the principle of State responsibility. It is widely admitted that a State is sovereign in its own territory including the airspace above it. From this point of view, it seems to follow that a State can conduct nuclear weapon tests within its own territory. But this is not the case, because the soveiregnty of a State should not be such as to cause harm to others. Nuclear weapon tests conducted within a metropolitan territory of a State can easily cause harm to the rest of the world. Here, the question of State responsibility plays an important role. In fact, it should override the consideration of State Sovereignty. Thus nuclear tests within a territory of a State should be regarded as illegal because of the potential threat to vital interests of others.

Nuclear weapon tests may pollute the air above and beyond the territory of the State because the radioactive materials may be deposited high in the stratosphere and may be swept away to other parts of the world by prevailing winds. Admittedly, international law at pesent has not yet defined the height of the "airspace" over which the terrestrial State has sovereignty. It is, however, generally admitted that "airspace" does not include "outer space". Thus the damage to flights in the outer space in the future, should the nuclear weapon tests still be conducted, would also necessarily belong to the responsibility of the terrestrial State which carries out the tests. The radioactive materials could also spread to the "airspace" of other States or the "airspace" above the high seas. Should the fall-out cause damage to other States or their nationals, or to a ship or aircraft navigating the high seas or the "airspace" above the high seas, it is my Delegation's opinion that the damage should be the responsibility of the State which carried out the nuclear weapon tests.

As regard the nuclear weapon tests on non-self-governing territories, it is the opinion of my Delegation that though dorment, the sovereiguty over the territory rests with its native people. The administering State can be considered as being vested temporarily with the attributes of that sovereignty. In administering the non-self-governing territories, a State has to comply with the Charter of the United Nations. Under Article 73 of the Charter, the administering State has accepted as "a sacred trust the obligation to promote to the utmost....the well-being of the inhabitants of these territories." One should be very cynical indeed to contend

that nuclear weapon tests are carried out on non-self-governing territories to promote the "well-being of the inhabitants of these territories."

In the opinion of my Delegation, nuclear weapon tests on non-self-governing territories must be regarded as illegal because they are definitely contrary to the Charter and the spirit of the United Nations.

If nuclear weapon tests on non-self-governing territories are regarded as illegal, the tests on trust territories should be even more so. The administering State of the latter does not have a sovereignty over the area, and its legal capacity is even more limited than the former. The administering State of a trust territory is more than an agent of the Trusteeship Council.

I would like to mention in this connection the concept of "strategic areas" in the trusteeship system. Among the trusteeship agreements made so far, I think, only one contains the clause of the "strategic area." This was the agreement regarding the trust territory of the Pacific Islands. In this "strategic area" the trusteeship agreement of 1947 allowed the administering State (the United States of America) to close certain areas for security reasons. The United States in this very area detonated hydrogen bombs in 1954. As the result of the explosion, many islanders were exposed to radioactive fall-out. I may again refer to the Secretariat's report for the effects of the test on the people of the islands. Their sad story has been well reflected in the Secretariat's report.

The issue I want to submit is, whether the concept of "strategic area" may justify the administering State to conduct nuclear tests on trust territories. Although the clause may grant the State the right to build military bases, it is the opinion of my Delegation that it does not give them the right to carry out the explosion of nuclear weapons on those territories.

The Geneva Convention on the High Seas, 1958, stated that the freedoms of the sea included, inter alia, the freedom of navigation, the freedom of fishing, the freedom to lay submarine cables and pipelines, and the freedom to fly over the high seas. However, there has not yet been concluded an international agreement as to the legality of nuclear weapon tests on the high seas. A resolu-

tion on nuclear tests on the high seas, adopted at Geneva on April 23, 1958, recognized the fact that "there is a serious and genuine apprehension on the part of many States that nuclear explosions constitute an infringement of the freedom of the seas". A nuclear test on the high seas will definitely cause hazards to the fisheries of many nations. The essential question here is whether the freedom of the, high seas can be used so as to create damage to other peoples' interests, and my Delegation is of the opinion that it cannot be used to that end. The explosion of nuclear weapons on the high seas should be prohibited.

If these experiments and tests continue, it would be difficult to maintain that they will not infringe upon the recognized freedoms of the high seas. Navigation will be halted, fishing will be suspended, submarine cables and pipelines may be affected, the freedom to fly over the high seas will seriously be interrupted, and the waters and the air of the high seas will definitely be polluted. These freedoms are designed for the benefit of mankind, and definitely not for the convenience of one or two States, detrimental to the legitimate interests of the rest of the world.

Therefore, taking into consideration the effects of the detonation of nuclear weapons, the tests on the high seas cannot be regarded as legal. They cannot be regarded as a legitimate and justified use of the high seas. It is an infringement upon the freedom of the high seas and upon the safety of mankind.

There is one more aspect of the nuclear weapon test which should be considered : how it is conducted. The tests can be carried out in the air, on the surface, underground, and underwater. As to tests carried out in the air and on the surface, both kinds of tests have practically the same destructive effects and both produce radioactive materials which are dangerous to human life. It is safe to say, therefore, that such tests are illegal. Considering its effects on fisheries and navigation, underwater nuclear tests may also be included in this category.

As to underground nuclear explosions, however, it may be contended that they may not have the destructive effects comparable to the air and surface explosions, that at least its effects are harnessed within the relatively strong concrete. Also, the radioactive materials

as a result of the explosion may not endanger human life because they are contained deep in the ground. Yet, the underground tests are elements in promoting the notorious arms race. Politically, as I will discuss presently, all nuclear weapon tests are inadmissible including the underground tests.

We still remember clearly Hiroshima and Nagasaki. The sacrifice of hundreds of thousands of Japanese lives during the bombing of Hiroshima and Nagasaki caused widespread alarm with regard to the destructive power of nuclear weapons. From that time on, the status of atomic weapons can no longer be classified as ordinary "conventional" weapons. The problem of nuclear or atomic weapons testing, therefore, cannot be regarded as just another experiment in physical science.

Moreover, nuclear weapon tests are not only the problem of countries belonging to the nuclear club alone. If the tests are not barred, sooner or later, the nuclear weapon tests will also be conducted by the present have-not States. If the nuclear powers continue their tests, the have-not States will always be tempted to have nuclear weapons of their own. Since generally the nuclear powers would not willingly give such weapons to the have-not States, the result of all this would be that more tests will be conducted by have-not States for their own nuclear weapons, and this will cause more harm to mankind.

Nuclear weapon tests also intensify the arms race within the framework of the cold-war. As long as the cold war continues to exist, no party in the controversy will let itself be overmatched by the other. Both the United States and the Soviet Union prefer to negotiate on the problems of East-West tension "from a position of strength". This means that any development in nuclear weapons on one side will almost automatically be followed by nuclear testing by its opponent. It is not difficult to see that this kind of dangerous "balance of power" is based on a precarious basis, and that international tension will continue to grow as long as nuclear weapon tests continue, whether in the air, on the ground, on the high seas, underground or underwater.

The great dilemma today seems to be the contradiction between what is considered the necessity for national preservation on the

one hand and the necessity for the safety of mankind and civilization on the other. From the political point of view, therefore, the crux of the problem of nuclear tests is the cold war.

After making these observations, I will be very brief in answering the questions formulated in the Topics for Discussion.

I (*a*) Yes.

(*b*) Yes, with the provision that such reparation will not exceed reparation paid to the nationals of the State concerned.

(*c*) Yes.

II (*a*) First part—yes
Second part—it is contrary to international law.

(*b*) Yes.

III (*a*) Yes.

(*b*) Actual damage should be proved.

(*c*) Yes.

IV It is my Delegation's contention that nuclear weapons *per se* are illegal. This view is based upon the following considerations :

1. That they are "poisonous" and thus contrary to the Hague Regulations (1899 and 1907) and the Geneva Gas Protocol of 1923 prohibiting the use of poisonous gases in warfare.

2. That the use of the nuclear weapons is a crime against humanity, because it covers destruction of civilian population in time of war, thus contrary to the established rules of the law of war.

3. That its total character may destroy a large number of people indiscriminately and is thus contrary to the established rules of the law of war.

4. That its total character may destroy a large number of people indiscriminately and is thus contrary to the Genocide Convention of 1948 which prohibits the destruction, in whole or in part, of national, ethnical, racial or religious groups.

5. That its effects on the civilian population are contrary to the Geneva Convention (IV) of 1949 on the Protection of Civilian Persons in Time of War.

Since nuclear weapons used both in warfare and in tests have almost the same destructive and radioactive effects, it may also be possible to deduce from this that nuclear weapon tests too are illegal. The stoppage of the tests can certainly be considered a matter of international concern.

Allow me to recapitulate briefly the main points of the position of my Delegation regarding nuclear tests :

My Delegation is of the opinion that nuclear weapon tests are illegal, no matter where they take place or by whom they are carried out and under whatever circumstances. Nuclear weapon tests should be prohibited and discontinued. The use of nuclear energy should be restricted to peaceful purposes only. We are of the opinion that damage caused by nuclear tests should be the responsibility of the State which carried out the tests. The findings in the *Trail Smelter Arbitration* can be used as a legal basis. Though, in principle, claims should be based on actual damage, it has to be kept in mind, however, that it will be very difficult to make an assessment, especially in terms of money, of material damage to life and health of human beings, animals and plants or of the genetic effects of the tests. Moreover, it is quite possible that the damaging effects will only be manifest after a certain time, perhaps years after the tests.

It is tempting to say that the problem of nuclear tests is essentially a political problem, rather than a legal one. Indeed important political issues are involved, perhaps even predominantly so.

From the legal point of view it would be ideal if nuclear weapon tests could be conventionally outlawed by an international convention. I wonder, however, whether under the circumstances, with cold-war issues polluting the international atmosphere, that ideal could materialize. But my Delegation sincerely believes that the Committee's findings regarding the legality of nuclear tests will be of great importance and will mean a concrete and valuable step in the right direction towards

achievement of that ideal. I may, therefore, be permitted to express my Delegation's earnest hope that the Committee will be able to establish unequivocally the illegality of nuclear weapon tests and if the Committee decides to formulate a resolution in line with its findings, my Delegation is prepared to support such a resolution.

Burma : The subject of nuclear tests is not new or unfamiliar but that branch of international law which we wish to invoke in pronouncing such tests illegal is new and unexplored. Nuclear tests have gone on for many years and upwards of more than 100 tests had already been made before the great Indian leader, Mr. Nehru, put upon himself the task of questioning their legality.

The forum of this Committee is hardly the place for dramatic pronouncements of moral condemnation of tests, but we can easily understand the appeal made by the Japanese Delegate last year to humanitarian considerations for declaring these tests illegal. Humanitarian considerations would forthwith lead our thoughts to the condemnation of the use of nuclear weapons in time of war on the basis of the many declarations beginning with the Declaration of St. Petersburg of 1868 to the Geneva Convention of 1949. For in all these international conventions the use of weapons of mass destruction was prohibited.

In the present discussion this aspect of the matter does not call for consideration as our immediate concern is with the legality of nuclear tests only. The Committee has before it the 1956 and 1958 Reports of the United Nations Scientific Committee on the Effects of the Atomic Radiation, the extracts from the 1958 Reports on the Hazards to Men of Nuclear and Allied Radiations prepared by the British Medical Research Council and the Draft Convention and Commentaries on Civil Liability for Nuclear Damage of the International Atomic Energy Agency of 1960.

These investigations had been conducted with a view to safeguard the population from the dangers and hazards arising out of the use of atomic energy for peaceful purposes, but even after reading these reports we are left with the impression that the injurious effects of atomic radiation and fall-out must necessarily present a source of perennial danger to the life and integrity of the human

species accustomed as they have been to the natural radiation since the beginning of the world.

The dangers arising out of nuclear explosions, as described in the scientific papers placed at the disposal of the Committee, are grim and foreboding. We are not sufficiently informed of the evil effects of radiation resulting from underground tests, but those tests carried out in the atmosphere and in the seas had given rise to hazards long distanced both in time and space resulting from radiation and fall-out. These results are not confined to the territories of the testing countries. The spread and increase of radioactivity are global in character and the fall-out rising into the stratosphere scattered on to the distant regions of the earth within a space of several years.

Both radiation and fall-out are capable of causing what has been scientifically described as somatic and genetic effects on the human body. While somatic effects may cause harm to the individual person during his life time, genetic effects would extend to future generations. These results would appear to have been confirmed by the experience of the Japanese victims both of last War and of the tests conducted in the Pacific Ocean.

Satisfied as we are with the truth of the scientific investigations carried out in respect of local and global radioactive fall-out from nuclear test explosions and the biological and genetic effects of such fall-out and radiation, the question naturally arises as to what action the people living and working in peace in the far distant lands should take by way of seeking redress for the wrong suffered by them. In the circumstances, the State of which these victims are nationals must necessarily appeal to international law and fix the responsibility for redress on the State which conducted the nuclear tests. As already remarked, this particular branch of State responsibility has not been previously explored to the extent of obtaining well settled principles of liability.

There can be no doubt whatsoever that the principle of State responsibility must be extended to afford relief and satisfaction to the States to which the victims of atomic radiation and fall-out belong. Such extension of these principles was foreseen by Oppenheim who, at page 342 of his treatise on international law remarks : "The increasing complexities of modern international relations, in particular having regard to the unlimited potentialities of scientific

weapons of destruction, may call for far-reaching extensions of individual responsibility expressly declared by international law." The learned author was thinking of the violation of law in respect of international control of atomic energy by individuals and not by States. At page 343, the learned author states that an act of the State injurious to another, if wilfully committed, is an international delinquency.

State responsibility may also arise through an abuse of a right enjoyed by virtue of international law, and this occurs when a State acts in an arbitrary manner and inflicts injury upon other States not justified by legitimate considerations of its own advantage. On the same principle the duty is cast upon the State not to interfere with the riparian rights of other States.

These legal principles have already found expression in a number of cases before courts and tribunals in a number of countries. The *Trail-Smelter Arbitration* Tribunal arrived at this conclusion enunciating the principle in the following terms :

> "Under the principles of international law, as well as the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequences and the injury is established by clear and convincing evidence."

The damage in this case was done to the crops, pasture lands, trees and agriculture generally as well as to livestock as the result of sulphur dioxide fumes emitted from a smelting plant in British Columbian Canada. The tribunal in the circumstances held the dominion of Canada liable on the ground that there was a violation of the obligation to protect other States from injuries emanating from its territories and this violation constituted an abuse of right, an unlawful act. The facts giving rise to the *Trail-Smelter Arbitration* have very close affinity to those arising out of the undertaking of nuclear tests by a State within its own territory, and it is submitted that the principles of state responsibility laid down in the said case can with equal justice be applied to the conducting of nuclear tests.

In seeking to extend the principle of municipal law, we must take into account the well known dictum of Westlake that "the duties

and rights of States are only the duties and rights of the men who compose them and it is scientifically wrong and practically undesirable to divorce international law from general principles of law and morality which underline the main systems of municipal jurisprudence regulating the conduct of human beings."

Thus, to solve the problem set before this Committee, it should, as set out in the Statute of the International Court of Justice, seek its guidance from the "general principles of law recognized by civilized nations", viz., the general principles of municipal jurisprudence, and in particular, of private law in so far as they are applicable to relations of States.

The Committee's Secretariat has placed materials before us of sufficient weight to enable the Committee to come to the conclusion that a State conducting nuclear tests within its own territory is, under international law, guilty of an act of international delinquency. The Committee has been referred to the principles of tortious liability adopted by the various systems of law. The accepted principle in Anglo-American law is that it is wrong to do wilful harm to one's neighbour without lawful justification and excuse. The same principle is recognized by France in Article 1382 of the *Code Napoleon*, by Italy in Article 2043 of the *Italian Civil Code* and by Germany in sections 823 and 826 of the *German Civil Code*. The *Swiss Code* also incorporates the same principle in Article 41, and Soviet law observes this principle of law in Article 403 of the *Soviet Civil Code*.

This law of liability for unlawful harm is based on the principle of fault, but in more recent times this principle of fault has been qualified by the application of the principle of absolute liability in respect of dangers created by the respondent. The English case of *Rylands v. Fletcher* is in point for it lays down "A person who for his own purposes brings on his land and collects and keeps there anything likely to do mischief, if it escapes, must keep it in at his peril, and, if he does not do so, he is *prima facie* answerable for all the damage which is the natural consequence of this escape." In the American law of torts this principle of liability for ultra-hazardous activities is stated in these words :

> "One who carries on an ultra-hazardous activity is liable to another whose person, land or chattels the actor should recognise

as likely to be harmed by the unpreventable miscarriage of the activity for harm resulting thereto from that which makes the activity ultra-hazardous, although the utmost care is exercised to prevent the harm."

The principle of absolute liabilityfor dangerous things is found accepted by the major legal systems of Europe and America. The Islamic Book of rules of justice, *Majalla* in Article 1197 provides "no person may be prevented from doing as he wishes with his property unless in so doing he should cause grave damage to other persons."

The African customary law does not diverge widely in its essentials from the accepted concepts of the common law. The Chinese and Japanese law also recognise the principle of absolute liability for dangerous things. The Burmese law, based as it is on the English common law, similarly recognises this principle. Dr. E. Maung in his *Expansion of Burmese Law*, (1951 page 56) mentions that even before the common law came to impinge upon the native customary law, it was a recognised principle that a person has the duty to act so as to avoid injury to others even though in the exercise of one's right. Hence a person felling trees on his own land adjacent to another's holding was liable in damage for the injury caused to buildings, human beings and animals on the adjoining land.

It would thus appear that this agreed principle of tortious liability recognised in all the major legal systems of the world can readily furnish the source from which international law can draw in enunciating its own rules and principles with regard to international torts and tortious liability. Adopting this principle this Committee should share the view that a State harbouring dangerous things on its territory or carrying out dangerous experiments within its territory should be held liable for damage or harm caused to neighbouring State.

In regard to the nuclear tests carried out in the open seas, it has been said in some quarters that the interference caused to navigation is negligible and the harm done to the living resources of the sea is slight and that these disadvantages were far outweighed by the resulting advantage of keeping the would-be enemy of world peace in constraint. But such a bland reason cannot possibly appeal

to this Committee. The end does never in law justify the means. The introduction of such a concept into the municipal law would result in grave injustice to the victims of the illegal act. The same result would undoubtedly follow if such a view be adopted in the realm of international law.

The high seas are not subject to the sovereignty of any one nation. The reservation of immense areas of the open seas for nuclear testing purposes must necessarily result in the denial of the right of other nations to navigate in the area. The power of the latest explosions is such that vast areas of the open seas would for a considerable length of time be placed out of bounds—so to speak—to international shipping as well as to fishing operations. Thus if nuclear testing be permitted in the high seas, the four freedoms of the sea recently adopted by the international convention would certainly lose their meaning and purpose.

The United Nations Convention on Fishing in Article I lays down the general principle that, subject to regulations relating to conservation of the living resources of the sea, all States have the right for their nationals to engage in fishing in the high seas. Articles 24 and 25 of the convention adopted by the U. N. Conference on the Law of the Sea require States to take steps to prevent pollution of the sea by oil and radioactive waste and other harmful agents. The tragic experience of the Japanese fishing fleet shows how substantially the fishing waters could be polluted and how the living resources of the sea could be destroyed as a result of nuclear testing conducted on the high seas. In the face of these grim facts' this Committee is bound to agree that nuclear testing in the high seas is illegal as being contrary to the four freedoms of the sea settled and agreed to under the U.N. Convention on the Law of the Sea.

Japan : Events which took place since our Tokyo session do not show any sign of optimism regarding nuclear tests. Two months after the Tokyo Conference, France conducted her fourth nuclear test. Last autumn, when efforts had been made for bringing negotiations at Geneva to a successful conclusion, the Soviet Union resumed a series of nuclear tests, which culminated in the detonation of the 50 megaton bomb, despite a solemn appeal by the United Nations. Following this Soviet resumption, the United States of America decided to undertake laboratory and underground nuclear

tests. It has recently been reported that she is planning mid-air nuclear explosions.

The Japanese Government lodged protests with the French Government on April 27, and with the Government of the Soviet Union on September 2, October 20, October 25, and again on October 30. She also made a protest to the Government of the United States on September 6.

At the United Nations last autumn, the Japanese Delegation took an active part in the six power draft resolution on the suspension of nuclear tests. Japan also made efforts for the adoption of a resolution on the conclusion of a test ban treaty under effective international control.

As mentioned in a general statement in the previous session, Japan's repeated protests and her other actions are based mainly on humanitarian considerations and the broad conception of safeguarding world peace, and not on the technical question of illegality of such tests.

The steady increase of radioactive fall-out is certainly a matter of great concern to us and to entire humanity—a matter which is also highly relevant in the consideration of the legality or otherwise of nuclear tests. However, even if the scientists should fail to prove actual damage done by radioactive fall-out, or even if they succeed in inventing the so-called "clean bombs", nuclear tests are fraught with serious danger to world peace. They create suspicions and accelerate an intensive armament race in nuclear weapons, which is itself a great menace to world peace.

The problems before the Committee, however, are technical legal problems. Such problems are fit to be discussed not by moralists or politicians, but by trained lawyers alone. A nuclear test, damage, reparation of damage, preventive remedies etc. are very much like tort problems in domestic law familiar to ordinary lawyers in civilized countries.

The countries conducting such a test may indeed believe in all honesty that in view of the present state of international affairs such measures are absolutely necessary for guaranteeing the security of their own countries or for the defence of the Free World or of the Communist world, as the case may be. In the absence of international treaties banning nuclear tests, their position may be regarded as similar to the position of a lawful industrial enterprise utilizing nuclear energy which is equally fraught with dangers to the community at large. The municipal laws of civilized countries have provided for strict liability along the lines of *Rylands* v. *Fletcher* in Anglo-American law, or a similar principle of *Gefaehrdungshaftung* in Continental law, i.e. liability without any proof of carelessness for created hazards, which, it seems, has already been accepted in the countries of Euratom and of the Organisation for European Economic Co-operation in the case of nuclear danger. May not similar principles be accepted in the case of damage arising out of nuclear weapon tests, as falling under the "general principles of law recognized by civilised nations?"

It is submitted that the question be discussed without a show of political air and without any suggestion of moral condemnation of any of the countries concerned. These are problems which must be tackled by lawyers, as in cases where they deal with domestic legal problems of a civil law character, dealing with the incidence of loss or the prevention of damage.

The concept of *delict* or tort has a nuance of moral condemnation, having been associated in the 19th century with the idea of *culpa*. The French place this strict liability under a separate caption *Quasi-delict*, and Judge Smith of the Harvard Law School wanted to keep this strict liability separated from tortious liability.

Japan: [Further Views]:

The problem of nuclear weapons tests can only be solved by the complete banning of such tests. This can be effected by agreement by the testing states to cease to make such tests. This connotes big political actions on their part which are of course a thing of prime importance. As the distinguished observer from the United Nations correctly stated, the sheer inquiry into the legality of such tests will not solve our problems.

The United States of America have made the tests with the belief that such measures are absolutely necessary for the defence not only of herself but also for the defence of the Free World, and the Soviet Union is making such tests probably believing that such tests

are necessary for the defence of the Communist World. I hope that mankind will through Hobbesian logic come to have a government which can control the dangerous actions of the testing States leading to mutual destruction. But at present the world is not so organized, and international law presupposing a society of sovereign States is incompetent to control their actions. This does not mean, however, that it is meaningless to deliberate on the legality of nuclear tests. The examination shows that there is a wide divergence between the rules of positive law so far evolved and the sentiments of justice of mankind in general. There is, to use a classical phrase, a conflict between positive law and natural law. In our inquiry into problems before the Committee, we should use two distinct methods. What are the present rules, and what ought to be the rules which ought to be the international law. For instance, when we consider the question of compensation to be paid to the injured party, we can more easily introduce the principle of strict liability into the international field through the doctrine of civilized jurisprudence. But it will be found that when we come to the question of preventive remedies, international law as presently established is incompetent to bring the international rules to the level of the more complete remedies recognized by municipal laws of civilized nations, until political organization of international society witnesses a radical change.

Such, in brief, is the viewpoint of the Japanese Government in considering the legality of nuclear tests in various forms which are considered by the Committee.

The answers of the Government of Japan to the questions formulated in the Topics of Discussion are as follows :

I (a) A State that has carried out the tests ought to be responsible for direct damage caused by them under the internal law of the State.

(b) A State that has carried out the tests and caused such damage is liable to pay reparation to the injured alien's home State, provided that local remedy has been exhausted.

(c) When damage was caused to a person who was outside the territory of the State carrying out the tests, the injured person's home State can demand from the former reparation under the principles of State responsibility.

II (a) & (b) With regard to questions (a) and (b), extent to which the neighbouring States are endangered should determine such a question. If the danger of causing damage to the neighbouring States is beyond doubt and over-whelmingly great, the State is exercising its territorial right to such an extent as will constitute an abuse of right under International Law.

III (a) The State carrying out such tests is to be held responsible for the pollution of air in accordance with the principles laid down in the *Trail Smelter Arbitration* case.

(b) Under the existing international law, it would be necessary for the claimant State to prove actual damage.

(c) With regard to the first question, it would depend on the nature and extent of the harmful effects resulting from contamination of air. As for the second question, the answer would be in the negative as long as the benefit of local remedy is assured.

IV The use of atomic weapons in time of war, when it causes an indiscriminate destruction of life and property, violates, at least by analogy, the existing rules of customary and conventional international law, as embodied, for instance, in the provisions of the Hague Regulations of 1907 and the Geneva Protocol of 1925. For the second question, holding of nuclear tests or the manufacture of atomic weapons cannot be said to be illegal by itself. In respect of the last point, stoppage of nuclear tests is indeed a question of universal concern.

V Under the existing International Law, there is no recourse but to ask payment for the damage resulting from nuclear tests.

Where the case has been referred to an international court, an injuction by the court for stoppage of such tests should be necessary upon application.

VI The answer depends on the case. To establish the area of danger zones, without giving reasonable consideration to the interests of other nations in the exercise of the freedom of the high seas, and in such a way as to interfere with

international traffic and fisheries, is a violation of the principles of International Law.

VII It is a violation of International Law to carry out nuclear tests in such places and in such manner as will obstruct or adversely affect the fisheries of other nations on the high seas.

VIII To carry out nuclear tests which will affect the advancement of the inhabitants of the trust territory is to be considered as contrary to the general purposes of the trusteeship system.

In making these answers the Japanese Government wishes to emphasise that humanitarian consideration should be given a priority over the technical aspects of the legality of nuclear tests. The answers, therefore, shall not prejudice the position of the Japanese Government based on such consideration with regard to any particular nuclear tests in the future as well as in the past.

Pakistan: Today, when a blanket of nuclear war clouds is menacing the whole human scene, a searching reappraisal of the code of conduct that governs international relationship is a demand upon mankind. Man's progress from the cave to outer space will become meaningless in this international age if we cannot ultimately evolve a code of conduct with common objectives for all nations, based upon the rule of law. Due to scientific developments our planet has become much too small and it has become much too dangerous for it to be ruled by anything but law. As long as the rule of force retains its paramount position as a final arbiter of international disputes, there will remain always the possibility of war by miscalculation. I cannot see how we can hope to secure peace in the world except by establishing law between nations and equal justice under the law.

We are living at a decisive moment in the history of man. Rapid and dramatic changes in the technical and scientific fields, too numerous to enumerate, daily defy evaluations on the basis of outmoded slogans and outdated interpretations. At a pace beyond imagination the whole pattern of existence is being reshaped. Mere guidance from hidebound political doctrines may not provide firm footholds for the dynamic present and an uncertain future. Age-old barriers such as seas and mountains, weather and climate and space are fading into relative insignificance.

As we listen to the roar of current history, every day that passes, its call seems more clear that mankind, men and nations-races and colour-must learn to live together or they may have to perish together.

Man has learnt how to destroy the world-he must now learn how to save it for an honourable, just and true peace for free man in all countries before the sands of time run out, and the civilization as we know it is buried underneath it.

The peace we have today, as has been rightly said, is a peace maintained by retaliatory terror. This is not a peace without fear. Man is tied to the wheel of fear. The faster the wheel moves, the greater is the psychological strain and unbalance in man's life.

As I have observed earlier, the old complacent faith of man about his future has given way to doubt. The doubt has now passed into alarm. The feeling of alarm is heightened by the erected walls of hatred and by the nature of conflicts and controversies that plague the world.

The genetic, biological and other effects of nuclear radiation have been studied and commented upon, from time to time, by the United Nations scientific agencies and by other scientific bodies.

It is estimated that about one hundred and thirty nuclear tests have so far been carried out in various parts of the world over the past fifteen years. Each nuclear test has added its quota of radioactive material to the land, the sea and the air, and the scientific evidence collected and set out in Chapter I of the Report of the Secretariat has shown that the general contamination of the world by radioactive substances is in the process of having its biological and genetic effects on the human race. The indefinite continuation of nuclear tests and pollution of the atmosphere, land and water all over the world may seriously affect the life and health of the populations of all countries. If the nuclear powers continue testing nuclear weapons, the non-nuclear States may have to consider the question as to whether the testing States are liable in international law for the damage caused by these tests. Even if the tests are carried out within the territory of the testing state and even if the tests do not cause any immediate damage to neighbouring States, every test carried out may still have harmful effects on the rest of the world by its contribution to the quota of harmful radioactive substances in the

air, the land and the sea. This is so because every nuclear explosion results in the radioactive fission products being drawn into the stratosphere and these fission products gradually spread out over a large part of the world and return ultimately to the earth in the form of rain or snow. The estimates of the time for this return have recently been sharply revised. Whereas in earlier official discussions on fall-out the average length of time which the radioactive particles would spend in the stratosphere was reckoned at ten years, the actual time is now estimated by scientists to be two to three years. Consequently, the radioactive materials from over one hundred nuclear tests have already returned to the earth with their radioactive pollution. The tests of nuclear weapons so far have already distributed sufficiently extra radioactivity over the world to be detectable by instruments of precision. Every nuclear test spreads an additional quota of radioactive elements over every part of the world and each added amount of radiation may cause damage to the health of human beings all over the world. It is, therefore, a pertinent point to consider whether the nuclear powers are liable under international law. International morality demands and international law may require the cessation of nuclear tests.

The logic of the whole situation, however, demands a political solution without which all discussions on the subject may have purely an academic significance with no particular influence on the policies of the nuclear powers.

A great nuclear power violated the moratorium and in disregard of world public opinion started its tests of the monster megaton bombs. This has started the inevitable chain reaction of further nuclear tests by other nuclear powers.

It is not enough therefore to approach the question of the cessation of nuclear tests from a purely academic legal point of view. The hard realities of political life have to be taken into account for making our declarations of any practical significance and value. Failure to recognise the hard realities of political situation will lend an air of unreality to our academic deliberations. We have to recognise that mere declaration by us, that nuclear tests are illegal, will not bring about a cessation of the tests. We have further to consider whether the question of cessation of nuclear tests without an effective and proper method of inspection and control can in any

sense help towards the solution of the real problem. Voluntary ban on tests without inspection and control may afford an opportunity to the more unscrupulous nuclear powers to make secret preparation for gaining technical and tactical advantages in the nuclear field, which inevitably will start the vicious circle of further nuclear tests by others all over again. It seems obvious that none of the nuclear powers are agreeable to abandon their own concepts of their national security and their own theories on balance of power and retaliatory terror.

It may be safely asserted, in spite of possible views to the contrary, that nuclear tests, broadly and generally speaking, to the extent they endanger the health, safety and security of life-human and otherwise and to the extent it imperils the security of this planet and the survival and continuation of life on earth-they are illegal and most certainly immoral without any doubt.

I draw the attention of the Committee to the *Trail Smelter Arbitration Case* (*United States* vs. *Canada*). The *Corfu Channel Case* and the *Fletchers Case* have also been quoted. The legal principles established in those cases are rationally valid and correct and it may be said that they may have their application to the topic under discussion.

To us, above all, it is the supreme crisis in human civilisation. It represents a deep crisis in the development of the human life and thought. Man is faced with a moral crisis of the highest magnitude. The question is, whether we would allow our lives, our civilization to continue to grow and flourish or in our insane attempt to impose a particular system of life we would risk even the destruction of the human species from the face of the earth. This is an acute moral problem and anything that goes to help to solve this problem, will earn our heartfelt approval.

I had occasion to observe earlier and I take the opportunity of reiterating it again that whether we would respond to the challenge of our age, and evoke adequate spiritual, moral and emotional responses from the depths of our being to re-discover the real meaning and purpose of life and help man channelise his efforts in the direction of organizing a peaceful, just and free world within the framework of world order, where men and nations may live without fear,

under the law, with equal justice for all, refusing to sacrifice the human destiny, as a moral being, has a mark of interrogation, which the Asian-African continents need answer from the depths of their ancient wisdom, for the salvation of man.

We shall therefore lend our full support to any resolution that may call for a ban of nuclear tests.

Our answers to the questions formulated in the Topics for Discussion are as follows:

Question I	(a)	—	Yes.
	(b)	—	Yes.
	(c)	—	Yes.
Question II	(a)	—	Yes.
	(b)	—	Yes.
Question III	(a)	—	Yes.
	(b)	—	On proof of actual damage only.
	(c)	—	Yes.
Question IV	(i)	—	Not illegal-Proof of actual damage.
	(ii)	—	Yes.
Question V		—	Not sufficient. Injunction is necessary.
Question VI		—	Yes.
Question VII		—	Yes.
Question VIII		—	Not lawful.

Thailand: I wish to make the following observations which represent the personal views of my humble self. I shall confine my remarks primarily to the legal aspects of the problem.

The title "Legality of Nuclear Tests" is misleading in the extreme. I hope we are not called upon to establish the legality of nuclear tests, nor indeed their illegality. To state that it is legal to have nuclear tests is certainly not the purpose of this Conference; on the other hand, to say categorically that nuclear tests are in

themselves and by themselves illegal is to state an ideology or a wishful thinking rather than a realisable condition of facts in the modern law of nations. The most that could be done and should indeed be done would be to bring all nuclear tests under the control and rules of international law.

Nuclear tests are at present uncontrolled and uncontrolled nuclear tests are unnecessary evils. They are uncontrolled in the sense that scientifically they are not controllable. That is why they are called tests or experiments. That is why it sometimes happens that the explosion encompasses far greater area of destruction than expected or calculated or indeed planned by scientists. Apart from the inability of scientists to plan or control such tests within reason, there is sufficient legal justification to bring them under international legal control. The discoveries in modern science and technology have advanced the world to a stage where it would indeed be dangerous if the progressive development of international law lags too far behind. It is up to us lawyers and especially international lawyers to find a satisfactory solution to this urgent problem and to create international machinery to control nuclear testing.

Although it is the consensus of every one here that nuclear tests should be banned, and I sympathise and even subscribe to that, but to ban nuclear tests would still involve a political decision, and to do it with some measure of success it is necessary to have the assistance and cooperation of those who experiment with nuclear explosions. It follows as a matter of logic that the position would be the same in reverse if we, Asian African nations, are having nuclear tests either in the Atlantic Ocean or in Europe, East or West. But the facts remain what they are and we have to accept them as such. It would appear to be our special responsibility to see to it that international law corresponds to the needs of international life and in particular to the progress of international science and technology.

It is essential to observe that technically-I mean legally speaking-nuclear tests are not in themselves abominable. They need not be harmful if they could be done in such a way as not to cause damage to anything or to any human life. They need not be objectionable if they are conducted in a controllable manner, such as underground explosion, or if they do not involve another country either directly by being carried on upon the soil of another State, or indirectly

through fall-out, or if they are not conducted on the high seas or in the airspace over and above the high seas.

There is no existing positive rule of international law which prohibits the testing of nuclear explosions in one's own country without affecting private lives and properties. Rather it is part of territorial sovereignty to exercise such right or power. *Lex lata* therefore furnishes no legal basis to outlaw nuclear tests as such. But according to State practice as well as *de lege ferenda* several legal aspects of nuclear testing are open to discussion.

If nuclear testing is not in itself *injuria sine damno*, damage resulting from nuclear tests is clearly not *damnum sine injuria*. Needless for me to recall to my learned colleague from Japan that compensation was given as reparation for damages suffered by private persons as a result of a nuclear explosion. The legal basis for such a claim was undisputed.

The legal basis for the remedies for damages resulting from nuclear tests can be found not so much in the international law of State responsibility *co nomine*, or in the international law doctrine of *l'abus de droit*, but rather in a number of private law analogies irrespective of whether or not it involves State responsibility or an abuse of right in international law.

First, there is a general principle of law recognised by most nations dating back to classical Roman law that a person can enjoy the right in his property so long as he does so without harming his neighbour; similarly, a State could exercise its territorial sovereignty in so far as its exercise is not harmful to others.

Secondly, on the analogy of the common law concept of nuisance, tortious liability is created where an occupier of land lets some unpleasant or harmful substance, such as fumes or odour, escape from his land to the detriment of adjoining property.

Thirdly, absolute liability may be attributed to those who experiment with nuclear explosions on such legal principles as the doctrine of *Rylands* v. *Fletcher* or of strict liability for animals.

The following conclusions may be submitted:

a. The topic under consideration should be referred to as "Legal Control of Nuclear Tests".

b. Nuclear tests are not *per se* illegal, but to prevent potential harmful consequences they should be internationally controlled.

c. International machinery for legal control of nuclear testing should form the subject of further studies by this Committee. The Secretariat might be entrusted with the preparation of a further report on this point. A close and effective supervision of nuclear testing is needed.

d. Apart from the procedural machine to control nuclear testing, it should also be subject to the following substantive limitations:

(1) Nuclear tests should not be conducted on the high seas or in the air space over the high seas because they necessarily infringe upon the freedom of the high seas and airspace thereabove.

(2) Nuclear tests should not be performed in the territory not forming part of the metropolitan State conducting the tests.

(3) Nuclear tests should not be allowed if it is clear that there would be fall-outs dangerous or injurious to life.

e. Within the framework of the above substantive limitations which are preventive in nature, remedial measures should be provided whereby injured States or individuals should be fully and promptly compensated.

f. All things considered, a nuclear test, when legally and scientifically controlled, should only be conducted, if it does not involve the risk or potentiality of culminating in a global holocaust. For if and when such contingency actually does occur, humanity itself will be wholly destroyed and with it all the fine principles of international law it has evolved through centuries of toil and hardship must perish.

U.A.R.—There is no doubt that nuclear and thermonuclear explosions whether carried out on the ground, in the air or in the sea Produce blast, heat, fall-out and radiation which entail physical and biological effects very harmful to mankind and his environment.

To this may be added the internal hazard of these explosions to the human body, the hazard from radiostrontium. The risk of in-

troducing strontium 90 in the atmosphere could be a great hazard to the future of humanity. Scientists have already explained its biological damage, its relation to diseases (such as leukaemia, bone tumors and cancer) its effects on the reduction of life-span and also its genetic effects.

Apart from direct damages, nuclear and thermonuclear explosions have serious indirect damages, namely:

a. The possibility of mass movement of the population and of their deprivation of means of livelihood.

b. The effect on weather and rain.

c. The destruction of the living sources of the seas.

d. The interference with the freedom of air-navigation and the navigation in the high seas due to the large zones being rendered unsafe because of these nuclear explosions.

At the Tokyo session, I mentioned the harmful effects of the three French nuclear tests which were carried out in the Algerian Sahara on February the 13th 1960, April 1st 1960 and December 28th 1960. I said that, according to a report prepared by the Faculty of Science, Alexandria University, radiation increased in my country and the radioactive fall-out reached at times, as a result of these tests, fifty times double the normal.

It is appropriate to mention now the effects of the fourth French test which was carried out in the Algerian Sahara on April 28, 1961.

According to the data published by the U.A.R. Nuclear Energy Establishment, the fourth French test in the Algerian Sahara produced its effects in the territory of the U.A.R. Samples of airborne fall-out collected at Cairo and Inchas showed that the activity went up to a level which reached 300, 180, 100 and 80 times the background concentration of the air under normal conditions. The peak values of deposition of the mixed fission products at the selected sites varied from 4 to 99 per Km. square. The normal deposition was almost zero under normal conditions of no testing.

As regards the French nuclear tests, it was also announced that Ghana suffered from the first test which was conducted on February 13, 1960. It was proved that an increase of radiation was found in the samples of research workers. Harvest, soil, water and milk were badly affected.

As regards the nuclear tests conducted by the Soviet Union starting in September 1961, it was reported by the U.A.R. Nuclear Energy Establishment that the effects of these tests were felt in the territory of the U.A.R. and that the samples collected by this Establishment showed an increase of radiation and also the existence of radioactive fall-out.

Although nuclear tests may be conducted in deserted areas and under worked up precautions in order to avoid the exposure of the peoples to local fall-out, yet nothing can be done to avoid exposing almost the entire world population to global fall-out resulting from a large explosion. This global fall-out is inherent in the very nature of nuclear tests, particularly multi-megaton tests, and it cannot be eliminated. It is a long-term hazard. Its short-term effects are not the only risk.

As the adverse biological and genetic effects as well as the widespread damage resulting from nuclear explosions cannot be denied, I would not hesitate to declare nuclear tests illegal whether conducted by a State in its colonies, in trust territories, in the high seas or in its own territory.

Regarding nuclear tests carried out by a State in its colonies, we believe that Articles 73 & 74 of the United Nations Charter give specific rights to non-self-governing territories, and provide that these territories are no more under the complete sovereignty of colonial countries. The members of the United Nations having committed themselves to the respect of some international standards in their relations with their colonies, they no more have the right to expose the peoples of these territories as well as of the neighbourhood to disasters by undertaking nuclear tests.

Regarding nuclear tests carried out in trust territories, I would like to point out that under Chapter 12 of the Charter of the United Nations concerning the trusteeship system, as well as under the terms of trusteeship agreements, the trustee authority has no right to use the territories it holds on trust from the United Nations for the purpose of undertaking nuclear tests. Such an act by the trustee authority is against the basic objectives of the trusteeship system.

Regarding nuclear tests carried out in the high seas, we would like to point out that according to the law of the sea, no State can

exercise sovereignty over the high seas. In time of peace, freedom of navigation, freedom of fisheries, freedom to lay submarine cables and freedom of aerial movement are correlated to the absolute rule of freedom of the seas. Nuclear tests in the high seas cause injurious effects upon fishing even outside the zone of immediate danger. Moreover, States undertaking nuclear tests in the high seas, prohibit air navigation and sea navigation in the areas where the tests are carried out. This act is a grave interference with the freedom of the air and freedom of the high seas. There is no doubt that the destruction of the living sources of the sea is a violation of the existing rules of international law.

As regards nuclear tests carried out by a State in its territory, it was argued that the use of nuclear weapons in time of war may be justified on the ground that this will weaken the striking power of the enemy and a large number of human lives will be saved. This argument, however, is not available in case of nuclear explosions carried out in time of peace by a State even within its territory, since the harmful effects of such explosions cannot be confined within its boundaries and since aliens living in its territory or passing through the danger area and also the people of the neighbouring States may be affected by these explosions.

It was argued too that on the basis of national sovereignty, any country has the right to acquire nuclear weapons as a means of self-defence and that it has the right to carry out nuclear tests for the manufacture and perfection of these weapons. This concept, in our opinion, is unacceptable. We believe that nuclear weapons are against the existing rules of international law. There are many international instruments which include specific prohibitions of the use of poisonous weapons and gases and other weapons of mass destruction. The basic principle agreed upon in these international instruments is that the only legitimate objective of war is to defeat the enemy's military force and that the destruction of life and property which goes beyond this objective is illegal. Nuclear weapons, in our opinion, are illegal because they are poisonous and cause unnecessary suffering, and are employed without regarding the distinction between combatants and non-combatants. We may add that these nuclear weapons are against the principles of morality. The fear created by the explosion of such weapons is that of total destruction,

and no country is morally allowed to spread such fear and anxiety among the peoples of the world.

The responsibility of a State for damages caused to aliens living or passing through its territory and the peoples of the neighbouring countries as a result of nuclear tests carried out in its own territory may be based on the well known theory of the abuse of the right. According to this theory, the responsibility of the State may become involved when it avails itself of its right in an arbitrary manner in such a way as to inflict upon another State an injury which cannot be justified by a legitimate consideration of its own advantage. The responsibility of such State may be based also on the principle of absolute responsibility for dangerous substances or things which is universally recognised as a general principle of law by civilised nations.

I shall now answer briefly the questions formulated in the Topics for Discussion prepared by the Secretariat.

Number of Question	Answer
I. (A)	The State is responsible under the law of tort.
(B) & (C)	The State which conducts the test is liable to pay reparation to the injured alien's home State which may exercise its right of diplomatic protection of nationals abroad.
II. (A)	The use by a State of its own territory for the purpose of conducting nuclear tests is contrary to the principles of International Law.
(B)	The responsibility of the testing State may be based on the theory of the abuse of the right.
III. (A)	The liability of the testing State to pay reparation to the injured alien's home State may also be based on the principle of absolute responsibility for dangerous substances or things.
(B)	According to the general rules, the claimant must prove actual damage in order to be paid reparation. Probably damage is very difficult to be estimated.

In the mean time, the action should be suspended until the damage actually exists.

(C) Yes.

IV. Yes.

V. In all cases, however, whether damage is actual or not, the testing State may be compelled to desist from this dangerous act by an appropriate action. The competent body to decide on the necessity of such action is the United Nations.

VI & VII Yes.

VIII. No.

Observer for International Law Commission (Dr. Radhabinod Pal, Chairman of the Commission): I must first of all thank you for inviting me in my capacity as an Observer on behalf of the International Law Commission, as also in my personal capacity, to take part in the present deliberations of the Committee on the question of legality of nuclear tests. The question really is one that should immediately exercise the minds of all men of goodwill. Indeed, it raises a grave and anxious issue demanding immediate decision. I have listened with a deep and admiring attention to every word that has fallen from the Hon'ble Members of the Committee in respect of this question and I must say, that if the popular will of the world is at all a force, then the developments thus helping to bring together friends from the diverse parts of the world, would be sure to help them to find that preponderant coefficient of driving force which should win our souls and spirits in one flaming effort in this respect. The sense of injustice thus universally felt being an indissoluble blend of reason and empathy, though evolutionary in its manifestation, offering as it were, only a common language for communication, will, I am sure, have to be heeded to.

I express my inability to participate in this deliberation in my capacity as Observer on behalf of the International Law Commission for the simple reason that the question, though in a partial form, came before that Body as far back as 1956. The question came up before the Commission twice in the course of the same session, once in connection with the question of freedom of the high seas and

again in connection with the question of pollution of the high seas including the air space above. You will find a summary of the deliberations on those occasions in the Commission's *Year Book* for 1956, Vol. I at pages 11 to 62, though not of course continuous, under Articles 2 and 23 of the draft on the Law of the Sea; you know this draft was ultimately substantially adopted by the United Nations in the shape of the Geneva Convention of 1958. I can't vouch whether attention of the Representatives are drawn to the discussions that took place on these questions before the Commission. But anyway those Articles, which are the result of the discussions, are adopted by the United Nations. As to my personal capacity, I should only say I had not the questions before me, before I came here, and I had not an opportunity of thoroughly examining any of them. Without such a study I should not venture any comment or opinion on these grave questions.

As to the question of legality of use of nuclear weapons in war, again, I have had occasion in quite a different capacity to express my view in relation to such user by the Allied Powers at Hiroshima and Nagasaki, and I should refrain from saying anything more in this connection. I did give expression to my views in my dissenting judgment. In these circumstances, and specially in view of the most comprehensive nature of the questions raised, I would pray that yourself and the Distinguished Members of the Committee would excuse my inability to comply with your invitation to participate in this deliberation in either capacity. The question involved really goes to the very root and raises many fundamental matters, which, I must confess, I could not pay proper attention to before coming here. The developments in question have driven us so helplessly to live with the horror of our achievements that I venture not to trust my ability to keep my capacities distinct in this respect and I will therefore refrain from saying anything more here in this connection. At the same time, I would assure you, I shall draw the Commission's special attention to this matter, to the questions raised and deliberations as also the conclusions arrived at this meeting.

In concluding, I would like to draw the attention of this Body to the typical justifying attempts which appear in the Editorial Note by Professor Myres McDougal of the Editorial Board of the

American Journal of International Law in 1955, in the said journal at pages 356 onwards, which note was provoked by the condemnation of such tests by Arnold Jowett in the British House of Lords in 1954 (*House of Lords Debate, Fifth Series*) as also by a very comprehensive attack on the tests by Dr. Margolis in the *Yale Law Journal* (1955). I would utter one word of caution, though not of grave consequence, namely our reference to the advisibility of referring to and relying on Article 38 of the Statute of the International Court.

Article 38, as you all know, comprises several clauses. So far as clause (d) is concerned, the decisions collected by the Secretariat should at least provide a subsidiary means for the determination of the law on this point, and there is a general principle of law well recognised by the civilised nations referred to in clause (c). But then what I am warning you or saying a word of caution in reference to is this: If you will refer to the debate at the Sixth Committee of the General Assembly during its 1960 session, while adopting a resolution on future work in the field of codification and progressive development of international law whereby we decided that international law must take due account of the momentous political, economic and social development which had been taking place in international communities, you will find what possible use the existence of this Article in this Statute is capable of. I can tell you that some say that in spite of the changing world, in spite of the changing geography of international law, in spite of the new nations coming into being who had no voice in the formation of the existing international law, the nations have indirectly accepted the existing rules of law, the international law, the rules, actual rules framed, though they did not participate in it, through this Article 38, because Article 38 is on the Statute and by being Members of the United Nations, they also became automatically members of the Court, and thereby accepted everything that is stated in the Statute, and that is why I am just uttering a word of caution before you refer to and rely on this Article 38 of the Statute of the Court.

Observer for the United Nations (Mr. Oscar Schachter) Mr. Chairman, I am very grateful for the opportunity you have given me to say a few words on this important subject, but all I can do with all humility is perhaps say a few words rather tentatively in my personal capacity.

In regard to the issue posed before this Committee, I would like to raise some questions which occurr ed to me. My essential question is whether this problem of such magnitude and complexity can properly and justifiably be discussed in terms of analogies and legal concepts drawn from other situations. As one who has been a teacher of law and a student of law as well as an official, I share with many of you the interest and even the delight of dealing with analogy, of extending to new situations old principles and of attempting to find in various legal systems, common maxims and common principles. These are fascinating exercises for the lawyer. They are creative and they are a great utility to the judicial bodies in dealing with new situations. But there is always the question that lawyers must face, as to whether it is justified and wise to apply particular maxims to situations which in many respects are substantially different. Can we carry principles of tort and tortious responsibility, the doctrine of *Rylands and Fletcher* which has to do with pollution of streams, the *Trail Smelter case*, over to an area which involves such entirely different considerations, which involves problems of the magnitude that are completely disproportionate to the problems dealt with in these cases? I wonder too whether it would carry conviction, in the outside world, if lawyers, jurists, said that this problem of nuclear tests which has been perplexing the world and the United Nations for many years can in some way be answered by referring to *Rylands and Fletcher* and the *Trail Smelter case*. I am raising this as a question, and as a question I think it should be considered. Does not one beg the question of the nuclear test simply by referring to these analogies? After all the records of the United Nations and elsewhere show that the States concerned do recognise the harm. They do consider this an evil. There isn't any question about the desirability of bringing about a cessation of nuclear tests, but there is the problem, a great problem of the predicament in which these States, these major powers, have found themselves. They are not desirous of continuing nuclear tests, and to some degree they have been attempting to deal with this, to meet their preoccupation with the problems of security, by negotiations long protracted, but not, in my opinion, fruitless, in order to arrive at the kind of arrangement, the kind of solution, which will bring this problem to the end. As those of you who are acquainted with the progress of the talks in Geneva must be aware, that a treaty has been virtually agreed upon though there still have been some clauses which have not been agreed

upon. I don't put this forward in an optimistic sense but as an indication that the parties concerned do consider that feasible and that practical arrangements are possible to solve this problem. Now what I am in essence suggesting here by way of questions is, that this is the problem of legislation and that this is the problem of new arrangements that must be made. I think the jurists of the world can make a contribution in that direction not only by looking at the past, not only with trying to find out where the precedents regarding noxious fumes or pollution of streams may be relevant, but by more realistically looking at what might be done towards arrangements which can be effective and which can promise at this particular juncture some hope of early attainment. And therefore I would simply again stress that I am speaking now as one who views this in the professional sense in terms of the problem of law that has been raised and to indicate that the real question is whether this is not a legislative problem to be faced through new arrangements now being worked out rather than a problem to be viewed in terms of analogies, concepts and precedents derived from wholly different situations. I put forward these questions with great humility and with all respect to the very interesting and learned discussion which I have greatly benefitted from you. Thank you very much Mr. Chairman.

Observer for the League of Arab States (Dr. Clovis Maksoud): We in the Arab States, may be logically, or because we do not possess the various nuclear and thermonuclear weapons, approach this problem without the caution that commitment requires, because through the Arab League the Arab States and Governments have declared without equivocation that they are against nuclear weapons, and the testing of nuclear weapons. We would do all within our possibilities to commit, not only our respective governments, but also persuade governments of like minded interests and like minded attitudes to do the same thing. Therefore I find myself not necessarily representing an organisation where the views have not been concretised as in the United Nations in so far as the finality of conclusions have not been attained in view of the fact that discussions are still in progress; the organisation which I represent includes the 12 governments who have committed themselves against nuclear tests. Therefore if I might sound a little less cautious or less tentative in the expression of my views, I know that usually, in such distinguished jurists' associations and committees, tentativeness and caution are criteria for eligibility to speak. However, I beg to show that it is also a very juristic position to take a definite stand, to do this without any caution and without tentativeness, at least as far as the Arab States are concerned. On the other hand, I would like to make a few basic observations concerning this very important problem to which we have been subjected. On the one hand, we have observed from the various discussions that have been made in the last day or two, that the political and legal questions involved in the nuclear tests pass imperceptibly into each other. Therefore it is not possible to distinguish completely the political from the legal problems involved. In a way the problems that are here before us concerning the ban on nuclear tests are in fact a blend of political, military, strategic as well as legal questions and this becomes more self-evident in the sense that the legal consequences, namely, the effects on human beings of the nuclear tests, are not always evident and clear, and this is due to the fact that the biological results and the scientific conclusions that have been attained in the last few years have rendered it almost without any doubt that the physical effects on the biological states of man are long-range and that it is not necessary for the effects of nuclear tests to affect the human being within a limited period of time. However, there are also the mutations which develop and which cannot be foreseen either in terms of the being itself or in terms of the time when this mutation will evolve. Therefore the legal consequence of this biological result is not determinable and because of the fact that it is not determinable, it makes the legal position rather untenable; it makes the legal consequences and possible legal reflection difficult to maintain unless the question of fact is proven as in the case of torts. If it is not proven within the framework of time, it is not possible therefore to have a legal consequence out of this nuclear position. Hence the problem of mutation in the physical development of man, in the biological development of the future generation, is not determinable. Hence if we apply the classical and traditional legal precepts and concepts, the issue of mutation and its long-range effects on the physical structure of man is in a state of flux and fluid. Therefore this problem itself is of vital importance. The documents have proven the point that the mutation is on the future generation most probably and that this mutation can express itself in biological defects in many consequences which are not