause of peace.[52].

Second: Within International Arbitration Decisions

There are many famous cases in the international arena, such as the Trail Smelter case in 1941 and the Lake Lenox case in 1956, in which international arbitration tribunals determined international liability based on the occurrence of the harm, rather than the nature of the activity that caused it. These are considered applications of the theory of risk. From a jurisprudential perspective, these rulings did not clarify whether states are only liable for intentional conduct resulting in harm, or whether they are also liable for negligent or reckless conduct, or whether their liability is absolute in all cases of transboundary harm.[53].

Regarding the Trail Smelter case, due to the continued emission of fumes from the smelter, the United States again protested to the Canadian government. Diplomatic negotiations between the two parties resulted in an agreement referring the dispute to a special arbitration panel. This panel issued two rulings:

The first, issued on April 16, 1938, addressed compensation for damages incurred from January 1932 to October 1937. The second ruling, issued in March 1941, which is relevant to our discussion, required the court to address the issue of fume emissions from the smelter and subsequently consider whether there was a legal

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[51]Summary of Judgments, Advisory Opinions and Orders of the International Court of Justice, 1992-1996, previous reference, pp. 107-108.

[52]In a separate opinion, Judge Shihab al-Din stated that, in his view, the Court had not fully grasped the meaning of the WHO's question. The WHO, he argued, was not actually asking whether the use of nuclear weapons by one of its members was legal under international law in general, but rather whether such use would constitute a breach of a member's obligations under the organization. Judge Christopher Gregory Weeramantry added that this was the first time the Court had refused to issue an advisory opinion requested by the Agency, and that the Court should be commended for this question. He explained that the issue raised by the WHO addressed obligations in three specific areas: states' obligations in the field of health, states' obligations in the field of the environment, and states' obligations to the organization. He further noted that this question was entirely different from the one raised by the General Assembly concerning the threat or use of nuclear weapons, and that the Court had treated it as a question about the attempt in general, without discussing states' obligations in the aforementioned areas. For further details, see: Summary of Advisory Opinions of the International Court of Justice, ibid., p. 112.

[53]Mohammed Adel Askar, International Environmental Law, previous reference, p. 816.

obligation to avoid environmental pollution. The court ultimately established a permanent operating regime for the smelter, which included an obligation for Canada to pay compensation for any damages to US interests resulting from the smelter's fumes, even if the smelting activities were fully compliant with the permanent regime established by the court's ruling.[54].

Although the court ruled the foundry's operation legal, it obligated the Canadian government to pay the necessary compensation to the US government. This constitutes an admission of the theory of risk as the basis for its liability. However, some legal scholars question the ruling's reliance on this theory, pointing out that it was based on an agreement between Canada and the United States regarding Canada's liability for damages incurred by the US, leaving the determination of these damages and the compensation to the court.[55].

Similarly, in the case of Lake Lenox, the ruling was based on the existence of an international customary obligation not to pollute the waters flowing into the country of the.[56]...

It is clear that risk theory can address the problems caused by environmental pollution in general. Therefore, resorting to it is necessary to ensure effective protection of the environment from the dangers of modern technology, which is in line with the legal opinion that sees its applicability in all cases of pollution ،[57]. Furthermore, its content mandates the establishment of international responsibility when harm results from an act committed by a state, regardless of the nature of that act or whether it was lawful. Therefore, it has become an effective legal safeguard for guaranteeing the rights of those harmed and facilitating compensation for damages arising from environmental pollution in cases where the fault of the responsible party cannot be proven.[58].

Given the inadequacy of theory to cover modern sources of pollution, the principle of "the polluter is responsible" emerged as a new objective basis. Its emergence coincided with the idea of sustainable development, which requires achieving economic development on the condition that it does not deplete the available natural environmental resources.

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[54]UN.RI.AA.Vol 111, pp.1980-1981

[55]Mohammed Bouat, "International Responsibility for Environmental Damage", previous reference, p. 51.

[56]Abdul Aziz Mukhaimer Abdul Hadi, The Role of International Organizations in Environmental Protection, Dar Al Nahda Al Arabiya, Cairo, Egypt, n.d., 1986, p. 60.

[57]Muammar Rateeb Muhammad Abdul Hafez, International Responsibility for the Transport and Storage of Hazardous Waste, previous reference, p. 378.

[58]Nazih Muhammad Al-Sadiq Al-Mahdi, "The Scope of Civil Liability for Environmental Pollution", a paper presented to a conference on "Towards an Active Role of Law in Protecting and Developing the Environment in the United Arab Emirates", May 2-4, 1999, p. 25.

Conclusion

The central problem addressed in this research revolved around understanding the evolving landscape of international civil liability rules in the field of environmental protection, with the aim of developing effective policies to combat environmental damage. It was essential to begin this study by highlighting the concept of the environment in general, presenting its various definitions. The study concluded that the environment encompasses all external conditions and factors in which living organisms exist and which influence their processes, whether these are created by God Almighty or by humankind.

In addition to clarifying the concept of the environment, the study also explored the concept of environmental damage, which threatens the human environment with destruction. It concluded that this damage includes any alteration to the living or non-living components of the environment or ecosystems, including damage to marine, terrestrial, or atmospheric life.

In light of the research problem, it became clear that the concept of international responsibility has undergone several developments, similar to the evolution of the system of responsibility in domestic law. These developments were necessitated by the evolution of the international community and the international legal system. International responsibility is no longer confined to personal standards and principles (as in the case of the fault or wrongful act theory), but has begun to move towards the horizons of the theory of absolute responsibility or responsibility based on risk, in order to meet the demands of the scientific and technological development the world is undergoing. We have seen that absolute international responsibility, which is based on the element of harm and the causal link between the act and the harm without requiring the presence of fault, has become a broad field that can be relied upon to compensate for environmental damage in cases that pose a significant threat to the environment. Therefore, recognizing responsibility without the presence of the element of fault has become of considerable importance in this field.

Although there is no established international customary rule upon which to base the application of this theory in international relations, there is a growing trend in its application through international agreements, as we have seen throughout our research. We have also found that there are a number of difficulties and obstacles hindering the application of traditional rules of international responsibility for environmental damage caused by hazardous and environmentally harmful activities. It is therefore necessary to seek modern and advanced systems, policies, and foundations that suit the specific nature of environmental problems and how to protect the environment, especially in areas not under state sovereignty. We have presented the efforts made to achieve this goal, particularly through the draft articles of the International Law Commission on responsibility for damage resulting from acts not prohibited by international law or within the scope of international

conventions, and through the contributions of international jurisprudence on environmental damage.

Furthermore, we have seen that preventive environmental policies are the most urgent and appropriate policy for environmental protection systems. This is also evident in the issue of damage caused by activities not internationally prohibited, which represents one of the modern approaches to addressing environmental damage through a general international obligation on subjects of international law to prevent harm, as well as to avoid the outbreak of unnecessary international environmental conflicts. Despite all this, it is not too late yet, but there must be international solidarity and cooperation. It is the duty of international organizations to coordinate efforts among themselves, and for countries to enact strict environmental laws and legislation and fill the legal vacuum in the field of environmental protection, and for the media to mobilize its tremendous efforts for the sake of environmental awareness. The goal is for people to live a stable and safe life, free from risks and diseases and far from all manifestations of fear and anxiety, so that we may then achieve our desired hopes.

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