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Type of State Responsibility for Environmental Matters in International Law

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Résumé

Cet article porte sur la responsabilité de l'État en matière d'environnement. Nous étudierons d'abord le développement historique de responsabilité depuis Grotius. Nous nous concentrerons sur le concept moderne de la responsabilité concernant la responsabilité pour risque et discuterons les cas dans lesquels la responsabilité de l'État pour une violation d'obligation internationale est stricte ou absolue. Nous démontrerons que la responsabilité stricte n'est pas un concept unanimement accepté mais qu'il sert toutefois de support à la pratique de quelques États pour les activités qui causent des dommages environnementaux.

Nous étudierons brièvement les projets de la Commission de droit international concernant la responsabilité pour des activités qui ne sont pas interdites par le droit inter-

Abstract

This article analyses State responsibility for environmental matters. We will approach the subject of State responsibility, in section I, by looking at the historical development of State responsibility since Grotius. Two schools of thought concerning subjective and objective responsibility will be discussed. We focus on the modern concept of liability regarding liability for created risk and discuss cases in which the responsibility of the State for a breach of international obligations is strict or absolute. This section will then examine briefly the International Law Commission's discussion on the Liability for Activities not Prohibited by International Law and International Crimes of States.

Section 2 examines whether criminalizing environmental harmful conduct can be justified. We will dis-

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national et des crimes internationaux d'État. Nous discuterons de projets d'articles de la Commission, par exemple, de l'article 19 qui prévoit qu'un crime international d'État est le résultat de la violation sérieuse d'obligations internationales qui sont essentielles et importantes pour la sauvegarde et la préservation de l'environnement des humains. Nous terminerons en constatant que, sur la base du droit général de la responsabilité, un État doit être trouvé responsable pour tous les dommages causés à un autre État.

Pour faire suite à notre discussion générale sur la responsabilité, nous considérerons le droit international environnemental et le droit de la guerre pour déterminer sur quoi repose directement la protection de l'environnement en temps de guerre. Nous discuterons à savoir si le droit relatif à la responsabilité d'un État protège l'environnement en temps de guerre. On examinera aussi si la responsabilité d'un État pour un dommage environnemental en temps de guerre est stricte ou absolue ou si la victime doit prouver que l'État belligérant a commis un acte illégal. Nous verrons que si un gouvernement est tenu responsable pour les actes de ses fonctionnaires et autres représentants officiels, il doit de même être responsable pour ses actes causant des dommages à l'environnement.

cuss some ILC Draft Articles, inter alia, article 19 in which an international crime committed by a State is said to result from a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment.

Section 3 focuses on the responsibility for environmental damage in time of armed conflict. We will discuss whether the law related to State responsibility protects the environment in time of war. This section also examines whether the responsibility of States for harm caused to the environment in time of war is strict, absolute, or whether the victim has to prove that the belligerent State has committed an illegal act. Finally we will analyze the international treaties, international judicial and State practices for State responsibility of the aggregate of its officials, including its armed forces. We will see that if a government bears wide and unlimited responsibility for the acts of all its officials, it will be responsible for their acts causing environmental damage.

We will conclude that, according to the general rules of international law of State responsibility, a State would be held responsible for any damage it or its agents caused. We will emphasize that although strict responsibility has not been strongly accepted, it enjoys some support among State practices for activities causing environmental damage.

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The concept of State responsibility and its sources is one of the most complex subjects in the general theory of international law. A general question that one may ask is whether or not a State is responsible in international law for damages or injuries caused to another State and, if so, to what extent it incurs international responsibility for its actions. The word responsibility is used for the term "obligation". Usually an obligation arises from breach of a contract or when one violates the rules of law. It is the violation of an international obligation, that is any act on the part of a State that breaks a rule of international law, which constitutes an unlawful act and gives rise to international responsibility. The degree of responsibility for the violation of international law depends on what is in fact prohibited by the particular rule of international law, the type of illegality and the nature of the rules governing the incident.

There exists a basic rule that "every international wrongful act by a State gives rise to international responsibility."[1] Thus, the issue is the permissibility of an act and whether or not such action is prohibited by international law. If an act of a State causing damage to another State was committed willfully and maliciously or in a grossly negligent manner, this would constitute intentional delinquency[2].

This study analyses State responsibility for environmental matters. We approach the subject of State responsibility by looking at the historical development of State responsibility since Grotius. Two schools of thought concerning subjective and objective responsibility will be discussed. We focus on the modern concept of liability regarding liability for created risk and discuss

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1 Roberto Ago, acting as Rapporteur of the International Law Commission, formulated the "basic rule" under the rubric "the internationally wrongful act as a source of responsibility". See Ian BROWNLIE, ***System of the Law of Nations, State Responsibility***, New York, Oxford University Press, 1983, Part 1, p. 23. In its judgement on the ***Chorzow Factory*** (***German*** v. ***Poland***), ((1927) P.C.I.J. jd. 434), the court said: "It is a principle of international law, and even a general conception of law, that any breach of an engagement involves an obligation to make reparation".

2 See Lassa OPPENHEIM, ***International Law, A Treatise***, 7th ed., vol. 1, London, Longmans, 1944, p. 311; S.N. SIMONDS, "Conventional Warfare and Environmental Protection: A Proposal for International Legal Reform", (1992) 29 ***Stan. J. Int'l. L***. 165, 197.

cases in which the responsibility of the State for a breach of international obligations is strict or absolute. We will emphasize that although strict responsibility has not been strongly accepted, it enjoys some support among State practices for activities causing environmental damage. We will then examine briefly the International Law Commission's discussion on the "Liability for Activities not Prohibited by International Law" and "International Crimes of States". We will discuss some International Law Commission (ILC) Draft Articles, ***inter alia***, article 19 in which an international crime committed by a State is said to result from a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment.

We will discuss legal consequences of violating the law of war and law related to the environment. The final section is dedicated to long-term and long-distance environmental health effects. It examines whether the responsibility of States for wartime activities damaging the environment is strict, absolute, or whether fault must be proven. It discusses the different forms of reparation, that is restitution, compensation and satisfaction for breach of a legal obligation. Various problems which must be resolved in order to determine reparation for ecological damages of war will be considered in this section. The study will finally examine the responsibility of States for the acts or omissions of State personnel which are incompatible with the rules of international law.

I. The Role of Fault in State Responsibility

When damage to the environment of a State occurs as a result of illegal activities, existing international law[3] and custom can enforce responsibility on the actor. However, the determination of

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3 Such as Stockholm Declaration on the Human Environment, UN DOC. A/CONF.48/14, at 72, reprinted in (1972) 11 I.L.M. 1416 (hereinafter ***Stockholm Declaration***). For example, ***Oslo Convention for the Prevention of Marine Pollution by Dumping From Ships and Aircraft***, 932 U.N.T.S. 3; (1975) U.K.T.S. 119, Cmd. 6228; (1972) 11 I.L.M. 262; the text reprinted in Iwona RUMMEL-BULSKA and Seth OSAFO, ***Selected Multilateral Treaties in the Field of the Environment***, vol. 2, Cambridge, Grotius Publications, 1991, p. 266; 1972 ***Convention for the Protection of the World Cultural and Natural Heritage*** (hereinafter ***UNESCO Convention***), 27 U.S.T. 37; (1972) 11 I.L.M. 1358.

the violation of environmental law suffers from several problems[4]. There is little specification of the concepts of "strict" and "fault" in international environmental law and it has failed to clarify whether liability is strict or whether fault must be proved. Furthermore, since governments are unwilling to be held responsible for their actions, certain difficulties in presenting a claim, which make the relevance of the concept more prospective than actual, must be overcome particularly with respect to environmental damage in wartime.

There have been two schools of thought on the basis of State responsibility[5], both of them take "an international wrongful act" as their starting-point. According to one of them, "fault as culpa" is the central constituent of State responsibility. The concept of fault in the conduct of the State is attributed to Grotius[6]. The Grotian view has been supported by certain eminent opinions such as those of Oppenheim, Fauchile, Lauterpacht and Jiménez de Aréchaga[7], among others. Oppenheim states that "[a]n act of a State injurious to another State is nevertheless not an international delinquency if committed neither willfully and maliciously

4 See Ian BROWNLIE, ***Principles of Public International Law***, 4th ed., Oxford, Clarendon, 1990, pp. 512-515.

5 According to the principle of objective responsibility (or the "risk" theory), a State is strictly responsible for its performance's lawfulness or unlawfulness while subjective responsibility maintains that intention (***dolus***) and negligence (***culpa***) are special elements that render a State responsible for its action. Arbour states: "Une analyse de la doctrine traditionnelle laisse voir que les auteurs de droit international se sont divisés en deux grandes écoles sur le fondement général ou coutumier de la responsabilité internationale. La première école [...] réserve à la notion de faute une place centrale dans la théorie de la responsabilité; [...] La seconde école [...] fait découler la responsabilité de l'État du seul fait de la violation d'une obligation internationale." See J.-Maurice ARBOUR, ***Droit international public***, 3e éd., Cowansville, Éditions Yvon Blais, 1997, p. 474.

6 Accioly states that "l'exigence de la faute est ancienne. On la trouve, comme on le sait, dans les maîtres primitifs du droit des gens, depuis Grotius." See Hildebrando ACCIOLY, "Principes généraux de la responsabilité internationale d'après la doctrine et la jurisprudence", ***Recueil des Cours***, vol. 96, Leyde, A.W. Sijthoff, 1959, p. 353, at p. 364. He considered fault similar to the notion of intention which operates in tort law. He says: "Il semble que la principale opposition à l'idée de faute, comme base de la responsabilité internationale, est surtout le résultat de sa confusion avec l'idée d'intention méchante. En vérité, il y a eu une sûre tendance dans le sens de la considérer comme le désir de produire un tort." (p. 366).

7 See Eduardo JIMÉNEZ DE ARÉCHAGA, "International Law in the Past Third of a Century", ***Recueil des Cours***, vol. 159, Leyde, A.W. Sijthoff, 1978, p. 3, at p. 273.

nor with culpable negligence."[8] Aréchaga states that liability without fault "only results from conventional law, [it] has no basis in customary law or general principles and, since it deals with exceptions rather than general rules, cannot be extended to fields not covered by the specific instruments."[9]

In contrast to this "fault theory" is the school of "causal liability" or "objective responsibility". It provides that States are objectively responsible for the breach of an international obligation without regard to fault as an additional subjective factor[10]. According to "no-fault" theory, a breach of duty by result and establishment of causal connection are enough to hold States responsible[11].

A. Subjective Responsibility[12]

According to the school of "subjective responsibility" or "liability for fault", the State's malicious intent (***dolus***) or culpable negligence (***culpa***) provides the proper basis of State responsibility in all cases[13]. There are some difficulties in the distinction between ***culpa*** (negligence, fault) and ***dolus***[14] (intent) within the concept of wrongfulness. When the relation is close, the distinc-

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8 See L. OPPENHEIM, ***op. cit.***, note 2, vol. I, p. 343.

9 See ***supra***, note 7, p. 273.

10 See Mohamed BEDJAOUI, "Responsibility of States, Fault and Strict Liability", in ***Encyclopedia of Public International Law***, vol. 10, North Holland, Published under the Auspices of the Max Planck Institute, 1982, pp. 359-362.

11 N.A.M. Green, referring to the decision of the court in the ***Russian Indemnity Case,*** (1912), stated: "'all liability whatever may be its origin is finally estimated in money terms and transferred into obligations to pay [...] It is not possible for the Tribunal to perceive essential differences between various responsibilities.' In particular it should be stressed that 'fault' or ***culpa*** is not an essential ingredient in the notion of international responsibility". See N.A. Maryan GREEN, ***International Law***, 3d ed., London, Pitman, 1987, p. 241.

12 Fault in the sense of a breach of obligation is equal to the objective element of State responsibility. See Brian D. SMITH, ***State Responsibility and the Marine Environment, the Rules of Decision***, Oxford, Clarenton Press, 1988, pp. 15-21. Salvioli states that when there is an illegal act, there is fault. See SALVIOLI, "Les règles générales de la paix", ***Recueil des Cours***, vol. 46, Leyde, A.W. Sijthoff, 1933, p. 5, at p. 97.

13 See I. BROWNLIE, ***op. cit.***, note 4, p. 438.

14 The term ***dolus*** is used to describe any intentional act which causes harm. A State is responsible if its intentional action causes harm.

tion of these two may play a significant role in a certain context[15]. In the view of some authors, the "fault as ***culpa***" is very similar to the notion of "intention"[16]. The term ***culpa*** (fault) is synonymous with "omission of duty"[17] and unlawful act[18] and means any deviation from prudence or duty. In this sense, the elements of fault include the will, the act, and the unlawfulness of the act. In fact, fault is the origin of responsibility[19]. It has been brought up in the ***Jamaica Case***[20] by the Mixed Claim Commission set up between Great Britain and the United States. The British ship Jamaica and her cargo were burnt and totally destroyed. The captured property was not anywhere near the United States. Two United States Commissioners examined the case and decided that the responsibility must be based on a fault imputable to the person charged. Commissioner Gore stated that: "Where there is no fault, no omission of duty, there can be nothing whereon to support a charge of responsibility or justify a complaint."[21]

As to the State's obligation to protect foreign interests and punish the offenders harming them, the Mexico-United States Claim Commission in the ***Mecham Case***[22] considered "negligence" as the failure to perform an obligation and stated: "Even though more efficacious measures might perhaps have been employed to

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15 I. BROWNLIE ***op. cit.***, note 4, p. 440.

16 For a precise discussion on the different theories of fault and intention, see H. ACCIOLY, ***op. cit.***, note 6, pp. 364-369. Accioly views the confusion of 'tort' with 'fault' as the source of opposition to the fault theory.

17 See Bin CHENG, ***General Principles of Law as Applied by International Courts and Tribunals***, Cambridge, Grotius Publications, 1987, pp. 218-225.

18 Brownlie, referring to the Franco-Italian Conciliation Commission, stated that responsibility may be a result of ***culpa*** in the performance of lawful measures. In this claim, the Italian Government raised the question of the responsibility of the French Government for acts of administrators-sequestrator of the property of Rizzo and eleven other Italian nationals: ***Re Rizzo***, (1955) I.L.R. 22, 317. See I. BROWNLIE, ***op. cit.***, note 4, p. 441.

19 B. CHENG, ***op. cit.***, note 17, p. 225, The decision of the permanent Court of Arbitration shows that "[f]ault consists in the violation of an obligation, giving rise to responsibility". Such violation has been termed an "unlawful act".

20 ***Jamaica Case (Great Britain*** v. ***United States)***, (1978) 4 Int. Adj., M.S. p. 489 (***Jay Treaty***, art. VII, Arb. (1794)).

21 ***Id.***, arbitral awards; John Bassett MOORE, ***International Adjudication – Ancient and Modern History and Documents, Together with Mediatorial Reports, Advisory Opinions. and the Decisions of Domestic Commissions on International Claims***, Modern Series IV, New York, Oxford University Press, 1931, p. 489, at p. 499.

22 The ***Mecham Case*** (***United States*** v. ***Mexico***), (1929) 4 R.I.A.A. 440.

apprehend the murderers of Mecham, that is not the question, but rather whether what was done shows such a degree of negligence, defective administration of justice, or bad faith, that the procedure falls below the standards of international law."[23] A person is said to be negligent if he acts without taking due care[24] or attention with respect to the harmful consequences of his actions[25]. In that sense, negligence can be considered as the failure to perform an obligation. As defined in ***Hazzard v. Chase Nat. Bank of the City of New York***[26], "[t]he term refers only to that legal delinquency which results whenever a man fails to exhibit the care which he ought to exhibit, whether slight, ordinary, or great."[27] Thus negligence means the failure to perform any legal duty. One is expected to take due care when there exists a foreseeable risk of harm. Foreseeability of risk is a necessary condition for blame and for the liability related to a certain action. Foreseeability consists in the natural and probable consequences of one's actions. An example of this is a case in which the harm caused arises from an intentional action, that is where the wrongdoer had the desire to cause certain consequences. Any negligent act may foreseeably cause harmful effects. Therefore,

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23 ***Id***., 443.

24 Indeed the duty of protection goes as far as it can possibly be permitted as, for instance, mentioned by the Rapporteur in the ***Spanish Zone of Morocco Claim,*** Report III (1923), (1924) 2 R.I.A.A. 615, 645. He stated: "It has finally been recognized that the State is obliged to exercise only that degree of vigilance which corresponds to the means at its disposal. To require that these means should always measure up to the circumstances would be to impose upon the State duties which it would often not be able to fulfil. Thus, the view that the vigilance required should correspond to the importance of the interests at stake has not been able to prevail."

The ***Alabama Case*** is also important in that the Tribunal found that the British Government had failed to use diligence in performing its neutral obligations. The Alabama Award stated that "The 'due diligence' [...] ought to be exercised by neutral governments in exact proportion to the risk": see ***Alabama Case***, (1872) U.K. & U.S. 1, Int. Arb., p. 495, Arbitral awards of 1827; John Bassett MOORE, ***History and Digest of the International Arbitrations to Which the United States Has Been a Party***, vol. 1, Washington, US Government Printing Office, 1898, pp. 495-682.

25 See Joseph Carman SMITH, ***Liability in Negligence***, London, Carswell Legal Publications, 1984, p. 2.

26 159 Misc. 57, 287 N.Y.S. 541, 552.

27 ***Id.***

everyone has the duty to act according to the standard of care[28] so as to avoid causing harm[29].

B. Objective Responsibility

The idea of "causal liability" was first expressed in 1902 by Anzilotti and was echoed in the work of many of his followers such as Brownlie[30], Delbez, Guggenheim[31] Schwarzenberger[32], Eagleton[33] and Arbour[34]. In Anzilotti's opinion, "la théorie de la faute doit être ici mise absolument hors de cause."[35]

Arbour answers the question whether violation of an international norm is enough to hold a State responsible by stating: "Il

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28 In the ***Home Missionary Society Case,*** (1920) 6 R.I.A.A. 42, the Tribunal provided that a State will not be held responsible for harm caused by rebel or by government forces countering rebel activity unless there is a failure to exercise due diligence; see I. BROWNLIE ***op. cit.***, note 1, p. 172. There should not be international responsibility if it shows steady effort to refrain from wrongful act and breach of obligation. The same is true when the mere failure to comply with such obligations is the result of ***"vis major"***. This was confirmed by the ***Russian Indemnity Case***, (1912) H.C.R.P. 532, 546 (transl.) PCA) which states: "The exception of ***vis major***, invoked as the first line of defense, may be pleaded in public international law as well as in private law." In fact, in many situations no responsibility will arise because there will be no proof of a lack of due diligence.

29 I. BROWNLIE, ***op. cit.***, note 1**,** pp. 130-135.

30 I. BROWNLIE, ***op. cit.***, note 4, p. 437.

31 Paul GUGGENHEIM, "Les principes de droit international public", ***Recueil des Cours***, vol. 80, Leyde, A.W. Sijthoff, 1952, p. 5, at pp. 147 and 148. He states that in most cases, it seems to be impossible to "déterminer quelle était l'attitude psychologique de l'organe". See Paul GUGGENHEIM, ***Traité de droit international public***, t. II, 1954, Genève, Librairie de l'Université, Georg et cie, p. 51.

32 See M. BEDJAOUI, ***op. cit.***, note 10, pp. 359-362; Georg SCHWARZENBERGER, ***International Law***, iii, 3d ed., London, Stevens & Sons, 1957; Georg SCHWARZENBERGER, "Principles of International Law", ***Recueil des Cours***, vol. 87, Leyde, A.W. Sijthoff, 1955, pp. 350-353.

33 Eagleton states: "It is not necessary to assume [...] that all acts occurring within a state are ***prima facie*** in consonance with the will of the State. Whether they are or not, the sole responsibility of the state is for such acts as international law regards as illegal and productive of responsibility." See Clyde EAGLETON, ***The Responsibility of States in International Law,*** New York, New York University Press, 1928, p. 213.

34 See J.M. ARBOUR, ***op. cit.***, note 5.

35 Dionisio ANZILOTTI, "La responsabilité internationale des États à raison des dommages soufferts par des étrangers", (1906) ***Rev. gén. dr. int. pub.*** 5.

est certain que l'on doive répondre affirmativement à cette question"[36].

The General Claims Commission, set up by a convention between Mexico and the United States in 1923, made an important contribution in this respect in the well-known ***Neer***[37] and ***Claire***[38] claims. In the ***Neer*** claim, the General Claims Commission applied the objective test.

Under the no-fault theory, fault may also be taken into account in the assessment of the degree of liability and examination of the consequences of the wrongful act.

State responsibility has been the subject of extensive study by the ILC, and this body has increasingly endorsed the "no fault" theory. Quentin-Baxter states that the breach of an international obligation constitutes the basis of liability for risk: the "duty to avoid, minimize and provide reparation for transboundary losses or injuries"[39].

In 1980, the ILC, at its thirty-second session, adopted on first reading Part One of the Draft Articles concerning "the origin of international responsibility"[40]. The Commission, from 1980 to 1986, received seven reports from its Special Rapporteur, Willem Riphagen, for Parts Two[41] and Three of the topic[42].

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36 See J.-Maurice ARBOUR, ***Droit international public***, 2e éd., Cowansville, Éditions Yvon Blais, 1992, p. 276.

37 ***Neer Claim***, (1926) 4 R.I.A.A. 60.

38 ***Claire Claim***, (1929) 5 R.I.A.A. 516.

39 See "Fourth Report to the ILC on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law", UN DOC. A/CN.4/373, June 27, 1983.

40 ***ILC Yearbook 1980***, vol. II, Part 2, pp. 26-63, UN DOC. A/35/10, c. III.

41 The ILC adopted in Part 2, Draft Articles 1 to 5 (for the text of art. 1 to 5 (para. 1), with commentaries, see ***ILC Yearbook 1985***, vol. II, Part 2, p. 24 et seq.) and art. 6 (Cessation of wrongful conduct), 6 bis (Reparation), 7 (Restitution in kind), 8 (Compensation), 10 (Satisfaction), 10 bis (Guarantees of non-repetition) (for the text of art. 5, para. 2 and art. 6, 6 bis, 7, 8, 10 and 10 bis, with commentaries, see Official Records of the General Assembly, 48th Sess., Supp. No. 10 (A/48/10), pp. 132 et seq.), 11 (Countermeasures by an injured State), 13 (Proportionality) and 14 (Prohibited countermeasures) (for the text of art. 11, 13 and 14, Supp. No. 10 A/49/10). It had furthermore received from the Drafting Committee a text for art. 12 (Conditions relating to resort to countermeasures), on which it deferred action (see ***Id***., para. 352.).

42 At its 47th Session, the Commission had also provisionally adopted for inclusion in Part 3, art. 1 (Negotiation), 2 (Good offices and mediation), 3 (Conciliation), 4 (Task of the Conciliation Commission), 5 (arbitration), 6

In the words of article 1 (Part I) of the ILC Draft Articles, "[e]very international wrongful act of a State entails the international responsibility of that State."[43] The ILC, in its Draft Article on the responsibility of State, does not refer to fault[44], but only refers to the question of identifying the State responsible for wrongful acts and breaches of international obligations. The commission's Draft Article 3 declares that a State has committed an international wrongful act when "(a) [its] conduct consisting of an action or omission is attributable to the State under international law; and (b) that conduct constitutes a breach of an international obligation of the State."[45]

International responsibility can arise from either an action or an omission that causes a breach of an international obligation[46]. It may also result from the breach of an obligation derived from any source of international law[47]. The origin of an international wrongful act, whether customary, conventional or any other, is irrelevant for the purpose of establishing State responsibility[48].

(Terms of reference of the Arbitral Tribunal), 7 (Validity of an arbitral award) and Annex, art. 1 (The Conciliation Commission) and 2 (The Arbitral Tribunal). For the seven reports of the Special Rapporteur, see ***ILC Yearbook 1980***, vol. II, Part 1, p. 107, doc. A/CN.4/330; ***ILC Yearbook 1981***, vol. II, Part 1, p. 79, doc. A/CN.4/334; ***ILC Yearbook 1982***, vol. II, Part 1, p. 22, doc. A/CN.4/354; ***ILC Yearbook 1983***, vol. II, Part 1, p. 3, doc. A/CN.4/366; and Add. 1; ***ILC Yearbook 1984***; vol. II, Part 1, p. 1, doc. A/CN.4/380; ***ILC Yearbook 1985***, vol. II, Part 1, p. 3, doc. A/CN.4/389; and ***ILC Yearbook 1986***, vol. II, Part 1, p. 1, doc. A/CN.4/397; and Add. 1.

43 See ***infra***, note 44.

44 Draft Articles on State Responsibility, Part I, in "Report of the ILC on the work of its thirty-second Session" (May 5-July 25, 1980), UN DOC. A/35/10, ***ILC Yearbook 1980,*** vol. II, Part 2, p. 30. Bedjaoui states that "[i]t is indeed the almost automatic practice of tribunals, once a breach of obligation has – without preliminary recourse to the concept of fault – been established and attributed to a State, to pass on to a second Stage at which they ascertain whether and to what extent the relevant conduct of the State concerned was malicious or willfully harmful." See M. BEDJAOUI, ***op. cit.,*** note 10, p. 359.

45 "Report of the ILC on the work of its forty-eighth Session" (May 6-July 26, 1996), General Assembly Official Records, 51st Sess., Supp. No. 10 (A/51/10).

46 ***Id***. ILC Draft Articles, art. 3.

47 Art. 4 of the Draft Article makes clear that "an act of a State may only be characterized as internationally wrongful by international law. Such characterization cannot be affected by the characterization of the same act as lawful by internal law." See ***supra***, note 44.

48 Art. 17 of ILC Draft Article states:

"1. An act of a State which constitutes a breach of an international obligation is an internationally wrongful act regardless of the origin, whether customary, conventional or other, of that obligation.

In Part I of its Draft Articles, the ILC has exempted certain inevitable events as grounds for which wrongfulness may be established. The ILC reserved the duty to pay compensation for damage even when wrongfulness is precluded[49]. Article 35 of Part I provides that even though wrongfulness of a State's action may be precluded by virtue of consent, ***force majeure*** and fortuitous events[50], distress[51] and a state of necessity, such preclusion "does not prejudge any question that may arise in regard to compensation for damage caused by that act."[52] Members of the ILC were of the opinion that compensation, however, ought to be paid[53]. Thus, the ILC, by citing these provisions, has adopted responsibility for results as the single form of responsibility. This confusing conclusion raises the question of the origin of the obligation to pay compensation. Zemanek states that "the ILC had created a further obstacle: by adopting responsibility for result as the single form of responsibility for all unlawful acts, it had theoretically excluded circumstances precluding fault, since fault was not a condition of responsibility."[54]

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2. The origin of the international obligation breached by a State does not affect the international responsibility arising from the internationally wrongful act of that State."

Supra, note 44.

49 See art. 35 of Draft Articles. ***Supra***, note 44.

50 Art. 31 of Draft Articles. ***Supra***, note 44.

51 Art. 32 of Draft Articles. ***Supra***, note 44.

52 Art. 33 of Draft Articles. ***Supra***, note 44.

53 Michael Barton AKEHURST, "International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law", vol. XVI, ***Netherl. Y.B. Int'l L.***, Netherlands, Martinus Nijhoff, 1985, p. 12. Pinto states: "Draft Article 35, last in the series comprising part 1 of the Commission's work on State responsibility, then serves as a device which at once signals the end of the integrated sequence of provisions concerning acts which, evaluated in terms of their wrongfulness, give rise to responsibility, and at the same time transports us to the threshold of a new idea. [...] Thus, certain acts which cause damage, irrespective of their evaluation in terms of wrongfulness, might nevertheless be found to entail compensation, a remedy normally associated with responsibility. The duty to compensate would thus emanate from a source other than the particular breach of a legal obligation and arise through the application of different, though unspecified, legal principles." See M.C.W. PINTO, "Reflection of International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law", vol. XVI, ***Netherl. Y.B. Int'l L.,*** Netherlands, Martinus Nijhoff, 1985, p. 17, at p. 20.

54 See Karl ZEMANEK, "Causes and Forms of International Liability", in Bin CHENG & E.D. BROWN, eds., ***Contemporary Problems of International Law:***

Article 35 of the ILC Draft Articles does not mention that compensation should be paid in respect of reprisals (art. 30) or self-defense (art. 34). This seems to be a correct decision, as Akehurst stated, since it is a well-established rule of international law that there is no duty to pay compensation in respect of reprisals and acts of self-defense falling short of war[55]. This is correct when reprisal, as defined in ***Naulilaa Case***[56], "is an act of self-help by the injured State responding to an act contrary to international law by the offending state"[57], and only if it is a proportionate response to the prior illegality[58]. Otherwise, it is illegal ***pro tanto*** and gives rise to a duty to pay compensation[59].

C. The Modern Concept of Liability: Strict and Absolute Liability for Environmental Injury

One important contemporary development with regard to international State responsibility has been the acceptance of the principle of liability for the created risk. In the context of scientific and technological advances which have drawn humanity towards new activities, States tend to disregard the idea of fault as a basic factor of international wrongful action and do not seek to determine whether their act is in fact negligent[60]. This implies, in cir-

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Essays in Honour of Georg Schwarzenberger On his Eightieth Birthday, Sydney, The Law Book Co., 1988, p. 319, at p. 329.

55 M.B. AKEHURST, ***op. cit.***, note 53, p. 14.

56 ***Naulilaa Case***, (1928) 2 R.I.A.A. 1012.

57 ***Id***.

58 Martin DIXON, ***Textbook on International Law***, 2d ed., London, Blackstone Press, 1993, p. 30, p. 259.

59 M.B. AKEHURST, ***op. cit.***, note 53, p. 14.

60 For this reason, important international agreements specify that civil liability for aviation hazards is not dependent on proof of fault or negligence. Carriers are liable unless liability is disproved on one of certain specified grounds by the carrier. The ***Guatemala Protocol*** contains some fundamental modifications to the Warsaw System. Its main feature is a shift of principle, in that the fault liability at present attaching to the carrier will be changed (art. IV and V) into a risk liability: accordingly, the carrier will be liable also in cases where he bears no fault or blame. ***Protocol to Amend the Convention for the Unification of Certain Rules Relating to International Carriage by Air signed at Warsaw*** on Oct. 12, 1929, as amended by the ***Protocol*** done at the Hague on Sept. 28, 1955, signed at Guatemala on March 8, 1971; ICAO DOC. 8932/2; (1971) 10 ***I.L.M.*** 613.

The 1952 ***Rome Convention on Damage Caused by Foreign Aircraft to Third Parties on the Surface*** embodies the principle of absolute liability (art. 2). This article attaches the liability to the operator of the aircraft within the meaning

cumstances which have been previously defined by international conventions, that a State which causes damage to other States becomes liable for its actions. There is no need to prove that an act has been committed willfully and maliciously, or with culpable negligence or that it is contrary to a rule of international law. However, even if the action that causes damage is not illegal[61], the victim does not have to tolerate the risk of damage resulting from it; a social responsibility is imposed upon the actor[62]. The modern form of liability for activities not prohibited by international law has been developed because of the necessity of reconciling States' freedom to act with the justified fear that the unrestrained exercise of technological and industrial power may destroy humanity.

International obligations impose their requirements on States in different ways. It must be determined whether the responsibility of States for the breach of an international obligation is strict or whether they have a chance to defend themselves. Environmental law, similar to other branches of law, is characterized by rights and duties. Fault or intention are elements which are usually discussed in international environmental law[63] as necessary tools used to impose liability on States.

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of the Convention. It also says, in para. 3, that the owner shall be presumed to be the operator unless he proves that some other person was in control: ***Rome Convention***, (1952) 310 U.N.T.S. 181; ICAO DOC. 7634; [1952] J.A.L.C. 447.

61 Arbour defines "responsibility for risk": "[I]l y a des cas [...] où un État peut encourir une responsabilité a la suite d'activités parfaitement licites; c'est le problème typique de la responsabilité pour risque [...] Un traité international peut, par exemple, faire assumer aux États participants les risques éventuels d'une activité légitime": see J.-M. ARBOUR, ***op. cit.***, note 5, p. 477. In contrary, M.N. Shaw defines "risk" theory as "once an unlawful act has taken place [...] that state will be responsible in international law to the state suffering the damage irrespective of good or bad faith." See Malcolm N. SHAW, ***International Law***, 2d ed., Cambridge, Grotius Publications, 1986, p. 409.

It seems that a basic element in the application of the risk theory is that the activities causing damage are dangerous, but not unlawful.

62 When speaking of objective or absolute responsibility, most writers refer to liability and not to wrongful action. See Riccardo PISILLO-MAZZESCHI, "Forms of International Responsibility for Environmental Harm", in Francesco FRANCIONI and Tullio SCOVAZZI, eds., ***International Responsibility for Environmental Harm***, Great Britain, Graham & Trotman, 1991, p. 15.

63 See Alexander KISS and Dinah SHELTON, ***International Environmental Law***, England, Transnational Publishers, 1991, p. 350.

The term liability in the context of strict liability should be compared to that of fault[64]. It may be said that a State can exonerate itself from strict liability by proving that damage caused to the environment of other States is, for example, justifiable according to the provisions of the ***UN Charter***[65], or that it can be exonerated for wrongful acts on the basis of ***force majeure*** or intervening acts of third persons. These exonerations distinguish strict liability from absolute liability[66]. When certain ***force majeure*** exceptions are permitted, the liability is strict, not absolute.

Many legal systems accept strict liability in certain cases[67]. In the common law system, strict responsibility for environmental damage has emerged as seen in ***Rylands*** v. ***Fletcher***[68], in which the defendants were held liable without proof of their fault for harm caused when water escaped from a reservoir on their land and caused damage to the other party. However, it was lawful for the defendants to build a reservoir on their land. Strict liability is

64 Brownlie states that "[i]n truth the division between fault liability and strict liability is not as sharp as it is said to be in the textbooks of municipal law." See I. BROWNLIE, ***op. cit.,*** note 4, p. 476. Fleming states that strict liability is not always equivalent to liability without fault: see Jonh G. FLEMING, ***An Introduction to the Law of Torts***, Sydney, Law Book, 1979, pp. 158 and 159.

65 ***Charter of the United Nations*** (San Francisco), 1 U.N.T.S. xvi; (1946) U.K.T.S. 67; (1945) Am. J. Int. Law, Supp. 190. In force Oct. 24, 1945.

66 The regime of strict responsibility has been incorporated in several multilateral conventions treating issues of environmental injury. Goldie has discussed the distinction between strict and absolute liability in the context of environmental damage. See L.F.E. GOLDIE, "Liability for Damage and the Progressive Development of International Law", (1965) 14 ***I.C.L.Q.*** 1189, 1201-1220.

67 See J. SCHNEIDER, "State Responsibility for Environmental Protection and Preservation", in Richard FALK, Friedrich V. KRATOCHWIL and Saul H. MENDLOVITZ, eds., ***International Law, A Contemporary Perspective***, Boulder, Westview Press, 1985, p. 602, at p. 618; A. SPRINGER, The ***International Law of Pollution: Protecting the Global Environment in a World of Sovereign States***, Westport, Quorum Books, 1983, p. 130; L.F.E. GOLDIE, "Concepts of Strict and Absolute Liability and the Ranking of Liability in Terms of Relative Exposure to Risk", (1985) vol. XVI, ***N.Y.I.L.*** 175, 247.

68 (1968) L.R. 3 H.L. 330. McDougal, Lasswell and Valsic stated: "[A] liability approaching absolute for ultrahazardous activities is not a new concept and is now widely accepted in many mature systems of law. Its most authoritative base in Anglo-saxon law is commonly associated with the famous English case ***Rylands*** v. ***Fletcher***, and ordinarily generalized as holding that one who engages in an activity, or maintains a condition, involving an extraordinary degree of risk of harm to others is absolutely liable for the loss it causes." See Myres S. McDOUGAL, Harold D. LASSWELL and Yvan A. VLASIC, ***Law and Public Order in Space***, New Haven, Yale University Press, 1963, p. 616.

also found in many cases in the civil law system, especially in those of ultra-hazardous activities[69].

1. International Conventions

The theories of strict and absolute liability have evolved through international treaties incorporating relevant international doctrines. Some multilateral conventions[70] contain rules creating absolute or strict liability for operations which harm the environment. Article II of the ***Convention of International Liability for Damage Caused by Space Objects***[71] states: "A launching State shall be absolutely liable to pay compensation for damage caused by its space object on the surface of the earth or to aircraft in flight." This is an example of ***sine delicto***. It does not provide that States have duty not to cause damage, but they must pay for the damage which their space objects cause[72]. Absolute liability in this article is not equivalent to strict liability which is usually used to signify liability without fault. Article III of this Convention provides a form of fault responsibility for other kinds of damage.

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69 See Frederick Henry LAWSON and B.S. MARKESINIS, ***Tortious Liability for Unintentional Harm in the Common Law and Civil Law***, Cambridge, Cambridge University Press, 1982, c. 4.

70 See SCHNEIDER, ***op. cit.,*** note 67, pp. 616-619. A number of international multilateral agreements, which discuss liability in the field of nuclear energy are: ***Convention on Third Party Liability in the Field of Nuclear Energy***, Paris, July 29, 1960, (***Paris Convention***) in (1960) 8 Eur. Y.B. 202; (1968) U.K.T.S. 69, Cmd. 3755, 55 Am. J. Int. Law 1082; ***Convention on the Liability of Operators of Nuclear Ships***, Brussels, May 25, 1962, ***(Brussels Convention on Nuclear Ships***), (1963) 57 Am. J. Int. Law 268, art. 2; ***Convention Supplementary to the (OEEC) Paris Convention***, 1960, Brussels, January 31, 1963, 2 I.L.M***.*** 685; ***International Convention on Civil Liability for Nuclear Damage***, Vienna, May 21, 1963 (***Vienna Convention***), (1963) 2 I.L.M***.*** 727; Misc. 9 (1964), 2333, art. 4. Goldie argues that "[t]he concept of absolute liability developed in the nuclear liability treaties, more effectively than any other concept presented so far, prevents the creator of a risk from passing that risk on to the public and thus expropriating wealth and security from other people." See L.F.E. GOLDIE, "International Principles of Responsibility for Pollution", (1970) 9 ***Colum. J. Transnat'l L.*** 283.

71 ***Convention on International Liability for Damage Caused by Space Objects***, GA Res. 2777, UN GAOR, 26th Sess., Supp. No. 29, p. 25 (UN DOC. A/8528 (1971); 1975 Can. T.S. No. 7; 961 U.N.T.S. 187 (in force 1972).

72 See M.B. AKEHURST, ***op. cit.***, note 53, p. 10.

2. The Case Law

There are only a few significant international cases which can be considered in a discussion of strict and absolute liability. These cases provide little support for strict liability. The Dogger Bank Dispute (1904)[73] is an example of strict liability in public international law[74]. The Commissioners unanimously recognized that the vessels of the Russian fishing fleet did not commit any hostile act. Furthermore, the majority of Commissioners were of the opinion that the opening of fire by Admiral Rojdestvensky was not justifiable. Therefore, they relied on objective international responsibility.

The ***Gut Dam*** Arbitration[75] between the United States and Canada is another clear example which illustrates State responsibility. The tribunal adopted a standard of strict liability when it determined that Canada was responsible for all damages resulting from flooding by the dam built between Adams Island in Canadian territory and Les Galops in the United States. The tribunal was not interested in discussing fault, negligence, or whether Canada had anticipated possible damages which may have resulted from flooding by the dam[76].

Other important cases which point to the emergence of strict liability as a principle of public international law, in the view of some authors[77], are ***Trail Smelter Case*** (1911)[78], ***Corfu Channel Case*** (1949)[79], ***Lac Lanoux Case*** (1957)[80], ***Gut Dam*** arbitration

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73 In the Dogger Bank Incident, between Great Britain and Russia (1904), the Commission of Inquiry followed the rule that the existence of a mistake would not free the wrongdoer from liability (***U.K***. v. ***U.S.S.R.,*** 1905), Finding Report Feb. 26. 1905, The Hague Court Reports, New York, Oxford University Press, pp. 403-410.

74 See also the ***Panay Case*** (***U.S***. v. ***Japan***). On Dec. 12, 1937, on the Yangtze River, the U.S.S. Panay, a river gunboat, and eleven American merchant vessels and craft, property of the Standard Vacuum Oil Company, were attacked by Japanese aircraft. The Japanese Foreign Office indicated that the attack was a mistake. In this case, the Japanese government indemnified all the losses and dealt appropriately with those responsible for the incident. See Green Haywood HACKWORTH, ***Digest of International Law***, vol. V, Washington, U.S. Government Printing Office, 1943, p. 687.

75 (1969) I.L.M. 118, 133-42; 7 Can. Y.B. Int'l L. 316-18.

76 See SCHNEIDER, ***op. cit.***, note 67, pp. 616-619.

77 ***Id.,*** pp. 616-625.

78 (1931-41) 3 UN R.I.A.A. 1905.

79 (***U.K***. v. ***Albania***), (1949) I.C.J. 4 (merits).

(1968)[81], ***Juliana Ship Case***[82], ***Mura River Case***[83] and ***Cherry Point Case***[84]. The ***Trail Smelter Case*** and the ***Corfu Channel Case*** are almost identical in that they uphold the duty of every State not to cause damage to the environment of another State. Wilfred Jenks[85] states that since the tribunal in the ***Trail Smelter Case*** clearly implied that the liability arose from the inherently dangerous nature of the operations of the smelter, this is "a true case of liability for ultra-hazardous activities without proof of fault or negligence."[86] In the ***Corfu Channel Case***, it might be argued that Albania's responsibility to Great Britain arose, among other reasons, from its knowledge of a dangerous situation. The responsibility of Albania was based on its unlawful omission. The Court, by examining whether the Albanian government was aware of the danger and whether it could have warned the British convoy, raised the question of whether Albania had caused the damage from lack of due diligence. Decisions of the Court in both the ***Corfu Channel Case*** and ***Trail Smelter Case*** raise different issues. Some authors believe that these cases can be taken as proof of the acceptance of objective responsibility[87].

3. State Practice

It is evident that responsibility for environmental harm is now accepted in international customary law. At the same time, it appears that different forms of responsibility have been accepted in

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80 (***Spain*** v. ***France***), (1957)12 U.N.R.I.A.A. 281; (1959) 53 Am. J. Int. Law 156.

81 See (1969) 8 I.L.M. 118, 133-142; (1969) 7 Can. Y.B. Int'l L**.** 316-318.

82 See Gunther HANDL, "State Liability for Accidental Transnational Environmental Damage by Private Persons", (1980) 74 ***Am. J. Int. Law*** 525, 547.

83 Misc. 159, 57, 287 N.Y.S. 541, 552.

84 See G. HANDL, ***loc. cit.***, note 82, 544 and 545.

85 See Wilfred JENKS, "Ultra-hazardous Liabilities", ***Recueil des Cours***, vol. 117, Leyde, A.W. Sijthoff, 1966, p. 122.

86 ***Id***.

87 See GOLDIE, ***loc. cit.***, note 70, at 306. M. Kelson states "[i]f the state knows that an abnormally dangerous activity exists within its jurisdiction, it must prevent any harm resulting from that activity which would damage another State. If the State fails to prevent such harm, it is originally responsible, regardless of fault, for the damage suffered by other States." See J.M. KELSON, "State Responsibility and the Abnormally Dangerous Activity"**,** (1972) 13 ***Harv. Int'l L.J.*** 198, 236 and 237. Some respected writers have viewed the ***Corfu Channel Case*** as an acceptance of "***culpa*** theory". See for example L. OPPENHEIM, ***op. cit.***, note 2, p. 343.

international practice, depending on the circumstances of a particular case. There are several examples of State responsibility establishing strict or absolute liability for environmental injury. For example, the 1972 ***Liability Convention***[88] was directly relevant to Canada's claim in the Cosmos 954 incident. On January 24, 1978, debris from a Soviet spacecraft fell on Canadian soil. Most of the fragments were radioactive. The Canadian government informed the Soviet Union that it would submit a claim for damages, including environmental clean-up costs, caused by Cosmos 954. In its note, Canada invoked, ***inter alia***, the 1972 ***Liability Convention*** to which both Canada and the U.S.S.R. were parties. The U.S.S.R.'s willingness to pay a part of Canada's claim was recognition of its absolute responsibility[89].

An interesting example in State practice of strict responsibility for environmental injury is the Liberian tanker ***Juliana Incident***[90]***.*** In this case, there was no declaration of fault on the part of Liberia in the allegation of liability by the flag State, but the Liberian government offered 200 million yen in compensation[91]. There are different cases in State practice which confirm State responsibility for wrongful acts owing to lack of due diligence. The dispute between Australia and France over French nuclear tests in the Pacific[92] is an example of State responsibility for a wrongful act. The Australian government in paragraph 49 of its application before the International Court of Justice claimed that "the interference with ships and aircraft on the high seas and in the subjacent airspace, and the pollution of the high seas by radioactive fall-out constitute infringements of the freedom of the high seas."[93] The Government of Australia did not seek an award for damages but the first element of its claim was that atmospheric

88 The "1972 Convention on International Liability for Damage Caused by Space Objects", (1971) 10 ***I.L.M***. 965.

89 (1979) 18 ***I.L.M***. 899. See Nicolas Mateesco MATTE, ***Space Activities and Emerging International Law***, Canada, McGill University, 1984, pp. 100 and 101; FINCH and MOORE, "The Cosmos 954 Incident and International Space Law", (1979) 65 ***A.B.A. J.*** 56; Peter P.C. HAANAPPEL, "Some Observations on the Crash of Cosmos 954", (1978) 6 ***J. Sp. L.*** 147; B.D. SMITH, ***op. cit.,*** note 12, p. 116.

90 See HANDL, ***loc. cit.***, note 82, 530.

91 For another example in State practice on strict responsibility, see B.D. SMITH, ***op. cit.***, note 12, pp. 114-118.

92 ***Nuclear Test Case (Australia*** v. ***France)***, (1974) I.C.J. Rep. 253-457.

93 ***Id.,*** I.C.J. Pleadings 43.

nuclear testing was unlawful under a general rule of international law[94].

An overall examination of judicial decisions and State practice concerning strict and absolute responsibility reveals a number of cases where a strict liability standard has been applied for transboundary damages. It demonstrates that States accept strict responsibility in certain cases but not all. The examples given in this section reflect this attitude in international law. For example, States that are party to the conventions mentioned in this section have agreed to establish uniform rules of law governing responsibility for environmental damage. Commentators have also argued that the principle of strict liability has no place in customary international law but applies only in circumstances which are clearly referred to in international agreements[95]. The ILC, which has made significant progress in its study of international liability, seems to have the same idea. Its Schematic Outline adopted a complex balancing test to determine when one State must compensate another for transborder harm. It, begins, however, by supposing that loss or injury alone holds States liable for their actions[96]. The ILC indicated that strict liability would be appropriate for certain activities which may cause serious transboundary damage. In fact, the ILC implied that the application of strict liability to dangerous activities is a development of current State practice, under which strict liability is sometimes accepted by the State itself or is imposed on the conductor of an activity[97]. The Schematic Outline contains a "compound 'primary' obligation" including four duties: to prevent, inform, negotiate and repair[98]. According to this, the source State has to take "measures of prevention that as far as possible avoid a risk of loss or injury."[99] According to the final level of duty, if there is no conventional regime agreed upon and if damage occurs, the States involved must negotiate in good faith to determine their "rights and obli-

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94 ***Id***.

95 See Jillian BARRON, "After Chernobyl: Liability for Nuclear Accidents Under International Law", (1987) 25 ***Colum. J. Transnat'l L.*** 647, 660.

96 See Schematic Outline, ***ILC Yearbook 1984***; J. BARRON, ***op. cit.***, note 95, p. 659.

97 ***Id***. Robert QUENTIN-BAXTER, Fourth Report, A/CN.4/373, p. 205.

98 Schematic outline, ***ILC Yearbook 1984***, vol. II, p. 155, s. 5, art. 2.

99 ***Id***., s. 2, art. 1 and 3.

gations", and reparations shall be made unless "it is established" that making reparation does not accord with their "shared expectations."[100] Margraw states that "the duty to make reparations [...] is not equivalent to a rule of strict liability, but it approaches, and may be identical to, strict liability if the harm was unpredictable or if the harm was predictable and the source State ignored the first three duties completely."[101]

D. The ILC Work on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law

1. Introduction

International environmental law was primarily organized to regulate some traditional activities that might cause problems to other States, such as the use and regulation of boundary waters that traverse the territories of several States, the exploration of land in border areas and the transfrontier pollution of fresh water.

While the harm caused by these activities could be considerable, the classic responsibility perspective paid little attention to absolute liability for injuries sustained by innocent victims. Scientific and technological advances which might spell the ruin of mankind have obliged the international community to look for new ways to fill the gap. According to the newer concept of liability, loss or injury suffered as a result of ultra-hazardous activities is the central constituent of State responsibility. In this form of liability, due diligence does not provide any exemption from reparation for damage caused[102].

Modern proposed form of State responsibility is different from those which existed in the past. Jenks has proposed that the UN General Assembly adopt a "Declaration of Legal Principles Governing Ultra-Hazardous Activities" in the same authoritative

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100 ***Id.***, s. 4, art. 1 and 2.

101 See D. Barstow MARGRAW, "The Transboundary Harm: The International Law Commission's Study of International Liability", (1986) 80 ***Am. J. Int. Law*** 305**,** 313.

102 M. BEDJAOUI, ***op. cit.***, note 10, p. 360.

manner as the ***Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space***, unanimously adopted by the UN General Assembly on December 13, 1963[103]. The form of responsibility proposed is of conventional origin[104], in which liability results from the fact of injurious consequences without there being any need to qualify the act that gave rise to them.

The existence of ultra-hazardous though legal activities has led the drafters of international agreements to adopt solutions for compensating damage resulting from lawful activities. The ILC, in its work codifying the general rules of liability for acts not prohibited by international law[105], followed the same idea[106]. It has developed a novel regime based not on the notion of fault or a wrongful act but on the requirements of compensation for harm as an equitable balance of interests that allows the ultra-hazardous activities to continue[107]. The ILC regime applies to hazardous activities as well as to the harmful transboundary environmental effects of lawful activities. Although Quentin Baxter suggested that the topic should "be limited to the field of the environment", different questions regarding the scope of the topic were discussed by the commission. For example, if States are liable for transboundary harm arising from private corporate activities, should the liability of States go beyond environmental matters to cover economic and monetary or even medical and biological research activities? Or should a State be liable if a corporation based in it exports dangerous materials to developing States (e.g. the Bhopal disaster in India in which thousands of people were killed and injured)[108]? Thus, a full analysis of ILC work on liability for lawful activities is beyond the scope of our study, but a brief survey and a few comments are in order.

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103 See W. JENKS, ***op. cit.***, note 85, pp. 193-196.

104 M. BEDJAOUI, ***op. cit.***, note 10, p. 360.

105 The ILC worked on the topic of "International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law" (hereinafter the topic).

106 See Karl ZEMANEK, "Responsibility of State: General Principle", vol. 10, ***Encyclopedia of Public International Law***, North Holland: Published under the Auspices of the Max Planack Institute, 1982, p. 362, at p. 366.

107 See Robert QUENTIN-BAXTER, ***ILC Yearbook 1981,*** vol. II, Part 1, pp. 112-122.

108 ***Id***.

2. Historical Overview

In 1963, a report of the subcommittee recommended that the ILC's study shifts from State responsibility for injuries to aliens to a review of the general rules of State responsibility[109]. The report in one of its footnotes stated that "the question of possible responsibility based on "risk", in cases where a State's conduct does not constitute a breach of an international obligation, may be studied in this connection."[110] Roberto Ago, as special rapporteur, and his successor, Williem Riphagen, took the view that their mandate was to study the general rules of State responsibility rather than specifically liability for lawful activities[111].

In 1977, the UN General Assembly invited the ILC to work on the topic of international liability for injurious consequences arising out of acts not otherwise prohibited by international law[112]. In 1978, the Commission appointed Robert Quentin-Baxter as special rapporteur. He produced five reports, the last in 1984[113]. The most important of these was the "Schematic Out-

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109 "Report of the subcommittee on State responsibility to the ILC", UN DOC. A/CN.4/152 (1963); ***ILC Yearbook 1963,*** vol. II, pp. 227 and 228; D. B. MARGRAW, ***loc. cit.***, note 101, 306.

110 ***ILC Yearbook 1963***, vol. II, p. 228, No. 3.

111 "Second Report on State Responsibility", ***ILC Yearbook 1970***, vol. II, 178, para. 6; (1973), I, 14, paras. 4 and 5; Christian TOMUSCHAT, "International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law: The Work of the International Law Commission", in Francesco FRANCIONI and Tullio SCOVAZZI, eds., ***op. cit.***, note 62, p. 37, at p. 38. Judge E. Jiménez de Aréchaga stated that "the international law commission wisely decided not to codify the topic of state responsibility for unlawful acts and the rules concerning the liability for risks resulting from lawful activities simultaneously, for the reason that a joint examination of the two subjects could only make both of them more difficult to grasp." See E. JIMÉNEZ DE ARÉCHAGA, ***op. cit.***, note 7.

112 Resolution 32/151 of Doc. 19/1977, para. 7. See M.B. AKEHURST, ***op. cit.***, note 53, p. 3.

113 Robert QUENTIN-BAXTER's ***Preliminary Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law***, UN DOC. A/CN./4/ 334 and Adds. 1-2 (1980); ***Second Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law***, UN DOC. A/CN.4/346 and Adds. 1-2 (1981); ***Third Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law***, UN DOC. A/CN.4/360 and Corr. 1 (1982); ***Fourth Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law***, UN DOC. A/CN.4/373 and Corr. 1 (1983); ***Fifth Report on International Liability for Injurious Consequences Arising out of Acts Not Prohibited by International Law***, UN DOC. A/CN.4/383 and Add. 1 (1984).

line" attached to the third report and re-submitted with proposed changes in the fourth report, which disclosed the direction in which the Special Rapporteur intended to lead the ILC[114].

Quentin-Baxter summarized the aim of the "Schematic Outline" as follows:

> ***The first aim of the present topic is (1) to introduce States that foresee a problem of transboundary harm to make a regime consisting of a network of simple rules that yield reasonably clear answers; and those simple rules may be rules of specific prohibition, or rules of authorization subject to specific guarantees. (2) The second aim of the present topic is to provide a method of settlement that is reasonably fair, and that does not frighten States, when there is no applicable or agreed regime. That involves the possibility that liability will be apportioned – or*** [***...***] ***that the affected States must bear the whole burden of substantial physical transboundary harm – if the applicable principles and factors modify, or cancel out, the presumption that the source State should repair transboundary harm.***[115]

In 1985, Julio Barboza was appointed Special Rapporteur. He decided to pursue the topic by using the Schematic Outline as the most important material, subject to certain basic changes[116]. He revised the introductory articles proposed by Quentin-Baxter adding a number of general principles to them[117].

3. The Schematic Outline

The Schematic Outline defines its scope in section 1 as "[a]ctivities within the territory or control of a State which give rise or may give rise to loss or injury to persons or things within the territory or control of another State"[118]. The topic covers all physical uses of territory which give rise to adverse physical transboundary effects in another State. Injury to a State's prop-

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114 ***ILC Yearbook 1984***, vol. II, p. 155.

115 Fourth Report, A/CN.4/373, para. 69, quoted in M.C.W. PINTO, ***op. cit.***, note 53, p. 35.

116 See Julio BARBOZA's Preliminary Report, ***ILC Yearbook 1985***, vol. II, Part 1, p. 100, para. 14.

117 Julio BARBOZA's Fourth Report, UN DOC. A/CN.4, 413, April 6, 1988, 8, para. 17.

118 Third Report of June 23, 1982, UN DOC. A/CN.4/360 and corr. 1, reproduced in ***ILC Yearbook 1982***, vol. II, Part 2, p. 83 et seq.

erty is thus included but harm to ***terra nullius*** or harm done to an international organization is not[119].

Use of "territory or control" includes:

> ***any activity which takes place within the substantial control of the State; and any activity conducted on ships or aircraft of the acting State, or by nationals of the acting States, and not within the territory or control of any other State, otherwise than by reason of the presence within that territory of a ship in course of innocent passage, or an aircraft in authorized overflight.***[120]

Ago and Riphagen distinguished between a State's "primary" obligations, described as "rules imposing on States, in one or another sector of inter-state relations, obligations the breach of which can be a source of responsibility" and "secondary" obligations, defined as those which "purport to determine the legal consequences of failure to fulfil obligations established by the "primary" rules."[121] Quentin-Baxter in the Schematic Outline abandoned the dual obligation concept and tried to construct a single obligation concept as a "compound primary obligation". This consists of a series of four duties, namely, to prevent, to inform, to negotiate and to make reparation. The source State is required to take "measures of prevention that, as far as possible, avoid a risk of loss or injury."[122]

The second duty of the source State is to provide the affected state "all relevant and available information, including a specific indication of the kind and degree of loss or injury that it considers to be foreseeable."[123] The source State can withhold any relevant information for reasons of national or industrial security[124]. However, to the extent that a source State has failed to provide information that should be accessible to the affected State concerning the nature and effects of an activity, the affected State shall be allowed liberal recourse to fact and circumstantial evi-

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119 See D.B. MARGRAW, ***loc. cit.***, note 101, 311.

120 The Schematic Outline, ***ILC Yearbook 1984***, vol. II, p. 155.

121 Report of the ILC to the General Assembly, 31 UN GAOR Supp. No. 10, p. 165, UN DOC. A/31/10 (1976); ***ILC Yearbook 1976,*** Part 2, p. 1, 71; D.B. MARGRAW, ***loc. cit.***, note 101, 306 and 307.

122 The Schematic Outline, c. 5, art. 2. ***ILC Yearbook 1984***, vol. II, 155.

123 ***Id.,*** s. 2, art. 1.

124 ***Id.,*** s. 2, art. 3.

dence in order to determine whether the activity does or may give rise to loss or injury[125].

The third stage of duty incumbent on the source State is its obligation to "enter into negotiations" at the request of any source or affected State in order to consider whether a conventional regime is necessary to deal with the situation[126].

Failure to comply with these three duties, however, does not give rise to a right of action[127].

The fourth level of duty is that, if harm occurs, reparation shall be made by the acting State in respect of any such loss or injury unless it is established that the making of reparation is not "in accordance with the shared expectations of these states."[128]

II. Criminal Responsibility for Environmental Injury

The term "ecocide"[129] coined to describe the use of defoliants in Vietnam, is used to categorize the various forms of massive destruction of the environment in time of war. Although the term is new, the employment of means of destruction is as old as history itself. Teclaff contends that the term may justifiably be applied to peaceful activities that destroy the environment on a massive scale[130]. Many environmental treaties provide for penal

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125 ***Id.,*** s. 5, art. 4.

126 ***Id.,*** s. 3, art. 1(***c***).

127 D.B. MARGRAW, ***loc. cit.***, note 101, 311 and 312.

128 The Schematic Outline, s. 4, art. 2. ***ILC Yearbook 1984***, vol. II, 155.

129 The term "ecocide" has already passed into general, non-military usage as suggested by the dictionary definition: "The destruction of large areas of the natural environment by such activity as nuclear warfare, over exploitation of resources or dumping of harmful chemicals." ***Random House Dictionary of the English Language***, 2d ed., 1987.

130 See Ludwik A. TECLAFF, "Beyond Restoration – the Case of Ecocide", (1994) 34 ***Nat. Resources J.*** 933, 934. There are some situations for which States have agreed to take appropriate measures to prevent and punish acts harmful for the environment. This is the case in the vast majority of conventions covering trade in hazardous and other wastes, illegal fishing, marine pollution and trade in or possession of endangered species. Some of these conventions are: 1973 ***MARPOL Convention***, art. 4(2), 4(4), UN Legislative Series ST/LEG/SER.B/18, at 461; (1983) U.K.T.S. 27, Cmd. 8924; (1973) 12 I.L.M. 1319; 1972 ***London Dumping Convention***, art. 6(2), 26 U.S.T. 2403, T.I.A.S. 8165, amended Oct. 12, 1978, T.I.A.S. No. 8165, (1979) 18 I.L.M. 510; 1974 ***Paris Convention for the Prevention of Marine Pollution from***

sanctions against those who violate their provisions. Proposals come from the halls of academia. Berat, for example contends that "it is through enforcement of such a crime that states and individuals will be able to ensure greater respect for the right to a healthy environment."[131] He calls this crime "geocide" and states that a ***per se*** international crime of "geocide" is evolving[132]. Yuzon suggests that the language of "geocide" would have to expand upon the definition of genocide and borrow language from the 1948 ***Convention on Prevention and Punishment of Genocide***[133]***.***

Criminalizing environmentally harmful conduct may be justified because many environmental problems affect common property such as the atmosphere, the oceans, and natural resources which are available for reasonable use by all States. The environment is not protected by private vigilance. Criminalization of environmentally harmful conduct is an attempt to compensate for acts which offend the public interest; it also encourages compliance with laws or regulations that would otherwise be largely ignored and thus discourages acts which are particularly harmful to society.

Land-Based Sources, art. 12(1); 1982 UNCLOS, art. 217(8), 230, ***UN Convention on the Law of the Sea (Montego Bay***) UN DOC. A/Conf.62/122 (1982), Misc. 11 (1983) Cmd. 8941; (1982) 21 ***I.L.M***. 1261, concluded at Montego Bay, Jamaica, on Dec. 10, 1982, entry into force on Nov. 16, 1994, in accordance with art. 308 (1). Status: Signatories: 158. Parties: 106.

131 See L. BERAT, "Defending the Right to a Healthy Environment: Toward a Crime of Genocide in International Law", (1993) 11 ***Boston U. Int'l L.J.*** 327, 339.

132 ***Id***., 342 and 343.

133 ***Convention on Prevention and Punishment of Genocide,*** Dec. 9, 1948, 78 U.N.T.S. 277 (entered into force Jan. 12, 1951). According to the Convention, "genocide means any of the following acts committed with the intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such: (***a***) Killing members of the group; (***b***) Causing serious bodily or mental harm to members of the group; (***c***) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part; (***d***) Imposing measures intended to prevent births within the group; (***e***) Forcibly transferring children of the group to another group." Art. II. "[Genocide] whether committed in time of peace or in time of war, is a crime under international law which [the contracting parties] undertake to punish": Art. I. Persons charged with genocide "shall be tried by a competent tribunal of the State in the territory of which the act was committed, or by such international penal tribunal as may have jurisdiction with respect to those Contracting Parties which shall have accepted its jurisdiction." Art. VI. According to the Convention the following acts shall be punishable: (***a***) Genocide; (***b***) Conspiracy to commit genocide; (***c***) Direct and public incitement to commit genocide; (***d***) Attempt to commit genocide; (***e***) Complicity in genocide: Art. III.

A. ILC Draft Articles on State Responsibility

Some commentators doubt whether there is any need to separate State responsibility into civil and criminal liability. They reason that the consequences for civil and criminal liability are not different. This was part of the debate which took place from 1960 to 1963 and from 1967 to 1970 in the ILC. Among the points considered was the possible distinction between those international wrongful acts involving merely a duty to make reparation and those involving the application of sanctions[134]. The possible basis for such a distinction was also considered[135]. The commission decided to base its Draft Articles on wrongful acts, all recognized as such by the international community[136].

In 1979, however, the ILC adopted article 19 (in Part I) of its Draft Articles on State responsibility and for the first time tried to determine duties and obligations of States, the violation of which would be considered an international crime[137]. This article identifies as an international crime the serious breach by a State of an obligation essential to the protection of fundamental interests of the world community, including peace and security of human rights, and the safeguarding and preservation of the human environment. Paragraph 3(***d***) explicitly states that an "international crime" may result, ***inter alia***, "from a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment such as those prohibiting massive pollution of the atmosphere or of the seas."[138] Article 19 equates and links the safeguarding and preservation of the human environment (paragraph 3(***d***)) to the maintenance of international peace and security (para. 3(***a***)) and to the safeguarding of human beings (para. 3(***c***)). The view has been given by some ILC members that paragraph 3(***d***) might be premature in

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134 Members of the ILC could not agree on how to sanction States that committed international crimes. ***2 I.L.C. Yearbook 1976,*** Part 2, p. 108.

135 ***ILC Yearbook 1963***, vol. II, p. 228.

136 Marina SPINEDI, "International Crimes of States; The Legislative History", in J.H.H. WEILER, ***infra,*** note 141, pp. 1-141.

137 See J.H.H. WEILER, ***infra,*** note 141, pp. 362-372.

138 ILC Draft Articles on State Responsibility, Part I, "Report of the ILC on the work of its thirty-second Session", May 5-July 25, 1980, UN DOC. A/35/10: ***ILC Yearbook 1980,*** vol. II, Part 2.

terms of achieving community recognition[139]. This ILC Draft Article does not define "massive pollution" of the atmosphere or of the seas. This term should be defined in order to protect the environment more efficiently[140].

The ILC, by defining an "injured State", is suggesting that every member[141] of the international community is injured if the

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139 See "Report of the Commission to the General Assembly on the work of its forty-fifth Session", ***ILC Yearbook 1993***, vol. II, Part 2, UN DOC. A/CN.4/SER.A/1993/Add. 1 (Part 2), UN Sales No. E.95.V.4 (Part 2), pp. 49-53; Mark Allan GRAY, "The International Crime of Ecocide", 26 ***Cal. W. Int'l L.J.*** 215, 267.

140 A/C.6/31/SR.17, para. 10 (the US); ***Id***., SR.24, para. 73, and ***ILC Yearbook 1981***, vol. II, Part 1, p. 75; A/C.6/31/SR.18, paras. 37 and 38 (UK); See J.H.H. WEILER, ***infra***, note, 141, p. 61. Inclusion of the acts mentioned in art. 19.3(***d***) did not receive support from all States. It was expressly approved by only Mongolia and Mexico. States such as the U.S., the UK, Federal Republic of Germany, China, Egypt, Hungary, Indonesia, Syria and the former U.S.S.R. criticized this subparagraph. Some of these States based their criticism on the view that aggression (art. 3 (***a***)) and pollution (art. 3(***d***)) could not be put in the same category. ***Id***.

141 This is a different kind of liability since normally the directly affected State is considered an "injured State" and supposed to take measures against the wrongdoer. See M. DIXON, ***op. cit.***, note 58, p. 200. Some authors believe that "beyond the case of International crimes, there are no internationally wrongful act having an ***erga omnes*** character." See Fourth Report of GRAEFRATH, Doc. A/CN.4/366/Add. 1, p. 12, quoted in Giorgio GAJA, "Obligations ***Erga Omnes***, International Crimes and ***jus cogens***: A Tentative Analysis of Three Related Concepts", Joseph H.H. WEILER, ***International Crimes of State, A Critical Analysis of the ILC's Draft Article 19 of State Responsibility,*** Berlin, Walter de Gruyter, 1989, p. 157. Graefrath did not accept that the ***erga omnes*** construction leads to the development of an international criminal responsibility. See Bernard GRAEFRATH, "International Crimes – A Specific Regime of International Responsibility of States and Its Legal Consequences", in J.H.H. WEILER, ***Id.,*** p. 161, at p. 163. The International Court of Justice, in the ***Barcelona Traction Case***, (1970) I.C.J. Rep. 32, para. 33, used the concept of obligation ***erga omnes***. The Court then referred to "obligations of a State towards the international community as a whole: that is, to obligations which by their very nature [...] are the concern of all States". The Court stated: "In view of the importance of the rights involved, all States can be held to have a legal interest in their protection; they are obligations ***erga omnes***. [...] when one such obligation in particular is in question, in a specific case [...] all States have a legal interest in its observance." (para. 35). G. GAJA, ***Id.,*** pp. 151-154. Article 1 of the four ***Geneva Conventions*** of Aug. 12, 1949 (***infra***, note 259), for the protection of victims of war may meet the same requirement: ***erga omnes*** type of responsibility. A broad definition of this article has been suggested by the International Committee of Red Cross: "The contracting parties should not be content merely to apply its provisions themselves, but should do everything in their power to ensure that the humanitarian principles underlying the Convention are applied universally". See Commentary to the ***Geneva Conventions*** of Aug. 12, 1949: The ***Geneva Convention Relative to the Protection of Civilian Persons in Time of War*** (O. UHLER and H. COURSIER,

international wrongful act constitutes an international crime (Draft Article 5.3, part II). Draft Article 4 provides that the legal consequences of an international crime will be based on the provisions and procedures of the ***UN Charter*** relating to the maintenance of international peace and security. Draft Articles 14 and 15 identify the collective action which may be taken against a State which has committed an international wrongful act.

B. Crimes Against the Peace and Security of Mankind

The UN General Assembly, in Resolution 177 (II) of November 21, 1947, requested the ILC to: (a) "formulate the principles of international law recognized in the Charter of the Nuremberg Tribunal and in the Judgement of the Tribunal; and (b) prepare a Draft Code of offences against the peace and security of mankind."[142]

In 1950, the ILC adopted a formulation of the principles of international law recognized in the Charter of the Nuremberg Tribunal and in its judgement submitted them to the UN General Assembly. The Commission submitted, at its sixth session, in 1954, a Draft Code of Offences Against the Peace and Security of Mankind to the UN General Assembly[143].

On December 10, 1981, the UN General Assembly, in resolution 36/106, invited the ILC to take duly into account the progressive development of international law and to elaborate the Draft Code, and to give it priority in its study[144]. The ILC, from its 35th session, in 1983, to its 43d session, in 1991, received nine reports from its Special Rapporteur. In 1991, at its 43d session,

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eds., 1958), quoted in Theodor MERON ***Lex Lata***: "Is There Already a Differentiated Regime of State Responsibility in the ***Geneva Conventions***?", in J.H.H. WEILER, ***Id.,*** p. 228.

142 UN General Assembly, Resolution 177 (II) of Nov. 21, 1947.

143 ***ILC Yearbook 1982***, vol. II, Part 2, p. 121.

144 ***ILC Yearbook 1983***, vol. II, Part 1, p. 137, doc. A/CN.4/364; ***ILC Yearbook 1984***, vol. II, Part 1, p. 89, doc. A/CN.4/377; ***ILC Yearbook 1985***, vol. II, Part 1, doc. A/CN.4/387; ***ILC Yearbook 1986***, vol. II, doc. A/CN.4/398; ***ILC Yearbook 1987***, vol. II Part 1, doc. A/CN.4/404***; ILC Yearbook 1988***, vol. II, Part 1, doc. A/CN.4/411; ***ILC Yearbook 1989***, vol. II, Part 1, doc. A/CN.4/419 and Add. 1 and Corr. 1 and 2 (Spanish only); ***ILC Yearbook 1990***, vol. II, Part 1, doc. A/CN.4/430 and Add. 1; ***ILC Yearbook 1991***, vol. II, Part 1, doc. A/CN.4/435 and Add. 1 and Corr. 1.

the ILC adopted, on first reading, the Draft Articles of the Draft Code of Crimes against the Peace and Security of Mankind[145].

The Working Group, examining the issue of willful and severe damage to the environment, proposed to the 48th session of the ILC that such an occurrence be considered either as (i) a war crime, or (ii) a crime against humanity, or (iii) a separate crime against the peace and security of mankind. The ILC decided to refer to the Drafting Committee only the text prepared by the Working Group that described willful and severe damage to the environment as a war crime. From June 6 to July 5, 1996, the ILC adopted the final text of a set of 20 Draft Articles constituting the code of crimes against the peace and security of mankind[146].

The seventh category of war crimes addressed in subparagraph (***g***) of article 20 of the ILC Draft Article covers war crimes which have their basis in articles 35 and 55 of the 1977 ***Geneva Protocol I***[147]***.*** It reads: "[A]ny of the following war crimes constitutes a crime against the peace and security of mankind when committed in a systematic manner or on a large scale: [...] (***g***) in the case of armed conflict, using methods or means of warfare not justified by military necessity with the intent to cause widespread, long-term and severe damage to the natural environment and thereby gravely prejudice the health or survival of the population if such damage occurs."[148]

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145 See ***ILC Yearbook 1991***, vol. II, Part 2, para. 175.

146 UN DOC. A/52/10. N.A. Maryam GREEN***, op. cit.***, note 11, p. 243. A number of representative at the CCD stated that the ***Enmod Convention*** must apply to ***erga omnes*** and not only to the State parties. CCD/pv. 692 (Netherlands); 697 (Iran); 699 (Japan); 701 (Egypt and Yugoslavia); 724 (Mexico). See G. FISCHER, "La convention sur l'interdiction d'utiliser des techniques de modification de l'environnement à des fins hostiles", (1977) XXIII, ***A.F.D.I.*** 820, 831. The consequences of environmental modification techniques are international and they are a potential ground for liability in international law prohibiting environmental destruction. If one accepts its close relation to the peace and security of mankind, the ***Enmod Convention*** should not be limited to the member states and should apply equally to all members of the international community. The ***Convention on the Prohibition of Military or Any Hostile Use of Environmental Modification Techniques (Geneva)***, 31 U.S.T. 333, (1977) 16 I.L.M. 88 ***(***hereinafter ***Enmod Convention***). In force Oct. 5, 1978.

147 See 1977 ***Protocols I and II Additional to the Geneva Conventions of August 12, 1949 and Relating to the Geneva Protection of Victims of International Armed Conflicts***, 1125 U.N.T.S. 3, 1125 U.N.T.S. 609, (1977) 16 I.L.M. 1391. In force Dec. 7, 1978.

148 ***Id***.

This article contains three additional elements which are not given as requirements for violation of the 1977 ***Geneva Protocol I***. First, the use of prohibited methods or means of warfare is considered not justified by military necessity. Secondly, it states that military conduct should result in more serious consequences for the health or survival of the population in order to constitute a war crime, namely, gravely prejudicial consequences as compared to prejudicial consequences required for a violation of the 1997 ***Geneva Protocol I***. Thirdly, the present subparagraph requires that the damage to the environment should have occurred as a result of the prohibited conduct. This subparagraph applies "in the case of armed conflict", whether of an international or a non-international character, in contrast to the more limited scope of application of the 1977 ***Geneva Protocol I*** which applies only to international armed conflict. The present subparagraph does not include the phrase "in violation of international humanitarian law" in order to avoid giving the impression that this type of conduct necessarily constitutes a war crime under existing international law in contrast to the preceding subparagraphs[149].

C. Doctrinal Opinion

Concerning ecocide, commentators suggest that this should include crimes against humanity[150]. Both Gray[151] and Gilbert[152] quoted from Mohr who stated that "[t]he term international crimes' is only and simply used for labeling a certain kind of in-

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149 The Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict prepared by the ICRC state that "[d]estruction of the environment not justified by military necessity violates international humanitarian law. Under certain circumstances, such destruction is punishable as a grave breach of international humanitarian law". Doc. A/49/323, annex.

150 Some commentaries argued that Saddam Hussein should be charged as a war criminal for environmental acts. Some members of the Congress have called for the establishment of a war crimes tribunal, to consider, ***inter alia***, the environmental damage caused to the Persian Gulf environment. David FREED, "Hussein Trial Urged over Oil Damage", ***L.A. Times***, March 18, 1991 (Sen. John Kerry). See "The Gulf War: Environment as a Weapon", Proceedings of the Eighty-Fifth Annual Meeting of the American Society of International Law, April 18, 85 ***Am. Soc. Int'l L. Proc***. 214, 228.

151 Mark Allan GRAY, "The International Crime of Ecocide", (1995-1996) 26 ***Cal. W. Int'l L.J.*** 215.

152 See Geoff GILBERT, "The Criminal Responsibility of States", (1990) 39 ***I.C.L.Q.*** 345, 347.

ternationally wrongful acts (sic) of an extremely grave nature."[153] This idea asserts that ecocide is more than a serious international delict. Article 19 of the ILC Draft Article[154], identifying an act of State constituting breach of an international obligation as "an internationally wrongful act", supports the proposition that States can be responsible for international crimes[155].

Bassiouni writes that international crimes reflect the existence of any one or more of the following elements: a) a threat to the peace and security of mankind; b) "conduct recognized as shocking to the conscience of the world community" and contrary to its shared values; c) an effect on public interests in more than one State and whose commission exceeds national boundaries; and d) the involvement of citizens of more than one State[156].

Environmental destruction which fits within the definition of ecocide, as evidenced by the Draft Articles on State Responsibility and the Draft Code of Crimes Against the Peace and Security of Mankind, is recognized as an international crime.

Pleshakov analyzed the criminal aspect of environmental protection in the Draft of the Criminal Code of the Soviet Union and its republics, and defined "crime against peace and safety of humankind" in international criminal law. The problem of ecocide has long existed as an international crime. It is defined as the performance of intentional harm to the human environment for a military or other purpose. He suggests that the notion of ecocide should be introduced into Russian law. He concludes that the Criminal Code of the Russian Federation should include provisions for the punishment of crimes against the ecological interests of the international community. Pleshakov also states that the criteria for defining activities intentionally threatening the ecological safety of humankind as criminal should include long-

153 G. GILBERT, ***loc. cit.***, note 152; Manfred MOHR, "The ILC's Distinction Between 'International Crimes' and 'International Delicts' and Its Implications" in Marina SPINEDI and Bruno SIMMA, eds., ***United Nations Codification of State Responsibility,*** New York, Oceana Publications, 1987, p. 115; M.A. GRAY, ***loc. cit.***, note 151, 264.

154 See ***supra***, note 44.

155 Art. 19, ***supra***, note 44.

156 M. Cherif BASSIOUNI, ***A Draft International Criminal Code and Draft Statute for an International Criminal Tribunal***, Dordrecht, Martinus Nijhoff, 1987, p. 36.

term ecological consequences dangerous for people and environment[157].

Berat contends that "states should begin to move toward a comprehensive international environmental legal dispensation that recognizes the unity of the planet as a single, fragile ecosystem" and that such a "dispensation should revolve around the creation of the crime of geocide, literally a killing of the earth, the environmental counterpart of genocide, and its entrenchment as an international legal crime."[158] He suggests that the international community should adopt a geocide convention which holds accountable the most conspicuous destroyers of the environment and create a permanent international environmental tribunal to prosecute offenders[159]. Yuzon proposes that the quantum of proof that is necessary in international crime of environmental destruction, or the threshold of damage that must occur in such cases, should be relatively low compared to the ***Enmod Convention*** and 1977 ***Geneva Protocol I***[160]***.*** He states that any damage, regardless of the degree, whether widespread, long-term, or severe, would automatically render the actor criminally liable[161].

Richard Falk proposed an interesting idea for a convention on the crime of ecocide[162] which was adopted at the Emergency Conference Against Environmental Warfare in Indochina, held in Stockholm in June 1972. It criminalized many of the activities in which the United States had engaged during the Vietnam war[163]. The document defined ecocide as, ***inter alia***, II (c) the use of chemical herbicides to defoliate and deforest natural forests; (d) the use of bombs and artillery in such quantity, density, or size

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157 A. M. PLESHAKOV, "Ecological Crimes Against Peace and Safety of Humankind", (1994) 7 ***State and L***. 81 (in Russian), summarized by Liliya ALTSHULER and printed in Foreign Publications, 8 ***Geo. Int'l Env. L. Rev***. 227, 251 and 252.

158 See L. BERAT, ***loc. cit.***, note 131, 328 and 329.

159 ***Id.,*** 329.

160 See Ensign Florencio J. YUZON, "Deliberate Environmental Modification Through the Use of Chemical and Biological Weapons: 'Greening' the International Laws of Armed Conflict to Establish an Environmentally Protective Regime", (1996) 11 ***Am. U.J. Int'l L. & Pol'y*** 793, 841.

161 ***Id***., 841.

162 See Richard A. FALK, ***Revitalizing International Law***, Iowa, Iowa State University Press, 1989, p. 187.

163 Michael N. SCHMITT, "***Green War: An Assessment of the Environmental Law of International Armed Conflict"***, (1997) 22 ***Yale J. Int'l L.*** 1, 11.

as to impair the quality of the soil or to enhance the prospect of diseases dangerous to human beings, animals, or crops; (e) the use of bulldozing to destroy large tracts of forest or cropland for military purposes; (f) the use of techniques designed to increase rainfall or otherwise modify weather as a weapon of war[164]. The document forbade, ***inter alia***, the employment of weapons of mass destruction (WMD)[165]. Persons who committed such acts, or were otherwise culpable for their commission, would be punished, at minimum, to the extent of being removed from any position of public trust[166].

Falk also recommended the passage of national legislation providing effective penalties for persons guilty of ecocide[167]. The United Nations may be called upon to take "appropriate" action under the ***Charter of the United Nations*** to prevent and suppress ecocide[168]. This implies that ecocide could amount to a breach of the peace and security of mankind that might lead the UN to take measures in accordance with articles 41 and 42 of the ***Charter of the United Nations*** to maintain or restore international peace and security[169].

States must attach penal sanctions to certain kinds of conduct and activities that threaten, damage or destroy those natural resources which represent internationally shared values. Unfortunately, international law does not afford a well-tested body of principles concerning environmental crime. Ecocide, whether committed in time of peace or in time of war, should be considered a crime under international law. Persons committing acts such as ecocide, conspiracy to commit ecocide, attempt to commit ecocide and complicity in ecocide must be punished.

164 See R.A. FALK, ***op. cit.***, note 162.
165 ***Id***., art. 2.
166 ***Id***., art. 4.
167 ***Id***., art. 6.
168 ***Id***., art. 9.
169 See ***Charter of the United Nations***, ***supra***, note 65.

III. Responsibility for Environmental Damage in War

A. Introduction

In today's world, the potential for oil spills and other environmental catastrophes is greater than ever before. There are some indications of a movement towards international agreements concerning strict and absolute liability in case of environmental damage. Some international agreements imply that the duty of a State is not just to protect its own environment, but to protect the environment of all. International environmental standards have been developing to protect the global environment.

Violation of the laws of war leads to criminal liability[170]. All the ***Geneva Conventions*** of 1949 contain identical articles according to which no party to the Convention shall be allowed to absolve itself or others of any liability incurred for breaches referred to in article 50 of the Convention[171]. Each party to the Convention must try to suppress all acts contrary to the provisions of the Convention[172]. A party to a conflict may request an inquiry into any alleged violation of the ***Geneva Convention***[173]. Cheng states that acts which are contrary to the rules and customs of warfare, "although they may be justifiable and advantageous from the military point of view, are considered as unlawful or even criminal."[174] In the past, invading armies used to destroy all enemy property and its environment to stop their attack. In the nineteenth century, however, it became a recognized rule of international law that wanton destruction of enemy property was prohibited[175].

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170 See 1949 ***Geneva Conventions***, art. 49/I, 50/II, 129/III and 149/IV. ***Supra*** note 147.

171 ***Id.,*** art. 51/I, 52/II, 131/III and 148/IV.

172 ***Id.,*** art. 49/I, 50/II, 129/III and 149/IV.

173 ***Id.,*** art. 52/I, 53/II, 132/III, 149/IV.

174 See B. CHENG, ***op. cit.***, note 17, p. 63.

175 See art. 23(***g***) of the 1907 ***Hague Convention IV. Hague Convention IV Respecting the Laws and Customs of War on Land***, 100 U.K.F.S. (1906-1907) 338-59 (Fr.); (1910) U.K.T.S. 9, Cd. 5030 (Eng. Fr.); CXII UKPP (1910) 59 (Eng. Fr.); 2 Am. J. Int. Law (1908) Supp. 90-117 (Eng. Fr.); 205 C.T.S. (1907) 227-98 (Fr.). In force from Jan. 26, 1910.

There have been many criminal cases involving the law of war. Some of these cases concerned crimes against international law. In most peace treaties, the parties established responsibility for all damages caused. For example, at the end of the First World War, on November 11, 1918, the Principal Allied and Associated Powers[176] granted an armistice to Germany at the request of the Imperial German Government. They desired that the war should be resolved by a firm, just and durable peace. The contracting parties in the ***Treaty of Versailles***[177] (June 28, 1919) agreed that upon the coming into force of the treaty, the state of war would be terminated. Regarding responsibility for damages caused, article 231 of the treaty states: "The Allied and Associated Governments affirm and Germany accepts the responsibility of Germany and its allies for causing all the loss and damage which the Allied and Associated Governments and their nationals have been subjected to as a consequence of the war imposed upon them by the aggression of Germany and its allies."[178] In the 1919 ***Peace Treaty of St. Germain*** between the Allied Powers and Austria, the latter accepted its own and its allies' responsibility for causing the loss and damage to the Allied and Associated Governments and their nationals as a result of the war imposed upon them by the aggression of Austria-Hungary and its allies[179]. This trend has been observed in other peace treaties such as the ***Trianon Treaty*** in which Hungary accepted responsibility for the loss and damage caused as a consequence of war imposed upon the Allied and Associated Governments and their nationals by the aggression of Austria-Hungary and its allies[180].

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176 The Principal Allied and Associated Powers described in the ***Treaty of Versailles*** are the U.S., the British Empire, France, Italy and Japan. ***Allemagne***, ***The Treaty of Peace Between the Allied and Associated Powers and Germany***: ***The Protocol Annexed Thereto***, the agreement respecting the military occupation of the territories of the Rhine, and the treaty between France and Great Britain respecting assistance to France in the event of unprovoked aggression by Germany, signed at Versailles, June, 28, 1919, London, ill., Cartes, 1919***.***

177 See Fred L. ISRAEL, vol. II, ***Major Peace Treaties of Modern History***, ***1648-1967,*** New York, Chelsea House, 1967, p. 1265.

178 ***Id***., p. 1391.

179 Art. 177 of the ***St. Germain Treaty***, ***id.***, vol. III, p. 1598.

180 See art. 161 of the ***Trianon Treaty*** printed in F.L. ISRAEL, ***op. cit.,*** note 177, vol. III, p. 1923.

B. Illegal Act and the Law of War: Violation of the Customary Law of War

Waging war[181] against another State except in self-defense or according to the UN Charter is a crime.[182] All forms of warfare are harmful to man and its environment and so all warfare can be perceived to be a form of environmental warfare. Falk defined "environmental warfare" as "including all those weapons and tactics which either intend to destroy the environment ***per se*** or disrupt normal relationships between man and nature on a sustained basis."[183]

Acts which violate the laws or customs of war (war crimes) were covered, ***inter alia***, by specific provisions of the regulations annexed to the 1907 ***Hague Convention*** IV[184], the 1949 ***Geneva Convention IV***[185], the Nuremberg Charter Tribunal and the judgment of the Tribunal[186].

Violations of the laws or customs of war include, ***inter alia***, wanton destruction[187] of cities, towns or villages and devastation

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181 It was stated in the Nuremberg Judgement (1946) that "the Charter makes the planning or waging of a war of aggression or a war in violation of international treaties a crime" and that it was "therefore not strictly necessary to consider whether and to what extent aggressive war was a crime before the execution of the London Agreement". The Tokyo Tribunal also rejected "submissions of the Defense to the effect that aggression was not a crime." See G. SCHWARZENBERGER, ***op. cit.***, note 32, vol. II, pp. 485 and 486.

182 See Sydney Dawson BAILEY, ***Prohibitions and Restraints in War***, London, Oxford University Press, 1972, pp. 41-53.

183 Richard A. FALK, "Environmental Warfare and Ecocide-Facts, Appraisal and Proposals", in ***The Committee on Foreign Relations, United States Senate, Prohibiting Military Weather Modification, Hearing before the Subcommittee on Ocean and International Environment***, 92d Congress, 2d Sess., Washington, US Government Printing Office, 1972, p. 138.

184 See ***supra***, note 175.

185 See ***supra***, note 147.

186 Res. 3(1), Feb. 13, 1946 and 95 (1), Dec. 11, 1946; GAOR, 1st Sess., 35th mtg., Oct. 24, 1946, pp. 699 and 700. Reprinted in Dietrich SCHINDLER and Jiri TOMAN, ***The Laws of Armed Conflict, A Collection of Conventions, Resolutions and Other Documents***, Geneva, Henry Dunant Institute, 1973, p. 701.

187 Responsibility for wanton destruction has not been accepted in all cases. For example, in 1892, the majority of the Chilean-United States Claim Commission in the ***Edward C. Du Bois Case***, in which Chilean forces destroyed the property of American citizens in Peru, held that "[t]he Government of Chile should be held responsible for the wanton and unnecessary destruction of claimants' property." See Marjorie M. WHITEMAN,

not justified by military necessity[188]. Environmental destruction as a military tool and attacks on forest or other kinds of vegetation by incendiary weapons[189] have been prohibited[190]. Both the Nuremberg and Tokyo Tribunals described war crimes ***stricto sensu*** as violations of the laws and customs of war. According to both charters, war crimes signify breaches of any of the rules of warfare including international conventions[191]. The principles of customary international law – namely the principles of necessity, humanity, proportionality, discrimination and unnecessary suffering – provide guidelines for any other belligerent act not specifically mentioned in the treaties.

C. Long-term and Long-distance Environmental Health Effects

This section is concerned with the effects of environmental conditions on human health and with the health of the environment in general. It is evident that in a theater of war all compo-

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Damages in International Law. vol. III, Washington, US Government Printing Office, 1943, p. 1698.

188 See Principles of Nuremberg Tribunal, Principle VI. See "Trail of German Major War Criminals: Proceedings of the International Military Tribunal Sitting at Nuremberg", Part 22, H.M.S.O., London, 1950.

189 See ***Protocol III*** of the ***Inhumane Weapons Convention***. 1980 ***Convention on Prohibition or Restrictions on the Use of Certain Conventional Weapons Which May be Deemed to be Exhaustively Injurious or to Have Indiscriminate Effects***, Oct. 10, 1980, 19 I.L.M. 1523 (1980) (hereinafter ***Inhumane Weapons Convention).*** Concluded at Geneva on Oct. 10, 1980; entry into force on Dec. 2, 1983, in accordance with art. 5, paras. 1 and 3; registration on Dec. 2, 1983, No. 22495. Status: Signatories: 51. Parties: 62.

Parties: Argentina, Australia, Austria, Belarus, Belgium, Benin, Bosnia and Herzegovina, Brazil, Bulgaria, Canada, China, Croatia, Cuba, Cyprus, Czech Republic, Denmark, Djibouti, Ecuador, Finland, France, Germany, Georgia, Greece, Guatemala, Hungary, India, Ireland, Israel, Italy, Japan, Jordan, Lao People's, Democratic Republic, Latvia, Liechtenstein, Luxembourg, Malta, Mauritius, Mexico, Mongolia, Morocco, Netherlands, New Zealand, Niger, Norway, Pakistan, Philippines, Poland, Romania, Russian Federation, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Togo, Tunisia, Uganda, Ukraine, United Kingdom, United States of America, Uruguay, Yugoslavia.

Signatories: Afghanistan, Egypt, Iceland, Nicaragua, Nigeria, Portugal, Sierra Leone, Sudan, Turkey, Viet Nam. UN Treaty Data Base, general table of contents, available at the following address: [http://www. un.org/Depts/ Treaty/bible/Front_E/tocGEN.html].

190 See ***supra***, note 146.

191 See Georg SCHWARZENBERGER, ***International Law as Applied by International Courts and Tribunals***, vol. II, London, Steven & Sons, 1968, p. 484.

nents of the environment are subject to severe abuse, given even disciplined use of technological power. The risk of war continues even with the coming of peace. Such damages, obviously, are not necessarily confined to the area in which they first occur and, indeed, it is difficult to confine them. Moreover, the natural recovery from such damage, even with intensive human efforts to aid this recovery, may be measured in years or even decades. For example, chemical and biological weapons disturb the environmental balance and have harmful effects on the human population, vegetation, water, land and the entire ecosystem for a long time. Mines or bombs can make land, sea and other components of the environment unsafe for people. Those booby traps and land mines which have not exploded during a war have similar effects on the environment and population[192]. Such damage to natural vegetation and to crops grown for food and fiber is often long-lasting[193]. Therefore, once the war is over, the harmful effects of damage may not be felt until years or decades after the act[194]. The harmful effects of air pollution present another problem. The naked eye is not able to see some air pollutants such as carbon monoxide which damages plants, animals and humans.

Regarding the use of nuclear weapons, there is no basis for distinguishing between human health protection and environmental protection. The use of nuclear weapons can cause damage to human health and the environment in the territory of the State which uses a nuclear weapon, and in the territory of the target State and other States. Radiation does not respect national boundaries and can be carried for thousands of kilometers, and wherever it is deposited it will cause harm to human health and the environment. The consequences of using nuclear weapons can be catastrophic, as seen in the effects of radiation on human health and the environment in the Chernobyl accident on April 26, 1986.

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192 See Claude PILLOUD, Yves SANDOZ, Christophe SWINARSKI and Bruno ZIMMERMANN, ***Commentary on the Additional Protocols of 8 June 1977 to the Geneva Convention of 12 August 1949***, Geneva, International Committee of the Red Cross, Martinus Nijhoff Publishers, 1987, p. 411.

193 See Essam EL-HINNAWI and Manzur H. HASHMI, "Natural Resources and the Environmental Series", vol. 7, Dublin, Tycooly International, 1982, 15-29.

194 This problem was highlighted by the Chernobyl accident (1986) in which the explosion of a Soviet nuclear reactor caused pollution in several countries. This accident may cause directly or indirectly thousands of cases of cancer. See A. KISS and D. SHELTON, ***op. cit.***, note 63, p. 392.

This was the most serious accident in the history of the nuclear industry. Large amounts of radioactive material were released into the environment and had immediate and long-term health and environmental effects, as was reported by the joint EC/IAEA/WHO International Conference held in Vienna in April 8-12, 1996. The number of fatal cancer victims among the residents of contaminated territories and strict control zones due to the accident was calculated to reach around 6,600 over the next 85 years[195]. The United Kingdom National Radiation Protection Board has estimated that in the EEC countries 1,000 people will die and 3,000 will contract non-fatal cancer because of the accident. The report states: "[L]ethal radiation doses were reached in some radiosensitive local ecosystems, notably for coniferous trees and for some small mammals within 10 km of the reactor site, in the first few weeks after the accident. By the autumn of 1986, dose rates had fallen by a factor of 100. [...] The possibility of long term genetic effects and their significance remains to be studied."[196]

These harmful effects can only be eliminated with considerable risk and tremendous effort over several years. In this respect, a series of obstacles must be overcome before responsibility can be placed upon a State. First, a link of causality must be established between a culpable act and long-term damage sustained by the State. If one of the parties in a war acts in such a way that its action causes damage to the other party in the far distant future, or if its action causes injury in the long-term, it is not always possible to identify the author of the damage. It is a well-known principle of law that ***causa proxima non remota spectatur***. It must be mentioned that States are responsible for the proximate consequences of their illegal actions[197]. "Proximate" does not mean immediate, but there should be a link between the damage and the act[198] and it is not always easy to elucidate the appropriate

195 International Atomic Energy Agency, "One Decade After Chernobyl: Summing up the Consequences of the Accident", International Conference, April 8-12, 1996 (Vienna, Austria, International Atomic Energy Agency, 1996), co-sponsored by the European Commission (EC), International Atomic Energy Agency (I.A.E.A.) and the World Health Organization (WHO), p. 5.

196 ***Id.,*** p. 6.

197 See I. BROWNLIE, ***op. cit.***, note 4, pp. 240-253.

198 This conclusion does not apply to all cases. In the case of ***Pieri Dominique and Co***. (***France*** v. ***Venezuela***), the Nicaraguan Claim Commission did not accept

criterion for finding out proximate causality in a legal context[199]. This condition has been emphasized by the Italo-United States conciliation in the ***Armstrong Cork Company Case***[200] in which a company suffered a loss as a result of the aggressive war undertaken by Italy on June 10, 1940. The Commission based its decision on the ***Pertusla Case*** and summarized the conditions of compensation as follows:

1. that these nationals have suffered a loss;
2. that there exist a link of casualty between the loss and the war;
3. that the loss be in connection with the property located in Italy;
4. that this property have been owned by the United Nations on June 10, 1940;
5. that this property suffered injury or damage;
6. that the loss to be made good to the consequence of said injury or damage[201].

Second, the author of the damage should be identified. If the damage continues after the end of the war, proof of causation makes it difficult to impute the responsibility to one source rather than another. There is no significant State practice in this respect. Identification of the author is more difficult when the damage results from several acts or collective omissions. For example, one State may participate in wrongful conduct or may provide

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the direct and approximate cause of any wrong on the part of the respondent Government. It adopted the rule that "the Government is not responsible for '***lucro cesante***' (unaccrued or uncollected profits), or indirect damage suffered in business as a consequence of war." See M.M. WHITEMAN, ***op. cit.***, note 187, p. 1783.

199 The principle of proximate casualty has been known as that of normal and natural consequences of a damaging act. In the ***Antippa (the Spyros) Case*** (1926), the Greco-German Mixed Arbitral Tribunal said: "According to the principles recognized both by municipal and by international law, the indemnity due from one who has caused injury to another comprises all loss which may be consider as the normal consequences of the causing the damage." See B. CHENG, ***op. cit.***, note 17, p. 249. The foreseeability of the consequences of an act may be considered as a criterion to render its author liable for all his voluntary acts which are illegal. (pp. 245-253).

200 14 R.I.A.A. 159-167.

201 ***Id.***, 165.

technology to another that has the intention to use it in war to harm the environment of others. Indeed, the former State does not violate a primary obligation but its assistance may facilitate the breach of an international obligation by the recipient State. Article 1 common to all ***Geneva Conventions*** and Protocols provides that "[t]he High Contracting Parties undertake to respect and to ensure respect for the present Convention in all circumstances."[202] Therefore, an arm-supplying State for any armed conflict should be co-responsible for violation of the law on means of warfare under the ***Geneva Conventions***. States supplying weapons should be deemed to be co-responsible with their user in case of attacks on the natural environment. State responsibility for "collective", "participation" or "complicity" was analyzed by Ago and the ILC. Ago described the composite conduct as "made up of a series of separate actions or omissions which relate to separate situations but which, taken together, meet the conditions for a breach of a given international obligation."[203] The ILC considered the legal consequences of acts or omissions which aid or assist another State in the breach of an international obligation. ILC Draft Article 27 states: "Aid or assistance by a State to another State, if it is established that it is rendered for the commission of an internationally wrongful act carried out by the latter, itself constitutes an internationally wrongful act, even if, taken alone, such aid or assistance would not constitute the breach of an international obligation."[204] The ***culpa*** doctrine for State responsibility seems to be relevant here where there is no breach unless the State "intends" to facilitate a violation by the recipient State of its obligation[205].

D. Type of Responsibility for Wartime Activities

International decisions, agreements, and standards concerning State responsibility, although not fully developed, constitute a moral responsibility for States toward the global environment in times of both peace and conflict. The question is how far States

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202 See ***supra***, note 147.

203 See ***ILC Yearbook 1976,*** vol. II, p. 73.

204 See, s***upra***, note 44.

205 ILC Report to the General Assembly, II ***ILC Yearbook 1976***, p. 73, at p. 93; UN Doc. A/CN.4/Ser. A/1976/Add. 7 (Part.2), 1976.

are considered to be responsible for environmental damage resulting from their wartime activities. It must be determined whether responsibility exists only for some specific case or whether there are some general provisions that may include all possible environmental damage resulting from armed conflict. It must also be determined whether responsibility is "absolute", "strict" or whether "fault" must be proved. International law provides little support in favor of strict responsibility for environmental damage, let alone the acceptance of this form of liability in wartime. The lack of clear principles of responsibility in this field derives in part from the general reluctance of States to define binding rules of State responsibility and, in particular, from their hesitation to establish regulatory standards that would limit their military activities. Due to the relatively recent growth and spread of, ***inter alia***, nuclear activities, resolving these issues is necessary. It is foolish to assume that future wars will not give rise to significant environmental damage. It is therefore important to reexamine the theories of State responsibility for environmental damage under international law.

Strict responsibility is preferable for environmental damage resulting from wartime activities for several reasons. First, if fault provides the basis of State responsibility in such environmental damage, it may be impossible to decide what conduct is to be deemed negligent. Experts may even find it difficult to determine the application of standards of care and they may therefore interpret war regulations differently. Determining that there should be a causal nexus between the damage and the negligence of the State[206], and also between the damage and the war [207], may make it difficult for an environmentally injured State to obtain the evidence it requires to prove its case. This may exempt the defendant from its obligation to make compensation for any harm caused to the environment of that State.

Second, when the type of State responsibility for environmental damage is unclear, one interpretation of that responsibil-

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206 See ***Re Rizzo***, ***supra***, note 18, 317, 322.

207 In the decision of the Italo-American Conciliation Commission given in December 1954 in the ***Giuditta Grottanelli Shafer Case***, art. 78(4)(***a***) of the Treaty of Peace was interpreted as not to require a relation of cause and effect between damage and a "fait de guerre", but only causal, close and direct relation between the damage and the war. See ***Shafer Claim***, (1955) I.L.R. 22, 959-964.

ity would allow a State to fully escape responsibility by asserting a lack of intention in causing any of the environmental damage. One commentator suggests that the international community should hold States responsible for any foreseeable or intentional damage caused to the environment[208]. This is true in situations both when the damage is deliberately directed against an opponent and in cases of collateral damage affecting belligerents, neutrals or the acting State's own environment.

Third, belligerents usually damage all private and public enemy property, immovable or movable, on each other's territory at the outbreak of war. The destruction of the human environment in times of war is usually caused by intentional actions of the belligerents. To overcome the troops of the enemy, the State power attempts intentionally damage the enemy's environment, or objects of artistic, historical or archaeological value belonging to the enemy's cultural heritage. As it has been demonstrated in this study, States and possibly individuals and organizations intentionally causing damage or permitting environmental harm commit an international crime. States should be held strictly responsible for their willful activities causing damage to the environment.

Fourth, an absolute liability for ultrahazardous activities is not a new concept and is now widely accepted in many legal systems[209]. Haley defines ultrahazardous activity "as an act or conduct, not common usage, which necessarily involves a risk of serious harm to the person or property of others which can not be eliminated by the exercise of utmost care."[210] He states that this description "perhaps aptly fits the launching of missiles at the present time, since the complexity of the rocket propulsion and guidance systems and the myriad possibilities of malfunctions present such a risk."[211] Keeton, discussing principles of strict liability, states that if there is a significant risk of substantial damage, strict liability would be applicable to the dangerous ac-

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208 See Anthony LEIBLER, "Deliberate Wartime Environmental Damage: New Challenges for International Law", (1992) 23 ***Cal. W. Int'l L.J***. 67, 83.

209 See M.S. MCDOUGAL, H.D. LASSWELL and Y.A. VLASIC., ***op. cit***., note 68, p. 616.

210 See Andrew G. HALEY, ***Space Law and Government***, New York, Appleton-Century-Crofts, 1963, p. 235.

211 ***Id***.

tivities[212]. Waligory states that strict liability should be imposed upon the responsible State in situations where the activity is inherently destructive or ultrahazardous. He writes that "this theory is based on the potential magnitude of the damage that may occur despite all possible precautions. The doctrine of strict liability could provide justice and equity in that no State shall be called upon to pay for environmental damage arising from extraordinary risks created by other States."[213] This type of liability has already been incorporated into international law in the areas of offshore drilling operations, carriage of oil by sea, and activities relating to the use of nuclear energy[214].

Waging war is not a new phenomenon, nor is using the environment as a weapon a new strategy. One notable characteristic of most wars is the nature of the belligerents' conduct. War activities are, by their very nature, harmful and risky and, although not considered inherently destructive of the environment, are usually illegal if they cause destruction, unless a State argues that, for example, it has acted in retaliation for a prior illegal act committed by the other side[215] or that the act is a justifiable military necessity. The potential hazards of nuclear damage and contamination in time of war are much more dramatic than hazards of other activities, for example, aviation which was considered dangerous enough to give impetus to international action concerning ultra-hazardous liability. Concerning the most vivid example of environmental damage during hostilities, the intentional Gulf War oil spills, no one asserted that such damage could be considered legal. Strict responsibility is to be imposed on a State which knowingly engages in a conduct that results in a violation of international law.

Fifth, when war breaks out, even one limited to two States, other nations are affected. The neutral States may feel the consequences of the outbreak of war in many ways. A belligerent State

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212 Page KEETON, ***Prosser and Keeton on the Law of Torts***, St. Paul, Minn., West Pub., 1974, pp. 75, 78 and 79; Moira Hayes WALIGORY, "Radioactive Marine Pollution: International Law and State Liability", (1992) 15 ***Suffolk Transnat'l L.J.*** 674, 697.

213 M.H. WALIGORY, ***supra***, note 212, 697.

214 ***Id***.

215 See A. DAMMED, "National Prosecution for International Crime", ed., ***International Criminal Law***, vol. III Enforcement, N.Y., Transnational Publications Inc., 1987, 177.

has a duty to respect the rights of neutral States in time of war[216]. If due diligence is the standard of conduct for State responsibility for wartime damage to the environment, neutral States may bear some of the costs of the environmental harm where this harm is unforeseeable.

In conclusion, an overall evaluation of State practice and conventional international law concerning strict and absolute responsibility demonstrates that States accept either strict or absolute responsibility in certain cases. This depends on necessary specifications such as the nature of the violation giving rise to liability. In light of the difficulties associated with relying on a negligence standard, and because of the special risks created by wartime activities, we suggest that a strict liability standard is appropriate in this field, and that such a standard should be firmly established for wartime activities damaging the environment. We propose that strict liability for environmental injury of wartime acts be firmly established by international conventions. Our preference is for strict liability for environmental damage sustained during armed conflict, which would eliminate a burden of which the victim is not reasonably able to discharge. He may prove legal causation between the facts of the damage, but may never prove fault or negligence.

E. State Responsibility for Reparation of Environmental Damage

1. Forms of Reparation[217]

It is a principle of international law that indemnification is required where the exercise of armed force is unlawful. International law has also established that compensation is not required

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216 See Walter G. SHARP, "The Effective Deterrence of Environmental Damage During Armed Conflict: a Case Analysis of the Persian Gulf War", 137 ***Mil. L. Rev***. 1, 25.

217 The legal foundation for claims for war damages have changed in this century. For more details see G. SCHWARZENBERGER, ***op. cit.***, note 191, vol. II, pp. 758-783. When comparing the reparation systems of the pre-1914 law and the post-1945 settlements, Schwarzenberger stated that "[i]t was, first, from monetary reparations to reparations in kind, and, secondly from reparations to restitutions of identifiable property removed by the defeated Powers from the territories under their wartime occupation." ***Id***.

for damage incidental to the lawful use of armed forces[218]. The language of the Permanent Court of International Justice in the ***Chorzow Factory Case***[219] represents a clear example of the recognition of the content of this duty. It states: "It is a principle of international law, and even a general conception of law, that any breach of an engagement involves an obligation to make reparation."[220] "Reparations" may be understood to refer to all measures, that is restitution, compensation, and satisfaction which a State in breach of its obligations may have to take[221].

On September 29, 1918, the principal Allied and Associated Powers (the U.S.A., the British Empire, France, Italy and Japan) granted an Armistice to Bulgaria at the request of the Royal Government of Bulgaria. Article 121 of the treaty states that "Bulgaria recognizes that, by joining in the war of aggression which Germany and Austria-Hungary waged against the Allied and Associated Powers, she has caused to the latter losses and sacrifices of all kinds, for which she ought to make complete reparation."[222]

"Restitution" represents the obligation of a breaching State to reduce the effects of the breach and restore the situation that existed before the breach. The Court in the ***Chorzow Factory Case*** stated that the duty to make reparation should

> ***wipe out all consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind, or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it – such are the principles which should serve to determine the amount of compensation due for an act contrary to international law.***[223]

By the ***Peace Treaty of Versailles***, Germany and her allies undertook, in addition to the compensation decided on, to restitute

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218 See Marian Nash LEICH, "Agora: The Downing of Iran Air Flight 655", (1989) 83 ***Am. J. Int. Law*** 318, 321.

219 ***Chorzow Factory Case*** (Merits), (1928) P.C.I.J. (Ser. A) 17.

220 ***Id.,*** 29.

221 See I. BROWNLIE, ***op. cit.***, note 4, pp. 457-463.

222 See the ***Neuilly Treaty*** printed in F.L. ISRAEL, ***op. cit.,*** note 177, vol. III, 1771.

223 ***Chorzow Factory Case*** (merits), (1928) P.C.I.J. (Ser. A) 47; B. CHENG, ***op. cit.***, note 17, p. 169.

in cash any "cash taken away, seized or sequestrated" and also restitute "animals, objects of every nature and securities taken away, seized or sequestrated."[224] Another outstanding illustration of restitution in the peace settlement is that of the ***Italian Peace Treaty*** of February 10, 1947. It states that the obligation to make restitution applies to all public and private property removed from the territory of Allied and Associated Powers[225].

"Compensation" is the second form of reparation. It means the payment of money as "valuation" of the asset damaged because of the wrongful act. In article 3 of the 1907 ***Hague Convention IV***[226], the duty to "pay compensation" has been expressly recognized.

In the ***Peace Treaty of Versailles***, Germany and her allies accepted responsibility for all the losses and damages caused by the war. She undertook to "make compensation for all damages done to the civilian population of the Allied and Associated Powers and to their property during the period of the belligerency of each as an Allied or Associated power against Germany by such aggression by land, by sea and from the air, and in general all damages as defined in Annex I hereto."[227]

The categories of compensable damages enumerated in Annex I of the treaty are, ***inter alia***, "[d]amages caused by Germany or her allies in their own territory or in occupied or invaded territory to civilian victims of all acts injurious to health or capacity to work, or to honor, as well as to the surviving dependents of such victims."[228]

"Satisfaction" is often connected to non-economic damages. It can take different forms such as formal apology, acceptance of responsibility or formal assurance against future repetition. The declaratory judgement of a court as to the unlawfulness of an act can also be considered a measure of satisfaction[229].

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224 See art. 238 of the ***Peace Treaty of Versailles*** in F.L. ISRAEL, ***op. cit.,*** note 177.

225 See art. 75 of the ***Italian Peace Treaty*** of 1947 in F.L. ISRAEL, ***op. cit.,*** note 177, vol. IV, p. 2452.

226 See ***supra***, note 175.

227 See art. 232 of the ***Peace Treaty of Versailles*** in F.L. ISRAEL, ***op. cit.***, note 177, p. 312.

228 F.L. ISRAEL, ***op. cit***., note 177**,** p. 1396.

229 See I. BROWNLIE, ***op. cit.***, note 4, p. 459.

2. Reparation of Ecological Damages of War

States incur international responsibility for their illegal acts committed in warfare against enemy States, neutrals and their nationals. Article 3 of the 1907 ***Hague Convention IV*** reads: "A belligerent party which violates the provisions of the said Regulation shall [...] be liable to pay compensation."[230] Environmental damage in wartime usually consists in a violation of territory or a hostile action on the part of a belligerent State. To illustrate this, we may consider, for example, a case in which military forces of State A enter the territory of State B and destroy its environment. Responsibility for this injury and, thus, restitution, compensation and satisfaction certainly lies with State A. If unauthorized troops cause damage to the environment of State B, State A may be held responsible for its failure to exercise due diligence in order to prevent the damage.

Since international environmental law is in a primitive stage of development, it is not always possible to distinguish between the different sorts of reparations, that is restitution, compensation or satisfaction, from considering existing precedents. Various elements are required and problems must be resolved to establish compensation for victims. First, the nature of the duties of States regarding environmental protection and the mode of the breach, which have already been considered, may determine the approach to the question of compensation. Second, the different types of environmental damage resulting from wartime activities which affect the environment make the problem of their compensation difficult to deal with. Some claims have an economic character (e.g. devastation of agricultural lands in a certain area) while "lost enjoyment" is the most important in others. The specific performance of restitution or compensation may in certain cases be impossible. Ecological damage, in particular, is almost impossible to quantify in economic terms. Monetary damages may be paid for non-material damages[231]. It would be necessary to codify general rules for assessing the quantity of ecological damage.

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230 See ***supra***, note 175.

231 In the ***I'm Alone Case***, for example, the U.S. suggested a sum of $25,000 for the indignity suffered by Canada: see (1935) 3 R.I.A.A. 1609.

F. Responsibility of the State for its Armed Forces

1. General Rules

A government is the aggregate of all its officials, including those in its armed forces, and it bears wide and unlimited vicarious responsibility for their acts. For this reason, it must be held to a higher standard of care[232]. When acts or omissions of State personnel are incompatible with the rules of international law, they give rise to State responsibility whether its functions are of an international or of an internal character. Their conduct shall be considered an act of the State if such persons are acting on behalf of that State or exercising governmental authority in the case of the absence of the official authorities. This idea is different from that of the medieval period as described by Grotius. According to Grotius, a State is responsible for the acts of its members only through its involvement in wrongdoing. Subsequently, writers have distinguished between direct (for its own conduct) and indirect (for the conduct of its members) responsibility on the part of the State[233]. A State has at all times, both in peace and in war, a duty to protect other States against injurious acts including environmental damage by its agents. It is responsible for the act of an individual[234] or of its agents if the State is revealed to be involved in illegal acts of its own[235] through an omission to re-

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232 See I. BROWNLIE, ***op. cit.,*** note 4, at p. 183. Article 3 of the 1907 ***Hague Convention*** states that "a State is responsible for all acts committed by its armed forces." In the hostilities between Chinese and Japanese forces, the British Government informed both parties that they should be responsible for any loss of British life and property caused by their armed forces. In February 1938, the United States announced that "it would attribute to Japan responsibility for damage caused to United States nationals or property by Japanese armed forces in China." See L. OPPENHEIM, ***op. cit.,*** note 2, pp. 323-330.

233 See C. EAGLETON, ***op. cit.***, note 33, p. 76.

234 ***Id.,*** p. 78. He states: "The responsibility of the State for the acts of individuals is therefore based upon the territorial control which it enjoys, and which enables it, and it alone, to restrain and punish individuals, whether nationals or not, within its limits."

235 This is the imputability of acts of the State in international law. See B. CHENG, ***op. cit.***, note 17, p. 180. Cheng states that "international law, in order to determine whether or not a person is acting as a State official, whose acts may be imputed to the State, decides autonomously according to the facts of the case and not according to the municipal status of the individual concerned." He enumerated two pertinent considerations governing the imputability of acts of official to the State, namely the "character of the act in

strain or punish, or through positive encouragement of the agents or individual[236]. Acting as an agent means acting under and within the authority given by national law and, thus, representing the will of the State. The nature of the acts and the nature of the function of the official are important factors in determining whether a State is to be held responsible or not. It is important to distinguish between different acts performed by the same agent. If the agent acts in his official capacity, the State is responsible; otherwise, he assumes responsibility for his wrongful acts.

2. International Judicial and State Practice

Responsibility on the part of the State consists in its failure to live up to international obligations to act with due diligence to avoid causing damage to other States. If an individual[237] commits an international crime, he or she must be punished according to the characteristics of that particular case[238].

Under the ***Charter of the International Military Tribunal of Nuremberg***[239]***,*** "any person who commits an act which constitutes a crime under international law is responsible therefore and liable to punishment."[240] According to the tribunal, a person who violates the laws or customs of war, including wanton destruction of

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question" and the "nature of the function which the official is entrusted to discharge." ***Id***.

236 Some authors and some court decisions believe that a State is responsible for any act of its agents, whether authorized or not. See C. EAGLETON, ***op. cit.***, note 33, pp. 44-94.

237 Edmonds and Oppenheim stated that "members of the armed forces who commit such violations of the recognized rules of warfare as are ordered by their Government or by their commander are not war criminals and cannot therefore be punished by the enemy. He may punish the official or commanders responsible for such orders if they fall into his hands." In W.M. GRAHAM HARRISON, ed., ***Manual of Military Law***, vol. VI, Washington, US Government Printing Office, 1906, pp. 758-760; B. CHENG, ***op. cit.***, note 17, p. 203.

238 ***Id***. Stern states: "Ces actes – crimes contre la paix, crime de guerre et crimes contre l'humanité – engagent en tout état de cause la responsabilité de leur auteur: s'il s'agit, d'un subordonné, l'ordre reçu ne l'exonère pas en principe; s'il s'agit du chef de l'État, il ne bénéficie d'aucune immunité, et sa qualité de chef d'État ne l'exonère en rien de sa responsabilité pénale internationale." Brigitte STERN, "Les problèmes de responsabilité posés par la crise et la 'Guerre' du Golfe", Brigitte STERN, éd., ***Les aspects juridiques de la crise et de la guerre du golfe***, Paris, Éditions Montchrestien, 1991, p. 333.

239 Principles of Nuremberg Tribunal 1950, Principle I. ***Supra***, note 188.

240 ***Id***.

cities, towns or villages or devastation not justified by military necessity[241], is responsible under international law even if he acted pursuant to an order from his government or from a superior[242]. In the ***Hostage Trial*** (1948), the defendants stated that the acts charged as crimes were carried out pursuant to orders of superior officers whom they were obliged to obey. The Tribunal said "the general rule is that members of the armed forces are bound to obey the lawful orders of their commanding officers and they cannot escape criminal liability by obeying a command which violates international law and outrages fundamental concepts of justice."[243]

In the Mexico-United States General Commission in the ***Janes Case*** (1926), a Mexican national was held liable for having killed an American national. The Commission declared that a State is responsible for what it has done or failed to do and not for the act of individual persons. It said:

> [***T**]**he government is liable for not having measured up to its duty of diligently prosecuting and probably punishing the offender. The culprit has transgressed the penal code of his country; the State, so far from having transgressed its own penal code (which perhaps not even is applicable to it) has transgressed a provision of international law as to State duties.*** [***...***] [***T**]**he government can be sentenced once the non-performance of its judicial duty is proven to amount to an international delinquency, the theories on guilt or intention in criminal and civil law not being applicable here. The damage caused by the culprit is the damage caused to Janes' relatives by Janes' death; the damage caused by the government's negligence is the damage resulting from the non-punishment of the murderer.***[244]

In ***Pear's Case***[245], Frank Pears, a citizen of the United States, was shot and killed by a sentinel in Honduras. The U.S. stated that the action was committed in violation of the military ordi-

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241 ***Id.,*** Principle VI.

242 ***Id.,*** Principle IV.

243 See Leon FRIEDMAN, ***The Law of War, A Documentary History***, vol. II, New York, Random House, 1972, p. 1307. In the German War Trial (1972), the German Supreme Court said that "the subordinate obeying [...] an order [violating the law] is liable to punishment, if it was known to him that the order of the superior involved the infringement of civil or military law." ***Id***., p. 1307.

244 See B. CHENG, ***op. cit.***, note 17, pp.174-176.

245 ***Id.,*** pp. 762-765.

nance and demanded the arrest and punishment of the sentry and compensation for Pear's relatives. The Government of the Honduras paid the sum demanded.

The most cruel war crimes are usually committed by militia and volunteer troops. Responsibility for their crimes rests upon the State which employs them. A government is not responsible for environmental damage caused by these troops if they are unauthorized. As stated in the ***Home Missionary Society Case*** (1920): "It is a well-established principle of international law that no government can be held responsible for the act of rebellious bodies of men committed in violation of its authority, where it is itself guilty of no breach of good faith, or of no negligence in suppressing insurrection."[246] The same conclusion may be reached respecting soldiers' crimes committed as ordinary individuals. We may learn from the ***Irene Roberts Case***[247] that environmental damage done to other States by soldiers absent from their regiments and not under the direct authorization of their officers are called "common crimes" and do not affect the responsibility of their governments. These soldiers, therefore, are personally liable for their personal actions. On the other hand, a government is responsible if it commits an illegal act by omitting to prevent or punish the act of the individual. On January 7, 1885, the American consul in Colombia reported that the country was in a state of revolution. The rebels had seized a river steamer belonging to a U.S. citizen and the government authorities had done the same thing on other rivers. The U.S. Secretary of State said that "while the question of accountability for the spoliation of insurgents may remain open, yet there can be no doubt as to the responsibility of the ***de jure*** for all spoliation it may resort to for its own protection."[248]

We can conclude that a government is liable for the injuries and destruction caused to other States as a result of the miscon-

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246 (1955) 6 R.I.A.A. 42-45. See also ***Youman's Claim*** in which an American citizen became involved in a riot in a Mexican town: ***Youman's Claim*** (***U.S***. v. ***Mexico***), (1920) General Claims Commission IV, R.I.A.A. 110; 21 Am. J. Int. Law 1927, 571.

247 ***Irene Roberts Case***, Ralston, Venezuelan's Arbitration, p. 142, cited in C. EAGLETON, ***op. cit.,*** note 33, p. 62.

248 See John Bassett MOORE, ***A Digest of International Law***, vol. VIII, Washington, US Government Printing Office, 1906, p. 1038.

duct of its enlisted and uniformed soldiers even if their actions were not ordered by their superior in command[249].

3. Treaty Law

A number of international agreements make States responsible for acts committed by their armed forces in wartime. One example is the 1899 ***Hague Convention II with Respect to the Law and Custom of War on Land***[250]***.*** Regulations respecting the laws and customs of war on land are annexed to this Convention[251]. The Convention and the regulations annexed to it were revised and amended at the second Peace Conference in 1907 and incorporated as the fourth annex to the 1907 ***Hague Convention***[252]***.*** The Convention and its regulations lay down rules as model[253] instructions addressed to the armed land forces. Article 3 of the 1907 ***Hague Convention*** states: "A belligerent party which violates the provisions of the said Regulations shall, if the case demands, be liable to pay compensation. It shall be responsible for all acts committed by persons forming part of its armed forces." According to this article, States, but not officers and soldiers, shall bear responsibility for all damages caused to civilians and there should be close links between armed forces and belligerent governments[254]. Thus a belligerent government is responsible for any destruction and it is unacceptable, as the German delegate, Major General Von Gundell in the course of the 1907 Conference argued,[255] for a victim to demand compensation from the officer or soldier who violated the regulation of the Convention. The term

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249 ***Id***., pp. 758-760.

250 1899 ***Hague Convention II Respecting the Laws and Customs of War on Land***, U.K.F.S., vol. 91, 1898-1899, pp. 988-1002 (Fr.); G.B.T.S., 1901, No. 11, cd. 800; Am. J. Int. Law, vol. 1, 1907 Supp., pp. 129-153 (Eng.).

251 Art. 1 of the ***Hague Convention IV***, ***supra***, note 175.

252 ***See supra***, note 175.

253 Art. 1 of the 1907 ***Hague Convention IV*** states: "The Contracting Powers shall issue instructions to their armed land forces which shall be in conformity with the Regulations respecting the laws and customs of war on land, annexed to the present Convention." ***Supra***, note 175.

254 This conclusion is drawn from article 1 of the Regulations annexed to the 1907 ***Hague Convention IV***, ***supra***, note 175.

255 See F. KALSHOWEN, "State Responsibility for Warlike Acts of the Armed Forces", (1991) 40 ***I.C.L.Q***. 827, 832.

"Armed Forces"[256] mentioned in this article applies not only to regular armies, but also to militia and volunteer corps[257].

Similar to article 3 of the 1907 ***Hague Convention*** is article 91 of the 1977 ***Geneva Protocol I***. It reads as follows: "A Party to the conflict which violates the provisions of the Convention or of this protocol shall, if the case demands, be liable to pay compensation, it shall be responsible for all acts committed by persons forming part of its armed forces."[258]

Most of the treaties on war crimes concluded between the world wars show that delegates tried to assign responsibility to the State rather than to individuals and it is clear from the conventions that only States are competent to bring an action against another State. Although it is difficult for individual victims of war to claim compensation from a State's armed forces, just as it is difficult for an injured person to bring an action against a State, it seems not to be a proper decision to prevent an individual, especially neutral persons, from doing so. The 1949 ***Geneva Convention IV*** obliges States to give instructions to their military, civil and other authorities concerning their rights and obligations in these matters[259]. It states that "the party to the conflict in whose hands protected persons may be is responsible for the treatment

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256 Armed forces have also been defined in the 1949 ***Geneva Convention***: ***Convention I***, art. 13; ***Convention II***, art. 13; ***Convention III***, art. 4. See D. SCHINDLER and J. TOMAN, ***op. cit.,*** note 186, pp. 293, 323 and 345. It defined "armed forces" in art. 43 of 1949 ***Geneva Protocol I*** to "consist of all organized armed forces, groups and units which are under a command responsible to that party for the conduct of its subordinates, even if that Party is represented by a government or an authority not recognized by an adverse party". ***Supra***, note 147.

257 Art. 1 of the ***Regulations Respecting the Laws and Customs of War on Land*** annexed to the ***Hague*** C***onvention IV***. It states that "The laws, rights, and duties of war apply not only to arms, but also to militia and volunteer corps fulfilling the following conditions: 1) to be commanded by a person responsible for his subordinates; 2) to have a fixed distinctive emblem recognizable at a distance; 3) to carry arms openly; and 4) to conduct their operations in accordance with the laws and customs of war." ***Supra***, note 175.

258 See 1977 ***Geneva Protocol I, supra***, note 147. This protocol supplements rather than replaces the 1949 ***Geneva Conventions.***

259 ***The 1949 Geneva Convention IV,*** art. 144, and ***Convention III,*** art. 127. The 1949 ***Geneva Convention IV*** R***especting the Laws and Customs of War on Land.,*** signed in August 1949, entry into force Oct. 21, 1950; 75 U.N.T.S. (1950) 287-417 (En. Fr.); (1950) 157 U.K.F.S. 355-423 (Eng.); (1958) U.K.T.S. 39 Cmnd. 550 (Eng. Fr.); ZZZII U.K.P.P. (1958-1959) 11 (Eng. Fr.); (1956) 50 Am. J. Int. Law 724-83 (Eng.).

accorded to them by its agents"[260]. Article 148 of the said Convention, which is the repetition of article 51 of the 1949 ***Geneva Convention II*** and article 131 of the 1949 ***Geneva Convention III***, states "No High Contracting Party shall be allowed to absolve itself or any other High Contracting Party of any liability incurred by itself or by another High Contracting Party in respect of breaches referred to in the preceding article." Grave breaches in article 147 of the ***Geneva Convention IV*** are described, ***inter alia***, as "extensive destruction and appropriation of property."

A State is responsible for the wrongdoing of its armed forces irrespective of whether they acted willfully or unintentionally[261] or whether they acted in their capacity as an organ of the State or not. This conclusion is derived from a broad application of article 3 since it includes all violations of the regulations mentioned in the annex to the Convention committed by armed forces. It may be concluded that any act of the armed forces which violates the general rules of State responsibility leads to State responsibility.

4. ILC Draft Articles

Maintaining global safety is not possible if each man tries only to satisfy his own personal desire. Each organ should respect the internal law of its country while acting in its own capacity. Doing so is a cornerstone of State responsibility. Thus, placing restraints on the destruction of non-military objectives, including the environment, requires a well-disciplined army that respects the orders of its commanders. Organs cannot maintain the necessary military discipline if they do not act in their own capacity. Chapter II of the ILC Draft Articles is devoted to the "Act of the State" under international law. It follows that the capacity of the

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260 ***Id., Convention IV,*** art. 29.

261 The international precedents accepted the very strict accountability for mistaken action. An example of State responsibility arising from mistaken actions of armed forces is the U.S.S.R.'s shooting down of KAL 007. See G.M. McCARTHY, "Limitation on the Right to Use Force Against Civil Aerial Intruders, The Destruction of KAL Flight 007 in Community Perspective", (1984), vol. 6, ***N.Y.L. Sch. J. Int'l & Comp. L***. In ***Massey Case***, (1938) 941 R.I.A.A. iii, 1905, it was said: "I believe that it is undoubtedly a sound general principle that, whenever misconduct on the part of any such persons, whatever may be their particular status or rank under domestic law, results in the failure of a nation to perform its obligations under international law, the nation must bear the responsibility for the wrongful acts of its servants." See B. CHENG, ***op. cit.***, note 17, p. 195.

State's organ in the case in question irrespective of the actor's competence to perform that act[262] is the sole condition for holding the State responsible for the conduct of its organ[263]. Thus, if the armed forces of a State cause environmental damage during war, that damage appears to be covered by the ILC Draft Articles if "it is established that such person or group of persons was in fact acting on behalf of that State." The point is that this condition will certainly cause some difficulty since it is not always easy to prove that the army was acting in "that capacity in the case in question". The same is true for organs of an entity that is not part of the normal structure of the State, but is empowered to act on behalf of governmental authority by the national law of that State[264]. States are responsible for the acts of persons who, in the absence of official authority, act on behalf of those States[265].

Article 11 of the 1980 Draft Rules provides that "the conduct of a person or a group of persons not acting on behalf of the State shall not be considered as an act of the State under international law." Kiss, in his commentary to this article, states that "this does not appear to be accepted for environmental matters."[266] By referring to the ***Trail Smelter Case*** and Stockholm Principles, he affirms that the State whose territory serves to support the activities resulting in environmental injury to other States is responsible for the damage caused.

We can conclude that under the 1907 ***Hague Convention IV***, the 1949 ***Geneva Convention IV*** and the 1977 ***Geneva Protocol I***, a State assumes responsibility for acts by its "organs" including members of its armed forces even if those acts are ***ultra vires***. This seems to be different under general principles of international law including those mentioned in the ILC's Draft Articles of State Responsibility. Thus, Hague and Geneva rules, which merely codify what has become a generally accepted principle of State responsibility during armed conflict, appear to establish a higher standard of responsibility for violations of their rules than would otherwise be the case.

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262 Art. 6 of ILC Draft Articles. ***Supra***, note 44.
263 ***Id.***, art. 5.
264 ***Id.,*** art. 7 (2).
265 ***Id.,*** art. 8 (***b***).
266 See A. KISS and D. SHELTON, ***op. cit.***, note 63, pp. 353 and 354.

Conclusion

A. Type of State Responsibility for Environmental Matters

"Fault as ***culpa***" cannot properly be defined as a general requirement for cases to be considered violations of international obligation. The "no-fault" theory, thus, seems to provide a better basis for establishing reasonable standards in international relations while maintaining the principle of reparation. It does not deny that fault as ***culpa*** may be a condition of State responsibility. This point is explained by Amerasinghe and quoted by Smith: "The basis of [State responsibility] will vary with the content of the international obligation. This may be a strict basis or the basis of risk in some circumstances, while in others it may involve malice or culpable negligence, or conceivably malice alone."[267]

In 1978, the ILC began to discuss the new legal relationships that might arise as consequences of harm caused by an act that was not wrongful under international law. In the view of the Commission, liability does not depend on wrongfulness but rather arises from a primary rule of obligation (***sic utere tue ut alienum non laedas***)[268]. The present situation was correctly summarized by the Director-General of UNITAR: "There is reason to think that studies now being carried out by the International Law Commission might gradually result in new rules and principles which would be acceptable to the world community as a whole."[269]

B. Damage to the Environment as a Crime

Declaring unacceptable damage to the environment a punishable crime against the environment would make governments more reluctant to resort to wanton environmental destruction.

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267 See B.D. SMITH, ***op. cit.***, note 12, p. 17. In Stark's words, "it is probable that 'culpable negligence' means in this connection no more than the breach of an international obligation to perform or abstain from a certain line of conduct. Whether a mental element is added or not would appear to depend simply on the specific rule of international law" See J.G. STARK, "Imputability in International Delinquencies", (1938) 19 ***Brit. Y.B. Int'l L.*** 104, 114.

268 M.C.W. PINTO, ***op. cit.***, note 53, pp. 24-34.

269 See Remnants of War 10 and 82 (UNITAR and Libyan Institute for International Relations, eds., sales pub. No. UNITAR/CR/26 (1983), quoted in Karl Josef PARTSCH, "Remnants of War as a Legal Problem in the Light of the ***Libyan Case***", (1984) 78 ***Am. J. Int. Law*** 386, 396.

Establishing "ecocide" as a crime under international law would prevent future environmental abuse.

The ILC has contributed to the development of international law to protect the environment against the effects of military activities. In its Draft Article on State responsibility (Part One)[270] the ILC enumerated certain acts as international crimes. It states that an international crime may result, ***inter alia***, from "a serious breach of an international obligation of essential importance for the safeguarding and preservation of the human environment, such as those prohibiting massive pollution of the atmosphere or of the seas."[271] In its 48th session from June 6 to July 5, 1996, the ILC adopted the final text of a set of twenty Draft Articles constituting the ***Code of crime against the peace and the security of mankind***[272]. The Commission considered willful and severe damage to the environment a war crime.

C. Responsibility for Environmental Damage in War

The effects of war on humans and their environment continue even with the coming of peace. Beth Osborne Daponte, a demographer with the U.S. Census Bureau, estimated that after the 1991 Persian Gulf War's conclusion, 111,000 Iraqi civilians had died from war-related health problems by the end of 1991. Many of these deaths are attributable to "[a]llied bombing of Iraq's electrical generating capacity, which was needed to fuel Iraq's sewerage and water treatment system."[273]

International law prohibits a State from carrying out or authorizing activities which damage human health and the environment. In using weapons which cause mass destruction in war, a State is subject to the specific obligations established by the rules of general international law reflected in treaty and custom. Any use of such weapons would violate these rules of general international law.

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270 ILC Draft Articles on State Responsibility, ***supra***, note 44.

271 ***Id.,*** art. 19, para. 3(***d***) of the ILC Draft Articles on State Responsibility.

272 "Report of the ILC on the work of its forty-eighth Session" (May 6-July 26, 1996), General Assembly Official Records. 51st Sess., Supp. No. 10 (A/51/10).

273 Study Shows Iraqi Post-War Deaths Greater Than Initially Thought, PR Newswire, Aug. 17, 1993, available in Lexis-Nexis Library, PR News File.

A State which causes damage to other States will be under an obligation to make reparation for the consequences of the violation. This arises from a principle of general application, and there is no reason to exclude violations relating to environmental obligations. If a State causes damage to the environment in time of war, especially in a third State not involved in the conflict, financial reparation should cover the costs associated with material damage to the environment. This approach has been confirmed by Security Council Resolution 687, which reaffirmed that Iraq was liable under international law, ***inter alia***, for "environmental damage and the depletion of natural resources" resulting from the unlawful invasion and occupation of Kuwait."[274]

Under article 3 of the 1907 ***Hague Convention IV***[275], a belligerent is responsible for all acts committed by persons forming part of its armed forces. The rule of the 1907 ***Hague Convention IV***, imposing responsibility on a State for misdeeds of its armed forces in land warfare, has entered customary law. The Security Council, in its resolution addressing Iraq's attempted annexation of Kuwait, clearly demonstrated that a duty of indemnity attaches to the unlawful use of armed force, both for breaches of the humanitarian rules of armed conflict and for the use of unlawful armed force itself.

274 Security Council Res. 687 (April 3, 1991).

275 1907 ***Hague Convention IV***, ***supra***, note 175.