A WORLD FEDERATION

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Contents

Chapter 1

THE HISTORY OF INTERNATIONAL LAW

"With law shall our land be built up, but with lawlessness laid waste." Njal's Saga, Iceland, c 1270.

1.1 What is law?

After the invention of agriculture, roughly 10,000 years ago, humans began to live in progressively larger groups, which were sometimes multi-ethnic. In order to make towns, cities and finally nations function without excessive injustice and violence, both ethical and legal systems were needed. Today, in an era of global economic interdependence, instantaneous worldwide communication and all-destroying thermonuclear weapons, we urgently need new global ethical principles and a just and enforcible system of international laws.

The principles of law, ethics, politeness and kindness function in slightly different ways, but all of these behavioral rules help human societies to function in a cohesive and trouble-free way. Law is the most coarse. The mesh is made finer by ethics, while the rules of politeness and kindness fill in the remaining gaps.

Legal systems began at a time at a time when tribal life was being replaced by life in villages, towns and cities. One of the oldest legal documents that we know of is a code of laws enacted by the Babylonian king Hammurabi in about 1754 BC. It consists of 282 laws, with scaled punishments, governing household behavior, marriage, divorce, paternity, inheritance, payments for services, and so on. An ancient 2.24 meter stele inscribed with Hammurabi's Code can be seen in the Louvre. The laws are written in the Akkadian language, using cuneiform script.

Humanity's great ethical systems also began during a period when the social unit was growing very quickly. It is an interesting fact that many of history's greatest ethical teachers lived at a time when the human societies were rapidly increasing in size. One can think, for example of Moses, Confucius, Lao-Tzu, Gautama Buddha, the Greek philosophers, and

Figure 1.1: **A portion of Hammurabi's Code, c. 1754 BC**

Jesus. Muhammad came slightly later, but he lived and taught at a time when tribal life was being replaced by city life in the Arab world. During the period when these great teachers lived, ethical systems had become necessary to over-write raw inherited human emotional behavior patterns in such a way that increasingly large societies could function in a harmonious and cooperative way, with a minimum of conflicts.

1.2 Magna Carta, 1215

2015 marks the 800th anniversary of the Magna Carta, which is considered to be the foundation of much of our modern legal system. It was drafted by the Archbishop of Canterbury to make peace between the unpopular Norman King John of England and a group of rebel barons. The document promised the protection of church rights, protection for the barons from illegal imprisonment, access to swift justice, and limitations feudal payments to the Crown. It was renewed by successive English sovereigns, and its protection against illegal imprisonment and provisions for swift justice were extended from the barons to ordinary citizens. It is considered to be the basis for British constitutional law, and in 1789, it influenced the drafting of the Constitution of the United States. Lord Denning described the Magna Carta as "the greatest constitutional document of all times: the foundation of the freedom of the individual against the arbitrary authority of the despot".

Figure 1.2: **King John is forced to sign the Magna Carta**

Figure 1.3: **Lord Denning described the Magna Carta as "the greatest constitutional document of all times: the foundation of the freedom of the individual against the arbitrary authority of the despot".**

1.3   The English Bill of Rights, 1689

When James II was overthrown by the Glorious Revolution the Dutch stadholder William III of Orange-Nassau and his wife, Mary II of England were invited to be joint sovereigns of England. The Bill of Rights was originally part of the invitation, informing the couple regarding the limitations that would be imposed on their powers. Later the same year, it was incorporated into English law. The Bill of Rights guaranteed the supremacy of Parliament over the monarch. It forbid cruel and unusual punishments, excessive bail and excessive fines. Freedom of speech and free elections were also guaranteed, and a standing army in peacetime was forbidden without the explicit consent of Parliament. The Bill of Rights was influenced by the writings of the Liberal philosopher, John Locke (1632-1704).

1.4   The United States Constitution and Bill of Rights, 1789

The history of the Federal Constitution of the United States is an interesting one. It was preceded by the Articles of Confederation, which were written by the Second Continental Congress between 1776 and 1777, but it soon became clear that Confederation was too weak a form of union for a collection of states.

George Mason, one of the drafters of the Federal Constitution, believed that "such a government was necessary as could directly operate on individuals, and would punish those only whose guilt required it", while another drafter, James Madison, wrote that the more he reflected on the use of force, the more he doubted "the practicality, the justice and the efficacy of it when applied to people collectively, and not individually."

Finally, Alexander Hamilton, in his Federalist Papers, discussed the Articles of Confederation with the following words: "To coerce the states is one of the maddest projects that was ever devised... Can any reasonable man be well disposed towards a government which makes war and carnage the only means of supporting itself, a government that can exist only by the sword? Every such war must involve the innocent with the guilty. The single consideration should be enough to dispose every peaceable citizen against such government... What is the cure for this great evil? Nothing, but to enable the... laws to operate on individuals, in the same manner as those of states do."

In other words, the essential difference between a confederation and a federation, both of them unions of states, is that a federation has the power to make and to enforce laws that act on individuals, rather than attempting to coerce states (in Hamilton's words, "one of the maddest projects that was ever devised.") The fact that a confederation of states was found to be far too weak a form of union is especially interesting because our present United Nations is a confederation. We are at present attempting to coerce states with sanctions that are "applied to people collectively and not individually."The International Criminal Court, which we will discuss below, is a development of enormous importance, because it acts on individuals, rather than attempting to coerce states.
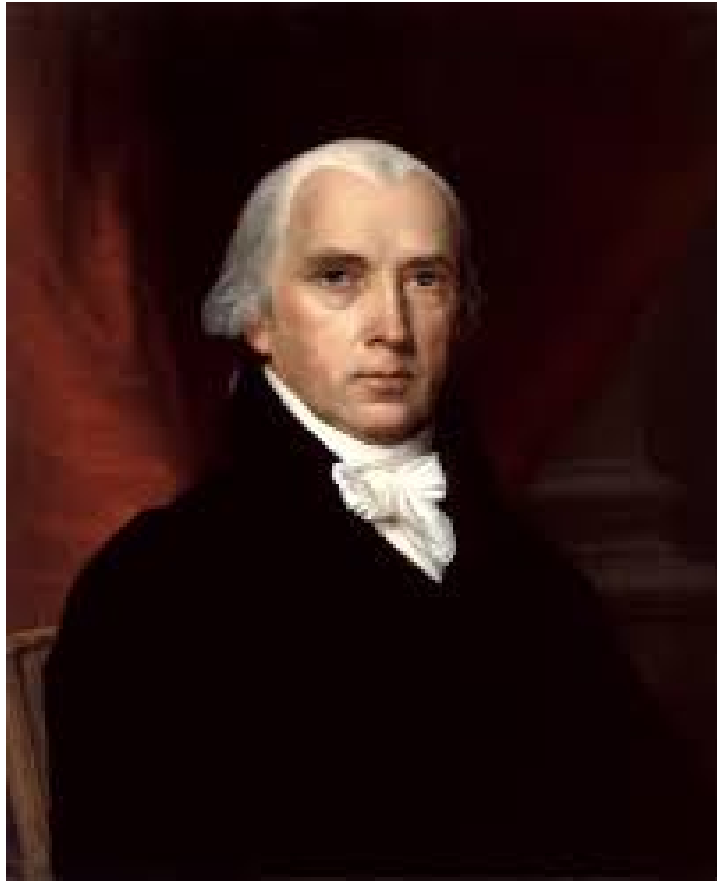
Figure 1.4: **James Madison, wrote that the more he reflected on the use of force, the more he doubted "the practicality, the justice and the efficacy of it when applied to people collectively, and not individually." He later introduced the Constitutional amendments that became the U.S. Bill of Rights.**

There are many historical examples of successful federations; but in general, unions of states based on the principle of confederation have proved to be too weak. Probably our best hope for the future lies in gradually reforming and strengthening the United Nations, until it becomes a federation.

In the case of the Federal Constitution of the United States, there were Anti-Federalists who opposed its ratification because they feared that it would be too powerful. Therefore, on June 8, 1789, James Madison introduced in the House of Representatives a series of 39 amendments to the constitution, which would limit the government's power. Of these, only amendments 3 to12 were adopted, and these have become known collectively as the Bill of Rights.

Of the ten amendments that constitute the original Bill of Rights, we should take particular notice of the First, Fourth and Sixth, because they have been violated repeatedly and grossly by the present government of the United States.

The First Amendment requires that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances." The right to freedom of speech and freedom of the press has been violated by the punishment of whistleblowers. The right to assemble peaceably has also been violated repeatedly and brutally by the present government's militarized police.

The Fourth Amendment states that "The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized." It is hardly necessary to elaborate on the U.S. Government's massive violations of the Fourth Amendment. Edward Snowden's testimony has revealed a huge secret industry carrying out illegal and unwarrented searches and seizures of private data, not only in the United States, but also throughout the world. This data can be used to gain power over citizens and leaders through blackmail. True democracy and dissent are thereby eliminated.

The Sixth Amendment requires that "In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defense." This constitutional amendment has also been grossly violated.

In the context of federal unions of states, the Tenth Amendment is also interesting. This amendment states that "The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people." We mentioned above that historically, federations have been very successful. However, if we take the European Union as an example, it has had some problems connected with the principle of subsidiarity, according to which as few powers as possible should be decided centrally, and as many issues as possible should be decided locally. The European Union was originally designed as a free trade area, and because of its history commercial considerations have trumped environmental ones. The principle of subsidiarity has not been followed, and enlightened environmental laws of member states have been declared to be illegal by the EU because they conflicted with free trade. These are difficulties from which we can learn as we contemplate the conversion of the United Nations into a federation.

The United States Bill of Rights was influenced by John Locke and by the French philosophers of the Enlightenment. The French Declaration of the Rights of Man (August, 1789) was almost simultaneous with the U.S. Bill of Rights.

We can also see the influence of Enlightenment philosophy in the wording of the U.S. Declaration of independence (1776): "We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights,

that among these are Life, Liberty and the pursuit of Happiness.–That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed..."Another criticism that can be leveled against the present government of the United States is that its actions seem to have nothing whatever to do with the consent of the governed, not to mention the violations of the rights to life, liberty and the pursuit of happiness implicit in extrajudicial killings.

1.5 Kellogg-Briand Pact, 1928

World War I was a catastrophe that still casts a dark shadow over the future of humanity. It produced enormous suffering, brutalization of values, irreparable cultural loss, and a total of more than 37 million casualties, military and civilian. Far from being the "war to end war", the conflict prepared the way for World War II, during which nuclear weapons were developed; and these now threaten the existence the of human species and much of the biosphere.

After the horrors of World War I, the League of Nations was set up in the hope of ending the institution of war forever. However, many powerful nations refused to join the League, and it withered. Another attempt to outlaw war was made in 1928. in the form of a pact named after its authors, U.S. Secretary of State, Frank B. Kellogg and French Foreign Minister Astrid Briand. The Kellogg-Briand Pact is formally called the General Treaty for the Renunciation of War as an Instrument of National Policy. It was ultimately ratified by 62 Nations, including the United States (by a Senate vote of 85 to 1). Although frequently violated, the Pact remains in force today, establishing a norm which legally outlaws war.

1.6 United Nations Charter, 1945

The Second World War was even more disastrous than the First. Estimates of the total number of people who died as a result of the war range between 50 million and 80 million. With the unspeakable suffering caused by the war fresh in their minds, representatives of the victorious allied countries assembled in San Fransisco to draft the charter of a global organization which they hoped would end the institution of war once and for all.

The Preamble to the United Nations Charter starts with the words: "We , the peoples of the United Nations, determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind; and to unite our strength to maintain international peace and security; and to ensure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest; and to employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims."

Article 2 of the UN Charter requires that "All members shall refrain in their interna-

tional relations from the threat or use of force against the territorial integrity or political independence of any state." This requirement is somewhat qualified by Article 51, which says that "Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security." Thus, in general, war is illegal under the UN Charter. Self-defense against an armed attack is permitted, but only for a limited time, until the Security Council has had time to act. The United Nations Charter does not permit the threat or use of force in preemptive wars, or to produce regime changes, or for so-called "democratization", or for the domination of regions that are rich in oil. [1]

Clearly, the United Nations Charter aims at abolishing the institution of war once and for all; but the present Charter has proved to be much too weak to accomplish this purpose, since it is a confederation of the member states rather than a federation. This does not mean that that our present United Nations is a failure. Far from it! The UN has achieved almost universal membership, which the League of Nations failed to do. The Preamble to the Charter speaks of " the promotion of the economic and social advancement of all peoples", and UN agencies, such as the World Health Organization, the Food and Agricultural Organization and UNESCO, have worked very effectively to improve the lives of people throughout the world. Furthermore, the UN has served as a meeting place for diplomats from all countries, and many potentially serious conflicts have been resolved by informal conversations behind the scenes at the UN. Finally, although often unenforceable, resolutions of the UN General Assembly and declarations by the Secretary General have great normative value.

When we think of strengthening and reforming the UN, then besides giving it the power to make and enforce laws that are binding on individuals, we should also consider giving it an independent and reliable source of income. As it is, rich and powerful nations seek to control the UN by means of its purse strings: They give financial support only to those actions that are in their own interests.

A promising solution to this problem is the so-called "Tobin tax", named after the Nobel-laureate economist James Tobin of Yale University. Tobin proposed that international currency exchanges should be taxed at a rate between 0.1 and 0.25 percent. He believed that even this extremely low rate of taxation would have the beneficial effect of damping speculative transactions, thus stabilizing the rates of exchange between currencies. When asked what should be done with the proceeds of the tax, Tobin said, almost as an afterthought, "Let the United Nations have it."

The volume of money involved in international currency transactions is so enormous that even the tiny tax proposed by Tobin would provide the United Nations with between 100 billion and 300 billion dollars annually. By strengthening the activities of various UN agencies, the additional income would add to the prestige of the United Nations and thus make the organization more effective when it is called upon to resolve international political conflicts. The budgets of UN agencies, such as the World Health Organization,

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[1]http://www.un.org/en/documents/charter/preamble.shtml

Figure 1.5: **Clearly, the United Nations Charter aims at abolishing the institution of war once and for all.**

the Food and Agricultural Organization, UNESCO and the UN Development Programme, should not just be doubled but should be multiplied by a factor of at least twenty.

With increased budgets the UN agencies could sponsor research and other actions aimed at solving the world's most pressing problems: AIDS, drug-resistant infections diseases, tropical diseases, food insufficiencies, pollution, climate change, alternative energy strategies, population stabilization, peace education, as well as combating poverty, malnutrition, illiteracy, lack of safe water and so on. Scientists would would be less tempted to find jobs with arms-related industries if offered the chance to work on idealistic projects. The United Nations could be given its own television channel, with unbiased news programs, cultural programs, and "State of the World" addresses by the UN Secretary General.

In addition, the voting system of the United Nations General Assembly needs to be reformed, and the veto power in the Security Council needs to be abolished.

1.7 International Court of Justice, 1946

The International Court of Justice (ICJ) is the judicial arm of the United Nations. It was established by the UN Charter in 1945, and it began to function in 1946. The IJC is housed in the Peace Palace in the Hague, a beautiful building constructed with funds donated by Andrew Carnegie. Since 1946, the IJC has dealt with only 161 cases. The reason for this low number is that only disputes between nations are judged, and both the countries involved in a dispute have to agree to abide by the Court's jurisdiction before the case can be accepted.

Besides acting as an arbitrator in disputes between nations, the IJC also gives advisory opinions to the United Nations and its agencies. An extremely important judgment of this kind was given in 1996: In response to questions put to it by WHO and the UN General Assembly, the Court ruled that "the threat and use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and particularly the principles and rules of humanitarian law." The only possible exception to this general rule might be "an extreme circumstance of self-defense, in which the very survival of a state would be at stake". But the Court refused to say that even in this extreme circumstance the threat or use of nuclear weapons would be legal. It left the exceptional case undecided. In addition, the World Court added unanimously that "there exists an obligation to pursue in good faith and bring to a conclusion negotiations leading to nuclear disarmament in all its aspects under strict international control."

This landmark decision has been criticized by the nuclear weapon states as being decided "by a narrow margin", but the structuring of the vote made the margin seem more narrow than it actually was. Seven judges voted against Paragraph 2E of the decision (the paragraph which states that the threat or use of nuclear weapons would be generally illegal, but which mentions as a possible exception the case where a nation might be defending itself from an attack that threatened its very existence.) Seven judges voted for the paragraph, with the President of the Court, Muhammad Bedjaoui of Algeria casting the deciding vote. Thus the Court adopted it, seemingly by a narrow margin. But three of the judges who voted against 2E did so because they believed that no possible exception should be mentioned! Thus, if the vote had been slightly differently structured, the result would have be ten to four.

Of the remaining four judges who cast dissenting votes, three represented nuclear weapons states, while the fourth thought that the Court ought not to have accepted the questions from WHO and the UN. However Judge Schwebel from the United States, who voted against Paragraph 2E, nevertheless added, in a separate opinion, "It cannot be accepted that the use of nuclear weapons on a scale which would, or could, result in the deaths of many millions in indiscriminate inferno and by far-reaching fallout, have pernicious effects in space and time, and render uninhabitable much of the earth, could be lawful."

Judge Higgins from the UK, the first woman judge in the history of the Court, had problems with the word "generally" in Paragraph 2E and therefore voted against it, but she thought that a more profound analysis might have led the Court to conclude in favor of illegality in all circumstances.

Judge Fleischhauer of Germany said, in his separate opinion, "The nuclear weapon is, in many ways, the negation of the humanitarian considerations underlying the law applicable in armed conflict and the principle of neutrality. The nuclear weapon cannot distinguish between civilian and military targets. It causes immeasurable suffering. The radiation released by it is unable to respect the territorial integrity of neutral States."

President Bedjaoui, summarizing the majority opinion, called nuclear weapons "the ultimate evil", and said "By its nature, the nuclear weapon, this blind weapon, destabilizes humanitarian law, the law of discrimination in the use of weapons... The ultimate aim of

every action in the field of nuclear arms will always be nuclear disarmament, an aim which is no longer Utopian and which all have a duty to pursue more actively than ever."

1.8 Nuremberg Principles, 1947

In 1946, the United Nations General Assembly unanimously affirmed "the principles of international law recognized by the Charter of the Nuremberg Tribunal and the judgment of the Tribunal". The General Assembly also established an International Law Commission to formalize the Nuremberg Principles. The result was a list that included Principles VI, which is particularly important in the context of the illegality of NATO:

Principle VI: The crimes hereinafter set out are punishable as crimes under international law:

a) Crimes against peace: (I) Planning, preparation, initiation or waging of a war of aggression or a war in violation of international treaties, agreements or assurances; (II) Participation in a common plan or conspiracy for accomplishment of any of the acts mentioned under (I).

Robert H. Jackson, who was the chief United States prosecutor at the Nuremberg trials, said that "To initiate a war of aggression is therefore not only an international crime; it is the supreme international crime, differing from other war crimes in that it contains within itself the accumulated evil of the whole." Furthermore, the Nuremberg principles state that "The fact that a person acted pursuant to order of his Government or of a superior does not relieve him from responsibility under international law, provided a moral choice was in fact possible to him." The training of soldiers is designed to make the trainees into automatons, who have surrendered all powers of moral judgment to their superiors. The Nuremberg Principles put the the burden of moral responsibility squarely back where it ought to be: on the shoulders of the individual.

Figure 1.6: **In 1946, the United Nations General Assembly unanimously affirmed "the principles of international law recognized by the Charter of the Nuremberg Tribunal and the judgment of the Tribunal". The General Assembly also established an International Law Commission to formalize the Nuremberg Principles.**

1.9 The Universal Declaration of Human Rights, 1948

On December 10, 1948, the General Assembly of the United Nations adopted a Universal Declaration of Human Rights. 48 nations voted for adoption, while 8 nations abstained from voting. Not a single state voted against the Declaration. In addition, the General Assembly decided to continue work on the problem of implementing the Declaration. The Preamble to the document stated that it was intended "as a common standard of achievement for all peoples and nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms."

Articles 1 and 2 of the Declaration state that "all human beings are born free and equal in dignity and in rights", and that everyone is entitled to the rights and freedoms mentioned in the Declaration without distinctions of any kind. Neither race color, sex, language, religion, political or other opinion, national or social origin, property or social origin must make a difference. The Declaration states that everyone has a right to life, liberty and security of person and property. Slavery and the slave trade are prohibited, as well as torture and cruel, inhuman or degrading punishments. All people must be equal before the law, and no person must be subject to arbitrary arrest, detention or exile. In criminal proceedings an accused person must be presumed innocent until proven guilty by an impartial public hearing where all necessary provisions have been made for the defense of the accused.

No one shall be subjected to interference with his privacy, family, home or correspondence. Attacks on an individual's honor are also forbidden. Everyone has the right of

freedom of movement and residence within the borders of a state, the right to leave any country, including his own, as well as the right to return to his own country. Every person has the right to a nationality and cannot be arbitrarily deprived of his or her nationality.

All people of full age have a right to marry and to establish a family. Men and women have equal rights within a marriage and at its dissolution, if this takes place. Marriage must require the full consent of both parties.

The Declaration also guarantees freedom of religion, of conscience, and of opinion and expression, as well as freedom of peaceful assembly and association. Everyone is entitled to participate in his or her own government, either directly or through democratically chosen representatives. Governments must be based on the will of the people, expressed in periodic and genuine elections with universal and equal suffrage. Voting must be secret.

Everyone has the right to the economic, social and cultural conditions needed for dignity and free development of personality. The right to work is affirmed. The job shall be of a person'SSs own choosing, with favorable conditions of work, and remuneration consistent with human dignity, supplemented if necessary with social support. All workers have the right to form and to join trade unions.

Article 25 of the Declaration states that everyone has the right to an adequate standard of living, including food, clothing, housing and medical care, together with social services. All people have the right to security in the event of unemployment, sickness, disability, widowhood or old age. Expectant mothers are promised special care and assistance, and children, whether born in or out of wedlock, shall enjoy the same social protection. Everyone has the right to education, which shall be free in the elementary stages. Higher education shall be accessible to all on the basis of merit. Education must be directed towards the full development of the human personality and to strengthening respect for human rights and fundamental freedoms. Education must promote understanding, tolerance, and friendship among all nations, racial and religious groups, and it must further the activities of the United Nations for the maintenance of peace.

A supplementary document, the Convention on the Rights of the Child, was adopted by the United Nations General Assembly on the 12th of December, 1989. Furthermore, in July 2010, the General Assembly passed a resolution affirming that everyone has the right to clean drinking water and proper sanitation.

Many provisions of the Universal Declaration of Human Rights, for example Article 25, might be accused of being wishful thinking. In fact, Jean Kirkpatrick, former US Ambassador to the UN, cynically called the Declaration "a letter to Santa Claus". Nevertheless, like the Millennium Development Goals, the Universal Declaration of Human Rights has great value in defining the norms towards which the world ought to be striving.

It is easy to find many examples of gross violations of basic human rights that have taken place in recent years. Apart from human rights violations connected with interventions of powerful industrial states in the internal affairs of third world countries, there are many cases where governmental forces in the less developed countries have violated the human rights of their own citizens. Often minority groups have been killed or driven off their land by those who coveted the land, as was the case in Guatemala in 1979, when 1.5 million poor Indian farmers were forced to abandon their villages and farms and to flee to the
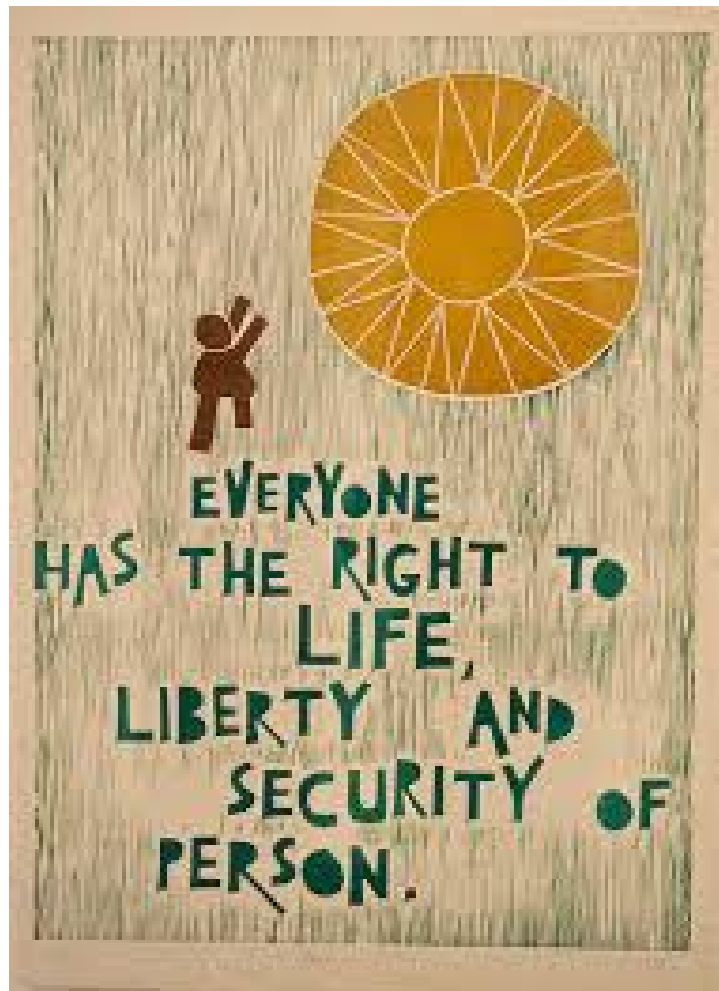
Figure 1.7: **The Universal Declaration of Human Rights has great value in defining the norms towards which the world ought to be striving.**

mountains of Mexico in order to escape murderous attacks by government soldiers. The blockade of Gaza and extrajudicial killing by governments must also be regarded as blatant human rights violations, and there are many recent examples of genocide.

Wars in general, and in particular, the use of nuclear weapons, must be regarded as gross violations of human rights. The most basic human right is the right to life; but this is right routinely violated in wars. Most of the victims of recent wars have been civilians, very often children and women. The use of nuclear weapons must be regarded as a form of genocide, since they kill people indiscriminately, babies, children, young adults in their prime, and old people, without any regard for guilt or innocence.

1.10   Geneva Conventions, 1949

According to Wikipedia, "The Geneva Conventions comprise four treaties, and three additional protocols, that establish the standards if international law for the humanitarian treatment of war. The singular term, Geneva Convention, usually denotes the agreements of 1949, negotiated in the aftermath of the Second World War (1939-1945), which updated the terms of the first three treaties (1864, 1906, 1929) and added a fourth. The Geneva Conventions extensively defined the basic rights of wartime prisoners (civilians and military personnel); established protection for the wounded; and established protections for civilians in and around a war-zone. The treaties if 1949 were ratified, in whole or with reservations, by 196 countries."

In a way, one might say that the Geneva Conventions are an admission of defeat by the international community. We tried to abolish war entirely through the UN Charter, but failed because the Charter was too weak.

Under the Fourth Geneva Convention, collective punishment is war crime. Article 33 states that "No protected person may be punished for an offense that he or she did not personally commit." Articles 47-78 also impose substantial obligations on occupying powers, with numerous provisions for the general welfare of the inhabitants of an occupied territory. Thus Israel violated the Geneva Conventions by its collective punishment of the civilian population of Gaza in retaliation for largely ineffective Hamas rocket attacks. The larger issue, however, is the urgent need for lifting of Israel's brutal blockade of Gaza, which has created what Noam Chomsky calls the "the world's largest open-air prison". This blockade violates the Geneva conventions because Israel, as an occupying power, has the duty of providing for the welfare of the people of Gaza.

1.11   Nuclear Non-Proliferation Treaty, 1968

In the 1960's, negotiations were started between countries that possessed nuclear weapons, and others that did not possess them, to establish a treaty that would prevent the spread of these highly dangerous weapons, but which would at the same time encourage cooperation in the peaceful uses of nuclear energy. The resulting treaty has the formal title Treaty

on the Non-Proliferation of Nuclear Weapons (abbreviated as the NPT). The treaty also aimed at achieving general and complete disarmament. It was opened for signature in 1968, and it entered into force on the 11th of May, 1970.

190 parties have joined the NPT, and more countries have ratified it than any other arms limitation agreement, an indication of the Treaty's great importance. Four countries outside the NPT have nuclear weapons: India, Pakistan, North Korea and Israel. North Korea had originally joined the NPT, but it withdrew in 2003. The NPT has three main parts or "pillars", 1) non-proliferation, 2) disarmament, and 3) the right to peaceful use of nuclear technology. The central bargain of the Treaty is that "the NPT non-nuclear weapon states agree never to acquire nuclear weapons and the NPT nuclear weapon states agree to share the benefits of peaceful use of nuclear technology and to pursue nuclear disarmament aimed at the ultimate elimination of their nuclear arsenals".

Articles I and II of the NPT forbid states that have nuclear weapons to help other nations to acquire them. These Articles were violated, for example, by France, which helped Israel to acquire nuclear weapons, and by China, which helped Pakistan to do the same. They are also violated by the "nuclear sharing" agreements, through which US tactical nuclear weapons will be transferred to several countries in Europe in a crisis situation. It is sometimes argued that in the event of a crisis, the NPT would no longer be valid, but there is nothing in the NPT itself that indicates that it would not hold in all situations.

The most blatantly violated provision of the NPT is Article VI. It requires the member states to pursue "negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament", and negotiations towards a "Treaty on general and complete disarmament". In other words, the states that possess nuclear weapons agreed to get rid of them. However, during the 47 years that have passed since the NPT went into force, the nuclear weapon states have shown absolutely no sign of complying with Article VI. There is a danger that the NPT will break down entirely because of the majority of countries in the world are so dissatisfied with this long-continued non-compliance. Looking at the NPT with the benefit of hindsight, we can see the third "pillar", the "right to peaceful use of nuclear technology" as a fatal flaw of the treaty. In practice, it has meant encouragement of nuclear power generation, with all the many dangers that go with it.

The enrichment of uranium is linked to reactor use. Many reactors of modern design make use of low enriched uranium as a fuel. Nations operating such a reactor may claim that they need a program for uranium enrichment in order to produce fuel rods. However, by operating their ultracentrifuge a little longer, they can easily produce highly enriched (weapons-usable) uranium.

The difficulty of distinguishing between a civilian nuclear power generation program and a military nuclear program is illustrated by the case of Iran. In discussing Iran, it should be mentioned that Iran is fully in compliance with the NPT. It is very strange to see states that are long-time blatant violators of the NPT threaten Iran because of a nuclear program that fully complies with the Treaty. I believe that civilian nuclear power generation is always a mistake because of the many dangers that it entails, and because of

the problem of disposing of nuclear waste. However, a military attack on Iran would be both criminal and insane. Why criminal? Because such an attack would violate the UN Charter and the Nuremberg Principles. Why insane? Because it would initiate a conflict that might escalate uncontrollably into World War III.

1.12 Biological Weapons Convention, 1972

During World War II, British and American scientists investigated the possibility of using smallpox as a biological weapon. However, it was never used, and in 1969 President Nixon officially ended the American biological weapons program, bowing to the pressure of outraged public opinion. In 1972, the United States, the United Kingdom and the Soviet Union signed a Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction. Usually this treaty is known as the Biological Weapons Convention (BWC), and it has now been signed by virtually all of the countries of the world.

However, consider the case of smallpox: A World Health Organization team led by D.A. Henderson devised a strategy in which cases of smallpox were isolated and all their contacts vaccinated, so that the disease had no way of reaching new victims. Descriptions of the disease were circulated, and rewards offered for reporting cases. The strategy proved to be successful, and finally, in 1977, the last natural case of smallpox was isolated in Somalia. After a two-year waiting period, during which no new cases were reported, WHO announced in 1979 that smallpox, one of the most frightful diseases of humankind, had been totally eliminated from the world. This was the first instance of the complete eradication of a disease, and it was a demonstration of what could be achieved by the enlightened use of science combined with international cooperation. The eradication of smallpox was a milestone in human history.

It seems that our species is not really completely wise and rational; we do not really deserve to be called "Homo sapiens". Stone-age emotions and stone-age politics are alas still with us. Samples of smallpox virus were taken to "carefully controlled" laboratories in the United States and the Soviet Union. Why? Probably because these two Cold War opponents did not trust each other, although both had signed the Biological Weapons Convention. Each feared that the other side might intend to use smallpox as a biological weapon. There were also rumors that unofficial samples of the virus had been saved by a number of other countries, including North Korea, Iraq, China, Cuba, India, Iran, Israel, Pakistan and Yugoslavia.

1.13 Chemical Weapons Convention, 1997

On the 3rd of September, 1992, the Conference on Disarmament in Geneva adopted a Convention on the Prohibition of Development, Production, Stockpiling, and Use of Chemical Weapons and on their Destruction. This agreement, which is usually called the Chemi-

cal Weapons Convention (CWC), attempted to remedy some of the shortcomings of the Geneva Protocol of 1925. The CWC went into force in 1997, after Hungary deposited the 65th instrument of ratification.

The provisions of Article I of the CWC are as follows: 1. Each State Party to this convention undertakes never under any circumstances: (a) To develop, produce, otherwise acquire, stockpile or retain chemical weapons, or transfer, directly or indirectly, chemical weapons to anyone; (b) To use chemical weapons; (c) To engage in any military preparation to use chemical weapons; (d) To assist, encourage or induce, in any way, anyone to engage in any activity prohibited to a State Party in accordance with the provisions of this Convention. 2. Each State Party undertakes to destroy chemical weapons it owns or possesses, or that are located any place under its jurisdiction or control, in accordance with the provisions of this Convention. 3. Each State Party undertakes to destroy all chemical weapons it abandoned on the territory of another State Party, in accordance with the provisions of this Convention. 4. Each State Party undertakes to destroy any chemical weapons production facilities it owns or possesses, or that are located in any place under its jurisdiction or control, in accordance with the provisions of this Convention. 5. Each State Party undertakes not to use riot control agents as a method of warfare.

The CWC also makes provision for verification by teams of inspectors, and by 2004, 1,600 such inspections had been carried out in 59 countries. It also established an Organization for the Prevention of Chemical Warfare. All of the declared chemical weapons production facilities have now been inactivated, and all declared chemical weapons have been inventoried. However of the world's declared stockpile of chemical warfare agents (70,000 metric tons), only 12 percent have been destroyed. One hopes that in the future the CWC will be ratified by all the nations of the world and that the destruction of stockpiled chemical warfare agents will become complete.

1.14   Mine Ban Treaty, 1999

In 1991, six NGOs organized the International Campaign to Ban Landmines, and in 1996, the Canadian government launched the Ottawa process to ban landmines by hosting a meeting among like-minded anti-landmine states. A year later, in 1997, the Mine Ban Treaty was adopted and opened for signatures. In the same year, Jody Williams and the International Campaign to ban Landmines were jointly awarded the Nobel Peace Prize. After the 40th ratification of the Mine Ban Treaty in 1998, the treaty became binding international law on the 1st of March, 1999. The Ottawa Treaty functions imperfectly because of the opposition os several militarily powerful nations, but nevertheless it establishes a valuable norm, and it represents an important forward step in the development of international law.

1.15 International Criminal Court, 2002

In 1998, in Rome, representatives of 120 countries signed a statute establishing an International Criminal Court (ICC), with jurisdiction over the crime og genocide, crimes against humanity, war crimes and the crime of aggression.

Four years were to pass before the necessary ratifications were gathered, but by Thursday, April 11, 2002, 66 nations had ratified the Rome agreement, 6 more than the 60 needed to make the court permanent. It would be impossible to overstate the importance of the ICC. At last, international law acting on individuals has become a reality! The only effective and just way that international laws can act is to make individuals responsible and punishable, since (in the words of Alexander Hamilton) "To coerce states is one of the maddest projects that was ever devised."

At present, the ICC functions very imperfectly because of the bitter opposition of several powerful countries, notable the United States. U.S. President George W. Bush signed into law the American Servicemembers Protection Act of 2002, which is intended to intimidate countries that ratify the treaty for the ICC. The new law authorizes the use of military force to liberate any American or citizen of a U.S.-allied country being held by the court, which is located in The Hague. This provision, dubbed the "Hague invasion clause," has caused a strong reaction from U.S. allies around the world, particularly in the Netherlands.

http://www.hrw.org/news/2002/08/03/us-hague-invasion-act-becomes-law

Despite the fact that the ICC now functions so imperfectly, it is a great step forward in the development of international law. It is there and functioning. We have the opportunity to make it progressively more impartial and to expand its powers.

1.16 Arms Trade Treaty, 2013

On April 2, 2013, a historic victory was won at the United Nations, and the world achieved its first treaty limiting international trade in arms. Work towards the Arms Trade Treaty (ATT) began in the Conference on Disarmament in Geneva, which requires a consensus for the adoption of any measure. Over the years, the consensus requirement has meant that no real progress in arms control measures has been made in Geneva, since a consensus among 193 nations is impossible to achieve.

To get around the blockade, British U.N. Ambassador Mark Lyall Grant sent the draft treaty to Secretary-General Ban Ki-moon and asked him on behalf of Mexico, Australia and a number of others to put the ATT to a swift vote in the General Assembly, and on Tuesday, April 3, 2013, it was adopted by a massive majority. Among the people who have worked hardest for the ATT is Anna Macdonald, Head of Arms Control at Oxfam. The reason why Oxfam works so hard on this issue is that trade in small arms is a major cause of poverty and famine in the developing countries. On April 9, Anna Macdonald wrote: "Thanks to the democratic process, international law will for the first time regulate the 70

billion dollar global arms trade. Had the process been launched in the consensus-bound Conference on Disarmament in Geneva, currently in its 12th year of meeting without even being able to agree on an agenda, chances are it would never have left the starting blocks..."

The passage of the Arms Trade Treaty by a majority vote in the UN General Assembly opens new possibilities for progress on other seemingly-intractable issues. In particular, it gives hope that a Nuclear Weapons Convention might be adopted by a direct vote on the floor of the General Assembly. The adoption of the NWC, even if achieved against the bitter opposition of the nuclear weapon states, would make it clear that the world's peoples consider the threat of an all-destroying nuclear war to be completely unacceptable.

1.17   Racism, Colonialism and Exceptionalism

A just system of laws must apply equally and without exception to everyone. If a person, or, in the case of international law, a nation, claims to be outside the law, or above the law, then there is something fundamentally wrong. For example, when U.S. President Obama said in a 2013 speech, "What makes America different, what makes us exceptional, is that we are dedicated to act", then thoughtful people could immediately see that something was terribly wrong with the system. If we look closely, we find that there is a link between racism, colonialism and exceptionalism. The racist and colonialist concept of "the white man's burden"is linked to the Neo-Conservative self-image of benevolent (and violent) interference in the internal affairs of other countries. [2]

1.18   The Oslo Principles on Climate Change Obligation, 2015

The future of human civilization and the biosphere is not only threatened by thermonuclear war: It is also threatened by catastrophic climate change. If prompt action is not taken to curb the use of fossil fuels: if the presently known reserves of fossil fuels are not left in the ground, then there is a great danger that we will pass a tipping point beyond which human efforts to stop a catastrophic increase in global temperatures will be useless because feedback loops will have taken over. There is a danger of a human-initiated 6th geological extinction event, comparable with the Permian-Triassic event, during which 96 percent of marine species and 70 percent of terrestrial vertebrates became extinct.

Recently there have been a number of initiatives which aim at making the human obligation to avert threatened environmental mega-catastrophes a part of international law. One of these initiatives can be seen in the proposal of the Oslo Principles on Climate Change Obligations; another is the Universal Declaration of the Rights of Mother Earth; and a third can be found in the concept of Biocultural Rights. These are extremely

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[2]http://www.countercurrents.org/avery101013.htm
https://www.youtube.com/watch?v=efI6T8lovqY
https://www.youtube.com/watch?v=IdBDRbjx9jo

Figure 1.8: **Recently there have been a number of initiatives which aim at making the human obligation to avert threatened environmental mega-catastrophes a part of international law.**

important and hopeful initiatives, and they point to towards the future development of international law for which we must strive.

[3]

1.19 Treaty on the Prohibition of Nuclear Weapons, 2017

A Treaty banning nuclear weapons was adopted by a majority vote on the floor of the UN General Assembly, following the precedent set by the Arms Trade Treaty. The Treaty on the Prohibition of Nudlear Weapons was passed on 7 July, 2017. It prohibits the

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[3]https://www.transcend.org/tms/2015/04/oslo-principles-on-global-climate-change-obligations/

https://www.transcend.org/tms/2015/04/climate-change-at-last-a-breakthrough-to-our-catastrophic-political-impasse/
http://www.commondreams.org/news/2015/04/14/lawsuit-out-love-unprecedented-legal-action-accuses-dutch-government-failing-climate
http://www.elgaronline.com/view/journals/jhre/6-1/jhre.2015.01.01.xml
http://therightsofnature.org/universal-declaration/

development, testing, production, stockpiling, stationing, transfer, use and threat of use of nuclear weapons, as well as assistance and encouragement to the prohibited activities. For nuclear armed states joining the treaty, it provides for a time-bound framework for negotiations leading to the verified and irreversible elimination of its nuclear weapons programme. Ihe International Campaign to Abolish Nuclear Weapons (ICAN) campaigned vigorously for the adoption of the Treaty, and was awarded the 2017 Nobel Peace Prize for its efforts. Although bitterly opposed by nuclear weapons states, the Treaty has great normative value, and one fervently hopes that the force of public opinion will eventually force all governments to give their citizens what the vast majority long for: a nuclear-weapon-free world.

It is generally agreed that a full-scale nuclear war would have disastrous effects, not only on belligerent nations but also on neutral countries. Mr. Javier Pérez de Cuéllar, former Secretary-General of the United Nations, emphasized this point in one of his speeches:

"I feel", he said, "That the question may justifiably be put to the leading nuclear powers: by what right do they decide the fate of humanity? From Scandinavia to Latin America, from Europe and Africa to the Far East, the destiny of every man and woman is affected by their actions. No one can expect to escape from the catastrophic consequences of a nuclear war on the fragile structure of this planet..."

"Like supreme arbiters, with our disputes of the moment, we threaten to cut off the future and to extinguish the lives of innocent millions yet unborn. There can be no greater arrogance. At the same time, the lives of all those who lived before us may be rendered meaningless; for we have the power to dissolve in a conflict of hours or minutes the entire work of civilization, with the brilliant cultural heritage of humankind."

1.20   Hope for the future, and responsibility for the future

Can we abolish the institution of war? Can we hope and work for a time when the terrible suffering inflicted by wars will exist only as a dark memory fading into the past? I believe that this is really possible. The problem of achieving internal peace over a large geographical area is not insoluble. It has already been solved. There exist today many nations or regions within each of which there is internal peace, and some of these are so large that they are almost worlds in themselves. One thinks of China, India, Brazil, the Russian Federation, the United States, and the European Union. Many of these enormous societies contain a variety of ethnic groups, a variety of religions and a variety of languages, as well as striking contrasts between wealth and poverty. If these great land areas have been forged into peaceful and cooperative societies, cannot the same methods of government be applied globally?

Today, there is a pressing need to enlarge the size of the political unit from the nation-state to the entire world. The need to do so results from the terrible dangers of modern weapons and from global economic interdependence. The progress of science has created

this need, but science has also given us the means to enlarge the political unit: Our almost miraculous modern communications media, if properly used, have the power to weld all of humankind into a single supportive and cooperative society.

We live at a critical time for human civilization, a time of crisis. Each of us must accept his or her individual responsibility for solving the problems that are facing the world today. We cannot leave this to the politicians. That is what we have been doing until now, and the results have been disastrous. Nor can we trust the mass media to give us adequate public discussion of the challenges that we are facing. We have a responsibility towards future generations to take matters into our own hands, to join hands and make our own alternative media, to work actively and fearlessly for better government and for a better society.

We, the people of the world, not only have the facts on our side; we also have numbers on our side. The vast majority of the world's peoples long for peace. The vast majority long for abolition of nuclear weapons, and for a world of kindness and cooperation, a world of respect for the environment. No one can make these changes alone, but together we can do it.

Together, we have the power to choose a future where international anarchy, chronic war and institutionalized injustice will be replaced by democratic and humane global governance, a future where the madness and immorality of war will be replaced by the rule of law.

We need a sense of the unity of all mankind to save the future, a new global ethic for a united world. We need politeness and kindness to save the future, politeness and kindness not only within nations but also between nations. To save the future, we need a just and democratic system of international law; for with law shall our land be built up, but with lawlessness laid waste.

Chapter 2

THE UNITED NATIONS CHARTER

2.1 The San Francisco Conference

Figure 2.1: **Harold Stassen. In 1985 he visited Denmark to lecture at a symposium entitled "Towards a Non-Violent Society". At that time he was the only living person who had signed the United Nations Charter. In his lecture, former Governor Stassen proposed steps for reforming the Charter.**

2.2 Article 1

The Purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;

3. To achieve international co-operation in solving international problems of an economic, social, cultural, or humanitarian character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion; and

4. To be a centre for harmonizing the actions of nations in the attainment of these common ends.

2.3 Article 2

The Organization and its Members, in pursuit of the Purposes stated in Article 1, shall act in accordance with the following Principles.

1. The Organization is based on the principle of the sovereign equality of all its Members.

2. All Members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

3. All Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.

4. All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.

5. All Members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.

6. The Organization shall ensure that states which are not Members of the United Nations act in accordance with these Principles so far as may be necessary for the maintenance of international peace and security.

7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter Vll.

Clearly the aim United Nations Charter os to abolosh the institution of war.

2.4   Against the institution of war

As we start the 21st century and the new millennium, our scientific and technological civilization seems to be entering a period of crisis. Today, for the first time in history, science has given to humans the possibility of a life of comfort, free from hunger and cold, and free from the constant threat of infectious disease. At the same time, science has given us the power to destroy civilization through thermonuclear war, as well as the power to make our planet uninhabitable through pollution and overpopulation. The question of which of these alternatives we choose is a matter of life or death to ourselves and our children.

Science and technology have shown themselves to be double-edged, capable of doing great good or of producing great harm, depending on the way in which we use the enormous power over nature, which science has given to us. For this reason, ethical thought is needed now more than ever before. The wisdom of the world's religions, the traditional wisdom of humankind, can help us as we try to insure that our overwhelming material progress will be beneficial rather than disastrous.

The crisis of civilization, which we face today, has been produced by the rapidity with which science and technology have developed. Our institutions and ideas adjust too slowly to the change. The great challenge which history has given to our generation is the task of building new international political structures, which will be in harmony with modern technology. At the same time, we must develop a new global ethic, which will replace our narrow loyalties by loyalty to humanity as a whole.

In the long run, because of the enormously destructive weapons, which have been produced through the misuse of science, the survival of civilization can only be insured if we are able to abolish the institution of war.

While in earlier epochs it may have been possible to confine the effects of war mainly to combatants, in our own century the victims of war have increasingly been civilians, and especially children. For example, according to Quincy Wright's statistics, the First and Second World Wars together cost the lives of 26 million soldiers, but the toll in civilian lives was much larger: 64 million. Since the Second World War, despite the best efforts of the U. N., there have been over 150 armed conflicts; and, if civil wars are included, there

are on any given day an average of 12 wars somewhere in the world. In the conflicts in Indo-China, the proportion of civilian victims was between 80 percent and 90 percent , while in the Lebanese civil war some sources state that the proportion of civilian casualties was as high as 97 percent.

Civilian casualties often occur through malnutrition and through diseases, which would be preventable in normal circumstances. Because of the social disruption caused by war, normal supplies of food, safe water and medicine are interrupted, so that populations become vulnerable to famine and epidemics. In the event of a catastrophic nuclear war, starvation and disease would add greatly to the loss of life caused by the direct effects of nuclear weapons.

The indirect effects of war are also enormous. Globally, preparations for war interfere seriously with the use of tax money for constructive and peaceful purposes. Today, despite the end of the Cold War, the world spends roughly a trillion (i.e. a million million) US dollars each year on armaments. This enormous flood of money, which is almost too large to imagine, could have been used instead for urgently needed public health measures.

The World Health Organization lacks funds to carry through an anti-malarial program on as large a scale as would be desirable, but the entire program could be financed for less than the world spends on armaments in a single day. Five hours of world arms spending is equivalent to the total cost of the 20-year WHO campaign, which resulted in the eradication of smallpox. For every 100,000 people in the world, there are 556 soldiers, but only 85 doctors. Every soldier costs an average of 20,000 US dollars per year, while the average spent per year on education is only 380 US dollars per school-aged child. With a diversion of funds consumed by three weeks of military spending, the world could create a sanitary water supply for all its people, thus eliminating the cause of almost half of all human illness.

A new and drug-resistant form of tuberculosis has recently become widespread, and is increasing rapidly in the former Soviet Union. In order to combat this new form of tuberculosis, and in order to prevent its spread to Western Europe, WHO needs 450 million US dollars, an amount equivalent to 4 hours of world arms spending. By using this money to combat tuberculosis in the former Soviet Union, WHO would be making a far greater contribution to global peace and stability than is made by spending the money on armaments.

Today's world is one in which roughly ten million children die each year from diseases related to poverty. Besides this enormous waste of young lives through malnutrition and preventable disease, there is a huge waste of opportunities through inadequate education. The rate of illiteracy in the 25 least developed countries is 80 percent, and the total number of illiterates in the world is estimated to be 800 million. Meanwhile every 60 seconds the world spends roughly 2 million U. S. dollars on armaments.

It is plain that if the almost unbelievable sums now wasted on armaments were used constructively, most of the pressing problems now facing humanity could be solved, but today the world spends more than 20 times as much per year on weapons as it does on development.

Because the world spends a thousand billion dollars each year on armaments, it follows

that very many people make their living from war. This is the reason why it is correct to speak of war as a social institution, and also the reason why war persists, although everyone realizes that it is the cause of much of the suffering that inflicts humanity. We know that war is madness, but it persists. We know that it threatens the future survival of our species, but it persists, entrenched in the attitudes of historians, newspaper editors and television producers, entrenched in the methods by which politicians finance their campaigns, and entrenched in the financial power of arms manufacturers, entrenched also in the ponderous and costly hardware of war, the fleets of warships, bombers, tanks, nuclear missiles and so on.

Science cannot claim to be guiltless: In Eisenhower's farewell address, he warned of the increasing power of the industrial-military complex, a threat to democratic society. If he were making the same speech today, he might speak of the industrial-military-scientific complex. Since Hiroshima, we have known that new knowledge is not always good. There is a grave danger that nuclear weapons will soon proliferate to such an extent that they will be available to terrorists and even to the mafia. Chemical and biological weapons also constitute a grave threat. The eradication of smallpox in 1979 was a triumph of medical science combined with international cooperation. How sad it is to think that military laboratories cultivate smallpox and that the disease may soon be reintroduced as a biological weapon!

The institution of war seems to be linked to a fault in human nature, to our tendency to exhibit altruism towards members of our own group but aggression towards other groups if we perceive them to be threatening our own community. This tendency, which might be called "tribalism", was perhaps built into human nature by evolution during the long pre-history of our species, when we lived as hunter-gatherers in small genetically homogeneous tribes, competing for territory on the grasslands of Africa. However, in an era of nerve gas and nuclear weapons, the anachronistic behavior pattern of tribal altruism and intertribal aggression now threatens our survival.

Fortunately, our behavior is only partly determined by inherited human nature. It is also, and perhaps to a larger extent, determined by education and environment; and in spite of all the difficulties just mentioned, war has been eliminated locally in several large regions of the world. Taking these regions as models, we can attempt to use the same methods to abolish war globally. For example, war between the Scandinavian nations would be unthinkable today, although the region once was famous for its violence. Scandinavia is especially interesting as a model for what we would like to achieve globally, because it is a region in which it has been possible not only to eradicate war, but also poverty; and at the same time, death from infectious disease has become a rarity in this region.

If we consider the problem of simultaneously eliminating poverty, war and frequent death from infectious disease, we are lead inevitably to the problem of population stabilization. At the time when poverty, disease and war characterized Scandinavia, the average fertility in the region was at least 6 children per woman-life. Equilibrium was maintained at this high rate of fertility, because some of the children died from disease without leaving progeny, and because others died in war. Today, poverty and war are gone from the Nordic countries, and the rate of premature death from infectious disease is very low. The simul-

taneous elimination of poverty, disease and war would have been impossible in Scandinavia if the rate of fertility had not fallen to the replacement level. There would then have been no alternative except for the population to grow, which it could not have continued to do over many centuries without environmental degradation, bringing with it the recurrence of poverty, disease and war.

In Scandinavia today, democratic government, a high level of education, economic prosperity, public health, high social status for women, legal, economic and educational equality for women, a low birth rate, and friendly cooperation between the nations of the region are mutually linked in loops of cause and effect. By contrast, we can find other regions of the world where low status of women, high birth rates, rapidly increasing population, urban slums, low educational levels, high unemployment levels, poverty, ethnic conflicts and the resurgence of infectious disease are equally linked, but in a vicious circle. The three age-old causes of human suffering, poverty, infectious disease and war are bound together by complex causal relationships involving also the issues of population stabilization and woman's rights. The example of Scandinavia shows us that it is possible to cure all these diseases of society; but to do so we must address all of the problems simultaneously.

Abolition of the institution of war will require the construction of structures of international government and law to replace our present anarchy at the global level. Today's technology has shrunken the distances, which once separated nations; and our present system of absolutely sovereign nation-states has become both obsolete and dangerous.

Professor Elie Kedourie of the University of London has given the following definition of nationalism: "...a doctrine invented in Europe at the beginning of the 19th century. It pretends to supply a criterion for the determination of the unit of population proper to enjoy a government exclusively its own, for the legitimate exercise of power in the state, and for the right organization of a society of states. Briefly, the doctrine holds that humanity is naturally divided into nations, that nations are known by certain characteristics which can be ascertained, and that the only legitimate type of government is national self-government."

A basic problem with this doctrine is that throughout most of the world, successive waves of migration, conquest and intermarriage have left such a complicated ethnic mosaic that attempts to base political divisions on ethnic homogeneity often meet with trouble. In Eastern Europe, for example, German-speaking and Slavic-speaking peoples are mixed together so closely that the Pan-German and Pan-Slavic movements inevitably clashed over the question of who should control the regions where the two populations lived side by side. This clash was one of the main causes of the First World War.

Similarly, when India achieved independence from England, a great problem arose in the regions where Hindus and Moslems lived side by side; and even Gandhi was unable to prevent terrible violence from taking place between the two communities. This problem is still present, and it has been made extremely dangerous by the acquisition of nuclear weapons by India and Pakistan.

More recently, nationalist movements in Asia and Africa have derived their force and popularity from a reaction against the years of European political and economic domination. Thus, at first sight, they seem to deserve our sympathy and support. However, in

building states, the new nationalists have often used hate for outsiders as mortar. For example, Israel is held together by hostility towards its Arab neighbors, while the Pan-Arab movement is held together by hostility towards Israel; and in this inflamed political climate of mutual fear and hatred, even clandestine nuclear weapons appear to either side to be justified.

A basic problem rooted in nationalist mythology exists in the concept of sanctions, which treat nations as if they were individuals. We punish nations as a whole by sanctions, even when only the leaders are guilty, even though the burdens of the sanctions often fall most heavily on the weakest and least guilty of the citizens, and even though sanctions often have the effect of uniting the citizens of a country behind the guilty leaders.

It is becoming increasingly clear that the concept of the absolutely sovereign nation-state is an anachronism in a world of thermonuclear weapons, instantaneous communication, and economic interdependence. Probably our best hope for the future lies in developing the United Nations into a World Federation. The strengthened United Nations should have a legislature with the power to make laws which are binding on individuals, and the ability to arrest and try individual political leaders for violations of these laws. The World Federation should also have the military and legal powers necessary to guarantee the human rights of ethnic minorities within nations.

A strengthened UN would need a reliable source of income to make the organization less dependent on wealthy countries, which tend to give support only to those interventions of which they approve. A promising solution to this problem is the so-called "Tobin tax", named after the Nobel-laureate economist James Tobin of Yale University. Tobin proposed that international currency exchanges should be taxed at a rate between 0.1 and 0.25 percent. He believed that even this extremely low rate of taxation would have the effect of damping speculative transactions, thus stabilizing the rates of exchange between currencies. When asked what should be done with the proceeds of the tax, Tobin said, almost as an afterthought, "Let the United Nations have it". The volume of money involved in international currency transactions is so enormous that even the tiny tax proposed by Tobin would provide the World Federation with between 100 billion and 300 billion dollars annually. By strengthening the activities of various UN agencies, such as WHO, UNESCO and FAO, the additional income would add to the prestige of the United Nations and thus make the organization more effective when it is called upon to resolve international political conflicts.

A federation is, by definition, a limited union of states, where the federal government has the power to make laws which are binding on individuals, but where the laws are confined to interstate matters, and where all powers not expressly delegated to the federal government are reserved for the several states. In other words, in a federation, each of the member states runs its own internal affairs according to its own laws and customs; but in certain agreed-on matters, where the interests of the states overlap, authority is specifically delegated to the federal government.

For example, if the nations of the world considered the control of narcotics to be a matter of mutual concern; if they agreed to set up a commission with the power to make laws preventing the growing, refinement and distribution of harmful drugs, and with the

power to arrest individuals for violating those laws, then we would have a world federation in the area of narcotics control.

If, in addition, the world community considered terrorism to be a matter of mutual concern; if an international commission were also set up with the power to make global anti-terrorist laws, and to arrest individuals violating those laws, then we would have a world federation with somewhat broader powers. If the community of nations decided to give the federal authority the additional power to make laws defining the rights and obligations of multinational corporations, and the power to arrest individuals violating those laws, then we would have a world federation with still broader powers; but these powers would still be carefully defined and limited.

In 1998, in Rome, representatives of 120 countries signed a statute establishing a Permanent International Court, with jurisdiction over war crimes and genocide. Four years were to pass before the necessary ratifications were gathered, but by Thursday, April 11, 2002, 66 nations had ratified the Rome agreement, 6 more than the 60 needed to make the court permanent. The jurisdiction of the Permanent International Court is at present limited to a very narrow class crimes. The global community will have a chance to see how the court works in practice, and in the future, the community may decide to broaden its jurisdiction.

In setting up a federation, the member states can decide which powers they wish to delegate to it; and all powers not expressly delegated are retained by the individual states. We are faced with the problem of constructing a new world order which will preserve the advantages of local self-government while granting certain carefully-chosen powers to larger regional or global authorities. Which things should be decided locally, or regionally, and which globally?

In the future, overpopulation and famine are likely to become increasingly difficult and painful problems in several parts of the world. Since various cultures take widely different attitudes towards birth control and family size, the problem of population stabilization seems to be one which should be solved locally. At the same time, aid for local family planning programs, as well as famine relief, might appropriately come from global agencies, such as WHO and FAO. With respect to large-scale migration, it would be unfair for a country which has successfully stabilized its own population, and which has eliminated poverty within its own borders, to be forced to accept a flood of migrants from regions of high fertility. Therefore the extent of immigration should be among the issues to be decided locally.

Security, and controls on the manufacture and export of armaments will require an effective authority at the global level. It should also be the responsibility of the international community to intervene to prevent gross violations of human rights. Since the end of the Cold War, the United Nations has more and more frequently been called upon to send armed forces to troubled parts of the world. In many instances, these calls for U. N. intervention have been prompted by clear and atrocious violations of human rights, for example by "ethnic cleansing" in Bosnia and by genocide in Rwanda. In the examples just named, the response of the United Nations would have been much more effective, and many lives would have been saved, if the action which was finally taken had come sooner.

Long and complex diplomatic negotiations were required to muster the necessary political and physical forces needed for intervention, by which time the original problems had become much more severe. For this reason, it has been suggested that the U. N. Secretary General, the Security Council and the General Assembly ought to have at their disposal a permanent, highly trained and highly mobile emergency force, composed of volunteers from all nations. Such an international police force would be able to act rapidly to prevent gross violations of human rights or other severe breaches of international law.

In evaluating the concept of an international police force directly responsible to the United Nations, it is helpful to examine the way in which police act to enforce laws and to prevent violence and crime at local and national levels. Within a community which is characterized by good government, police are not highly armed, nor are they very numerous. Law and order are not maintained primarily by the threat of force, but by the opinion of the vast majority of the citizens that the system of laws is both just and necessary. Traffic stops when the signal light is red and moves when it is green whether or not a policeman is present, because everyone understands why such a system is necessary. Nevertheless, although the vast majority of the citizens in a well-governed community support the system of laws and would never wish to break the law, we all know that the real world is not heaven. The total spectrum of human nature includes evil as well as a good. If there were no police at all, and if the criminal minority were completely unchecked, every citizen would be obliged to be armed. No one's life or property would be safe. Robbery, murder and rape would flourish.

Within a society with a democratic and just government, whose powers are derived from the consent of the governed, a small and lightly armed force of police is able to maintain the system of laws. One reason why this is possible has just been mentioned - the force of public opinion. A second reason is that the law acts on individuals. Since obstruction of justice and the murder of policemen both rank as serious crimes, an individual criminal is usually not able to organize massive resistance against police action.

Edith Wynner, one of the pioneers of the World Federalist movement, lists the following characteristics of police power in a well-governed society:

1. "A policeman operates within a framework of organized government having legislative, executive and judicial authority operating on individuals. His actions are guided by a clearly stated criminal code that has the legislative sanction of the community. Should he abuse the authority vested in him, he is subject to discipline and court restraint."

2. "A policeman seeing a fight between two men does not attempt to determine which of them is in the right and then help him beat up the one he considers wrong. His function is to restrain violence by both, to bring them before a judge who has authority to determine the rights of the dispute, and to see that the court's decision is carried out."

3. "In carrying out his duties, the policeman must apprehend the suspected individual without jeopardizing either the property or the lives of the community where the

suspect is to be arrested. And not only is the community safeguarded against destruction of property and loss of life but the rights of the suspect are also carefully protected by an elaborate network of judicial safeguards."

Edith Wynner also discusses the original union of the thirteen American colonies, which was a confederation, analogous to the present United Nations. This confederation was found to be too weak, and after eleven years it was replaced by a federation, one of whose key powers was the power to make and enforce laws which acted on individuals. George Mason, one of the architects of the federal constitution of the United States, believed that "such a government was necessary as could directly operate on individuals, and would punish those only whose guilt required it", while James Madison (another drafter of the U. S. federal constitution) remarked that the more he reflected on the use of force, the more he doubted "the practicability, the justice and the efficacy of it when applied to people collectively, and not individually". Finally, Alexander Hamilton, in his "Federalist Papers", discussed the confederation with the following words: "To coerce the states is one of the maddest projects that was ever devised... Can any reasonable man be well disposed towards a government, which makes war and carnage the only means of supporting itself - a government that can exist only by the sword? Every such war must involve the innocent with the guilty. This single consideration should be enough to dispose every peaceable citizen against such a government... What is the cure for this great evil? Nothing, but to enable the... laws to operate on individuals, in the same manner as those of states do."

The United Nations is at present a confederation rather than a federation, and thus it acts by attempting to coerce states, a procedure which Alexander Hamilton characterized as "one of the maddest projects that was ever devised". Whether this coercion takes the form of economic sanctions, or whether it takes the form of military intervention, the practicability, the justice and the efficacy of the UN's efforts are hampered because they are applied to people collectively and not individually. It is obvious that the United Nations actions to stop aggression of one state against another in the Korean War and in the Gulf War fail to match the three criteria for police action listed above. What is the cure for this great evil? "Nothing", Hamilton tells us, "but to enable the laws to act on individuals, in the same manner as those of states do."

Historically, confederations have always proved to be too weak; but federations have on the whole been very successful, mainly because a federation has the power to make laws which act on individuals. At the same time, a federation aims at leaving as many powers as possible in the hands of local authorities. Recent examples of federations include the United States of America, the United States of Brazil, the United States of Mexico, the United States of Venezuela, the Argentine Nation, the Commonwealth of Australia, the Dominion of Canada, the Union of South Africa, Switzerland, the Union of Soviet Socialist Republics and the European Federation. Thus we are rich in historical data on the strengths and weaknesses of federations, and we can make use of this data as we attempt to construct good government at the global level.

Looking towards the future, we can perhaps foresee a time when the United Nations will have been converted to a federation and given the power to make international laws which

are binding on individuals. Under such circumstances, true international law enforcement will be possible, incorporating all of the needed safeguards for lives and property of the innocent. One can hope for a future world where the institution of war will be abolished, and where public opinion will support international law to such an extent that a new Hitler or a future Melosovic will not be able to organize large-scale resistance to arrest, a world where international law will be seen by all to be just, impartial and necessary, a well-governed global community within which each person will owe his or her ultimate loyalty to humanity as a whole.

Besides a humane, democratic and just framework of international law and governance, we urgently need a new global ethic, - an ethic where loyalty to family, community and nation will be supplemented by a strong sense of the brotherhood of all humans, regardless of race, religion or nationality. Schiller expressed this feeling in his "Ode to Joy", the text of Beethoven's Ninth Symphony. Hearing Beethoven's music and Schiller's words, most of us experience an emotion of resonance and unity with its message: All humans are brothers and sisters - not just some - all! It is almost a national anthem of humanity. The feelings which the music and words provoke are similar to patriotism, but broader. It is this sense of a universal human family, which we need to cultivate in education, in the mass media, and in religion.

Educational reforms are urgently needed, particularly in the teaching of history. As it is taught today, history is a chronicle of power struggles and war, told from a biased national standpoint. Our own race or religion is superior; our own country is always heroic and in the right.

We urgently need to replace this indoctrination in chauvinism by a reformed view of history, where the slow development of human culture is described, giving adequate credit to all those who have contributed. Our modern civilization is built on the achievements of ancient cultures. China, India, Mesopotamia, ancient Egypt, Greece, the Islamic world, Christian Europe, and Jewish intellectual traditions all have contributed. Potatoes, corn and squash are gifts from the American Indians. Human culture, gradually built up over thousands of years by the patient work of millions of hands and minds, should be presented to students of history as a precious heritage - far too precious to be risked in a thermonuclear war.

In the teaching of science too, reforms are needed. Graduates in science and technology should be conscious of their responsibilities. They must resolve never to use their education in the service of war, or in any way which might be harmful to society or to the environment.

In modern societies, mass media play an extremely important role in determining behavior and attitudes. This role can be a negative one when the media show violence and enemy images, but if used constructively, the mass media can offer a powerful means for creating international understanding. If it is indeed true that tribalism is part of human nature, it is extremely important that the mass media be used to the utmost to overcome the barriers between nations and cultures. Through increased communication, the world's peoples can learn to accept each other as members of a single family.

Finally, let us turn to religion, with its enormous influence on human thought and behavior. Christianity, for example, offers a strongly stated ethic, which, if practiced,

would make war impossible. In Mathew, the following passage occurs: "Ye have heard it said: Thou shalt love thy neighbor and hate thy enemy. But I say unto you: Love your enemies, bless them that curse you, do good to them that hate you, and pray for them that spitefully use you and persecute you."

This seemingly impractical advice, that we should love our enemies, is in fact of the greatest practicality, since acts of unilateral kindness and generosity can stop escalatory cycles of revenge and counter-revenge such as those which characterize the present conflict in the Middle East and the recent troubles of Northern Ireland. However, Christian nations, while claiming to adhere to the ethic of love and forgiveness, have adopted a policy of "massive retaliation", involving systems of thermonuclear missiles whose purpose is to destroy as much as possible of the country at which the retaliation is aimed. It is planned that entire populations shall be killed in a "massive retaliation", innocent children along with the guilty politicians. The startling contradiction between what the Christian nations profess and what they do was obvious even before the advent of nuclear weapons, at the time when Leo Tolstoy, during his last years, was exchanging letters with a young Indian lawyer in South Africa. In one of his letters to Gandhi, Tolstoy wrote:

"...The whole life of the Christian peoples is a continuous contradiction between that which they profess and the principles on which they order their lives, a contradiction between love accepted as the law of life, and violence, which is recognized and praised, acknowledged even as a necessity..."

"This year, in the spring, at a Scripture examination at a girls' high school in Moscow, the teacher and the bishop present asked the girls questions on the Commandments, and especially on the sixth. After a correct answer, the bishop generally put another question, whether murder was always in all cases forbidden by God's law; and the unhappy young ladies were forced by previous instruction to answer 'Not always' - that murder was permitted in war and in the execution of criminals. Still, when one of these unfortunate young ladies (what I am telling is not an invention but a fact told to me by an eye witness) after her first answer, was asked the usual question, if killing was always sinful, she, agitated and blushing, decisively answered 'Always', and to the usual sophisms of the bishop, she answered with decided conviction that killing was always forbidden in the Old Testament and forbidden by Christ, not only killing but every wrong against a brother. Notwithstanding all his grandeur and arts of speech, the bishop became silent and the girl remained victorious."

As everyone knows, Gandhi successfully applied the principle of non-violence to the civil rights struggle in South Africa, and later to the political movement, which gave India its freedom and independence. The principle of non-violence was also successfully applied by Martin Luther King, and by Nelson Mandela. It is perhaps worthwhile to consider Gandhi's comment on the question of whether the end justifies the means: "The means may be likened to a seed", Gandhi wrote, "and the end to a tree; and there is the same inviolable connection between the means and the end as there is between the seed and the tree." In other words, a dirty method produces a dirty result; killing produces more killing; hate leads to more hate. Everyone who reads the newspapers knows that this is true. But there are positive feedback loops as well as negative ones. A kind act produces

a kind response; a generous gesture is returned; hospitality results in reflected hospitality. Buddhists call this principle of reciprocity "the law of karma".

The religious leaders of the world have the opportunity to contribute importantly to the solution of the problem of war. They have the opportunity to powerfully support the concept of universal human brotherhood, to build bridges between religious groups, to make intermarriage across ethnic boundaries easier, and to soften the distinctions between communities. If they fail to do this, they will have failed humankind at a time of crisis.

It is useful to consider the analogy between the institution of war and the institution of slavery. We might be tempted to say, "There has always been war, throughout human history; and war will always continue to exist." As an antidote for this kind of pessimism, we can think of slavery, which, like war, has existed throughout most of recorded history. The cultures of ancient Egypt, Greece and Rome were all based on slavery, and, in more recent times, 13 million Africans were captured and forced into a life of slavery in the New World. Slavery was as much an accepted and established institution as war is today. Many people made large profits from slavery, just as arms manufacturers today make enormous profits. Nevertheless, in spite of the weight of vested interests, slavery has now been abolished throughout most of the world.

Today we look with horror at drawings of slave ships, where human beings were packed together like cord-wood; and we are amazed that such cruelty could have been possible. Can we not hope for a time when our descendants, reading descriptions of the wars of the twentieth century, will be equally amazed that such cruelty could have been possible? If we use them constructively, the vast resources now wasted on war can initiate a new era of happiness and prosperity for the family of man. It is within our power to let this happen. The example of the men and women who worked to rid the world of slavery can give us courage as we strive for a time when war will exist only as a dark memory fading into the past.

2.5   Reforming the UN Charter

History has given all of us living today an enormous responsibility, and two daunting tasks: If civilization is to survive, we must not only stabilize the global population but also, even more importantly, we must eliminate the institution of war.

We face these difficult tasks with an inherited emotional nature that has not changed much during the last 40,000 years. Furthermore, we face the challenges of the 21st century with an international political system based on the anachronistic concept of the absolutely sovereign nation-state. However, the human brain has shown itself to be capable of solving even the most profound and complex problems. The mind that has seen into the heart of the atom must not fail when confronted with paradoxes of the human heart.

We must replace the old world of international anarchy, chronic war and institutionalized injustice, by a new world of law. The United Nations Charter, the Universal Declaration of Human Rights and the International Criminal Court are steps in the right direction, but these institutions need to be greatly strengthened and reformed.

We also need a new global ethic, where loyalty to one's family and nation will be supplemented by a higher loyalty to humanity as a whole.

In the words of the great Hungarian-American biochemist Albert Szent-Györgyi, "Man lives in a new cosmic world for which he was not made. His survival depends on how well and how fast he can adapt himself to it, rebuilding all his ideas, all his social and political institutions. ...Modern science has abolished time and distance as factors separating nations. On our shrunken globe today, there is room for one group only - the family of man."

The Russell-Einstein Manifesto of 1955, which led to the founding of Pugwash Conferences on Science and World Affairs, contains the following words: "There lies before us, if we choose, continual progress in happiness, knowledge, and wisdom. Shall we, instead, choose death, because we cannot forget our quarrels? We appeal as human beings to human beings: Remember your humanity, and forget the rest."

Features of a reformed UN Charter

The United Nations should be given a bicameral legislature. This would consist of an unchanged General Assembly and a much reformed and possibly renamed Security Council. In the reformed and democratized Security Council, the veto power would be absent, and final votes would be taken between regions with roughly equal populations.

In both the General Assembly and the reformed Security Council, legislature approved by a simple majority would pass, but the approval of both chambers would be needed for the legislation to become international law.

The laws would act on individuals, who could be arrested for violations, and tried by an expanded and reformed International Criminal Court even if they happened to be heads of state.

These reforms would give the United Nations a much improved decision-making capacity.

Effectiveness

Since the end of the Cold War, the United Nations has more and more frequently been called upon to send armed forces to troubled parts of the world. In many instances, these calls for U. N. intervention have been prompted by clear and atrocious violations of human rights, for example by "ethnic cleansing" in Bosnia and by genocide in Rwanda. In the examples just named, the response of the United Nations would have been much more effective, and many lives would have been saved, if the action which was finally taken had come sooner.

Long and complex diplomatic negotiations were required to muster the necessary political and physical forces needed for intervention, by which time the original problems had become much more severe.

For this reason, the governance model put forward above proposes that the U. N. Secretary General, the Security Council and the General Assembly ought to have at their

disposal a permanent, highly trained and highly mobile emergency force, composed of volunteers from all nations. Such an international police force would be able to act rapidly to prevent gross violations of human rights or other severe breaches of international law.

Within a society with a democratic and just government, whose powers are derived from the consent of the governed, a small and lightly armed force of police is able to maintain the system of laws. One reason why this is possible has just been mentioned - the force of public opinion. A second reason is that the law acts on individuals. Since obstruction of justice and the murder of policemen both rank as serious crimes, an individual criminal is usually not able to organize massive resistance against police action.

Resources and Financing

An extremely important first step towards strengthening the United Nations would be to give the U.N. a greatly enlarged and reliable source of income. The amount of money available to the U.N., and its member organizations such as UNESCO, WHO and FAO, should be increased by a factor of at least 50. The beneficial services rendered by expanded agencies such as WHO would give the U.N. *de facto* power and prestige that could be used in situations where conflict resolution is needed.

Various sources of increased income have been proposed:

- Dues paid to the U.N. by member states. These should be compulsory in the sense that member states would lose their voting rights if they did not pay their dues.

- Revenues from resources belonging to the international community, for example sea-bed resources.

- A tax on multinational corporations for the service of regulating international agreements.

- The Tobin tax, i.e. a tax of between 0.1% and 1% on international currency transactions.

12 European countries favor the Tobin tax. These include France and Germany, although not the U.K.

Tobin taxes are in place in some of the world's fastest-growing financial centers - Hong Kong, Mumbai, Seoul, Johannesburg and Taipei - where they are said to collectively raise 12 billion U.K. pounds a year.

The volume of international currency transactions is so enormous that a universally imposed Tobin tax of only 0.5% would raise between \$100 billion and \$300 billion per year. In 2015 the total UN budget was only \$5.6 billion, an absurdly small sum, considering the enormous importance of global governance, or the fact that the world spends \$1.7 trillion each year on armaments..

General Security

The problem of building a stable, just, and war-free world is difficult, but it is not impossible. The large regions of our present-day world within which war has been eliminated can serve as models. There are a number of large countries with heterogeneous populations within which it has been possible to achieve internal peace and social cohesion, and if this is possible within such extremely large regions, it must also be possible globally.

When we ask how very large and heterogeneous states achieve internal peace and security, we find that they do so by means of laws that act directly on individual citizens. Thus, the International Criminal Court is an extremely important first step towards the globalization of the methods of governance used by large states. In the Description section, we noted that the power to make and enforce laws which act directly on individuals is one of the key powers of successful federations.

Flexibility

In federations of states, all powers not expressly granted to the federal government are retained by the member states. Thus it is possible to grant powers one at a time, to see how they work in practice, and to gradually grant other powers.

Historically, most federations have begun with very limited powers. More powers were granted later as the member states gained confidence in the federal government.

Accountability and Transparency

In order to make its activities more widely known and better understood, the United Nations ought to have its own television channel.

Such a network could produce an unbiased version of the news. It could broadcast documentary programs on global problems. It could produce programs showing viewers the music, art and literature of other cultures than their own. It could broadcast programs on the history of ideas, in which the contributions of many societies were adequately recognized.

At New Year, when people are in the mood to think of the past and the future, the Secretary General of the United Nations could broadcast a "State of the World" message, summarizing the events of the past year and looking forward to the new year, with its problems, and with his recommendations for their solution.

In order to reduce the danger of misuse of power, a bicameral legislature could be introduced, retaining the on-nation-one vote system in the General Assembly but introducing a new legislative body where final votes would be taken by regions with roughly equal populations.

Giving the United Nations the powers of a federation

Many of the changes that we need to achieve a stable, sustainable and war-free world involve reform of the United Nations.

Our best hope for the future lies in changing the United Nations from a confederation into a federation.

The federation would be a limited union, where the federal government would have the power to make laws binding on individuals, but where the laws would be confined to interstate matters, with all powers not expressly delegated to the federal government retained by the individual states. In other words, in a federation each of the member states runs its own internal affairs according to its own laws and customs; but in certain agreed-on matters, where the interests of the states overlap, authority is specifically delegated to the federal government.

History has shown that federations of states are stable and successful, while confederations, like our present United Nations, have always proved to be too weak.

Some examples of modern federations are Brazil, Australia, the United States, Russia, Switzerland and the European Union.

Successful federations have two key powers:

- The power to make and enforce laws which are binding on individuals.

- The power to impose taxes

In addition, it is very helpful if the federal government has greater military power than any of the member states. This it true of the United States and Russia, but it does not hold for the European Union.

The history of the Constitution of the United States is very interesting. In 1777, the member states formed a confederation (like the present United Nations), but this proved to be too weak. Then a group of leaders that included James Madison and Alexander Hamilton, urged that the Articles of Confederation of 1777 be replaced by a federal constitution.

In 1787, a Constitutional Convention was held in Philadelphia with the aim of drafting a new and stronger constitution. In the same year, Alexander Hamilton began to publish the Federalist Papers, a penetrating analysis of the problems of creating a workable government uniting a number of semi-independent states.

The key idea of the Federalist Papers is that the coercion of states is neither just nor feasible, and that a government uniting several states must function by acting on individuals. This central idea was incorporated into the Federal Constitution of the United States, which was adopted in 1788.

Alexander Hamilton, in his Federalist Papers [16], discussed the Articles of Confederation with the following words: "To coerce the states is one of the maddest projects that was ever devised... Can any reasonable man be well disposed towards a government which makes war and carnage the only means of supporting itself - a government that can exist

only by the sword? Every such war must involve the innocent with the guilty. The single consideration should be enough to dispose every peaceable citizen against such a government... What is the cure for this great evil? Nothing, but to enable the... laws to operate on individuals, in the same manner as those of states do."

The United Nations has a charter analogous to the Articles of Confederation: It acts by attempting to coerce states, a procedure which Alexander Hamilton characterized as "one of the maddest projects that was ever devised". Whether this coercion takes the form of economic sanctions, or whether it takes the form of military intervention, the practicability, the justice and the efficacy of the U.N.'s efforts are hampered because they are applied to people collectively and not one by one. What is the cure for this great evil? "Nothing", Hamilton tells us, "but to enable the laws to act on individuals, in the same manner as those of states do."

General background on UN reform can be found in references [13-29].

The International Criminal Court

In 1998, in Rome, representatives of 120 countries signed a statute establishing the International Criminal Court, with jurisdiction over the crime of genocide, crimes against humanity, war crimes, and the crime of aggression.

Four years were to pass before the necessary ratifications were gathered, but by Thursday, April 11, 2002, 66 nations had ratified the Rome agreement, 6 more than the 60 needed to make the court permanent.

It would be impossible to overstate the importance of the International Criminal Court. At last, international law acting on individuals has become a reality! The only effective and just way that international laws can act is to make individuals responsible and punishable.

Although the ICC is in place, it has the defect that since it is opposed by powerful states, it functions very imperfectly. Nevertheless, we can hope that with the passage of time, world public opinion will demand that the ICC become more impartial. We can also hope that the range of crimes under its jurisdiction will be extended.

The Nuclear Weapons Convention

[1]

On July 7, 2017, a treaty banning nuclear weapons was adopted by an overwhelming majority at the United Nations General Assembly [34]. Although opposed by all of the nuclear weapon states, the treaty is a great achievement. Here are the first few articles:

Article 1: Prohibitions

1. Each State Party undertakes never under any circumstances to:

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[1]https://www.un.org/disarmament/ptnw/
http://www.abolition2000.org/en/

(a) Develop, test, produce, manufacture, otherwise acquire, possess, or stockpile nuclear weapons or other nuclear explosive devices.

(b) Transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices, directly or indirectly.

(c) Receive the transfer of or control over nuclear weapons or other nuclear explosive devices directly or indirectly.

(d) Use or threaten to use nuclear weapons or other nuclear explosive devices.

(e) Assist, encourage, or induce, in any way, anyone to engage in any activity prohibited to a state party.

The Tobin tax

James Tobin, who was Sterling Professor of Economics at Yale University, and Nobel Laureate in Economics, proposed that international currency transactions be taxed at a small fraction of a percent [35]. He believed that even this extremely small tax would make exchange rates much more stable. When asked what should be done with the proceeds of the tax, Tobin added, almost as an afterthought, "Give it to the United Nations".

In fact, the volume of international currency transactions is so enormous that even the tiny tax proposed by Tobin would be sufficient to solve all the UN's financial problems.

In 2016, China drafted rules to impose a genuine currency transaction tax and this was referred to in financial press as a Tobin tax. The 2016 Democratic Party presidential candidate, Hillary Clinton, also favored a small tax on international currency transactions. However, the United States has consistently opposed the idea of giving the proceeds to the United Nations.

Links between poverty and war

The eradication of war as an institution will require that the United Nations be strengthened, that it be given the power of taxation, the power to make laws that are binding on individuals, and a reformed and democratic voting system. These reforms are likely to be opposed by the wealthy part of the world, because rich countries do not wish to give up their present advantages of power and wealth. For example, the wealthy nations may fear that if the United Nations had the power to impose taxes, the result would be a transfer of money from themselves to the poorer parts of the world.

From this discussion we can see that the problem of eliminating the institution of war by reforming and strengthening the United Nations is closely related to the problem of eliminating the intolerable economic inequality that characterizes the world today. The two problems must be addressed together.

Conversion to renewable energy

The worst dangers from a disastrous increase in global temperatures lie in the distant future; but to avoid them, action must be taken immediately.

In the long-term future (in several hundred years) climate change threatens to produce ocean level rises which will drown most of the world's coastal cities, and which will wipe out countries such as Bangladesh and Holland. At the same time, increases in temperature will make large parts of the Middle East, India and Africa uninhabitable. Even effects that will occur in the near future will be highly damaging.

The prices of solar power and wind energy have been falling at dramatic rates for decades, and are continuing to do so [47]. In many places, renewables are now cheaper than fossil fuels. At present, the price of fossil fuels grossly underestimates the actual costs. If the long term costs to human society and the ecosphere were taken into account, the price of fossil fuels would be nearly infinite; but even if a small fraction of the true cost were factored in, renewables would already be dramatically cheaper than fossil fuels. However rather than correcting for this error in pricing, goverments across the world are doing the opposite. They are instead subsidizing the fossil fuel industry at approximately half a trillion USD per year.

The main thing that the world needs to do is to abolish these subsidies and to factor in the externalities to correct the price of fossil fuels. At the same time, governments should actively support renewable energy infrastructure. The price correction could take the form of a carbon tax. If this is done, then economic forces alone will produce the rapid transition to renewable energy which we so urgently need to save the planet. In fact renewable energy infrastructure represents an unprecedented investment opportunity.

Hope that catastrophic climate change can be avoided comes from the exponentially growing world-wide use of renewable energy and from the fact prominent public figures, such as Pope Francis, Leonardo DiCaprio, Elon Musk, Bill McKibben, Naomi Klein and Al Gore, are making the public increasingly aware of the long-term dangers. Short-term disasters due to climate change may also become sufficiently severe to wake us up.

We can also gain hope from the fact that a number of countries, including India, Germany, France, Norway, Netherlands, have announced plans to ban vehicles powered with internal combustion engines. Meanwhile, the highly successful inventor and entrepreneur Elon Musk has made massive investments in factories manufacturing electric vehicles, improved lithium ion storage cells, and photovoltaic panels.

It is extremely important that the public should receive accurate information about anthropogenic climate change, because misinformation is being circulated by fossil fuel corporations and by politicians influenced by them.

There exist a many excellent studies of climate change, a few of which are cited in references.

Population stabilization

As glaciers melt in the Himalayas, depriving India and China of summer water supplies; as sea levels rise, drowning the fertile rice fields of Viet Nam and Bangladesh; as drought threatens the productivity of grain-producing regions of North America; and as the end of the fossil fuel era impacts modern high-yield agriculture, there is a threat of wide-spread famine. There is a danger that the 800 million people who are undernourished today [66] will not survive an even more food-scarce future.

People threatened with famine will become refugees, desperately seeking entry into countries where food shortages are less acute. Wars, such as those currently waged in the Middle East, will add to the problem.

What can we do to avoid this crisis, or at least to reduce its severity? We must urgently address the problem of climate change; and we must shift money from military expenditure to the support of birth control programs and agricultural research. We must also replace the institution of war by a system of effective global governance and enforcible international laws.

Sir Partha Dasgupta of Cambridge University has pointed out that the changes needed to break the cycle of overpopulation and poverty are all desirable in themselves. Besides education and higher status for women, they include state-provided social security for old people, provision of water supplies near to dwellings, provision of health services to all, abolition of child labor and general economic development.

Achieving a steady-state economic system

Endless economic growth on a finite planet is a logical impossibility. Just as population growth is limited by ecological constraints, so too is the growth of resource-using and pollution-producing industrial production. Culture, of course, can and should continue to grow,

A number of economists have studied this problem, and in particular, outstanding contributions have been made by Frederick Soddy [82,83], Nickolas Georgiescu-Roegan [84] and Herman Daly [86-89]. These authors have taken into account the role which entropy plays in economics.

Governments of large nations compared with global governance

The problem of achieving internal peace over a large geographical area is not insoluble. It has already been solved.

There exist today many nations or regions within each of which there is internal peace, and some of these are so large that they are almost worlds in themselves. One thinks of China, India, Brazil, Australia, the Russian Federation, the United States, and the European Union. Many of these enormous societies contain a variety of ethnic groups, a variety of religions and a variety of languages, as well as striking contrasts between wealth and poverty.

If these great land areas have been forged into peaceful and cooperative societies, cannot the same methods of government be applied globally?

Today there is a pressing need to enlarge the size of the political unit from the nation-state to the entire world. The need to do so results from the terrible dangers of modern weapons and from global economic interdependence.

The progress of science has created this need, but science has also given us the means to enlarge the political unit: Our almost miraculous modern communications media, if properly used, have the power to weld all of humankind into a single supportive and cooperative society.

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Chapter 3

THE UNIVERSAL DECLARATION OF HUMAN RIGHTS

Figure 3.1: **Eleanor and Franklin Roosevelt with their first two children. Eleanor Roosevelt (1884-1962) was the niece of US President Theodore Roosevelt. After marrying her fifth cousin, Franklin Delano Roosevelt, she served as First Lady during his four terms as US President. She also served as US Delegate to the United Nations General Assembly from 1945 to 1953. Harry Truman called her "First Lady of the World" in recognition of her achievements in the field of human rights. She served as the first chair of the UN Commission on Human Rights and oversaw the drafting of the Universal Declaration of Human Rights. She later chaired John F. Kennedy's Presidential Commission on the Status of Women. Eleanor Roosevelt is also remembered as an outstanding advocate of racial equality, economic and social justice, and journalistic freedom.**

Figure 3.2: **Eleanor Roosevelt on a commemorative stamp.**

Figure 3.3: **A photo of Charles Malik with Eleanor Roosevelt, with whom he worked to draft the Universal Declaration of Human Rights.**

Figure 3.4: **Freedom of Speech, one of a series of four paintings by Norman Rockwell.**
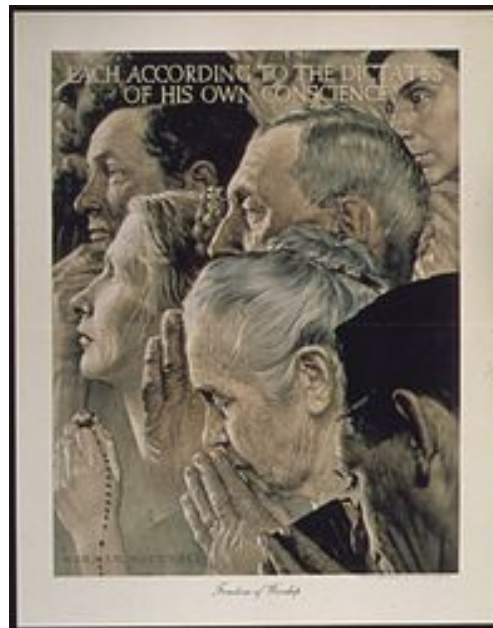

Figure 3.5: **Freedom of Worship, one of the Norman Rockwell paintings illustrating Franklin D Roosivelt's January 1941 speech on the Four Freedoms.**

Figure 3.6: **Freedom From Want**

Figure 3.7: **Freedom From Fear.**

3.1   Adoption by the UN General Assembly

On December 10, 1948, the General Assembly of the United Nations adopted a Universal Declaration of Human Rights. 48 nations voted for adoption, while 8 nations abstained from voting. Not a single state voted against the Declaration. In addition, the General Assembly decided to continue work on the problem of implementing human rights. The preamble of the Declaration stated that it was intended "as a common standard of achievement for all peoples and nations, to the end that every individual and every organ of society, keeping this Declaration constantly in mind, shall strive by teaching and education to promote respect for these rights and freedoms."

Articles 1 and 2 of the Declaration state that "all human beings are born free and equal in dignity and in rights", and that everyone is entitled to the rights and freedoms mentioned in the Declaration without distinctions of any kind. Neither race color, sex, language, religion, political or other opinion, national or social origin, property or social origin must make a difference.

The Declaration states that everyone has a right to life, liberty and security of person and property. Slavery and the slave trade are prohibited, as well as torture and cruel, inhuman or degrading punishments. All people must be equal before the law, and no person must be subject to arbitrary arrest, detention or exile. In criminal proceedings an accused person must be presumed innocent until proven guilty by an impartial public hearing where all necessary provisions have been made for the defense of the accused. No one shall be subjected to interference with his privacy, family, home or correspondence. Attacks on an individual's honor are also forbidden. Everyone has the right of freedom of movement and residence within the borders of a state, the right to leave any country, including his own, as well as the right to return to his own country. Every person has the right to a nationality and cannot be arbitrarily deprived of his or her nationality.

All people of full age have a right to marry and to establish a family. Men and women have equal rights within a marriage and at its dissolution, if this takes place. Marriage must require the full consent of both parties.

The Declaration also guarantees freedom of religion, of conscience, and of opinion and expression, as well as freedom of peaceful assembly and association. Everyone is entitled to participate in his or her own government, either directly or through democratically chosen representatives. Governments must be based on the will of the people, expressed in periodic and genuine elections with universal and equal suffrage. Voting must be secret.

Everyone has the right to the economic, social and cultural conditions needed for dignity and free development of personality. The right to work is affirmed. The job shall be of a person's own choosing, with favorable conditions of work, and remuneration consistent with human dignity, supplemented if necessary with social support. All workers have the right to form and to join trade unions.

Article 25 of the Declaration states that everyone has the right to an adequate standard of living, including food, clothing, housing and medical care, together with social services. All people have the right to security in the event of unemployment, sickness, disability, widowhood or old age. Expectant mothers are promised special care and assistance, and

children, whether born in or out of wedlock, shall enjoy the same social protection. Everyone has the right to education, which shall be free in the elementary stages. Higher education shall be accessible to all on the basis of merit. Education must be directed towards the full development of the human personality and to strengthening respect for human rights and fundamental freedoms. Education must promote understanding, tolerance, and friendship among all nations, racial and religious groups, and it must further the activities of the United Nations for the maintenance of peace.

A supplementary document, the Convention on the Rights of the Child, was adopted by the United Nations General Assembly on the 12th of December, 1989. Furthermore, in July 2010, the General Assembly passed a resolution affirming that everyone has the right to clean drinking water and proper sanitation. Many provisions of the Universal Declaration of Human Rights, for example Article 25, might be accused of being wishful thinking. In fact, Jean Kirkpatrick, former US Ambassador to the UN, called the Declaration "a letter to Santa Claus". Nevertheless, like the Millennium Development Goals, the Universal Declaration of Human Rights has great value in defining the norms towards which the world ought to be striving.

It is easy to find many examples of gross violations of basic human rights that have taken place in recent years. Apart from human rights violations connected with interventions of powerful industrial states in the internal affairs of third world countries, there are many cases where governmental forces in the less developed countries have violated the human rights of their own citizens. Often minority groups have been killed or driven off their land by those who coveted the land, as was the case in Guatemala in 1979, when 1.5 million poor Indian farmers were forced to abandon their villages and farms and to flee to the mountains of Mexico in order to escape murderous attacks by government soldiers. The blockade of Gaza and the use of drones to kill individuals illegally must also be regarded as gross human rights violations, and there are many recent examples of genocide.

Wars in general, and in particular, the use of nuclear weapons, must be regarded as gross violations of human rights. The most basic human right is the right to life; but this is right routinely violated in wars. Most of the victims of recent wars have been civilians, very often children and women. The use of nuclear weapons must be regarded as a form of genocide, since they kill people indiscriminately, babies, children, young adults in their prime, and old people, without any regard for guilt or innocence.

Furthermore, recent research shows that a war fought with nuclear weapons would be an ecological disaster. Smoke from burning cities would rise to the stratosphere, where it would spread globally and remain for a period of 10 years, blocking sunlight, destroying the the ozone layer, and blocking the hydrological cycle. An all-out war with thermonuclear weapons would essentially destroy all agriculture for such a long period that most humans would die from starvation. The damage to the biosphere would also be enormous. We may ask: by what right do the nuclear nations threaten the world with a disaster of these proportions? Would not a war fought with nuclear weapons be the greatest imaginable violation of human rights? We should remember that both war in general and the use of nuclear weapons in particular violate democratic principles: The vast majority of ordinary citizens prefer peace to war, and the vast majority also long for a world without nuclear

weapons.

We know that war is madness, but it persists. We know that it threatens the future survival of our species, but it persists, entrenched in the attitudes of mainstream newspaper editors, television producers and filmmakers, entrenched in the methods by which politicians finance their campaigns, and entrenched in the financial power of arms manufacturers, entrenched also in the ponderous and costly hardware of war, the fleets of bombers, warships, tanks, nuclear missiles and so on. It is plain that if the almost unbelievable sums now wasted on armaments were used constructively, most of the pressing problems facing the world today could be solved; but today the world spends more that 20 times as much on armaments as it does on development. Today's world is one in which roughly 10 million children die every year from diseases related to poverty. Besides this enormous waste of young lives through malnutrition and preventable disease, there is a huge waste of opportunities through inadequate education. The rate of illiteracy in the 25 least developed countries is 80%, and the total number of illiterates in the world is estimated to be 800 million. Meanwhile every 60 seconds the world spends roughly 3 million dollars on armaments. The millions who are starving have a right to food. The millions of illiterates have a right to education. By preferring armaments to development, we deny them these rights.

It is time for civil society to make its voice heard. Politicians are easily influenced by lobbies and by money, but in the last analysis they have to listen to the voice of the people. We have seen this recently in Tunisia, Egypt, Libya, Bahrain and Yemen. We should try to learn from the courage of the people of these countries who have defied guns and tanks to demand their human rights. No single person can achieve the changes that we need, but together we can do it: together we can build the world that we choose. No one living today asked to be born in a time of crisis, but the global crisis of the 21st century has given each of us an enormous responsibility: We cannot merely leave things up to the politicians, as we have been doing. The future is in our own hands: the hands of the people, the hands of civil society. This is not a time for building private utopias or cultivating our own gardens. Today everyone has two jobs: Of course we have to earn a living, but in addition, all of us have the duty to work actively, to the best of our abilities, to save humanity's future and the biosphe

3.2 Human rights versus national sovereignty

3.3 Rights of the Child

Figure 3.8:

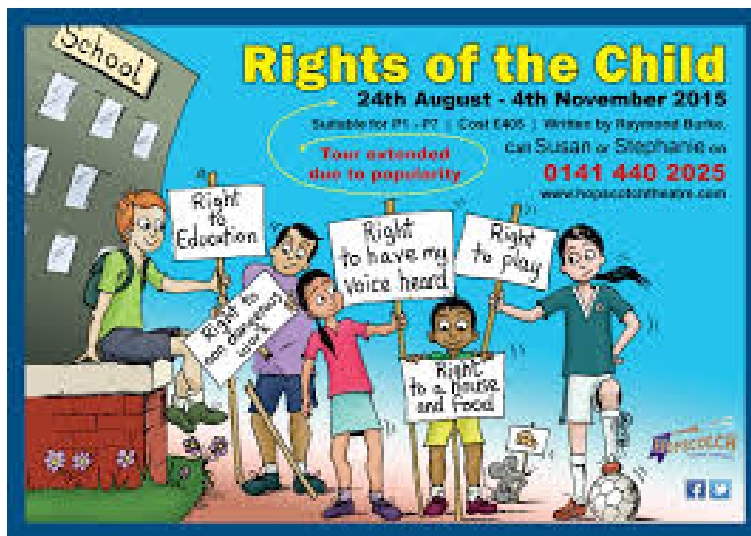Figure 3.9:

Figure 3.10:

Figure 3.11:

3.4 The struggle for women's rights

Experts agree that higher status for women. higher education for women, and jobs outside the home are key steps that are needed to stabilize global population. Moreover, these reforms are highly desirable for their own sake, for the sake of justice and equality, and for the sake of the uniquely life-oriented vision that women can give us.

In this chapter, we review some of the historical steps in this direction, staring with Mary Wollstonecraft's book *Vindication of the Rights of Woman*, published in 1792.

Mary Wollstonecraft

Vindication of the Rights of Woman

While in France, Mary Wollstonecraft had written *An Historical and Moral View of the French Revolution*, which was published in London in 1794. She also wrote *Vindication of the Rights of Woman* (1792) and *Vindication of the Rights of Man* (1792). Both of these were replies to Edmund Burke's argument for conservatism, *Reflection on the Revolution in France*. In her book on the rights of women, Mary wrote:

"My main argument is built on this simple principle, that if [woman] be not prepared by education to become the companion of man, she will stop the progress of knowledge and virtue; for truth must be common to all",

Wollstonecraft contends that society will degenerate without educated women, particularly because mothers are the primary educators of young children. She attributes the problem of uneducated women to men and

"...a false system of education, gathered from the books written on this subject by men who [consider] females rather as women than human creatures"

"Taught from their infancy that beauty is woman's sceptre, the mind shapes itself to the body, and, roaming round its gilt cage, only seeks to adorn its prison"

"I then would fain convince reasonable men of the importance of some of my remarks; and prevail on them to weigh dispassionately the whole tenor of my observations. I appeal to their understandings; and, as a fellow-creature, claim, in the name of my sex, some interest in their hearts. I entreat them to assist to emancipate their companion, to make her a help meet for them! Would men but generously snap our chains, and be content with rational fellowship instead of slavish obedience, they would find us more observant daughters, more affectionate sisters, more faithful wives, more reasonable mothers: in a word, better citizens. "

Votes for women

Emmeline Pankhurst (1858-1928)

The daughter of politically active parents, Emmeline was introduced to the campaign for women's suffrage at the age of 14. In 1879 she married Richard Pankhurst. He was a barrister, sympathetic to the cause of votes for women, and 24 years older than she. Of

Figure 3.12: **Mary Wollstonecraft in a painting by John Opie. She was the author of Vindication of the Roghts of Woman.**

the five children born to the marriage Emmeline and Richard's daughters Christobel and Sylvia became active in the fight for the political rights of women.

In 1903, a year after the death of her husband, Emmeline Pankhurst founded what was to become the most radical and controversial branch of the campaign for women's rights: the Women's Social and Political Union (WSPU). This organization, consisting entirely of women, believed that little progress would be made through polite requests for reform. Therefore WSPU members chained themselves to railings, broke the windows of prominent buildings, set fire to postboxes, attacked policemen, and, when arrested, went on hunger strikes. The hunger striking women were force-fed, their jaws being held open by steel clamps and tubes forced down their throats. Of course newspapers reported all of this, and debate about the issues reached a high pitch.

After World War I, the Representation of the People Act of 1918 extended the right to vote to men over 21, and to women property owners over 30.

Women's political rights in other countries

According to the Wikipedia article on *Woman's Suffrage*, "The first European country to introduce women's suffrage was the Grand Duchy of Finland, then part of the Russian Empire, which elected the world's first women Members of Parliament in the 1907 parliamentary elections. Norway followed, granting full women's suffrage in 1913. Denmark followed in 1915, and the Soviet Union followed in 1917.

"Most independent countries enacted women's suffrage in the inter-war era, including Canada in 1917, Britain (over 30 in 1918, over 21 in 1928), Germany, Poland in 1918, Austria and the Netherlands in 1919, and the United States in 1920 (Voting Rights Act of 1965 secured voting rights for racial minorities)...

"Late adopters in Europe were Spain in 1933, France in 1944, Italy in 1946, Greece in 1952,[12] San Marino in 1959, Monaco in 1962, Andorra in 1970, Switzerland in 1971 at federal level, and at local canton level between 1959 in the cantons of Vaud and Neuchatel and 1991 in the canton of Appenzell Innerrhoden,[16] and Liechtenstein in 1984. In addition, although women in Portugal obtained suffrage in 1931, this was with stronger restrictions than those of men; full gender equality in voting was only granted in 1976...

"The last Latin American country to give women the right to vote was Paraguay in 1961. In December 2015, women were first allowed to vote in Saudi Arabia (municipal elections).

"Extended political campaigns by women and their supporters have generally been necessary to gain legislation or constitutional amendments for women's suffrage. In many countries, limited suffrage for women was granted before universal suffrage for men; for instance, literate women or property owners were granted suffrage before all men received it. The United Nations encouraged women's suffrage in the years following World War II, and the Convention on the Elimination of All Forms of Discrimination Against Women (1979) identifies it as a basic right with 189 countries currently being parties to this Convention."

Figure 3.13: **Emmeline Pankhurst (1858-1928). In 1999, Time Magazine named Emmeline Pankhurst as one of the 100 most important people of the 20th century, noting that "she shaped an idea of women for our time; she shook society into a new pattern from which there could be no going back".**

Figure 3.14: **A WSPU poster by Hilda Davis, 1909.**

Figure 3.15: **Annie Kenney and Emmeline Pankhurst's daughter, Christobel. When World War I broke out, both Emmeline and Christobel Pankhurst halted their protests and supported conscription and the war effort. By contrast, Sylvia opposed the war. When the war was over, the Representation of the People Act of 1918 extended the right to vote to men over 21, and to women property owners over 30. The discrepancy between men and women was intended to ensure that women did not become a majority.**

Figure 3.16: **Sylvia Pankhurst in 1910. She wanted the suffragette movement to be explicitly on the side of the Labour Party, and broke with her family on this issue. She was also opposed to war. In 1915, Sylvia Pankhurst gave her enthusiastic support to the International Woman's Peace Congress, which was held in the Hague.**

Figure 3.17: **A suffragette who has chained herself to a railing.**

Figure 3.18: **The arrest of a suffragette.**

Educational equality for women

Maria Montessori and modern educational methods

Dr. Maria Montessori (1870-1952) was an Italian physician and educator who pioneered modern non-authoritarian methods of education. Her father was an official in the Italian Ministry of Finance, while her mother belonged to a family that greatly valued education. Encouraged by her mother, the young Maria first studied to become an engineer, at that time an unusual profession for a woman, and then changed to the even more unusual study of medicine.

After passing examinations in botany, zoology, experimental physics, histology, anatomy, and general and organic chemistry at the University of Rome, she was finally accepted as a medical student. Because she was a woman, Montessori encountered discrimination and opposition from both the students and staff of Rome's medical school. She was forced to perform anatomy dissections alone at night, because it was considered improper for a woman to view naked bodies in the company of men. Nevertheless, Maria Montessori graduated with distinction, having specialized in pediatrics and psychology during her last two years.

Dr. Montessori then became interested in the problem of educating retarded children. The experimental methods which she introduced were built on the natural tendencies of all children to explore their environments and to learn new skills. She gave her students the materials that they needed to be creative, and let them use these materials in their own spontaneous way. Her results were astonishingly successful, and most of her students, despite having been classified as retarded, were able to pass normal examinations. Encouraged by this success, Montessori tried the same methods on normal students. Again the results were remarkable. The normal children became super-good students. Her astonishingly good results made Maria Montessori internationally famous. She later studied anthropology and added this discipline to medicine, pediatrics and psychology as a background for her educational work.

Some quotations from Dr. Maria Montessori's many books

"And so we discovered that education is not something which the teacher does, but that it is a natural process which develops spontaneously in the human being. It is not acquired by listening to words, but in virtue of experiences in which the child acts on his environment. The teacher's task is not to talk, but to prepare and arrange a series of motives for cultural activity in a special environment made for the child" (from *The Absorbent Mind*).

"..the task of the educator lies in seeing that the child does not confound good with immobility, and evil with activity, as often happens in old-time discipline... A room in which all the children move about usefully, intelligently, and voluntarily, without committing any rough or rude act, would seem to me a classroom very well disciplined indeed." (from *The Montessori Method*)

Figure 3.19: **Dr. Maria Montessori (1870-1952).**

"The instructions of the teacher consist then merely in a hint, a touch - enough to give a start to the child. The rest develops of itself." (from *Dr. Montessori's Own Handbook*)

"Today, however, those things which occupy us in the field of education are the interests of humanity at large and of civilization, and before such great forces we can recognize only one country - the entire world."(from *The Montessori Method*)

"How can we speak of Democracy or Freedom when from the very beginning of life we mould the child to undergo tyranny, to obey a dictator? How can we expect democracy when we have reared slaves? Real freedom begins at the beginning of life, not at the adult stage. These people who have been diminished in their powers, made short-sighted, devitalized by mental fatigue, whose bodies have become distorted, whose wills have been broken by elders who say: 'your will must disappear and mine prevail!' - how can we expect them, when school-life is finished, to accept and use the rights of freedom?" (from *Education for a New World*)

"Nowadays nobody's life is safe. An absurd war may be declared in which all men - young and old, women and children - are in mortal danger. Civilians are bombed and people have to take refuge in underground shelters just as primitive men took refuge in caves to defend themselves against wild beasts. The supply of food may be cut off and millions may die of famine and plague. Do we not see men in rags or even naked, freezing to death, families separated and torn apart, children abandoned and roaming about in wild hordes?

"This we see, not only among those vanquished in war, but everywhere. Humanity itself is vanquished and enslaved - but why enslaved? Because all men are slaves, the victors as well as the vanquished, insecure, frightened, suspicious and hostile, compelled to defend themselves by means of spying and brigandage, using and fostering immorality as a means of defense..."

"It may seem that we have drifted rather far from our original subject - Education. This digression, however, must open up the new road along which we now have to go. In the same way in which we help the patients in a hospital to recover their health and continue to live so we must now help humanity to save itself. We must be nurses in a hospital, as vast as the world itself." (from *The Formation of Man*).

Malala Yousafzai

Malala Yousafzai was born in 1997 in the beautiful Swat Valley of Pakistan. Her father, Ziauddin Yousafzai is a poet, educational activist, and school owner. In 2008, he was contacted by a representative of the BBC's Urdu service and asked to recommend a girl from one of his schools to write a continuing blog about what life was like under the Taliban. When all of the girls whom Ziauddin asked were too frightened, he finally recommended his own daughter, Malala. Her blog was aired anonymously by the BBC Urdu service.

After the BBC diary ended, Malala Yousafzai and her father were approached by a New York Times reporter about filming a documentary. Wikipedia states that "Following

the documentary, Yousafzai was interviewed on the national Pashto-language station AVT Khyber, the Urdu-language Daily Aaj, and Canada's Toronto Star.[34] She made a second appearance on Capital Talk on 19 August 2009. Her BBC blogging identity was being revealed in articles by December 2009. She also began appearing on television to publicly advocate for female education. From 2009 to 2010 she was the chair of the District Child Assembly of the Khpal Kor Foundation through 2009 and 2010."

"In October 2011, Archbishop Desmond Tutu, a South African activist, nominated Yousafzai for the International Children's Peace Prize of the Dutch international children's advocacy group KidsRights Foundation. She was the first Pakistani girl to be nominated for the award. The announcement said, 'Malala dared to stand up for herself and other girls and used national and international media to let the world know girls should also have the right to go to school.' The award was won by Michaela Mycroft of South Africa.

"Her public profile rose even further when she was awarded Pakistan's first National Youth Peace Prize two months later in December. On 19 December 2011, Prime Minister Yousaf Raza Gillani awarded her the National Peace Award for Youth. At the proceedings in her honor, Yousafzai stated that she was not a member of any political party, but hoped to found a national party of her own to promote education. The prime minister directed the authorities to set up an IT campus in the Swat Degree College for Women at Yousafzai's request, and a secondary school was renamed in her honor. By 2012, Yousafzai was planning to organize the Malala Education Foundation, which would help poor girls go to school

"As Yousafzai became more recognized, the dangers facing her increased. Death threats against her were published in newspapers and slipped under her door. On Facebook, where she was an active user, she began to receive threats and fake profiles were created under her name. Eventually, a Taliban spokesman said they were 'forced' to act. In a meeting held in the summer of 2012, Taliban leaders unanimously agreed to kill her.

"On 9 October 2012, a Taliban gunman shot Yousafzai as she rode home on a bus after taking an exam in Pakistan's Swat Valley. Yousafzai was 15 years old at the time. According to reports, a masked gunman shouted "Which one of you is Malala? Speak up, otherwise I will shoot you all", and, on upon her being identified, shot her. She was hit with one bullet, which went through her head, neck, and ended in her shoulder. Two other girls were also wounded in the shooting."

Malala did not die, however. The shooting resulted in an enormous international wave of sympathy for her, and outrage at Taliban's murder attempt. She became the world's most famous teenager. She met Queen Elizabeth II and Barack Obama, and spoke at the Oxford Union. Harvard University and the Canadian Parliament. In 2014, she shared the Nobel Peace Prize with Kailash Satyarthi, a children's rights activist from India. Here are some excerpts from her Nobel Address:

"We had a thirst for education, we had a thirst for education because our future was right there in that classroom. We would sit and learn and read together. We loved to wear neat and tidy school uniforms and we would sit there with big dreams in our eyes. We wanted to make our parents proud and prove that we could also excel in our studies and

achieve those goals, which some people think only boys can.

"But things did not remain the same. When I was in Swat, which was a place of tourism and beauty, suddenly it changed into a place of terrorism. I was just ten when more than 400 schools were destroyed. Women were flogged. People were killed. And our beautiful dreams turned into nightmares.

"Education went from being a right to being a crime. Girls were stopped from going to school. When my world suddenly changed, my priorities changed too. I had two options. One was to remain silent and wait to be killed. And the second was to speak up and then be killed. I chose the second one. I decided to speak up.

"We could not just stand by and see those injustices of the terrorists denying our rights, ruthlessly killing people and misusing the name of Islam. We decided to raise our voice and tell them: Have you not learnt, have you not learnt that in the Holy Quran Allah says: if you kill one person it is as if you kill the whole humanity?

"...I tell my story, not because it is unique, but because it is not. It is the story of many girls. Today, I tell their stories too. I have brought with me some of my sisters from Pakistan, from Nigeria and from Syria, who share this story. My brave sisters Shazia and Kainat who were also shot that day on our school bus. But they have not stopped learning. And my brave sister Kainat Soomro who went through severe abuse and extreme violence, even her brother was killed, but she did not succumb.

"Also my sisters here, whom I have met during my Malala Fund campaign. My 16-year-old courageous sister, Mezon from Syria, who now lives in Jordan as refugee and goes from tent to tent encouraging girls and boys to learn. And my sister Amina, from the North of Nigeria, where Boko Haram threatens, and stops girls and even kidnaps girls, just for wanting to go to school.

"I am Malala. But I am also Shazia. I am Kainat. I am Kainat Soomro. I am Mezon. I am Amina. I am those 66 million girls who are deprived of education. And today I am not raising my voice, it is the voice of those 66 million girls.

"...Dear sisters and brothers, today, in half of the world, we see rapid progress and development. However, there are many countries where millions still suffer from the very old problems of war, poverty, and injustice.

"We still see conflicts in which innocent people lose their lives and children become orphans. We see many people becoming refugees in Syria, Gaza and Iraq. In Afghanistan, we see families being killed in suicide attacks and bomb blasts.

"Many children in Africa do not have access to education because of poverty. And as I said, we still see, we still see girls who have no freedom to go to school in the north of Nigeria.

"Many children in countries like Pakistan and India, as Kailash Satyarthi mentioned, many children, especially in India and Pakistan are deprived of their right to education because of social taboos, or they have been forced into child marriage or into child labor.

"...Dear sisters and brothers, dear fellow children, we must work - not wait. Not just the politicians and the world leaders, we all need to contribute. Me. You. We. It is our duty.

"Let us become the first generation to decide to be the last , let us become the first
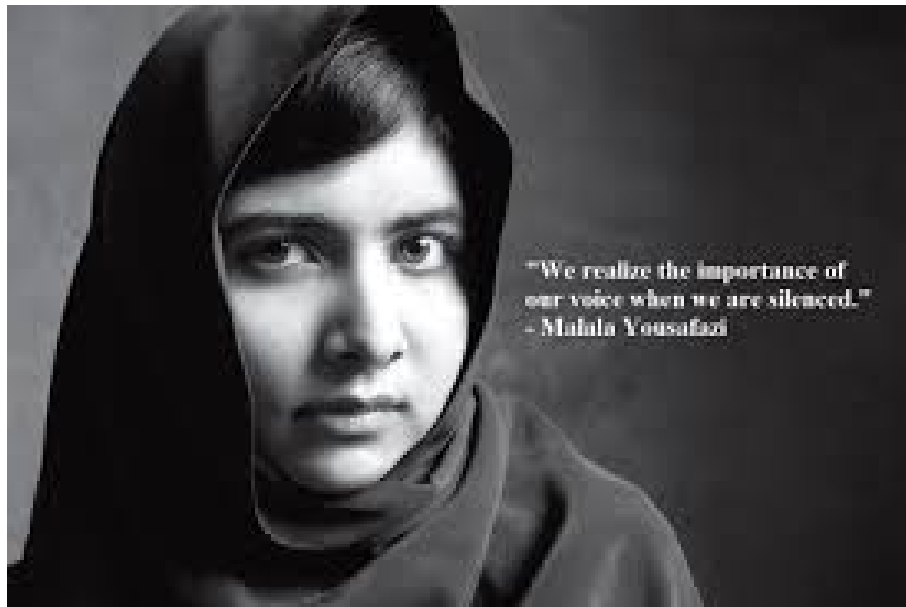
Figure 3.20: **Malala Yousafzai: "We realize the importance of our voice when we are silenced".**

generation that decides to be the last that sees empty classrooms, lost childhoods, and wasted potentials. Let this be the last time that a girl or a boy spends their childhood in a factory. Let this be the last time that a girl is forced into early child marriage. Let this be the last time that a child loses life in war. Let this be the last time that we see a child out of school. Let this end with us. Let's begin this ending ... together ... today ... right here, right now. Let's begin this ending now."

Figure 3.21: **Women are the intellectual equals of men.**

Figure 3.22: **When he was Sweden's Prime Minister, Olof Palme declared that his administration's goal was that "neither in education, nor in opportunities for employment, nor in law, nor in social custom, should there be any difference whatever between men and women".**

Figure 3.23: **Experts agree that educational and legal equality for women are vitally important steps towards stabilizing, and ultimately reducing, global population. These reforms are also extremely important for their own sake, and for the sake of the uniquely life-oriented insights that women can give to the world.**

3.5 Water as a human right

Lester Brown's lecture in Copenhagen

After a lecture at the University of Copenhagen in the 1980's, Lester R. Brown of the Earth Policy Institute was asked which resource would be the first to become critically scarce. Everyone in the audience expected him to say "oil", but instead he said "fresh water". He went on to explain that falling water tables in China would soon make China unable to feed its population. This would not cause famine in China itself because of the strength of the Chinese economy, which would allow the Chinese to purchase grain on the world market. However, shortages of fresh water in China would indeed cause famine, for example in Africa, because Chinese demand for grain would raise prices on the world market beyond the ability of poor countries to pay.

Predictions of drought in the Stern Review

According to a report presented to the Oxford Institute of Economic Policy by Sir Nicholas Stern on 31 January, 2006, areas likely to lose up to 30% of their rainfall by the 2050's because of climate change include much of the United States, Brazil, the Mediterranean region, Eastern Russia and Belarus, the Middle East, Southern Africa and Southern Australia. Meanwhile rainfall is predicted to increase up to 30% in Central Africa, Pakistan, India, Bangladesh, Siberia, and much of China.

Stern and his team point out that "We can... expect to see changes in the Indian monsoon, which could have a huge impact on the lives of hundreds of millions of people in India, Pakistan and Bangladesh. Most climate models suggest that the monsoon will change, although there is still uncertainty about exactly how. Nevertheless, small changes in the monsoon could have a huge impact. Today, a fluctuation of just 10% in either
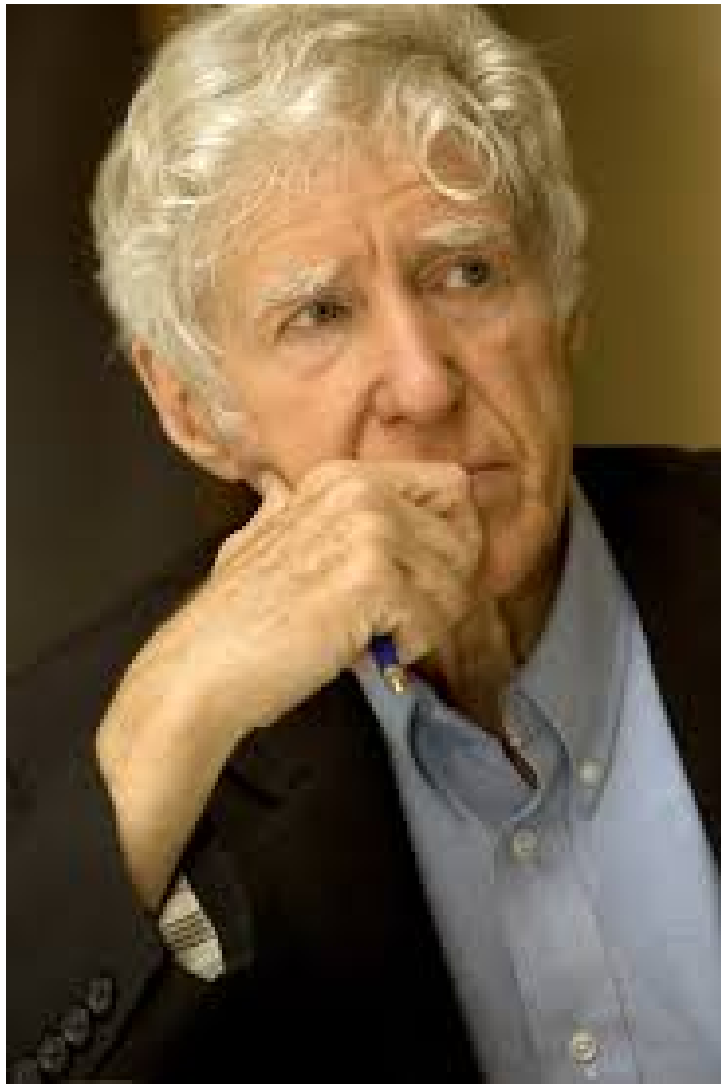
Figure 3.24: **Lester R. Brown**

direction from average monsoon rainfall is known to cause either severe flooding or drought. A weak summer monsoon, for example, can lead to poor harvests and food shortages among the rural population - two-thirds of India's almost 1.1 billion people. Heavier-than-usual monsoon downpours can also have devastating consequences..."

In some regions, melting of glaciers can be serious from the standpoint of dry-season water supplies. For example, melts from glaciers in the Hindu Kush and the Himalayas now supply much of Asia, including China and India, with a dry-season water supply. Complete melting of these glacial systems would cause an exaggerated runoff for a few decades, after which there would be a drying out of some of the most densely populated regions of the world.

The Human Right to Water and Sanitation (HRWS) was recognised as a human right by the United Nations General Assembly on 28 July 2010. ... It stated: "The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses."

Thirst for Profit: Corporate Control of Water in Latin America

Here are some excerpts from an article by Lisa Bascov-Ellen, published om June 19, 2009 by the Council on Hemispheric Affairs:

The Corporate Crusade to Commodify Water

"Water has been characterized as the oil of the 21st century. Blue gold. It is essential to life, and yet humanity faces a growing water crisis as a result of severe mismanagement in water and sanitation, which will be exponentially exacerbated in the coming decades by population growth combined with declining resources. Latin America has the greatest income disparity in the world and the population's access to water reflects this inequality. Over 130 million people living in the region do not have access to potable water in their homes, and sanitation is in even poorer condition, as it is estimated that only one in six persons has adequate sanitation services. According to the 2007 Annual Report from the nonprofit organization Water For People, Every day, nearly 6,000 people who share our world die from water-related illnesses - more than 2 million each year - and the vast majority of these are children... There are more lives lost each year to water-related illnesses than to natural disasters and wars combined.' It is clear that lack of access to clean water is a serious issue, one that has only started to gain international attention from a variety of organizations in recent years...

"The struggle over water is certainly not a new phenomenon. Wide-scale water privatization began in the 1990s and was often stipulated as a condition for assistance from international financial aid institutions, primarily the World Bank and the Inter-American Development Bank. Since then, there has been ongoing conflict over water management, with Latin America at the center of many of the models for resistance and restructuring. These water-related conflicts, popularly referred to as 'water wars', gained international attention a decade ago. The expulsion of water giant Bechtel by the citizens of the Boli-

Figure 3.25: **We all need clean water to survive.**

Figure 3.26: **Maude Barlow (born 1947). The Wikipedia article on her states that she is a "Canadian author and activist. She is the National Chairperson of the Council of Canadians, a citizens' advocacy organization with members and chapters across Canada. She is also the co-founder of the Blue Planet Project, which works internationally for the human right to water. Maude chairs the board of Washington-based Food and Water Watch, is a founding member of the San Francisco-based International Forum on Globalization, and a Councillor with the Hamburg-based World Future Council. In 2008/2009, she served as Senior Advisor on Water to the 63rd President of the United Nations General Assembly and was a leader in the campaign to have water recognized as a human right by the UN. She has authored and co-authored 16 books." Maude Barlow's work on the issue of water is especially important because fresh water is becoming increasingly scarce throughout the world.**

vian city Cochabamba marked the beginning of a greater resistance to water privatization and commercialization in Latin America. Given the failures of privatization and neoliberal policies in Latin America, it should not come as a surprise that the people are objecting to the commodification of this basic human need...

"In Cochabamba, after Bechtel was installed, it quickly raised rates by an average of 35% (and in some cases as much as 200%), which was far outside the budget of the city's poor and would have left many without access to water. Licenses were even required for individuals to collect rainwater from their roofs, and people were charged for water taken from their own wells...

"Protests escalated to the point that the Bolivian government declared a state of martial law, and eventually the company was forced to abandon their operations in the country."

3.6   The Rights of Indiginous Peoples
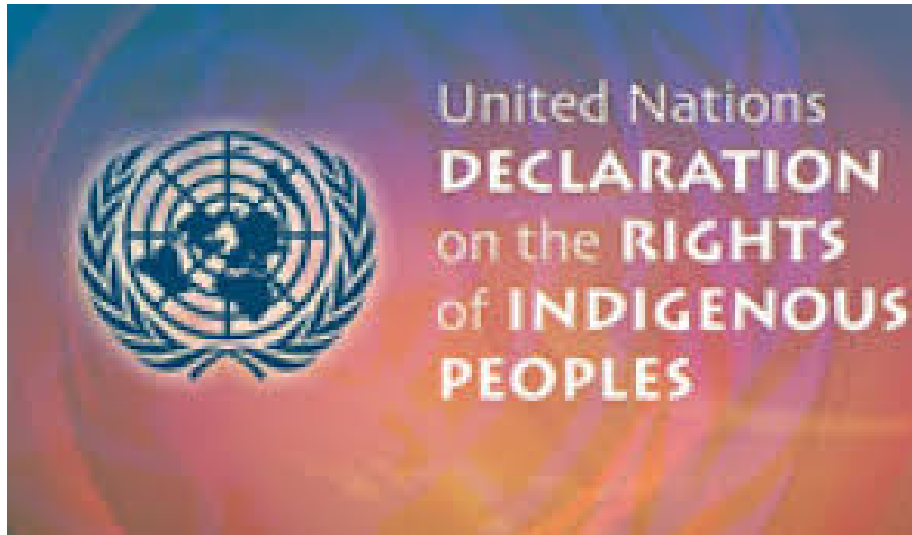
Figure 3.27:

Figure 3.28:

Figure 3.29:

Figure 3.30:

Figure 3.31:

Figure 3.32:

Figure 3.33:

3.7 The Rights of Mother Earth

The World People's Conference on Climate Change and the Rights of Mother Earth

This conference took place in Tiquipaya, just outside the city of Cochabamba, Bolivia, from April 19-22, 2010. The event was attended by around 30,000 people from over 100 countries. It was hosted by the Bolivian government, and the proceedings were transmitted online by the organizations OneClimate and Global Campaign for Climate Action.

One of the outstanding results of the conference was the drafting of a Universal Declaration of the Rights of Mother Earth, modeled on the United Nations' Universal Declaration of Human Rights. Both Declarations might be criticized for being unrealistic,[1] but both have great normative value. They define the goals towards which we ought to be striving.

Proposed Universal Declaration of the Rights of Mother Earth[2]

Preamble

We, the peoples and nations of Earth:

- *considering that we are all part of Mother Earth, an indivisible, living community of interrelated and interdependent beings with a common destiny;*

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[1]https://www.transcend.org/tms/2012/12/human-rights-a-letter-to-santa-claus/
[2]https://www.theguardian.com/environment/2011/apr/10/bolivia-enshrines-natural-worlds-rights
https://pwccc.wordpress.com

- *gratefully acknowledging that Mother Earth is the source of life, nourishment and learning and provides everything we need to live well;*

- *recognizing that the capitalist system and all forms of depredation, exploitation, abuse and contamination have caused great destruction, degradation and disruption of Mother Earth, putting life as we know it today at risk through phenomena such as climate change;*

- *convinced that in an interdependent living community it is not possible to recognize the rights of only human beings without causing an imbalance within Mother Earth;*

- *affirming that to guarantee human rights it is necessary to recognize and defend the rights of Mother Earth and all beings in her and that there are existing cultures, practices and laws that do so;*

- *conscious of the urgency of taking decisive, collective action to transform structures and systems that cause climate change and other threats to Mother Earth;*

- *proclaim this Universal Declaration of the Rights of Mother Earth, and call on the General Assembly of the United Nation to adopt it, as a common standard of achievement for all peoples and all nations of the world, and to the end that every individual and institution takes responsibility for promoting through teaching, education, and consciousness raising, respect for the rights recognized in this Declaration and ensure through prompt and progressive measures and mechanisms, national and international, their universal and effective recognition and observance among all peoples and States in the world.*

Article 1: Mother Earth

1. *Mother Earth is a living being.*

2. *Mother Earth is a unique, indivisible, self-regulating community of interrelated beings that sustains, contains and reproduces all beings.*

3. *Each being is defined by its relationships as an integral part of Mother Earth.*

4. *The inherent rights of Mother Earth are inalienable in that they arise from the same source as existence.*

5. *Mother Earth and all beings are entitled to all the inherent rights recognized in this Declaration without distinction of any kind, such as may be made between organic and inorganic beings, species, origin, use to human beings, or any other status.*

6. *Just as human beings have human rights, all other beings also have rights which are specific to their species or kind and appropriate for their role and function within the communities within which they exist.*

7. *The rights of each being are limited by the rights of other beings and any conflict between their rights must be resolved in a way that maintains the integrity, balance and health of Mother Earth.*

Article 2. Inherent Rights of Mother Earth

1. *Mother Earth and all beings of which she is composed have the following inherent rights:*

   (a) *the right to life and to exist;*

   (b) *the right to be respected;*

   (c) *the right to regenerate its bio-capacity and to continue its vital cycles and processes free from human disruptions;*

   (d) *the right to maintain its identity and integrity as a distinct, self-regulating and interrelated being;*

   (e) *the right to water as a source of life;*

   (f) *the right to clean air;*

   (g) *the right to integral health;*

   (h) *the right to be free from contamination, pollution and toxic or radioactive waste;*

   (i) *the right to not have its genetic structure modified or disrupted in a manner that threatens it integrity or vital and healthy functioning;*

   (j) *the right to full and prompt restoration the violation of the rights recognized in this Declaration caused by human activities;*

2. *Each being has the right to a place and to play its role in Mother Earth for her harmonious functioning.*

3. *Every being has the right to wellbeing and to live free from torture or cruel treatment by human beings.*

Article 3. Obligations of human beings to Mother Earth

1. *Every human being is responsible for respecting and living in harmony with Mother Earth.*

2. *Human beings, and all States guarantee peace and eliminate nuclear, chemical and biological weapons;*

   (a) *act in accordance with the rights and obligations recognized in this Declaration;*

   (b) *recognize and promote the full implementation and enforcement of the rights and obligations recognized in this Declaration;*

Figure 3.34: **The earth is our mother.**

(c) *promote and participate in learning, analysis, interpretation and communication about how to live in harmony with Mother Earth in accordance with this Declaration;*

(d) *ensure that the pursuit of human wellbeing contributes to the wellbeing of Mother Earth, now and in the future;*

(e) *establish and apply effective norms and laws for the defense, protection and conservation of the rights of Mother Earth;*

(f) *respect, protect, conserve and where necessary, restore the integrity, of the vital ecological cycles, processes and balances of Mother Earth;*

(g) *guarantee that the damages caused by human violations of the inherent rights recognized in this Declaration are rectified and that those responsible are held accountable for restoring the integrity and health of Mother Earth;*

(h) *empower human beings and institutions to defend the rights of Mother Earth and of all beings;*

(i) *establish precautionary and restrictive measures to prevent human activities from causing species extinction, the destruction of ecosystems or the disruption of ecological cycles;*

(j) *guarantee peace and eliminate nuclear, chemical and biological weapons;*

(k) *promote and support practices of respect for Mother Earth and all beings, in accordance with their own cultures, traditions and customs;*

(l) *promote economic systems that are in harmony with Mother Earth and in accordance with the rights recognized in this Declaration.*

Article 4: Definitions

1. *The term "being" includes ecosystems, natural communities, species and all other natural entities which exist as part of Mother Earth.*

2. *Nothing in this Declaration restricts the recognition of other inherent rights of all beings or specified beings.*

Suggestions for further reading

1. Lise Busck Jensen, *The First Manifesto of the Woman's Movement*, https://nordicwomensliterature.n first-manifesto-of-the-womens-movement/
2. E. Sylvia Pankhurst, *The Sufferegette Movement: An Intimate Account of Persons and Ideals*, (1931)
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Figure 3.35: **Love and respect Mother Earth.**

Figure 3.36: **We need reverence for all life, and even reverence for inanimate nature. We need respect and love for Mother Earth. She will return out love.**

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Chapter 4

INDIVIDUAL RESPONSIBILITY: THE NUREMNERG PRINCIPLES

4.1   The training of soldiers

Within individual countries, murder is rightly considered to be the worst of crimes. But the institution of war tries to convince us that if a soldier murders someone from another country, whom the politicians have designated as an "enemy", it is no longer a crime, no longer a violation of the common bonds of humanity. It is "heroic".

In their hearts, soldiers know that this is nonsense. Murder is always murder. The men, women and children who are supposed to be the "enemy", are just ordinary people, with whom the soldier really has no quarrel. Therefore when the training of soldiers wears off a little, so that they realize what they have done, they have to see themselves as murderers, and many commit suicide.

A recent article in the journal "Epidemiology" pointed out a startling statistic: for every American soldier killed in combat in 2012, 25 committed suicide. The article also quotes the Department of Veterans Affairs, which says that 18 veterans commit suicide every day.

Obviously, the training of soldiers must overwrite fundamental ethical principles. This training must make a soldier abandon his or her individual conscience and sense of responsibility. It must turn the soldier from a compassionate human being into an automaton, a killing machine. How is this accomplished? Through erosion of of the soldier's self-respect. Through the endless repetition of senseless rituals where obedience is paramount and from which rational thought and conscience are banished.

In his book on fanaticism, *The True Believer* (1951), the American author Eric Hoffer gives the following description of the factors promoting self-sacrifice:

"To ripen a person for self-sacrifice, he must be stripped of his individual identity. He must cease to be George, Hans, Ivan or Tado - a human atom with an existence bounded by birth and death. The most drastic way to achieve this end is by the complete assimilation of the individual into a collective body. The fully assimilated individual does not see himself
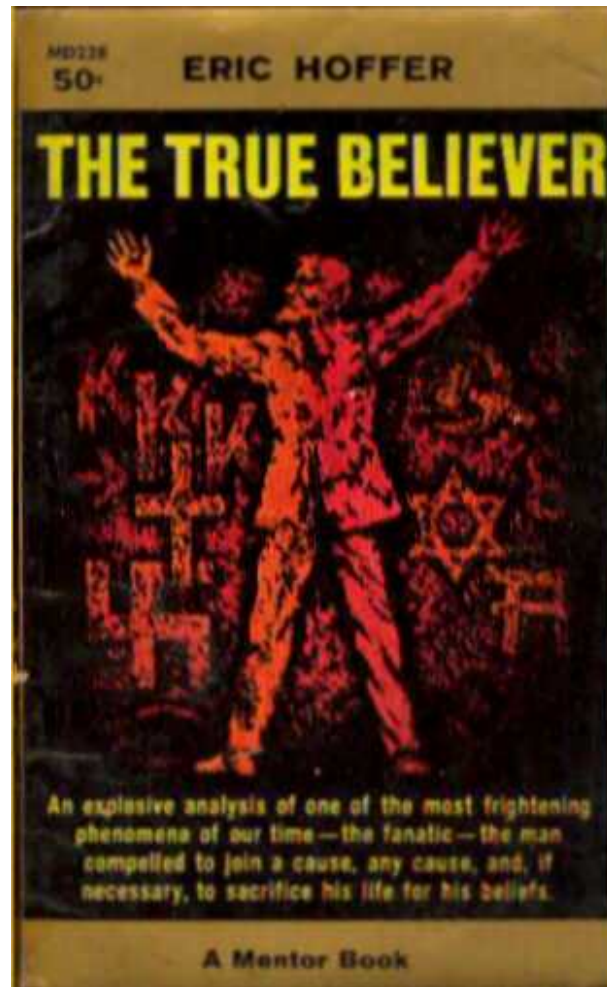
Figure 4.1:

and others as human beings. When asked who he is, his automatic response is that he is a German, a Russian, a Japanese, a Christian, a Muslim, a member of a certain tribe or family. He has no purpose, worth or destiny apart from his collective body, and as long as that body lives, he cannot really die. ...

"The effacement of individual separateness must be thorough. In every act, however trivial, the individual must, by some ritual, associate himself with the congregation, the tribe, the party, etcetera. His joys and sorrows, his pride and confidence must spring from the fortunes and capacities of the group, rather than from his individual prospects or abilities. Above all, he must never feel alone. Though stranded on a desert island, he must feel that he is under the eyes of the group. To be cast out from the group must be equivalent to being cut off from life.

"This is undoubtedly a primitive state of being, and its most perfect examples are found among primitive tribes. Mass movements strive to approximate this primitive perfection, and we are not imagining things when the anti-individualist bias of contemporary mass movements strikes us as being a throwback to the primitive."

The conditioning of a soldier in a modern army follows the pattern described in Eric Hoffer's book. The soldier's training aims at abolishing his sense of individual separateness, individual responsibility, and moral judgment. It is filled with rituals, such as saluting, by which the soldier identifies with his tribe-like army group. His uniform also helps to strip him of his individual identity and to assimilate him into the group. The result of this psychological conditioning is that the soldier's mind reverts to a primitive state. He surrenders his moral responsibility, and when the politicians tell him to kill, he kills.

4.2 Judgement at Nuremberg

4.3 The principles codefied and adopted by the UN

Suggestions for further reading

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2. Eric Hoffer, *The True Believer*, Harper and Row, (1951).

Chapter 5

TARGETING CIVILIANS

5.1   The bombardment of Copenhagen

Between 2 September and 5 September, 1807, the civilian population of Copenhagen was subjected to a bombardment by British military forces, without any declaration of war. The purpose of the bombardment was to induce terror in the population, and to thereby force the surrender of the Danish fleet, which the British feared might otherwise fall into the hands of Napoleon. It was one of the first occasions on which civilians were deliberately targeted in this manner.

Copenhagen was almost undefended, since the Danish army was positioned at the southern boundary of the country, ready to repel a possible attack by Napoleon's army. British troops and artillery were thus easily able to surround the city, while the British fleet occupied the harbor. On the first night of the bombardment, 5000 rounds were fired into the city, on the second night 2000, and on the third night 7000. New incendiary rockets developed by William Congreve were also used. More than 2000 civilians were killed by the bombardment, and about 30 percent of Copenhagen's buildings were destroyed. The bicentenary of this barbaric event might be an appropriate time to think about state-sponsored terror, in which innocent civilians are deliberately targeted.

5.2   The erosion of ethical principles during World War II

When Hitler invaded Poland in September, 1939, US President Franklin Delano Roosevelt appealed to Great Britain, France, and Germany to spare innocent civilians from terror bombing. "The ruthless bombing from the air of civilians in unfortified centers of population during the course of the hostilities", Roosevelt said (referring to the use of air bombardment during World War I) "...has sickened the hearts of every civilized man and

woman, and has profoundly shocked the conscience of humanity." He urged "every Government which may be engaged in hostilities publicly to affirm its determination that its armed forces shall in no event, and under no circumstances, undertake the bombardment from the air of civilian populations or of unfortified cities."

Two weeks later, British Prime Minister Neville Chamberlain responded to Roosevelt's appeal with the words: "Whatever the lengths to which others may go, His Majesty's Government will never resort to the deliberate attack on women and children and other civilians for purposes of mere terrorism."

Much was destroyed during World War II, and among the casualties of the war were the ethical principles that Roosevelt and Chamberlain announced at its outset. At the time of Roosevelt and Chamberlain's declarations, terror bombing of civilians had already begun in the Far East. On 22 and 23 September, 1937, Japanese bombers attacked civilian populations in Nanjing and Canton. The attacks provoked widespread protests. The British Under Secretary of State for Foreign Affairs, Lord Cranborne, wrote: "Words cannot express the feelings of profound horror with which the news of these raids has been received by the whole civilized world. They are often directed against places far from the actual area of hostilities. The military objective, where it exists, seems to take a completely second place. The main object seems to be to inspire terror by the indiscriminate slaughter of civilians..."

On the 25th of September, 1939, Hitler's air force began a series of intense attacks on Warsaw. Civilian areas of the city, hospitals marked with the Red Cross symbol, and fleeing refugees all were targeted in a effort to force the surrender of the city through terror. On the 14th of May, 1940, Rotterdam was also devastated. Between the 7th of September 1940 and the 10th of May 1941, the German Luftwaffe carried out massive air attacks on targets in Britain. By May, 1941, 43,000 British civilians were killed and more than a million houses destroyed.

Although they were not the first to start it, by the end of the war the United States and Great Britain were bombing of civilians on a far greater scale than Japan and Germany had ever done. For example, on July 24-28, 1943, British and American bombers attacked Hamburg with an enormous incendiary raid whose official intention "the total destruction" of the city.

The result was a firestorm that did, if fact, lead to the total destruction of the city. One airman recalled, that "As far as I could see was one mass of fire. 'A sea of flame' has been the description, and that's an understatement. It was so bright that I could read the target maps and adjust the bomb-sight." Another pilot was "...amazed at the awe-inspiring sight of the target area. It seemed as though the whole of Hamburg was on fire from one end to the other and a huge column of smoke was towering well above us - and we were on 20,000 feet! It all seemed almost incredible and, when I realized that I was looking at a city with a population of two millions, or about that, it became almost frightening to think of what must be going on down there in Hamburg."

Below, in the burning city, temperatures reached 1400 degrees Fahrenheit, a temperature at which lead and aluminum have long since liquefied. Powerful winds sucked new air into the firestorm. There were reports of babies being torn by the high winds from their mothers' arms and sucked into the flames. Of the 45,000 people killed, it has been estimated that 50 percent were women and children and many of the men killed were elderly, above military age. For weeks after the raids, survivors were plagued by "...droves of vicious rats, grown strong by feeding on the corpses that were left unburied within the rubble as well as the potatoes and other food supplies lost beneath the broken buildings."

The German cities Kassel, Pforzheim, Mainz, Dresden and Berlin were similarly destroyed, and in Japan, US bombing created firestorms in many cities, for example Tokyo, Kobe and Yokohama. In Tokyo alone, incendiary bombing caused more than 100,000 civilian casualties.

The nuclear arms race

On August 6, 1945, at 8.15 in the morning, a nuclear fission bomb was exploded in the air over the civilian population of Hiroshima in an already virtually defeated Japan. The force of the explosion was equivalent to fifteen thousand tons of TNT. Out of a city of two hundred and fifty thousand, one hundred thousand were killed immediately, and another hundred thousand were hurt. Many of the injured died later from radiation sickness. A few days later, Nagasaki was similarly destroyed.

The tragic destruction of the two Japanese cities was horrible enough in itself, but it also marked the start of a nuclear arms race that continues to cast a very dark shadow over the future of civilization. Not long afterwards, the Soviet Union exploded its own atomic

Figure 5.1: **Birth defects continue to be common on the Marshall Islands half a century after the Bikini tests**

bomb, creating feelings of panic in the United States. President Truman authorized an all-out effort to build superbombs based on thermonuclear reactions, the reactions that heat the sun and stars.

In March, 1954, the US tested a thermonuclear bomb at Bikini Atoll in the Pacific Ocean. It was 1000 times more powerful than the Hiroshima bomb. The Japanese fishing boat, Lucky Dragon, was 135 kilometers from the Bikini explosion, but radioactive fallout from the explosion killed one crew member and made all the others seriously ill. The distance to the Marshall Islands was equally large, but even today, islanders continue to suffer from the effects of fallout from the test, for example frequent birth defects.

Driven by the paranoia of the Cold War, the number of nuclear weapons on both sides reached truly insane heights. At the worst point, there were 50,000 nuclear weapons in the world, with a total explosive power roughly a million times the power of the Hiroshima bomb. This was equivalent to 4 tons of TNT for every person on the planet - enough to destroy human civilization many times over - enough to threaten the existence of all life on earth.

At the end of the Cold War, most people heaved a sigh of relief and pushed the problem of nuclear weapons away from their minds. It was a threat to life too horrible to think

about. People felt that they could do nothing in any case, and they hoped that the problem had finally disappeared.

Today, however, many thoughtful people realize that the problem of nuclear weapons has by no means disappeared, and in some ways it is even more serious now than it was during the Cold War. There are still 27,000 nuclear weapons in the world, many of them hydrogen bombs, many on hair-trigger alert, ready to be fired with only a few minutes warning. The world has frequently come extremely close to accidental nuclear war. If nuclear weapons are allowed to exist for a long period of time, the probability for such a catastrophic accident to happen will grow into a certainty.

Current dangers also come from proliferation. Recently, more and more nations have come to possess nuclear weapons, and thus the danger that they will be used increases. For example, if Pakistan's less-than-stable government should fall, its nuclear weapons might find their way into the hands of terrorists, and against terrorism deterrence has no effect.

Thus we live at a special time in history - a time of crisis for civilization. We did not ask to be born at a moment of crisis, but such is our fate. Every person now alive has a special responsibility: We owe it, both to our ancestors and to future generations, to build a stable and cooperative future world. It must be a war-free world, from which nuclear weapons have been completely abolished. No person can achieve these changes alone, but together we can build the world that we desire. This will not happen through inaction, but it can happen through the dedicated work of large numbers of citizens.

Civilians have for too long played the role of passive targets, hostages in the power struggles of politicians. It is time for civil society to make its will felt. If our leaders continue to enthusiastically support the institution of war, if they will not abolish nuclear weapons, then let us have new leaders.

5.3   Targeting civilians: The Geneva Conventions

In Protocol I of the Geneva Conventions, Articles 51 and 54 outlaw indiscriminate attacks on civilian populations, and destruction of food, water, and other materials needed for survival. Indiscriminate attacks include directly attacking civilian (non-military) targets, but also using technology such as biological weapons, nuclear weapons and land mines, whose scope of destruction cannot be limited. A total war that does not distinguish between civilian and military targets is considered a war crime.

Throughout history, military forces have frequently committed the crime of deliberately targeting civilian populations. An early example of this was the bombardment of neutral Copenhagen by British forces, which took place, without a declaration of war, from 2-5 September, 1807. The object of the bombardment was to terrorize the citizens of the city, so that they would persuade their government to surrender the Danish-Norwegian fleet to

the British. Besides exploding shells, incendiary rockets were used, and about a third of the city was destroyed. In England, news of the bombardment was greeted with mixed reactions. Canning wrote that "Nothing ever was more brilliant, more salutory or more effectual than the success [at Copenhagen]", but Lord Erskine condemned it by saying "if hell did not exist before, Providence would create it now to punish the ministers for that damnable measure."

Another instance of targeting of civilians was the 1937 Facist and Nazi destruction of Guernica, made famous by Picasso's painting. A report described the event as follows: "Guernica, the most ancient town of the Basques and the centre of their cultural tradition, was completely destroyed yesterday afternoon by insurgent air raiders. The bombardment of this open town far behind the lines occupied precisely three hours and a quarter, during which a powerful fleet of aeroplanes consisting of three types [of] Junkers and Heinkel bombers, did not cease unloading on the town bombs weighing from 1,000 lbs. downwards and, it is calculated, more than 3,000 two-pounder aluminium incendiary projectiles. The fighters, meanwhile, plunged low from above the centre of the town to machine-gun those of the civilian population who had taken refuge in the fields"

The Nanking Massacre was an episode of mass murder, mass rape and looting committed by Japanese troops against civilians and unarmed prisoners of war in Nanking (Nanjing), during the Second Sino-Japanese War. The massacre occurred during a six-week period starting on December 13, 1937, the day that the city surrendered to the Japanese. The International Tribunal of the Far East estimated in 1948 that over 200,000 people were killed in this incident. Neither pregnant women, babies, young girls, nor old people were spared.

On the 25th of September, 1939, Hitler's air force began a series of intense attacks on Warsaw. Civilian areas of the city, hospitals and fleeing refugees all were targeted. On the 14th of May, 1940, Rotterdam was also devastated. The German Luftwaffe also carried out massive air attacks on targets in Britain.

Although they were not the first to start it, by the end of the war, the United States and Britain were bombing civilian populations on a far greater scale than Japan and Germany had ever done. We can think of the terrible fire bombings of Hamburg, Kassel, Pforzheim, Mainz, Dresdin and Berlin, as well as Tokyo, Kobe, Yokahama, and the nuclear destruction of Hiroshima and Nagasaki. General Curtis LeMay, under whose command many of the attacks on Japanese civilians were carried out, said later: "I suppose that if [we] had lost the war, I would have been tried as a war criminal."

Among the most savage recent attacks on civilians were those that occurred during the Vietnam Wat. Besides conventional high explosives, chemical weapons were used, including the notorious Agent Orange. This was a defoliant which not only lastingly damaged the ecology of Vietnam, but also had terrible effects on the health of the civilian population.

According to Wikipedia, "The government of Vietnam says that 4 million of its citizens were exposed to Agent Orange, and as many as 3 million have suffered illnesses because of it; these figures include the children of people who were exposed....Children in the areas where Agent Orange was used have been affected, and have multiple health problems, including cleft palate, mental disabilities, hernias and extra fingers and toes. In the 1970's

high levels of dioxin were found in the breast milk of South-Vietnamese women, and in the blood of US military personnel who had served in Vietnam."

During the Vietnam war, the effect of conventional high-explosive bombs was also enormous. According to a study by Edward Miguel and GÃ©rard Roland of the University of California, "The United States Air Force dropped in Indochina, from 1964 to August 15, 1973, a total of 6,162,000 tons of bombs [in Indochina]...This tonnage far exceeded that expended in World War II."

Of this enormous quantity, more than million tons of bombs were dropped on the tiny country of Laos, making it, per capita, the most heavily bombed nation in history The bombings were part of the U.S. Secret War in Laos to support the Royal Lao Government against the Pathet Lao and to interdict traffic along the Ho Chi Minh Trail. The bombings destroyed many villages and displaced hundreds of thousands of Lao civilians during the nine-year period. Up to a third of the bombs did not explode, leaving Laos contaminated with vast quantities of unexploded ordnance. [1]

Genocides must also be included if we are to have a complete picture of the way in which governments attack civilian populations. These include the mass murder of Jews, Poles and Gypsies by the Nazis during World War II, Armenian Genocide, the genocides in Rwanda and Darfur, the genocidal treatment of Palestinians by Israel, and many many other cases.

Do our "Defense Departments" really defend us?

What is the point of this long and gruesome list of crimes committed by military forces against civilians? What I am trying to show, is that the very name, "Department of Defense" is a fraud. The military-industrial complex sells itself by claiming to defend civilians. It justifies vast and crippling budgets by the same claim. But it is a fraud. Soldiers do not "guard us while we sleep" as Kipling believed. They do not defend us. They do not care about civilian lives. What the generals, arms manufacturers and politicians are really defending is their own power, and their own profits. Civilians are just hostages. They are expendable.

We can see this most clearly if we think of nuclear war. Nations threaten each other with "Mutually Assured Destruction", which has the very appropriate acronym MAD. What does this mean? Does it mean that civilians are being protected? Not at all. Instead they are threatened with complete destruction. Civilians here play the role of hostages in the power games of their leaders.

If a thermonuclear war occurs it will be the end of human civilization and much of the biosphere. This will definitely happen in the future unless the world rids itself of nuclear weapons since, in the long run, the finite chance of accidental nuclear war happening due to a technical or human failure during a given year will gradually build up into a certainty of disaster. Nevertheless, our leaders stubbornly hold onto their nuclear toys, which seem to give them a sense of god-like power.

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[1]http://legaciesofwar.org/about-laos/secret-war-laos/

Civilians must stop being passive hostages. Civil society must make its will felt. Where democracy has decayed, it must be restored. If our leaders continue to enthusiastically support the institution of war, if they continue to cling to nuclear weapons, then let us have new leaders!

Chapter 6

NUCLEAR WEAPONS AS COLLECTIVE PUNISHMENT

"The unleashed power of the atom has changed everything except our ways of thinking, and thus we drift towards unparalleled catastrophes."

"I don't know what will be used in the next world war, but the 4th will be fought with stones."

Albert Einstein

6.1   Introduction

Today, the greatest threats facing human civilization and the biosphere are catastrophic climate change and nuclear war. Each of these could potentially destroy our civilization,

Figure 6.1: **Saint Paul's Cathedral during the London Blitz. Determined fire-fighting by citizens saved the cathedral from burning,** (Wikipedia)

kill most humans, and make most of our planet uninhabitable for most species, including our own.

The peoples of the world must unite and work with dedication to avoid these twin threats.

Figure 6.2: **A view of Dresden after the firebombing with a statue of "Goodness" in the foreground.** (Wikipedia)

6.2 Targeting civilians

The erosion of ethical principles during World War II

When Hitler invaded Poland in September, 1939, US President Franklin Delano Roosevelt appealed to Great Britain, France, and Germany to spare innocent civilians from terror bombing. "The ruthless bombing from the air of civilians in unfortified centers of population during the course of the hostilities", Roosevelt said (referring to the use of air bombardment during World War I) "...has sickened the hearts of every civilized man and woman, and has profoundly shocked the conscience of humanity." He urged "every Government which may be engaged in hostilities publicly to affirm its determination that its armed forces shall in no event, and under no circumstances, undertake the bombardment from the air of civilian populations or of unfortified cities."

Two weeks later, British Prime Minister Neville Chamberlain responded to Roosevelts appeal with the words: "Whatever the lengths to which others may go, His Majesty's Government will never resort to the deliberate attack on women and children and other civilians for purposes of mere terrorism."

Much was destroyed during World War II, and among the casualties of the war were the ethical principles that Roosevelt and Chamberlain announced at its outset. At the time of Roosevelt and Chamberlains declarations, terror bombing of civilians had already begun in the Far East. On 22 and 23 September, 1937, Japanese bombers attacked civilian populations in Nanjing and Canton. The attacks provoked widespread protests. The British Under Secretary of State for Foreign Affairs, Lord Cranborne, wrote: "Words cannot express the feelings of profound horror with which the news of these raids has been received by the whole civilized world. They are often directed against places far from the actual area of hostilities. The military objective, where it exists, seems to take a completely second place. The main object seems to be to inspire terror by the indiscriminate slaughter of civilians..."

On the 25th of September, 1939, Hitlers air force began a series of intense attacks on Warsaw. Civilian areas of the city, hospitals marked with the Red Cross symbol, and fleeing refugees all were targeted in a effort to force the surrender of the city through terror. On the 14th of May, 1940, Rotterdam was also devastated. Between the 7th of September 1940 and the 10th of May 1941, the German Luftwaffe carried out massive air attacks on targets in Britain. By May, 1941, 43,000 British civilians were killed and more than a million houses destroyed.

By the end of the war the United States and Great Britain were bombing of civilians on a far greater scale than Japan and Germany had ever done. For example, on July 24-28, 1943, British and American bombers attacked Hamburg with an enormous incendiary raid whose official intention was "the total destruction" of the city.

The result was a firestorm that did, if fact, lead to the total destruction of the city. One airman recalled, that "As far as I could see was one mass of fire. A sea of flame has been the description, and thats an understatement. It was so bright that I could read the target maps and adjust the bomb-sight." Another pilot was "...amazed at the awe-inspiring sight
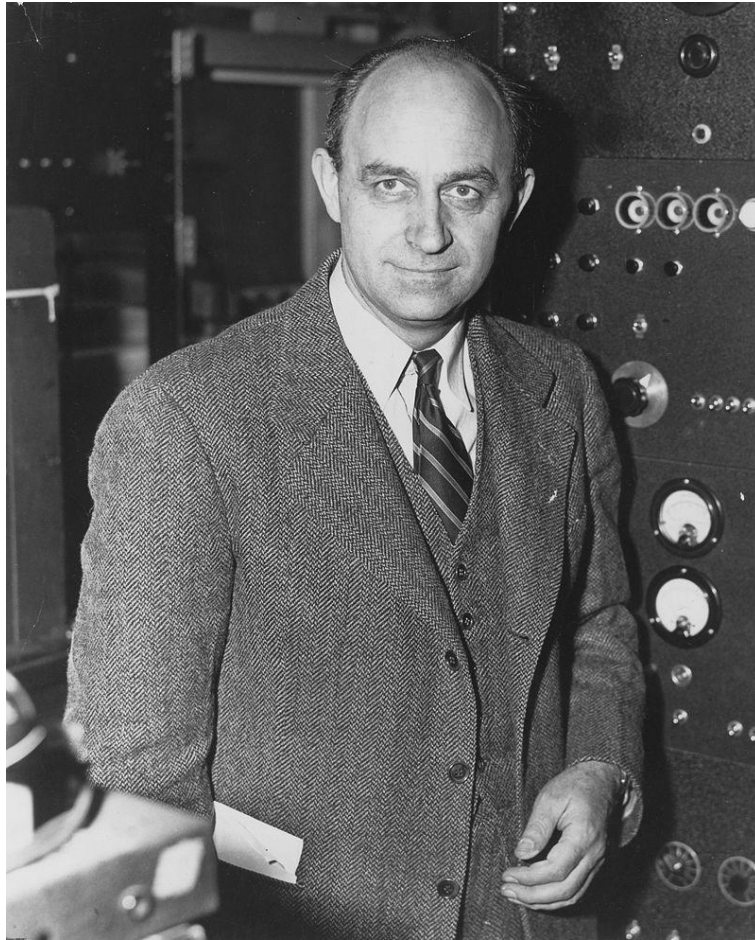
Figure 6.3: **Enrico Fermi (1901–1954). In 1934, he and his team of young Italian physicists split uranium atoms without realizing it.** (Public domain)

of the target area. It seemed as though the whole of Hamburg was on fire from one end to the other and a huge column of smoke was towering well above us - and we were on 20,000 feet! It all seemed almost incredible and, when I realized that I was looking at a city with a population of two millions, or about that, it became almost frightening to think of what must be going on down there in Hamburg."

Below, in the burning city, temperatures reached 1400 degrees Fahrenheit, a temperature at which lead and aluminum have long since liquefied. Powerful winds sucked new air into the firestorm. There were reports of babies being torn by the high winds from their mothers arms and sucked into the flames. Of the 45,000 people killed, it has been estimated that 50 percent were women and children and many of the men killed were elderly, above military age. For weeks after the raids, survivors were plagued by "...droves of vicious rats, grown strong by feeding on the corpses that were left unburied within the rubble as well as the potatoes and other food supplies lost beneath the broken buildings."

The German cities Kassel, Pforzheim, Mainz, Dresden and Berlin were similarly de-

stroyed, and in Japan, US bombing created firestorms in many cities, for example Tokyo, Kobe and Yokohama. In Tokyo alone, incendiary bombing caused more than 100,000 civilian casualties.

Hiroshima and Nagasaki

On August 6, 1945, at 8:15 in the morning, an atomic bomb was exploded in the air over Hiroshima. The force of the explosion was equivalent to twenty thousand tons of T.N.T.. Out of a city of two hundred and fifty thousand people, almost one hundred thousand were killed by the bomb; and another hundred thousand were hurt.

In some places, near the center of the city, people were completely vaporized, so that only their shadows on the pavement marked the places where they had been. Many people who were not killed by the blast or by burns from the explosion, were trapped under the wreckage of their houses. Unable to move, they were burned to death in the fire which followed.

Some accounts of the destruction of Hiroshima, written by children who survived it, have been collected by Professor Arata Osada. Among them is the following account, written by a boy named Hisato Ito. He was 11 years old when the atomic bomb was exploded over the city:

"On the morning of August 5th (we went) to Hiroshima to see my brother, who was at college there. My brother spent the night with us in a hotel... On the morning of the 6th, my mother was standing near the entrance, talking with the hotel proprietor before paying the bill, while I played with the cat. It was then that a violent flash of blue-white light swept in through the doorway."

"I regained consciousness after a little while, but everything was dark. I had been flung to the far end of the hall, and was lying under a pile of debris caused by the collapse of two floors of the hotel. Although I tried to crawl out of this, I could not move. The fine central pillar, of which the proprietor was so proud, lay flat in front of me. "

"I closed my eyes and was quite overcome, thinking that I was going to die, when I heard my mother calling my name. At the sound of her voice, I opened my eyes; and then I saw the flames creeping close to me. I called frantically to my mother, for I knew that I should be burnt alive if I did not escape at once. My mother pulled away some burning boards and saved me. I shall never forget how happy I felt at that moment - like a bird let out of a cage."

"Everything was so altered that I felt bewildered. As far as my eyes could see, almost all the houses were destroyed and on fire. People passed by, their bodies red, as if they had been peeled. Their cries were pitiful. Others were dead. It was impossible to go farther along the street on account of the bodies, the ruined houses, and the badly wounded who lay about moaning. I did not know what to do; and as I turned to the west, I saw that the flames were drawing nearer.."

"At the waters edge, opposite the old Sentai gardens, I suddenly realized that I had become separated from my mother. The people who had been burned were plunging into

Figure 6.4: **Hiroshima** (duniverso.com.br)

the river Kobashi, and then were crying out: 'Its hot! Its hot! They were too weak to swim, and they drowned while crying for help."

In 1951, shortly after writing this account, Hisato Ito died of radiation sickness. His mother died soon afterward from the same cause.

The postwar nuclear arms race

When the news of the atomic bombing of Hiroshima and Nagasaki reached Albert Einstein, his sorrow and remorse were extreme. During the remainder of his life, he did his utmost to promote the cause of peace and to warn humanity against the dangers of nuclear warfare. Together with Bertrand Russell and Joseph Rotblat he helped to found Pugwash Conferences on Science and World Affairs (Nobel Peace Prize 1995), an organization of scientists and other scholars devoted to world peace and to the abolition of nuclear weapons.

When Otto Hahn, the discoverer of fission, heard the news of the destruction of Hiroshima, he and nine other German atomic scientists were being held prisoner at an English country house near Cambridge. Hahn became so depressed that his colleagues feared that he would take his own life.

Figure 6.5: **Hiroshima. The greater absorption of thermal energy by dark colors resulted in the clothes pattern, in the tight-fitting areas on this survivor, being burnt into the skin.**(Public domain)

Figure 6.6: **Nagasaki before the nuclear explosion and firestorm.** (Public domain)

World public opinion was also greatly affected by the indiscriminate destruction of human life in Hiroshima and Nagasaki. Shortly after the bombings, the French existentialist author Albert Camus wrote: "Our technical civilization has just reached its greatest level of savagery. We will have to choose, in the more or less near future, between collective suicide and the intelligent use of our scientific conquests. Before the terrifying prospects now available to humanity, we see even more clearly that peace is the only battle worth waging. This is no longer a prayer, but a demand to be made by all peoples to their governments - a demand to choose definitively between hell and reason."

Among the scientists who had worked at Chicago and Los Alamos, there was relief that the war was over; but as descriptions of Hiroshima and Nagasaki became available there were also sharp feelings of guilt. Many scientists who had worked on the bomb project made great efforts to persuade the governments of the United States, England and the Soviet Union to agree to international control of atomic energy; but these efforts met with failure; and the nuclear arms race developed with increasing momentum.

In 1946, the United States proposed the Baruch Plan to internationalize atomic energy, but the plan was rejected by the Soviet Union, which had been conducting its own secret
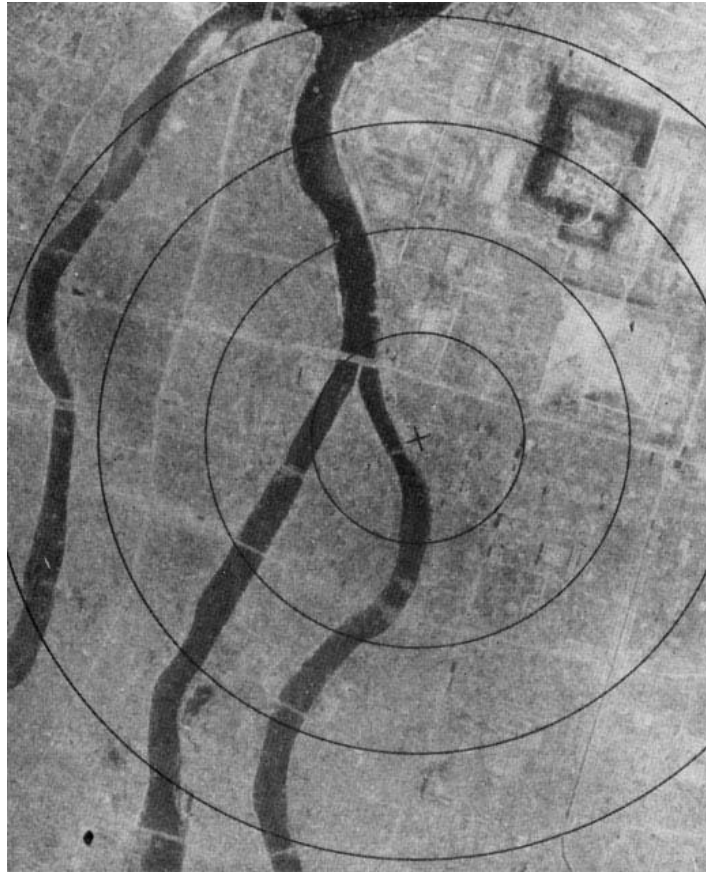
Figure 6.7: **Nagasaki afterwards.** (Public domain)

nuclear weapons program since 1943. On August 29, 1949, the USSR exploded its first
nuclear bomb. It had a yield equivalent to 21,000 tons of TNT, and had been constructed
from Pu-239 produced in a nuclear reactor. Meanwhile the United Kingdom had begun to
build its own nuclear weapons.

The explosion of the Soviet nuclear bomb caused feelings of panic in the United States,
and President Truman authorized an all-out effort to build superbombs using thermonu-
clear reactions - the reactions that heat the sun and stars. The idea of using a U-235
fission bomb to trigger a thermonuclear reaction in a mixture of light elements had first
been proposed by Enrico Fermi in a 1941 conversation with his Chicago colleague Edward
Teller. After this conversation, Teller (perhaps the model for Stanley Kubrick's character
Dr. Strangelove) became a fanatical advocate of the superbomb.

After Truman's go-ahead, the American program to build thermonuclear weapons made
rapid progress, and on October 31, 1952, the first US thermonuclear device was exploded
at Eniwetok Atoll in the Pacific Ocean. It had a yield of 10.4 megatons, that is to say it
had an explosive power equivalent to 10,400,000 tons of TNT. Thus the first thermonuclear
bomb was five hundred times as powerful as the bombs that had devastated Hiroshima and
Nagasaki. Lighter versions of the device were soon developed, and these could be dropped

Figure 6.8: **The United States exploded a hydrogen bomb near the island of Enewetak in the South Pacific in 1952. The explosive force of the bomb was 500 times greater than the bombs that destroyed Hiroshima and Nagasaki. The Soviet Union tested its first hydrogen bomb in 1953. In March, 1954, the US tested another hydrogen bomb at the Bikini Atoll in the Pacific Ocean. It was 1000 times more powerful than the Hiroshima bomb. The Japanese fishing boat, Lucky Dragon, was 130 kilometers from the Bikini explosion, but radioactive fallout from the test killed one crew member and made all the others seriously ill.** (Public domain)

Figure 6.9: **After discussing the Bikini test and its radioactive fallout with Joseph Rotblat, Lord Russell became concerned for the future of the human gene pool if large numbers of such bombs should ever be used in a war. To warn humanity of the danger, he wrote what came to be known as the Russell-Einstein Manifesto. On July 9, 1955, with Rotblat in the chair, Russell read the Manifesto to a packed press conference. The document contains the words: "Here then is the problem that we present to you, stark and dreadful and inescapable: Shall we put an end to the human race, or shall mankind renounce war?... There lies before us, if we choose, continual progress in happiness, knowledge and wisdom. Shall we, instead, choose death because we cannot forget our quarrels? We appeal as human beings to human beings: Remember your humanity, and forget the rest." Lord Russell devoted much of the remainder of his life to working for the abolition of nuclear weapons. Here he is seen in 1962 in Trafalgar Square, London, addressing a meeting of the Campaign for Nuclear Disarmament.** (Public domain)
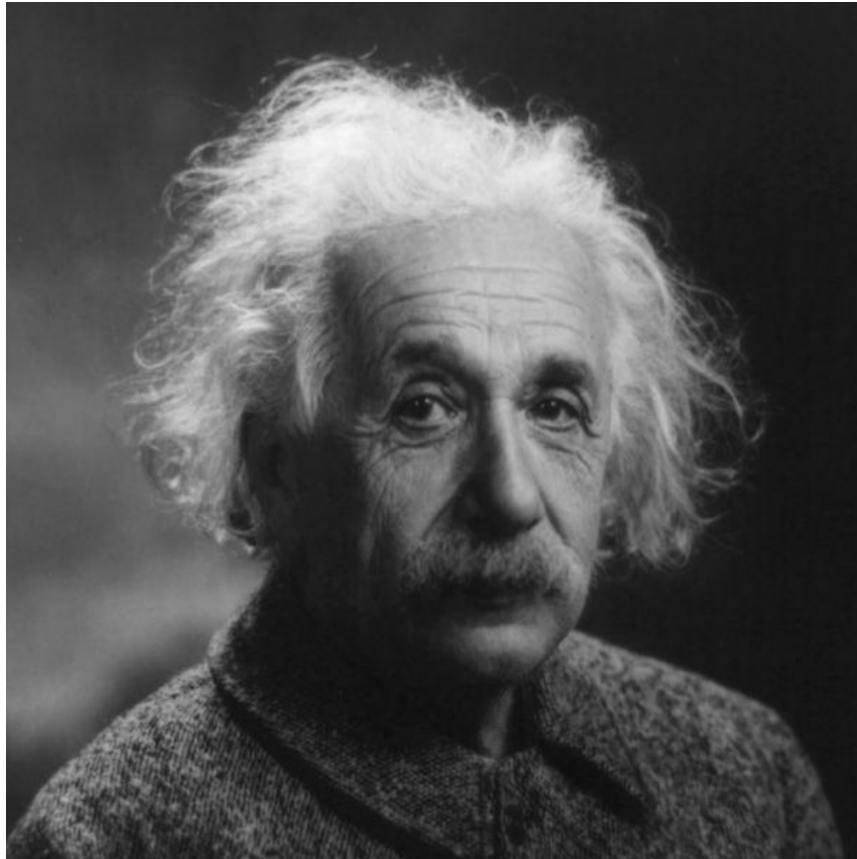
Figure 6.10: **Albert Einstein wrote: "The unleashed power of the atom has changed everything save our modes of thinking, and we thus drift toward unparalleled catastrophes." He also said, "I don't know what will be used in the next world war, but the 4th will be fought with stones."** (Wikimedia)

Figure 6.11: **Joseph Rotblat devoted the remainder of his life to working for peace and for the abolition of nuclear weapons. He became the president and guiding spirit of the Pugwash Conferences on Science and World Affairs, an organization of scientists and other scholars devoted to these goals. In his 1995 Nobel Peace Prize acceptance speech, Sir Joseph Rotblat (as he soon became) emphasized the same point that had been made in the Russell-Einstein Manifesto - that war itself must be eliminated in order to free civilization from the danger of nuclear destruction.** (Pugwash Conferences)
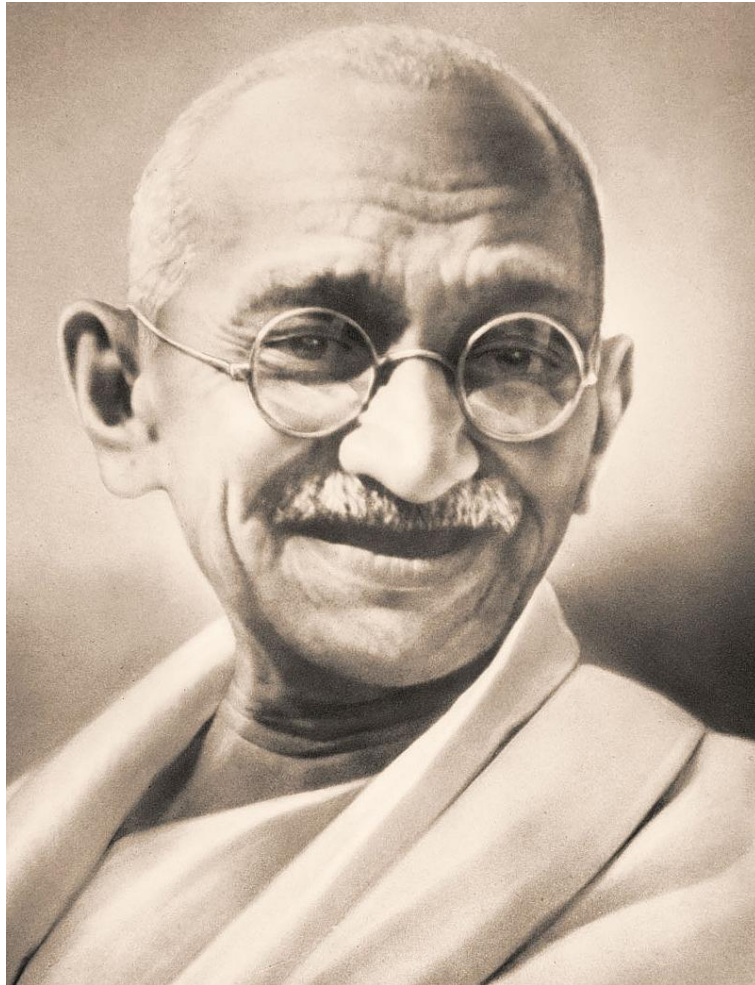
Figure 6.12: **To the insidious argument that "the end justifies the means", Mahatma Gandhi answered firmly: "They say 'means are after all means. I would say 'means are after all everything. As the means, so the end. Indeed the Creator has given us control (and that very limited) over means, none over end... The means may be likened to a seed, and the end to a tree; and there is the same inviolable connection between the means and the end as there is between the seed and the tree. Means and end are convertible terms in my philosophy of life." In other words, if evil means are used, the end achieved will be contaminated by the means used to achieve it. Gandhi's insight can be applied to the argument that the nuclear bombings that destroyed Hiroshima and Nagasaki helped to end World War II and were therefore justified. In fact, these terrible events lead to a nuclear arms race that still casts an extremely dark shadow over the future of human civilization.** (Public domain)

from aircraft or delivered by rockets.

The Soviet Union and the United Kingdom were not far behind. In 1955 the Soviets exploded their first thermonuclear device, followed in 1957 by the UK. In 1961 the USSR exploded a thermonuclear bomb with a yield of 58 megatons. A bomb of this size, three thousand times the size of the Hiroshima bomb, would be able to totally destroy a city even if it missed it by 50 kilometers. Fall-out casualties would extend to a far greater distance.

In the late 1950s General Gavin, Chief of Army Research and Development in the United States, was asked by the Symington Committee, "If we got into a nuclear war and our strategic air force made an assault in force against Russia with nuclear weapons exploded in a way where the prevailing winds would carry them south-east over Russia, what would be the effect in the way of death?"

General Gavin replied: "Current planning estimates run on the order of several hundred million deaths. That would be either way depending on which way the wind blew. If the wind blew to the south-east they would be mostly in the USSR, although they would extend into the Japanese area and perhaps down into the Philippine area. If the wind blew the other way, they would extend well back into Western Europe."

Between October 16 and October 28, 1962, the Cuban Missile Crisis occurred, an incident in which the world came extremely close to a full-scale thermonuclear war. During the crisis, President Kennedy and his advisers estimated that the chance of an all-out nuclear war with Russia was 50%. Recently-released documents indicate that the probability of war was even higher than Kennedy's estimate. Robert McNamara, who was Secretary of Defense at the time, wrote later, "We came within a hairbreadth of nuclear war without realizing it... Its no credit to us that we missed nuclear war..."

In 1964 the first Chinese nuclear weapon was tested, and this was followed in 1967 by a Chinese thermonuclear bomb with a yield of 3.3 megatons. France quickly followed suit testing a fission bomb in 1966 and a thermonuclear bomb in 1968. In all about thirty nations contemplated building nuclear weapons, and many made active efforts to do so.

Because the concept of deterrence required an attacked nation to be able to retaliate massively even though many of its weapons might be destroyed by a preemptive strike, the production of nuclear warheads reached insane heights, driven by the collective paranoia of the Cold War. More than 50,000 nuclear warheads were produced worldwide, a large number of them thermonuclear. The collective explosive power of these warheads was equivalent to 20,000,000,000 tons of TNT, i.e. 4 tons for every man, woman and child on the planet, or, expressed differently, a million times the explosive power of the bomb that destroyed Hiroshima.

The end of the Cold War

In 1985, Michael Gorbachev (1931-) became the General Secretary of the Communist Party of the Soviet Union. Gorbachev had become convinced by his conversations with scientists that the policy of nuclear confrontation between the United States and the USSR was far too dangerous to be continued over a long period of time. If continued, sooner or later, through accident of miscalculation, it would result in a disaster of unprecedented propor-

tions. Gorbachev also believed that the USSR was in need of reform, and he introduced two words to characterize what he felt was needed: *glasnost* (openness) and *perestroika* (reconstruction).

In 1986, US President Ronald Reagan met Mikhail Gorbachev in Reykjavik, Iceland. The two leaders hoped that they might find ways of reducing the danger that a thermonuclear Third World War would be fought between their two countries. Donald Reagan, the White House Chief of Staff, was present at the meeting, and he records the following conversation: "At one point in time Gorbachev said 'I would like to do away with all nuclear weapons. And Reagan hit the table and said 'Well why didn't you say so in the first place! Thats exactly what I want to do! And if you want to do away with all the weapons, Ill agree to do away with all the weapons. Of course well do away with all the weapons. 'Good, [said Gorbachev] 'Thats great, but you must confine SDI to the laboratory. 'No I wont, said Reagan. 'No way. SDI continues. I told you that I am never going to give up SDI." The SDI program, which seemingly prevented Presidents Reagan and Gorbachev from reaching an agreement to completely eliminate their nuclear weapons was Reagan's "Star Wars" program which (in violation of the ABM Treaty) proposed to set up a system of of radar, satellites and missiles to shoot down attacking missiles.

Gorbachev s reforms effectively granted self-government to the various parts of the Soviet Union, and he himself soon resigned from his post as its leader, since the office was no longer meaningful. Most of the newly-independent parts of the old USSR began to introduce market economies, and an astonished world witnessed a series of unexpected and rapid changes: On September 10, 1989 Hungarian government opened its border for East German refugees; on November 9, 1989 Berlin Wall was reopened; on December 22, 1989 Brandenburg Gate was opened; and on October 3, 1990 Germany was reunited. The Cold War was over!

The Non-Proliferation Treaty

During the Cold War, a number of international treaties attempting to reduce the global nuclear peril had been achieved after much struggle. Among these, the 1968 Nuclear Non-Proliferation Treaty (NPT) has special importance. The NPT was designed to prevent the spread of nuclear weapons beyond the five nations that already had them; to provide assurance that "peaceful" nuclear activities of non-nuclear-weapon states would not be used to produce such weapons; to promote peaceful use of nuclear energy to the greatest extent consistent with non-proliferation of nuclear weapons; and finally, to ensure that definite steps towards complete nuclear disarmament would be taken by all states, as well steps towards comprehensive control of conventional armaments (Article VI).

The non-nuclear-weapon states insisted that Article VI be included in the treaty as a price for giving up their own ambitions. The full text of Article VI is as follows: "Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict international control."

The NPT has now been signed by 187 countries and has been in force as international

law since 1970. However, Israel, India, Pakistan, and Cuba have refused to sign, and North Korea, after signing the treaty, withdrew from it in 1993. Israel began producing nuclear weapons in the late 1960s (with the help of a reactor provided by France) and the country is now believed to possess 100-150 of them, including neutron bombs. Israels policy is one of "nuclear opacity" - i.e., visibly possessing nuclear weapons while denying their existence.

South Africa, with the help of Israel and France, also produced nuclear weapons, which it tested in the Indian Ocean in 1979. In 1991 however, South Africa signed the NPT and destroyed its nuclear weapons.

India produced what it described as a "peaceful nuclear explosion" in 1974. By 1989 Indian scientists were making efforts to purify the lithium-6 isotope, a key component of the much more powerful thermonuclear bombs. In 1998, India conducted underground tests of nuclear weapons, and is now believed to have roughly 60 warheads, constructed from Pu-239 produced in "peaceful" reactors.

Pakistan's efforts to obtain nuclear weapons were spurred by India's 1974 "peaceful nuclear explosion". Zulfiquar Ali Bhutto, who initiated Pakistan's program, first as Minister of Fuel, Power and Natural Resources, and later as President and Prime Minister, declared: "There is a Christian Bomb, a Jewish Bomb and a Hindu Bomb. There must be an Islamic Bomb! We will get it even if we have to starve - even if we have to eat grass!" As early as 1970, the laboratory of Dr. Abdul Qadeer Khan, (a metallurgist who was to become Pakistan's leading nuclear bomb maker) had been able to obtain from a Dutch firm the high-speed ultracentrafuges needed for uranium enrichment. With unlimited financial support and freedom from auditing requirements, Dr. Khan purchased restricted items needed for nuclear weapon construction from companies in Europe and the United States. In the process, Dr. Khan became an extremely wealthy man. With additional help from China, Pakistan was ready to test five nuclear weapons in 1998. The Indian and Pakistani nuclear bomb tests, conducted in rapid succession, presented the world with the danger that these devastating bombs would be used in the conflict over Kashmir. Indeed, Pakistan announced that if a war broke out using conventional weapons, Pakistan's nuclear weapons would be used "at an early stage".

In Pakistan, Dr. A.Q. Khan became a great national hero. He was presented as the person who had saved Pakistan from attack by India by creating Pakistan's own nuclear weapons. In a Washington Post article[1] Pervez Hoodbhoy wrote: "Nuclear nationalism was the order of the day as governments vigorously promoted the bomb as the symbol of Pakistan's high scientific achievement and self-respect, and as the harbinger of a new Muslim era." Similar manifestations of nuclear nationalism could also be seen in India after India's 1998 bomb tests.

Early in 2004, it was revealed that Dr. Khan had for years been selling nuclear secrets and equipment to Lybia, Iran and North Korea. However, observers considered that it was unlikely that Khan would be tried for these offenses, since a trial might implicate Pakistan's army as well as two of its former prime ministers. Furthermore, Dr. Khan has the strong support of Pakistan's Islamic fundamentalists. Recent assassinations emphasize

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[1] 1 February, 2004

the precariousness of Pakistan's government. There is a danger that it may be overthrown by Islamic fundamentalists, who would give Pakistan's nuclear weapons to terrorist organizations. This type of danger is a general one associated with nuclear proliferation. As more and more countries obtain nuclear weapons, it becomes increasingly likely that one of them will undergo a revolution, during the course of which nuclear weapons will fall into the hands of subnational organizations.

Article VIII of the Non-Proliferation Treaty provides for a conference to be held every five years to make sure that the NPT is operating as intended. In the 1995 NPT Review Conference, the lifetime of the treaty was extended indefinitely, despite the general dissatisfaction with the bad faith of the nuclear weapon states: They had dismantled some of their warheads but had taken no significant steps towards complete nuclear disarmament. The 2000 NPT Review Conference made it clear that the nuclear weapons states could not postpone indefinitely their commitment to nuclear disarmament by linking it to general and complete disarmament, since these are separate and independent goals of Article VI. The Final Document of the conference also contained 13 Practical Steps for Nuclear Disarmament, including ratification of a Comprehensive Test Ban Treaty (CTBT), negotiations on a Fissile Materials Cutoff Treaty, the preservation and strengthening of the Anti-Ballistic Missile (ABM) Treaty, greater transparency with regard to nuclear arsenals, and making irreversability a principle of nuclear reductions. Another review conference is scheduled for 2010, a year that marks the 55th anniversary of the destruction of Hiroshima and Nagasaki.

Something must be said about the concept of irreversability mentioned in the Final Document of the 2000 NPT Review Conference. Nuclear weapons can be destroyed in a completely irreversible way by getting rid of the special isotopes which they use. In the case of highly enriched uranium (HEU), this can be done by mixing it thoroughly with ordinary unenriched uranium. In natural uranium, the rare fissile isotope U-235 is only 0.7%. The remaining 99.3% consists of the common isotope, U-238, which under ordinary circumstances cannot undergo fission. If HEU is mixed with a sufficient quantity of natural uranium, so that the concentration of U-235 falls below 20%, it can no longer be used in nuclear weapons.

Getting rid of plutonium irreversibly is more difficult, but it could be cast into large concrete blocks and dumped into extremely deep parts of the ocean (e.g. the Japan Trench) where recovery would be almost impossible. Alternatively, it could be placed in the bottom of very deep mine shafts, which could afterwards be destroyed by means of conventional explosives. None of the strategic arms reduction treaties, neither the SALT treaties nor the 2002 Moscow Treaty, incorporate irreversability.

The recent recommendation by four distinguished German statesmen that all short-range nuclear weapons be destroyed is particularly interesting [13]. The strongest argument for the removal of US tactical nuclear weapons from Europe is the danger of collapse of the NPT. The 2005 NPT Review Conference was a disaster, and there is a danger that at the 2010 Review Conference, the NPT will collapse entirely because of the discriminatory position of the nuclear weapon states (NWS) and their failure to honor their commitments under Article VI. NATOs present nuclear weapon policy also violates the NPT, and

correcting this violation would help to save the 2010 Review Conference from failure.

At present, the air forces of the European countries in which the US nuclear weapons are stationed perform regular training exercises in which they learn how to deliver the weapons. This violates the spirit, and probably also the letter, of Article IV, which prohibits the transfer of nuclear weapons from an NWS to a non-NWS. The "nuclear sharing" proponents maintain that such transfers would only happen in an emergency; but there is nothing in the NPT saying that the treaty would not hold under all circumstances. Furthermore, NATO would be improved, rather than damaged, by giving up "nuclear sharing". If President Obama wishes to fulfill his campaign promises [14] - if he wishes to save the NPT - a logical first step would be to remove US tactical nuclear weapons from Europe.

Flaws in the concept of nuclear deterrence

Before discussing other defects in the concept of deterrence, it must be said very clearly that the idea of "massive nuclear retaliation" is completely unacceptable from an ethical point of view. The doctrine of retaliation, performed on a massive scale, violates not only the principles of common human decency and common sense, but also the ethical principles of every major religion. Retaliation is especially contrary to the central commandment of Christianity which tells us to love our neighbor, even if he or she is far away from us, belonging to a different ethnic or political group, and even if our distant neighbor has seriously injured us. This principle has a fundamental place not only in in Christianity but also in Buddhism. "Massive retaliation" completely violates these very central ethical principles, which are not only clearly stated and fundamental but also very practical, since they prevent escalatory cycles of revenge and counter-revenge.

Contrast Christian ethics with estimates of the number of deaths that would follow a US nuclear strike against Russia: Several hundred million deaths. These horrifying estimates shock us not only because of the enormous magnitude of the expected mortality, but also because the victims would include people of every kind: women, men, old people, children and infants, completely irrespective of any degree of guilt that they might have. As a result of such an attack, many millions of people in neutral countries would also die. This type of killing has to be classified as genocide.

When a suspected criminal is tried for a wrongdoing, great efforts are devoted to clarifying the question of guilt or innocence. Punishment only follows if guilt can be proved beyond any reasonable doubt. Contrast this with the totally indiscriminate mass slaughter that results from a nuclear attack!

It might be objected that disregard for the guilt or innocence of victims is a universal characteristic of modern war, since statistics show that, with time, a larger and larger percentage of the victims have been civilians, and especially children. For example, the air attacks on Coventry during World War II, or the fire bombings of Dresden and Tokyo, produced massive casualties which involved all segments of the population with complete disregard for the question of guilt or innocence. The answer, I think, is that modern war has become generally unacceptable from an ethical point of view, and this unacceptability is epitomized in nuclear weapons.

The enormous and indiscriminate destruction produced by nuclear weapons formed the background for an historic 1996 decision by the International Court of Justice in the Hague. In response to questions put to it by WHO and the UN General Assembly, the Court ruled that "the threat and use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and particularly the principles and rules of humanitarian law." The only *possible* exception to this general rule might be "an extreme circumstance of self-defense, in which the very survival of a state would be at stake". But the Court refused to say that even in this extreme circumstance the threat or use of nuclear weapons would be legal. It left the exceptional case undecided. In addition, the World Court added unanimously that "there exists an obligation to pursue in good faith *and bring to a conclusion* negotiations leading to nuclear disarmament in all its aspects under strict international control."

This landmark decision has been criticized by the nuclear weapon states as being decided "by a narrow margin", but the structuring of the vote made the margin seem more narrow than it actually was. Seven judges voted against Paragraph 2E of the decision (the paragraph which states that the threat or use of nuclear weapons would be generally illegal, but which mentions as a possible exception the case where a nation might be defending itself from an attack that threatened its very existence.) Seven judges voted for the paragraph, with the President of the Court, Muhammad Bedjaoui of Algeria casting the deciding vote. Thus the Court adopted it, seemingly by a narrow margin. But three of the judges who voted against 2E did so because they believed that no possible exception should be mentioned! Thus, if the vote had been slightly differently structured, the result would have be ten to four.

Of the remaining four judges who cast dissenting votes, three represented nuclear weapons states, while the fourth thought that the Court ought not to have accepted the questions from WHO and the UN. However Judge Schwebel from the United States, who voted against Paragraph 2E, nevertheless added, in a separate opinion, "It cannot be accepted that the use of nuclear weapons on a scale which would - or could - result in the deaths of many millions in indiscriminate inferno and by far-reaching fallout, have pernicious effects in space and time, and render uninhabitable much of the earth, could be lawful." Judge Higgins from the UK, the first woman judge in the history of the Court, had problems with the word "generally" in Paragraph 2E and therefore voted against it, but she thought that a more profound analysis might have led the Court to conclude in favor of illegality in all circumstances. Judge Fleischhauer of Germany said in his separate opinion, "The nuclear weapon is, in many ways, the negation of the humanitarian considerations underlying the law applicable in armed conflict and the principle of neutrality. The nuclear weapon cannot distinguish between civilian and military targets. It causes immeasurable suffering. The radiation released by it is unable to respect the territorial integrity of neutral States."

President Bedjaoui, summarizing the majority opinion, called nuclear weapons "the ultimate evil", and said "By its nature, the nuclear weapon, this blind weapon, destabilizes humanitarian law, the law of discrimination in the use of weapons... The ultimate aim of every action in the field of nuclear arms will always be nuclear disarmament, an aim which

is no longer utopian and which all have a duty to pursue more actively than ever."

Thus the concept of nuclear deterrence is not only unacceptable from the standpoint of ethics; it is also contrary to international law. The World Courts 1996 advisory Opinion unquestionably also represents the opinion of the majority of the worlds peoples. Although no formal plebiscite has been taken, the votes in numerous resolutions of the UN General Assembly speak very clearly on this question. For example the New Agenda Resolution (53/77Y) was adopted by the General Assembly on 4 December 1998 by a massively affirmative vote, in which only 18 out of the 170 member states voted against the resolution.[2] The New Agenda Resolution proposes numerous practical steps towards complete nuclear disarmament, and it calls on the Nuclear-Weapon States "to demonstrate an unequivocal commitment to the speedy and total elimination of their nuclear weapons and without delay to pursue in good faith and bring to a conclusion negotiations leading to the elimination of these weapons, thereby fulfilling their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)". Thus, in addition to being ethically unacceptable and contrary to international law, nuclear weapons also contrary to the principles of democracy.

Having said these important things, we can now turn to some of the other defects in the concept of nuclear deterrence. One important defect is that nuclear war may occur through accident or miscalculation - through technical defects or human failings. This possibility is made greater by the fact that despite the end of the Cold War, thousands of missiles carrying nuclear warheads are still kept on a "hair-trigger" state of alert with a quasi-automatic reaction time measured in minutes. There is a constant danger that a nuclear war will be triggered by error in evaluating the signal on a radar screen. For example, the BBC reported recently that a group of scientists and military leaders are worried that a small asteroid entering the earths atmosphere and exploding could trigger a nuclear war if mistaken for a missile strike.

A number of prominent political and military figures (many of whom have ample knowledge of the system of deterrence, having been part of it) have expressed concern about the danger of accidental nuclear war. Colin S. Grey[3] expressed this concern as follows: "The problem, indeed the enduring problem, is that we are resting our future upon a nuclear deterrence system concerning which we cannot tolerate even a single malfunction." General Curtis E. LeMay[4] has written, "In my opinion a general war will grow through a series of political miscalculations and accidents rather than through any deliberate attack by either side." Bruce G. Blair[5] has remarked that "It is obvious that the rushed nature of the process, from warning to decision to action, risks causing a catastrophic mistake."... "This system is an accident waiting to happen."

Today, the system that is supposed to give us security is called Mutually Assured

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[2]Of the 18 countries that voted against the New Agenda resolution, 10 were Eastern European countries hoping for acceptance into NATO, whose votes seem to have been traded for increased probability of acceptance.

[3]Chairman, National Institute for Public Policy

[4]Founder and former Commander in Chief of the United States Strategic Air Command

[5]Brookings Institute

Destruction, appropriately abbreviated as MAD. It is based on the idea of deterrence, which maintains that because of the threat of massive retaliation, no sane leader would start a nuclear war.

Before discussing other defects in the concept of deterrence, it must be said very clearly that the idea of "massive nuclear retaliation" is a form of genocide and is completely unacceptable from an ethical point of view. It violates not only the principles of common human decency and common sense, but also the ethical principles of every major religion.

Having said this, we can now turn to some of the other faults in the concept of nuclear deterrence. One important defect is that nuclear war may occur through accident or miscalculation, through technical defects or human failings, or by terrorism. This possibility is made greater by the fact that despite the end of the Cold War, thousands of missiles carrying nuclear warheads are still kept on "hair-trigger alert" with a quasi-automatic reaction time measured in minutes. There is a constant danger that a nuclear war will be triggered by error in evaluating the signal on a radar screen.

Incidents in which global disaster is avoided by a hair's breadth are constantly occurring. For example, on the night of 26 September, 1983, Lt. Col. Stanislav Petrov, a young software engineer, was on duty at a surveillance center near Moscow. Suddenly the screen in front of him turned bright red.

An alarm went off. It's enormous piercing sound filled the room. A second alarm followed, and then a third, fourth and fifth. "The computer showed that the Americans had launched a strike against us", Petrov remembered later. His orders were to pass the information up the chain of command to Secretary General Yuri Andropov. Within minutes, a nuclear counterattack would be launched. However, because of certain inconsistent features of the alarm, Petrov disobeyed orders and reported it as a computer error, which indeed it was.

Most of us probably owe our lives to his coolheaded decision and knowledge of software systems. The narrowness of this escape is compounded by the fact that Petrov was on duty only because of the illness of another officer with less knowledge of software, who would have accepted the alarm as real.

Narrow escapes such as this show us clearly that in the long run, the combination of space-age science and stone-age politics will destroy us. We urgently need new political structures and new ethics to match our advanced technology. Modern science has, for the first time in history, offered humankind the possibility of a life of comfort, free from hunger and cold, and free from the constant threat of death through infectious disease. At the same time, science has given humans the power to obliterate their civilization with nuclear weapons, or to make the earth uninhabitable through overpopulation and pollution. The question of which of these paths we choose is literally a matter of life or death for ourselves and our children.

Will we use the discoveries of modern science constructively, and thus choose the path leading towards life? Or will we use science to produce more and more lethal weapons, which sooner or later, through a technical or human failure, will result in a catastrophic nuclear war? Will we thoughtlessly destroy our beautiful planet through unlimited growth of population and industry? The choice among these alternatives is ours to make. We live

at a critical moment of history, a moment of crisis for civilization.

No one alive today asked to be born at a time of crisis, but history has given each of us an enormous responsibility. Of course we have our ordinary jobs, which we need to do in order to stay alive; but besides that, each of us has a second job, the duty to devote both time and effort to solving the serious problems that face civilization during the 21st century. We cannot rely on our politicians to do this for us. Many politicians are under the influence of powerful lobbies. Others are waiting for a clear expression of popular will. It is the people of the world themselves who must choose their own future and work hard to build it.

No single person can achieve the changes that we need, but together we can do it. The problem of building a stable, just, and war-free world is difficult, but it is not impossible. The large regions of our present-day world within which war has been eliminated can serve as models. There are a number of large countries with heterogeneous populations within which it has been possible to achieve internal peace and social cohesion, and if this is possible within such extremely large regions, it must also be possible globally.

We must replace the old world of international anarchy, chronic war, and institutionalized injustice by a new world of law. The United Nations Charter, the Universal Declaration of Human Rights and the International Criminal Court are steps in the right direction. These institutions need to be greatly strengthened and reformed. We also need a new global ethic, where loyalty to one's family and nation will be supplemented by a higher loyalty to humanity as a whole. Tipping points in public opinion can occur suddenly. We can think, for example, of the Civil Rights Movement, or the rapid fall of the Berlin Wall, or the sudden change that turned public opinion against smoking, or the sudden movement for freedom and democracy in the Arab world. A similar sudden change can occur soon regarding war and nuclear weapons.

We know that war is madness. We know that it is responsible for much of the suffering that humans experience. We know that war pollutes our planet and that the almost unimaginable sums wasted on war prevent the happiness and prosperity of mankind. We know that nuclear weapons are insane, and that the precariously balanced deterrence system can break down at any time through human error or computer errors or through terrorist actions, and that it definitely will break down within our lifetimes unless we abolish it. We know that nuclear war threatens to destroy civilization and much of the biosphere.

The logic is there. We must translate into popular action which will put an end to the undemocratic, money-driven, power-lust-driven war machine. The peoples of the world must say very clearly that nuclear weapons are an absolute evil; that their possession does not increase anyone's security; that their continued existence is a threat to the life of every person on the planet; and that these genocidal and potentially omnicidal weapons have no place in a civilized society.

Modern science has abolished time and distance as factors separating nations. On our shrunken globe today, there is room for one group only: the family of humankind. We must embrace all other humans as our brothers and sisters. More than that, we must feel that all of nature is part of the same sacred family; meadow flowers, blowing winds, rocks,
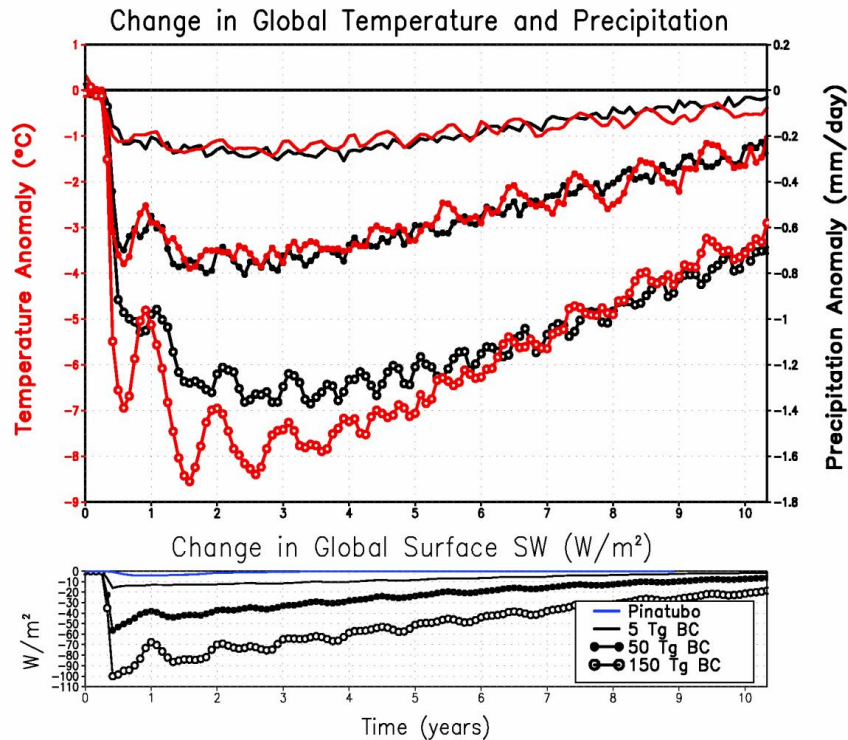
Figure 6.13: **Recent studies by atmospheric scientists have shown that the smoke from burning cities produced by even a limited nuclear war would have a devastating effect on global agriculture. The studies show that the smoke would rise to the stratosphere, where it would spread globally and remain for a decade, blocking sunlight and destroying the ozone layer. Because of the devastating effect on global agriculture, darkness from even a small nuclear war (e.g. between India and Pakistan) would result in an estimated billion deaths from famine.** (O. Toon, A. Robock and R. Turco, "The Environmental Consequences of Nuclear War", Physics Today, vol. 61, No. 12, 2008, p. 37-42)

trees, birds, animals, and other humans, all these are our brothers and sisters, deserving our care and protection. Only in this way can we survive together. Only in this way can we build a happy future.

"But nobody can predict that the fatal accident or unauthorized act will never happen", Fred Ikle of the Rand Corporation has written, "Given the huge and far-flung missile forces, ready to be launched from land and sea on on both sides, the scope for disaster by accident is immense... In a matter of seconds - through technical accident or human failure - mutual deterrence might thus collapse."

Another serious failure of the concept of nuclear deterrence is that it does not take into account the possibility that atomic bombs may be used by terrorists. Indeed, the threat of nuclear terrorism has today become one of the most pressing dangers that the world faces, a danger that is particularly acute in the United States.

Since 1945, more than 3,000 metric tons (3,000,000 kilograms) of highly enriched uranium and plutonium have been produced - enough for several hundred thousand nuclear weapons. Of this, roughly a million kilograms are in Russia, inadequately guarded, in establishments where the technicians are poorly paid and vulnerable to the temptations of bribery. There is a continuing danger that these fissile materials will fall into the hands of terrorists, or organized criminals, or irresponsible governments. Also, an extensive black market for fissile materials, nuclear weapons components etc. has recently been revealed in connection with the confessions of Pakistan's bomb-maker, Dr. A.Q. Khan. Furthermore, if Pakistan's less-than-stable government should be overthrown, complete nuclear weapons could fall into the hands of terrorists.

On November 3, 2003, Mohamed ElBaradei, Director General of the International Atomic Energy Agency, made a speech to the United Nations in which he called for "limiting the processing of weapons-usable material (separated plutonium and high enriched uranium) in civilian nuclear programmes - as well as the production of new material through reprocessing and enrichment - by agreeing to restrict these operations to facilities exclusively under international control." It is almost incredible, considering the dangers of nuclear proliferation and nuclear terrorism, that such restrictions were not imposed long ago. Nuclear reactors used for "peaceful" purposes unfortunately also generate fissionable isotopes of plutonium, neptunium and americium. Thus all nuclear reactors must be regarded as ambiguous in function, and all must be put under strict international control. One might ask, in fact, whether globally widespread use of nuclear energy is worth the danger that it entails.

The Italian nuclear physicist Francesco Calogero, who has studied the matter closely, believes that terrorists could easily construct a simple gun-type nuclear bomb if they were in possession of a critical mass of highly enriched uranium. In such a simple atomic bomb, two grapefruit-sized subcritical portions of HEU are placed at opposite ends of the barrel of an artillery piece and are driven together by means of a conventional explosive. Prof. Calogero estimates that the fatalities produced by the explosion of such a device in the center of a large city could exceed 100,000.

We must remember the remark of U.N. Secretary General Kofi Annan after the 9/11/2001 attacks on the World Trade Center. He said, "*This time* it was not a nuclear explosion". The meaning of his remark is clear: If the world does not take strong steps to eliminate fissionable materials and nuclear weapons, it will only be a matter of time before they will be used in terrorist attacks on major cities. Neither terrorists nor organized criminals can be deterred by the threat of nuclear retaliation, since they have no territory against which such retaliation could be directed. They blend invisibly into the general population. Nor can a "missile defense system" prevent terrorists from using nuclear weapons, since the weapons can be brought into a port in any one of the hundreds of thousands of containers that enter on ships each year, a number far too large to be checked exhaustively.

In this dangerous situation, the only logical thing for the world to do is to get rid of both fissile materials and nuclear weapons as rapidly as possible. We must acknowledge that the idea of nuclear deterrence is a dangerous fallacy, and acknowledge that the development of military systems based on nuclear weapons has been a terrible mistake, a false step that

needs to be reversed. If the most prestigious of the nuclear weapons states can sincerely acknowledge their mistakes and begin to reverse them, nuclear weapons will seem less glamorous to countries like India, Pakistan, North Korea and Iran, where they now are symbols of national pride and modernism.

Civilians have for too long played the role of passive targets, hostages in the power struggles of politicians. It is time for civil society to make its will felt. If our leaders continue to enthusiastically support the institution of war, if they will not abolish nuclear weapons, then let us have new leaders.

Establishment opinion shifts towards nuclear abolition

Today there are indications that the establishment is moving towards the point of view that the peace movement has always held: - that nuclear weapons are essentially genocidal, illegal and unworthy of civilization; and that they must be completely abolished as quickly as possible. There is a rapidly-growing global consensus that a nuclear-weapon-free world can and must be achieved in the very near future.

One of the first indications of the change was the famous Wall Street Journal article by Schultz, Perry, Kissinger and Nunn advocating complete abolition of nuclear arms [1]. This was followed quickly by Mikhail Gorbachev's supporting article, published in the same journal [2], and a statement by distinguished Italian statesmen [3]. Meanwhile, in October 2007, the Hoover Institution had arranged a symposium entitled "Reykjavik Revisited; Steps Towards a World Free of Nuclear Weapons" [4].

In Britain, Sir Malcolm Rifkind, Lord Hurd and Lord Owen (all former Foreign Secretaries) joined the former NATO Secretary General Lord Robertson as authors of an article in The Times advocating complete abolition of nuclear weapons [5]. The UK's Secretary of State for Defense, Des Brown, speaking at a disarmament conference in Geneva, proposed that the UK "host a technical conference of P5 nuclear laboratories on the verification of nuclear disarmament before the next NPT Review Conference in 2010" to enable the nuclear weapon states to work together on technical issues.

In February, 2008, the Government of Norway hosted an international conference on "Achieving the Vision of a World Free of Nuclear Weapons" [7]. A week later, Norway's Foreign Minister, Jonas Gahr Støre, reported the results of the conference to a disarmament meeting in Geneva [8]. On July 11, 2008 , speaking at a Pugwash Conference in Canada, Norway's Defense Minister, Anne-Grete Strøm-Erichsen, reiterated her country's strong support for the complete abolition of nuclear weapons [9].

In July 2008, Barack Obama said in his Berlin speech, "It is time to secure all loose nuclear materials; to stop the spread of nuclear weapons; and to reduce the arsenals from another era. This is the moment to begin the work of seeking the peace of a world without nuclear weapons."

Later that year, in September, Vladimir Putin said, "Had I been told just two or three years ago I wouldn't believe that it would be possible, but I believe that it is now quite possible to liberate humanity from nuclear weapons..."

Other highly-placed statesmen added their voices to the growing consensus: Australia's Prime Minister, Kevin Rudd, visited the Peace Museum at Hiroshima, where he made a strong speech advocating nuclear abolition. He later set up an International Commission on Nuclear Non-Proliferation and Disarmament co-chaired by Australia and Japan [10].

On January 9, 2009, four distinguished German statesmen (Richard von Weizäcker, Helmut Schmidt, Egon Bahr and Hans-Dietrich Genscher) published an article entitled "Towards a Nuclear-Free World: a German View" in the International Herald Tribune [12]. Among the immediate steps recommended in the article are the following:

- The vision of a nuclear-weapon-free world... must be rekindled.

- Negotiations aimed at drastically reducing the number of nuclear weapons must begin...

- The Nuclear Non-Proliferation Treaty (NPT) must be greatly reinforced.

- America should ratify the Comprehensive Nuclear Test-Ban Treaty.

- All short-range nuclear weapons must be destroyed.

- The Anti-Ballistic Missile (ABM) Treaty must be restored. Outer space may only be used for peaceful purposes.

Going to zero

On December 8-9, 2008, approximately 100 international leaders met in Paris to launch the Global Zero Campaign [11]. They included Her Majesty Queen Noor of Jordan, Norway's former Prime Minister Gro Harlem Brundtland, former UK Foreign Secretaries Sir Malcolm Rifkind, Margaret Beckett and David Owen, Ireland's former Prime Minister Mary Robinson, UK philanthropist Sir Richard Branson, former UN Under-Secretary-General Jayantha Dhanapala, and Nobel Peace Prize winners President Jimmy Carter, President Mikhail Gorbachev, Archbishop Desmond Tutu and Prof. Muhammad Yunus. The concrete steps advocated by Global Zero include:

- Deep reductions to Russian-US arsenals, which comprise 96% of the worlds 27,000 nuclear weapons.

- Russia and the United States, joined by other nuclear weapons states, cutting arsenals to zero in phased and verified reductions.

- Establishing verification systems and international management of the fuel cycle to prevent future development of nuclear weapons.

The Global Zero website [11] contains a report on a new public opinion poll covering 21 nations, including all of the nuclear weapons states.The poll showed that public opinion overwhelmingly favors an international agreement for eliminating all nuclear weapons

according to a timetable. It was specified that the agreement would include monitoring. The average in all countries of the percent favoring such an agreement was 76%. A few results of special interest mentioned in the report are Russia 69%; the United States, 77%; China, 83%; France, 86%, and Great Britain, 81%.

In his April 5, 2009 speech in Prague the newly-elected U.S. President Barack Obama said: "To reduce our warheads and stockpiles, we will negotiate a new strategic arms reduction treaty with Russia this year. President Medvedev and I will begin this process in London, and we will seek an agreement by the end of the year that is sufficiently bold. This will set the stage for further cuts, and we will seek to involve all nuclear weapon states in this endeavor... To achieve a global ban on nuclear testing, my administration will immediately and aggressively pursue U.S. ratification of the Comprehensive Test Ban Treaty."

A few days later, on April 24, 2009, the European Parliament recommended complete nuclear disarmament by 2020. An amendment introducing the "Model Nuclear Weapons Convention" and the "Hiroshima-Nagasaki Protocol" as concrete tools to achieve a nuclear weapons free world by 2020 was approved with a majority of 177 votes against 130. The Nuclear Weapons Convention is analogous to the conventions that have successfully banned chemical and biological weapons.

The role of public opinion

Public opinion is extremely important for the actual achievement of complete nuclear abolition. In the first place, the fact that the public is overwhelmingly against the retention of nuclear weapons means that the continuation of nuclear arsenals violates democratic principles. Secondly, the weapons are small enough to be easily hidden. Therefore the help of "whistle-blowers" will be needed to help inspection teams to make sure that no country violates its agreement to irreversibly destroy every atomic bomb. What is needed is a universal recognition that nuclear weapons are an absolute evil, and that their continued existence is a threat to human civilization and to the life of every person on the planet.

Our aim must be to delegitimize nuclear weapons, in much the same way that unnecessary greenhouse gas emissions have recently been delegitimized, or cigarette smoking delegitemized, or racism delegitemized. This should be an easy task because of the essentially genocidal nature of nuclear weapons. For half a century, ordinary people have been held as hostages, never knowing from day to day whether their own lives and the lives of those they love would suddenly be sacrificed on the alter of thermonuclear nationalism and power politics. We must let the politicians know that we are no longer willing to be hostages; and we must also accept individual responsibility for reporting violations of international treaties, although our own nation might be the violator.

Most of us grew up in schools where we were taught that duty to our nation was the highest duty; but the times we live in today demand a change of heart, a higher loyalty to humanity as a whole. If the mass media cooperate in delegitimizing nuclear weapons,

Figure 6.14: **Women Strike for Peace during the Cuban Missile Crisis in 1962.**(Public domain)

if educational systems cooperate and if religions [6] cooperate, the change of heart that we need - the global ethic that we need - can quickly be achieved.

Complete abolition of nuclear weapons

Although the Cold War has ended, the danger of a nuclear catastrophe is greater today than ever before. There are almost 16,000 nuclear weapons in the world today, of which more than 90 percent are in the hands of Russia and the United States. About 2,000 of these weapons are on hair-trigger alert, meaning that whoever is in charge of them has only a few minutes to decide whether the signal indicating an attack is real, or an error. The most important single step in reducing the danger of a disaster would be to take all

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[6]As an example of the role that religions can play, we can consider the Buddhist organization Soka Gakkai International (SGI), which has 12 million members throughout the world. SGIs President Daisaku Ikeda has declared nuclear weapons to be an absolute evil and for more than 50 years the organization has worked for their abolition.

weapons off hair-trigger alert.

Bruce G. Blair, Brookings Institute, has remarked "It is obvious that the rushed nature of the process, from warning to decision to action, risks causing a catastrophic mistake... This system is an accident waiting to happen." Fred Ikle of the Rand Corporation has written,' 'But nobody can predict that the fatal accident or unauthorized act will never happen. Given the huge and far-flung missile forces, ready to be launched from land and sea on on both sides, the scope for disaster by accident is immense... In a matter of seconds, through technical accident or human failure, mutual deterrence might thus collapse."

Although their number has been substantially reduced from its Cold War maximum, the total explosive power of todays weapons is equivalent to roughly half a million Hiroshima bombs. To multiply the tragedy of Hiroshima and Nagasaki by a factor of half a million changes the danger qualitatively. What is threatened today is the complete breakdown of human society.

There is no defense against nuclear terrorism. We must remember the remark of U.N. Secretary General Kofi Annan after the 9/11/2001 attacks on the World Trade Center. He said, ' 'This time it was not a nuclear explosion". The meaning of his remark is clear: If the world does not take strong steps to eliminate fissionable materials and nuclear weapons, it will only be a matter of time before they will be used in terrorist attacks on major cities. Neither terrorists nor organized criminals can be deterred by the threat of nuclear retaliation, since they have no territory against which such retaliation could be directed. They blend invisibly into the general population. Nor can a "missile defense system" prevent terrorists from using nuclear weapons, since the weapons can be brought into a port in any one of the hundreds of thousands of containers that enter on ships each year, a number far too large to be checked exhaustively.

As the number of nuclear weapon states grows larger, there is an increasing chance that a revolution will occur in one of them, putting nuclear weapons into the hands of terrorist groups or organized criminals. Today, for example, Pakistans less-than-stable government might be overthrown, and Pakistans nuclear weapons might end in the hands of terrorists. The weapons might then be used to destroy one of the worlds large coastal cities, having been brought into the port by one of numerous container ships that dock every day. Such an event might trigger a large-scale nuclear conflagration.

Today, the world is facing a grave danger from the reckless behavior of the government of the United States, which recently arranged a coup that overthrew the elected government of Ukraine. Although Victoria Nulands December 13, 2013 speech talks much about democracy, the people who carried out the coup in Kiev can hardly be said to be democracy's best representatives. Many belong to the Svoboda Party, which had its roots in the Social-National Party of Ukraine (SNPU). The name was an intentional reference to the Nazi Party in Germany.

It seems to be the intention of the US to establish NATO bases in Ukraine, no doubt armed with nuclear weapons. In trying to imagine how the Russians feel about this, we might think of the US reaction when a fleet of ships sailed to Cuba in 1962, bringing Soviet nuclear weapons. In the confrontation that followed, the world was bought very close indeed to an all-destroying nuclear war. Does not Russia feel similarly threatened

by the thought of hostile nuclear weapons on its very doorstep? Can we not learn from the past, and avoid the extremely high risks associated with the similar confrontation in Ukraine today?

In general, aggressive interventions, in Iran, Syria, Ukraine, the Korean Peninsula and elsewhere, all present dangers for uncontrollable escalation into large and disastrous conflicts, which might potentially threaten the survival of human civilization.

Few politicians or military figures today have any imaginative understanding of what a war with thermonuclear weapons would be like. Recent studies have shown that in a nuclear war, the smoke from firestorms in burning cities would rise to the stratosphere where it would remain for a decade, spreading throughout the world, blocking sunlight, blocking the hydrological cycle and destroying the ozone layer. The effect on global agriculture would be devastating, and the billion people who are chronically undernourished today would be at risk. Furthermore, the tragedies of Chernobyl and Fukushima remind us that a nuclear war would make large areas of the world permanently uninhabitable because of radioactive contamination. A full-scale thermonuclear war would be the ultimate ecological catastrophe. It would destroy human civilization and much of the biosphere.

One can gain a small idea of the terrible ecological consequences of a nuclear war by thinking of the radioactive contamination that has made large areas near to Chernobyl and Fukushima uninhabitable, or the testing of hydrogen bombs in the Pacific, which continues to cause cancer, leukemia and birth defects in the Marshall Islands more than half a century later.

The United States tested a hydrogen bomb at Bikini in 1954. Fallout from the bomb contaminated the island of Rongelap, one of the Marshall Islands 120 kilometers from Bikini. The islanders experienced radiation illness, and many died from cancer. Even today, half a century later, both people and animals on Rongelap and other nearby islands suffer from birth defects. The most common defects have been ' 'jelly fish babies", born with no bones and with transparent skin. Their brains and beating hearts can be seen. The babies usually live a day or two before they stop breathing.

A girl from Rongelap describes the situation in the following words: ' 'I cannot have children. I have had miscarriages on seven occasions... Our culture and religion teach us that reproductive abnormalities are a sign that women have been unfaithful. For this reason, many of my friends keep quiet about the strange births that they have had. In privacy they give birth, not to children as we like to think of them, but to things we could only describe as octopuses, apples, turtles and other things in our experience. We do not have Marshallese words for these kinds of babies, because they were never born before the radiation came."

The Republic of the Marshall Islands is suing the nine countries with nuclear weapons at the International Court of Justice at The Hague, arguing they have violated their legal obligation to disarm. The Guardian reports that ' 'In the unprecedented legal action, comprising nine separate cases brought before the ICJ on Thursday, the Republic of the Marshall Islands accuses the nuclear weapons states of a 'flagrant denial of human justice. It argues it is justified in taking the action because of the harm it suffered as a result of the nuclear arms race.

The Pacific chain of islands, including Bikini Atoll and Enewetak, was the site of 67 nuclear tests from 1946 to 1958, including the Bravo shot, a 15-megaton device equivalent to a thousand Hiroshima blasts, detonated in 1954. The Marshallese islanders say they have been suffering serious health and environmental effects ever since.

The island republic is suing the five 'established nuclear weapons states recognized in the 1968 nuclear non-proliferation treaty (NPT), the US, Russia (which inherited the Soviet arsenal), China, France and the UK, as well as the three countries outside the NPT who have declared nuclear arsenals: India, Pakistan and North Korea, and the one undeclared nuclear weapons state, Israel. The Republic of the Marshall Islands is not seeking monetary compensation, but instead it seeks to make the nuclear weapon states comply with their legal obligations under Article VI of the Nuclear Nonproliferation Treaty and the 1996 ruling of the International Court of Justice.

The Nuclear Age Peace Foundation (NAPF) is a consultant to the Marshall Islands on the legal and moral issues involved in bringing this case. David Krieger, President of NAPF, upon hearing of the motion to dismiss the case by the U.S. responded, ' 'The U.S. government is sending a terrible message to the world, that is, that U.S. courts are an improper venue for resolving disputes with other countries on U.S. treaty obligations. The U.S. is, in effect, saying that whatever breaches it commits are all right if it says so. That is bad for the law, bad for relations among nations, bad for nuclear non-proliferation and disarmament, and not only bad, but extremely dangerous for U.S. citizens and all humanity."

The RMI has appealed the U.S. attempt to reject its suit in the U.S, Federal Court, and it will continue to sue the nine nuclear nations in the International Court of Justice. Whether or not the suits succeed in making the nuclear nations comply with international law, attention will be called to the fact the nine countries are outlaws. In vote after vote in the United Nations General Assembly, the peoples of the world have shown how deeply they long to be free from the menace of nuclear weapons. Ultimately, the tiny group of power-hungry politicians must yield to the will of the citizens whom they are at present holding as hostages.

It is a life-or-death question. We can see this most clearly when we look far ahead. Suppose that each year there is a certain finite chance of a nuclear catastrophe, let us say 2 percent. Then in a century the chance of survival will be 13.5 percent, and in two centuries, 1.8 percent, in three centuries, 0.25 percent, in 4 centuries, there would only be a 0.034 percent chance of survival and so on. Over many centuries, the chance of survival would shrink almost to zero. Thus by looking at the long-term future, we can clearly see that if nuclear weapons are not entirely eliminated, civilization will not survive.

Civil society must make its will felt. A thermonuclear war today would be not only genocidal but also omnicidal. It would kill people of all ages, babies, children, young people, mothers, fathers and grandparents, without any regard whatever for guilt or innocence. Such a war would be the ultimate ecological catastrophe, destroying not only human civilization but also much of the biosphere. Each of us has a duty to work with dedication to prevent it.

One important possibility for progress on the seemingly intractable issue of nuclear

disarmament would be for a nation or group of nations to put forward a proposal for a Nuclear Weapons Convention for direct vote on the floor of the UN General Assembly. It would almost certainly be adopted by a massive majority. I believe that such a step would be a great achievement, even if bitterly opposed by some of the nuclear weapons states. When the will of the majority of the worlds peoples is clearly expressed in an international treaty, even if the treaty functions imperfectly, the question of legality is clear. Everyone can see which states are violating international law. In time, world public opinion will force the criminal states to conform with international law.

In the case of a Nuclear Weapons Convention, world public opinion would have especially great force. It is generally agreed that a full-scale nuclear war would have disastrous effects, not only on belligerent nations but also on neutral countries. Mr. Javier Pérez de Cuéllar , former Secretary-General of the United Nations, emphasized this point in one of his speeches: "I feel", he said, ' 'that the question may justifiably be put to the leading nuclear powers: by what right do they decide the fate of humanity? From Scandinavia to Latin America, from Europe and Africa to the Far East, the destiny of every man and woman is affected by their actions. No one can expect to escape from the catastrophic consequences of a nuclear war on the fragile structure of this planet. ..."

' 'No ideological confrontation can be allowed to jeopardize the future of humanity. Nothing less is at stake: todays decisions affect not only the present; they also put at risk succeeding generations. Like supreme arbiters, with our disputes of the moment, we threaten to cut off the future and to extinguish the lives of innocent millions yet unborn. There can be no greater arrogance. At the same time, the lives of all those who lived before us may be rendered meaningless; for we have the power to dissolve in a conflict of hours or minutes the entire work of civilization, with all the brilliant cultural heritage of humankind.

"...In a nuclear age, decisions affecting war and peace cannot be left to military strategists or even to governments. They are indeed the responsibility of every man and woman. And it is therefore the responsibility of all of us... to break the cycle of mistrust and insecurity and to respond to humanity's yearning for peace."

The eloquent words of Javier Pérez de Cuéllar express the situation in which we now find ourselves: Accidental nuclear war, nuclear terrorism, insanity of a person in a position of power, or unintended escalation of a conflict, could at any moment plunge our beautiful world into a catastrophic thermonuclear war which might destroy not only human civilization but also much of the biosphere.

A model Nuclear Weapons Convention already exists. It was drafted in 1996 and updated in 2007 by three NGOs: International Association of Lawyers Against Nuclear Arms, International Network of Engineers and Scientists Against Nuclear Proliferation and International Physicians for the Prevention of Nuclear War. The Nuclear Weapons Convention (NWC) can be downloaded in many languages from the website of Unfold Zero. It could be put to a direct vote at the present session of the UN General Assembly. The mechanism for doing this could exactly parallel the method by which the Arms Trade Treaty was adopted in 2013. The UN Ambassador of Costa Rica could send a copy of the NWC to Secretary General Ban Ki-moon, asking him, on behalf of Costa Rica, Mexico

and Austria to put it to a swift vote in the General Assembly.

There is strong evidence that the NWC would be passed by a large majority. For example, Humanitarian Initiative Joint Statement of 2015 was endorsed by 159 governments. Furthermore, the consensus document of the NPT Review Conference of 2010, endorsed by 188 state parties, contains the following sentence: ' 'The Conference expresses its deep concern at the humanitarian consequences of any use of nuclear weapons and reaffirms the need for all States at all times to comply with applicable international law, including international humanitarian law".

We can expect that the adoption of a Nuclear Weapons Convention will be opposed by the states that currently possess these weapons. One reason for this is the immense profits that suppliers make by ' 'modernizing" nuclear arsenals. For example, the Arms Control Association states ' 'The U.S. military is in the process of modernizing all of its existing strategic delivery systems and refurbishing the warheads they carry to last for the next 30-50 years." It adds ' 'Three independent estimates put the expected total cost over the next 30 years at as much as \$1 trillion." We should notice that these plans for long-term retention of nuclear weapons are blatant violations of Article VI of the NPT.

Money is often the motive for crimes, and in this case, a vast river of money is driving us in the direction of a catastrophic nuclear war. If we wait for the approval of the nuclear weapon states, we will have to wait forever, and the general public, whose active help we need in abolishing nuclear weapons, will feel more and more helpless and powerless. To prevent this, we need concrete progress rather than endless delay.

There are strong precedents for the adoption of the NWC against the opposition of powerful states. The Arms Trade Treaty is one precedent, the International Criminal Court is another and the Ottawa Treaty is a third.

The adoption of an Arms Trade Treaty is a great step forward; the adoption of the ICC, although its operation is imperfect, is also a great step forward, and likewise, the Antipersonnel Land-Mine Convention is a great step forward. In my opinion, the adoption of a Nuclear Weapons Convention, even in the face of powerful opposition, would also be a great step forward. When the will of the majority of the worlds peoples is clearly expressed in an international treaty, even if the treaty functions imperfectly, the question of legality is clear. Everyone can see which states are violating international law. In time, world public opinion will force the criminal states to conform to the law.
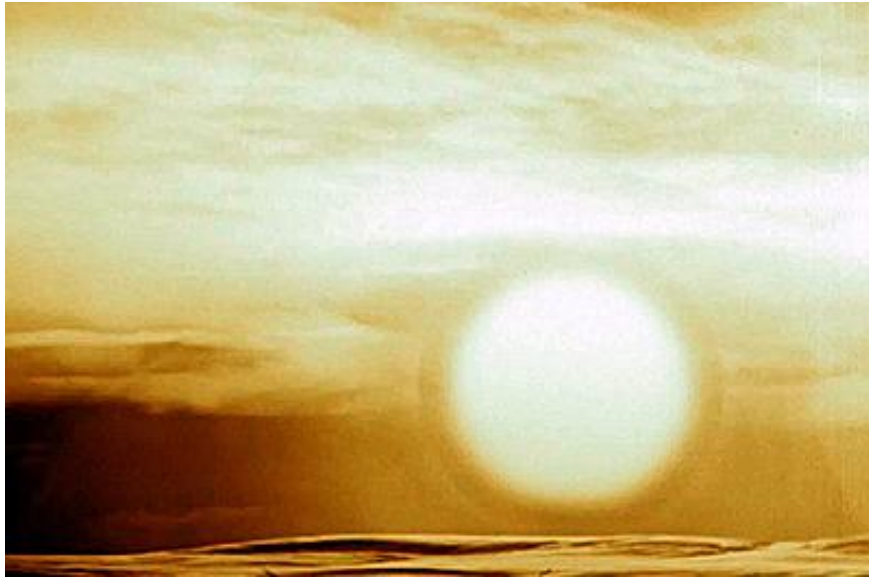
Figure 6.15: **Fireball of the Tsar Bomba (RDS-220), the largest weapon ever detonated (1961). Fission-fusion-fission bombs of almost unlimited power can be constructed by adding a layer of inecpensive ordinary uranium outside a core containing a fission-fusion bomb. Such a bomb would completely destroy a city even if it missed the target by 50 kilometers.** (Fair use: "Tsar Bomba", Wikipedia)

6.3   The Nuclear Weapons Convention

[7]

On July 7, 2017, a treaty banning nuclear weapons was adopted by an overwhelming majority at the United Nations General Assembly [34]. Although opposed by all of the nuclear weapon states, the treaty is a great achievement. Here are the first few articles:

Article 1: Prohibitions

1. Each State Party undertakes never under any circumstances to:

   (a) Develop, test, produce, manufacture, otherwise acquire, possess, or stockpile nuclear weapons or other nuclear explosive devices.

   (b) Transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices, directly or indirectly.

   (c) Receive the transfer of or control over nuclear weapons or other nuclear explosive devices directly or indirectly.

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[7]https://www.un.org/disarmament/ptnw/
http://www.abolition2000.org/en/

(d) Use or threaten to use nuclear weapons or other nuclear explosive devices.

(e) Assist, encourage, or induce, in any way, anyone to engage in any activity prohibited to a state party.

6.4 ICAN receives the Nobel Peace Prize

The International Campaign to Abolish Nuclear Weapons, abbreviated ICAN, is a coalition of 468 NGO's in 101 countries. The purpose of ICAN is to change the focus in the disarmament debate to "the the humanitarian threat posed by nuclear weapons, drawing attention to their unique destructive capacity, their catastrophic health and environmental consequences, their indiscriminate targeting, the debilitating impact of a detonation on medical infrastructure and relief measures, and the long-lasting effects of radiation on the surrounding area."

ICAN was founded in 2007 by the International Physicians for the Prevention of Nuclear War, an organization which itself received a Nobel Peace Prize in 1985. IPPNW was inspired by the success of the campaign that achieved the Ottawa Treaty in 1997, a treaty which banned antipersonnel land-mines against bitter opposition from the worst offenders. Thus, from the start. ICAN envisioned a treaty passed and without the participation or signatures of the nuclear weapons states. ICAN believed that such a treaty would have the great value of unambiguously underlining the illegality, immorality and omnicidal nature of nuclear weapons. Nuclear weapons states would eventually be forced to yield to the will of the vast majority of humankind.

On July 7, 2017, the Treaty on the Prohibition of Nuclear Weapons was adopted by an overwhelming majority, 122 to 1, by the United Nations General Assembly. The adoption of the treaty, a milestone in humanity's efforts to rid itself of nuclear insanity, was to a large extent due to the efforts of ICAN's participating organizations.

On December 10, 2017 ICAN's efforts were recognized by the award of the Nobel Peace Prize. Part of the motivation for the award was the fact that the threat of a thermonuclear global catastrophe is higher today than it has been at any time since the Cuban Missile Crisis. Because of the belligerent attitudes and mental instability of Donald Trump and Kim Jong Un, the end of human civilization and much of the biosphere is, in the words of Beatrice Fihn, "only a tantrum away".

Figure 6.16: **From left to right: Berit Reiss-Andersen, Chairman of the Norwegian Nobel Committee, Setsuko Thurlow, an 85-year-old survivor of the 1945 atomic bombing of Hiroshima, and ICAN Executive Director Beatrice Fihn.**

Figure 6.17: **Celebrating the award.**

6.5 The ICAN Nobel Lecture by Beatrice Fihn

Your Majesties, Members of the Norwegian Nobel Committee, Esteemed guests,

Today, it is a great honour to accept the 2017 Nobel Peace Prize on behalf of thousands of inspirational people who make up the International Campaign to Abolish Nuclear Weapons.

Together we have brought democracy to disarmament and are reshaping international law.

We most humbly thank the Norwegian Nobel Committee for recognizing our work and giving momentum to our crucial cause.

We want to recognize those who have so generously donated their time and energy to this campaign.

We thank the courageous foreign ministers, diplomats, Red Cross and Red Crescent staff, UN officials, academics and experts with whom we have worked in partnership to advance our common goal.

And we thank all who are committed to ridding the world of this terrible threat.

At dozens of locations around the world - in missile silos buried in our earth, on submarines navigating through our oceans, and aboard planes flying high in our sky - lie 15,000 objects of humankind's destruction.

Perhaps it is the enormity of this fact, perhaps it is the unimaginable scale of the consequences, that leads many to simply accept this grim reality. To go about our daily lives with no thought to the instruments of insanity all around us.

For it is insanity to allow ourselves to be ruled by these weapons. Many critics of this movement suggest that we are the irrational ones, the idealists with no grounding in reality. That nuclear-armed states will never give up their weapons.

But we represent the only rational choice. We represent those who refuse to accept nuclear weapons as a fixture in our world, those who refuse to have their fates bound up in a few lines of launch code.

Ours is the only reality that is possible. The alternative is unthinkable.

The story of nuclear weapons will have an ending, and it is up to us what that ending will be.

Will it be the end of nuclear weapons, or will it be the end of us?

One of these things will happen.

The only rational course of action is to cease living under the conditions where our mutual destruction is only one impulsive tantrum away.

Today I want to talk of three things: fear, freedom, and the future.

By the very admission of those who possess them, the real utility of nuclear weapons is in their ability to provoke fear. When they refer to their "deterrent" effect, proponents of nuclear weapons are celebrating fear as a weapon of war.

They are puffing their chests by declaring their preparedness to exterminate, in a flash, countless thousands of human lives.

Nobel Laureate William Faulkner said when accepting his prize in 1950, that "There is only the question of 'when will I be blown up?'" But since then, this universal fear has given way to something even more dangerous: denial.

Gone is the fear of Armageddon in an instant, gone is the equilibrium between two blocs that was used as the justification for deterrence, gone are the fallout shelters.

But one thing remains: the thousands upon thousands of nuclear warheads that filled us up with that fear.

The risk for nuclear weapons use is even greater today than at the end of the Cold War. But unlike the Cold War, today we face many more nuclear armed states, terrorists, and cyber warfare. All of this makes us less safe.

Learning to live with these weapons in blind acceptance has been our next great mistake.

Fear is rational. The threat is real. We have avoided nuclear war not through prudent leadership but good fortune. Sooner or later, if we fail to act, our luck will run out.

A moment of panic or carelessness, a misconstrued comment or bruised ego, could easily lead us unavoidably to the destruction of entire cities. A calculated military escalation could lead to the indiscriminate mass murder of civilians.

If only a small fraction of today's nuclear weapons were used, soot and smoke from the firestorms would loft high into the atmosphere - cooling, darkening and drying the Earth's surface for more than a decade.

It would obliterate food crops, putting billions at risk of starvation.

Yet we continue to live in denial of this existential threat.

But Faulkner in his Nobel speech also issued a challenge to those who came after him. Only by being the voice of humanity, he said, can we defeat fear; can we help humanity endure.

ICAN's duty is to be that voice. The voice of humanity and humanitarian law; to speak up on behalf of civilians. Giving voice to that humanitarian perspective is how we will create the end of fear, the end of denial. And ultimately, the end of nuclear weapons.

That brings me to my second point: freedom.

As the International Physicians for the Prevention of Nuclear War, the first ever anti-nuclear weapons organisation to win this prize, said on this stage in 1985:

"We physicians protest the outrage of holding the entire world hostage. We protest the moral obscenity that each of us is being continuously targeted for extinction."

Those words still ring true in 2017.

We must reclaim the freedom to not live our lives as hostages to imminent annihilation.

Man - not woman! - made nuclear weapons to control others, but instead we are controlled by them.

They made us false promises. That by making the consequences of using these weapons so unthinkable it would make any conflict unpalatable. That it would keep us free from war.

But far from preventing war, these weapons brought us to the brink multiple times throughout the Cold War. And in this century, these weapons continue to escalate us towards war and conflict.

In Iraq, in Iran, in Kashmir, in North Korea. Their existence propels others to join the nuclear race. They don't keep us safe, they cause conflict.

As fellow Nobel Peace Laureate, Martin Luther King Jr, called them from this very stage in 1964, these weapons are "both genocidal and suicidal".

They are the madman's gun held permanently to our temple. These weapons were supposed to keep us free, but they deny us our freedoms.

It's an affront to democracy to be ruled by these weapons. But they are just weapons. They are just tools. And just as they were created by geopolitical context, they can just as easily be destroyed by placing them in a humanitarian context.

That is the task ICAN has set itself - and my third point I wish to talk about, the future.

I have the honour of sharing this stage today with Setsuko Thurlow, who has made it her life's purpose to bear witness to the horror of nuclear war.

She and the hibakusha were at the beginning of the story, and it is our collective challenge to ensure they will also witness the end of it.

They relive the painful past, over and over again, so that we may create a better future.

There are hundreds of organisations that together as ICAN are making great strides towards that future.

There are thousands of tireless campaigners around the world who work each day to rise to that challenge.

There are millions of people across the globe who have stood shoulder to shoulder with those campaigners to show hundreds of millions more that a different future is truly possible.

Those who say that future is not possible need to get out of the way of those making it a reality.

As the culmination of this grassroots effort, through the action of ordinary people, this year the hypothetical marched forward towards the actual as 122 nations negotiated and concluded a UN treaty to outlaw these weapons of mass destruction.

The Treaty on the Prohibition of Nuclear Weapons provides the pathway forward at a moment of great global crisis. It is a light in a dark time.

And more than that, it provides a choice.

A choice between the two endings: the end of nuclear weapons or the end of us.

It is not naive to believe in the first choice. It is not irrational to think nuclear states can disarm. It is not idealistic to believe in life over fear and destruction; it is a necessity.

All of us face that choice. And I call on every nation to join the Treaty on the Prohibition of Nuclear Weapons.

The United States, choose freedom over fear. Russia, choose disarmament over destruction. Britain, choose the rule of law over oppression. France, choose human rights over terror. China, choose reason over irrationality. India, choose sense over senselessness. Pakistan, choose logic over Armageddon. Israel, choose common sense over obliteration. North Korea, choose wisdom over ruin.

To the nations who believe they are sheltered under the umbrella of nuclear weapons, will you be complicit in your own destruction and the destruction of others in your name?

To all nations: choose the end of nuclear weapons over the end of us!

This is the choice that the Treaty on the Prohibition of Nuclear Weapons represents. Join this Treaty.

We citizens are living under the umbrella of falsehoods. These weapons are not keeping us safe, they are contaminating our land and water, poisoning our bodies and holding hostage our right to life.

To all citizens of the world: Stand with us and demand your government side with humanity and sign this treaty. We will not rest until all States have joined, on the side of reason.

No nation today boasts of being a chemical weapon state. No nation argues that it is acceptable, in extreme circumstances, to use sarin nerve agent. No nation proclaims the right to unleash on its enemy the plague or polio.

That is because international norms have been set, perceptions have been changed.

And now, at last, we have an unequivocal norm against nuclear weapons.

Monumental strides forward never begin with universal agreement.

With every new signatory and every passing year, this new reality will take hold.

This is the way forward. There is only one way to prevent the use of nuclear weapons: prohibit and eliminate them.

Nuclear weapons, like chemical weapons, biological weapons, cluster munitions and land mines before them, are now illegal. Their existence is immoral. Their abolishment is in our hands.

The end is inevitable. But will that end be the end of nuclear weapons or the end of us? We must choose one.

We are a movement for rationality. For democracy. For freedom from fear.

We are campaigners from 468 organisations who are working to safeguard the future, and we are representative of the moral majority: the billions of people who choose life over death, who together will see the end of nuclear weapons.

Thank you.

6.6   The Nobel Lecture continued by Setsuko Thurlow

Your Majesties, Distinguished members of the Norwegian Nobel Committee, My fellow campaigners, here and throughout the world, Ladies and gentlemen,

It is a great privilege to accept this award, together with Beatrice, on behalf of all the remarkable human beings who form the ICAN movement. You each give me such tremendous hope that we can - and will - bring the era of nuclear weapons to an end.

I speak as a member of the family of hibakusha - those of us who, by some miraculous chance, survived the atomic bombings of Hiroshima and Nagasaki. For more than seven decades, we have worked for the total abolition of nuclear weapons.

We have stood in solidarity with those harmed by the production and testing of these horrific weapons around the world. People from places with long-forgotten names, like Moruroa, Ekker, Semipalatinsk, Maralinga, Bikini. People whose lands and seas were irradiated, whose bodies were experimented upon, whose cultures were forever disrupted.

We were not content to be victims. We refused to wait for an immediate fiery end or the slow poisoning of our world. We refused to sit idly in terror as the so-called great powers

took us past nuclear dusk and brought us recklessly close to nuclear midnight. We rose up. We shared our stories of survival. We said: humanity and nuclear weapons cannot coexist.

Today, I want you to feel in this hall the presence of all those who perished in Hiroshima and Nagasaki. I want you to feel, above and around us, a great cloud of a quarter million souls. Each person had a name. Each person was loved by someone. Let us ensure that their deaths were not in vain.

I was just 13 years old when the United States dropped the first atomic bomb, on my city Hiroshima. I still vividly remember that morning. At 8:15, I saw a blinding bluish-white flash from the window. I remember having the sensation of floating in the air.

As I regained consciousness in the silence and darkness, I found myself pinned by the collapsed building. I began to hear my classmates' faint cries: "Mother, help me. God, help me."

Then, suddenly, I felt hands touching my left shoulder, and heard a man saying: "Don't give up! Keep pushing! I am trying to free you. See the light coming through that opening? Crawl towards it as quickly as you can." As I crawled out, the ruins were on fire. Most of my classmates in that building were burned to death alive. I saw all around me utter, unimaginable devastation.

Processions of ghostly figures shuffled by. Grotesquely wounded people, they were bleeding, burnt, blackened and swollen. Parts of their bodies were missing. Flesh and skin hung from their bones. Some with their eyeballs hanging in their hands. Some with their bellies burst open, their intestines hanging out. The foul stench of burnt human flesh filled the air.

Thus, with one bomb my beloved city was obliterated. Most of its residents were civilians who were incinerated, vaporized, carbonized - among them, members of my own family and 351 of my schoolmates.

In the weeks, months and years that followed, many thousands more would die, often in random and mysterious ways, from the delayed effects of radiation. Still to this day, radiation is killing survivors.

Whenever I remember Hiroshima, the first image that comes to mind is of my four-year-old nephew, Eiji - his little body transformed into an unrecognizable melted chunk of flesh. He kept begging for water in a faint voice until his death released him from agony.

To me, he came to represent all the innocent children of the world, threatened as they are at this very moment by nuclear weapons. Every second of every day, nuclear weapons endanger everyone we love and everything we hold dear. We must not tolerate this insanity any longer.

Through our agony and the sheer struggle to survive - and to rebuild our lives from the ashes - we hibakusha became convinced that we must warn the world about these apocalyptic weapons. Time and again, we shared our testimonies.

But still some refused to see Hiroshima and Nagasaki as atrocities - as war crimes. They accepted the propaganda that these were "good bombs" that had ended a "just war". It was this myth that led to the disastrous nuclear arms race - a race that continues to this day.

Nine nations still threaten to incinerate entire cities, to destroy life on earth, to make

our beautiful world uninhabitable for future generations. The development of nuclear weapons signifies not a country's elevation to greatness, but its descent to the darkest depths of depravity. These weapons are not a necessary evil; they are the ultimate evil.

On the seventh of July this year, I was overwhelmed with joy when a great majority of the world's nations voted to adopt the Treaty on the Prohibition of Nuclear Weapons. Having witnessed humanity at its worst, I witnessed, that day, humanity at its best. We hibakusha had been waiting for the ban for seventy-two years. Let this be the beginning of the end of nuclear weapons.

All responsible leaders will sign this treaty. And history will judge harshly those who reject it. No longer shall their abstract theories mask the genocidal reality of their practices. No longer shall "deterrence" be viewed as anything but a deterrent to disarmament. No longer shall we live under a mushroom cloud of fear.

To the officials of nuclear-armed nations - and to their accomplices under the so-called "nuclear umbrella" - I say this: Listen to our testimony. Heed our warning. And know that your actions are consequential. You are each an integral part of a system of violence that is endangering humankind. Let us all be alert to the banality of evil.

To every president and prime minister of every nation of the world, I beseech you: Join this treaty; forever eradicate the threat of nuclear annihilation.

When I was a 13-year-old girl, trapped in the smouldering rubble, I kept pushing. I kept moving toward the light. And I survived. Our light now is the ban treaty. To all in this hall and all listening around the world, I repeat those words that I heard called to me in the ruins of Hiroshima: "Don't give up! Keep pushing! See the light? Crawl towards it."

Tonight, as we march through the streets of Oslo with torches aflame, let us follow each other out of the dark night of nuclear terror. No matter what obstacles we face, we will keep moving and keep pushing and keep sharing this light with others. This is our passion and commitment for our one precious world to survive.

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Chapter 7

COLLECTIVE PUNISHMENT IN THE MIDDLE EAST

7.1   Sanctions as collective punishment

Under the Fourth Geneva Convention, collective punishment is war crime. Article 33 states that "No protected person may be punished for an offense that he or she did not personally commit."

At present, we treat nations as though they were persons: We punish entire nations by sanctions, even when only the leaders are guilty, even though the burdens of the sanctions fall most heavily on the poorest and least guilty of the citizens, and even though sanctions often have the effect of uniting the citizens of a country behind the guilty leaders. Should we not regard sanctions as collective punishment? If we do so, then sanctions are a war crime, under the Fourth Geneva Convention.

There is much that can be criticized in the way that the Gulf War of 1990-1991 was carried out. Besides military targets, the US and its allies bombed electrical generation facilities with the aim of creating postwar leverage over Iraq. The electrical generating plants would have to be rebuilt with the help of foreign technical assistance, and this help could be traded for postwar compliance. In the meantime, hospitals and water-purification plants were without electricity. Also, during the Gulf War, a large number of projectiles made of depleted uranium were fired by allied planes and tanks. The result was a sharp increase in cancer in Iraq. Finally, both Shi'ites and Kurds were encouraged by the Allies to rebel against Saddam Hussein's government, but were later abandoned by the allies and slaughtered by Saddam.

The most terrible misuse of power, however, was the US and UK insistence the sanctions against Iraq should remain in place after the end of the Gulf War. These two countries used their veto power in the Security Council to prevent the removal of the sanctions. Their motive seems to have been the hope that the economic and psychological impact would provoke the Iraqi people to revolt against Saddam. However that brutal dictator remained firmly in place, supported by universal fear of his police and by massive propaganda. The

effect of the sanctions was to produce more than half a million deaths of children under five years of age, as is documented by UNICEF data. The total number of deaths that the sanctions produced among Iraqi civilians probably exceeded a million, if older children and adults are included.

Ramsey Clark, who studied the effects of the sanctions in Iraq from 1991 onwards, wrote to the Security Council that most of the deaths "are from the effects of malnutrition including marasmas and kwashiorkor, wasting or emaciation which has reached twelve per cent of all children, stunted growth which affects twenty-eight per cent, diarrhea, dehydration from bad water or food, which is ordinarily easily controlled and cured, common communicable diseases preventable by vaccinations, and epidemics from deteriorating sanitary conditions. There are no deaths crueler than these. They are suffering slowly, helplessly, without simple remedial medication, without simple sedation to relieve pain, without mercy."

The sanctions that are currently being imposed on Iran are also an example of collective punishment. They are damaging the health of ordinary Iranian citizens, who can in no way be blamed fro the policies of their government. According to Wikipedia: "Pharmaceuticals and medical equipment do not fall under the international sanctions, but the country is facing shortages of drugs for the treatment of 30 illnesses, including cancer, heart and breathing problems, thalassemia and multiple scleerosis, because Iran is not allowed to use International payment systems.... In addition, there are 40,000 haemophiliacs who can't get anti-clotting medicines... An estimated 23,000 Iranians with HIV/Aids have had their access to the drugs they need to keep alive severely restricted."

In addition to the fact that sanctions are a form of collective punishment, and thus a war crime under the Fourth Geneva Convention, we should also remember that Iran is completely within its rights under international law and under the NPT.

7.2   The agony of Iraq

There is a close relationship between petroleum and war. James A. Paul, Executive Director of the Global Policy Forum, has described this relationship very clearly in the following words:

"Modern warfare particularly depends on oil, because virtually all weapons systems rely on oil-based fuel - tanks, trucks, armored vehicles, self-propelled artillery pieces, airplanes, and naval ships. For this reason, the governments and general staffs of powerful nations seek to ensure a steady supply of oil during wartime, to fuel oil-hungry military forces in far-flung operational theaters."

"Just as governments like the US and UK need oil companies to secure fuel for their global war-making capacity, so the oil companies need their governments to secure control over global oilfields and transportation routes. It is no accident, then, that the world's largest oil companies are located in the world's most powerful countries."

"Almost all of the world's oil-producing countries have suffered abusive, corrupt and undemocratic governments and an absence of durable development. Indonesia, Saudi Ara-

bia, Libya, Iraq, Iran, Angola, Colombia, Venezuela, Kuwait, Mexico, Algeria - these and many other oil producers have a sad record, which includes dictatorships installed from abroad,bloody coups engineered by foreign intelligence services, militarization of government and intolerant right-wing nationalism."

Iraq, in particular, has been the scene of a number of wars motivated by the West's thirst for oil. During World War I, 1914-1918, the British captured the area (then known as Mesopotamia) from the Ottoman Empire after four years of bloody fighting. Although Lord Curzon (a member of the British War Cabinet who became Foreign Minister immediately after the war) denied that the British conquest of Mesopotamia was motivated by oil, there is ample evidence that British policy was indeed motivated by a desire for control of the region's petroleum. For example, Curzon's Cabinet colleague Sir Maurice Hankey stated in a private letter that oil was "a first-class war aim". Furthermore, British forces continued to fight after the signing of the Murdos Armistice.

In this way, they seized Mosul, the capital of a major oil-producing region, thus frustrating the plans of the French, who had been promised the area earlier in the secret Sykes-Picot Agreement. Lord Curzon was well aware of the military importance of oil, and following the end of the First World War he remarked: "The Allied cause has floated to victory on a wave of oil".

The Sykes-Picot Agreement essentially took away from the Arabs the autonomy that they had been promised if they fought on the side of the Allies against the Turks. Today this secret double-cross continues to be a great source of bitterness. [1]

During the period between 1918 and 1930, fierce Iraqi resistance to the occupation was crushed by the British, who used poison gas, airplanes, incendiary bombs, and mobile armored cars, together with forces drawn from the Indian Army. Winston Churchill, who was Colonial Secretary at the time, regarded the conflict in Iraq as an important test of modern military-colonial methods.

An article in The Guardian explains that "Churchill was particularly keen on chemical weapons, suggesting that they be used 'against recalcitrant Arabs as an experiment... I am strongly in favour of using poison gas against uncivilized tribes...'" [2]

In 1932, Britain granted nominal independence to Iraq, but kept large military forces in the country and maintained control of it through indirect methods. In 1941, however, it seemed likely that Germany might try to capture the Iraqi oilfields, and therefore the British again seized direct political power in Iraq by means of military force. It was not only Germany that Britain feared, but also US attempts to gain access to Iraqi oil.

The British fear of US interest in Iraqi oil was soon confirmed by events. In 1963 the US secretly backed a military coup in Iraq that brought Saddam Hussein's Ba'ath Party to power. In 1979 the western-backed Shah of Iran was overthrown, and the United States regarded the fundamentalist Shi'ite regime that replaced him as a threat to supplies of oil from Saudi Arabia.

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[1] https://www.khanacademy.org/humanities/history/euro
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sykes-picot-agreement-and-the-balfour-declaration
[2] http://www.theguardian.com/world/2003/apr/19/iraq.arts

Washington saw Saddam's Iraq as a bulwark against the militant Shi'ite extremism of Iran that was threatening oil supplies from pro-American states such as Kuwait and Saudi Arabia.

In 1980, encouraged to do so by the fact that Iran had lost its US backing, Saddam Hussein's government attacked Iran. This was the start of an extremely bloody and destructive war that lasted for eight years, inflicting almost a million casualties on the two nations. Iraq used both mustard gas and the nerve gases Tabun and Sarin against Iran, in violation of the Geneva Protocol.

Both the United States and Britain helped Saddam Hussein's government to obtain chemical weapons. A chemical plant, called Falluja 2, was built by Britain in 1985, and this plant was used to produce mustard gas and nerve gas. Also, according to the Riegel Report to the US Senate, May 25, (1994), the Reagan Administration turned a blind eye to the export of chemical weapon precursors to Iraq, as well as anthrax and plague cultures that could be used as the basis for biological weapons. According to the Riegel Report, "records available from the supplier for the period 1985 until the present show that during this time, pathogenic (meaning disease producing) and toxigenic (meaning poisonous), and other biological research materials were exported to Iraq perusant to application and licensing by the US Department of Commerce."

In 1984, Donald Rumsfeld, Reagan's newly appointed Middle East Envoy, visited Saddam Hussein to assure him of America's continuing friendship, despite Iraqi use of poison gas. When (in 1988) Hussein went so far as to use poison gas against civilian citizens of his own country in the Kurdish village of Halabja, the United States worked to prevent international condemnation of the act. Indeed US support for Saddam was so unconditional that he obtained the false impression that he had a free hand to do whatever he liked in the region.

On July 25, 1990, US Ambassador April Glaspie met with Saddam Hussein to discuss oil prices and how to improve US-Iraq relations. According to the transcript of the meeting, Ms Galspie assured Saddam that the US "had no opinion on the Arab-Arab conflicts, like your border disagreement with Kuwait." She then left on vacation. Mistaking this conversation for a green light, Saddam invaded Kuwait eight days later.

By invading Kuwait, Hussein severely worried western oil companies and governments, since Saudi Arabia might be next in line. As George Bush senior said in 1990, at the time of the Gulf War, "Our jobs, our way of life, our own freedom and the freedom of friendly countries around the world would all suffer if control of the world's great oil reserves fell into the hands of Saddam Hussein."

On August 6, 1990, the UN Security Council imposed comprehensive economic sanctions against Iraq with the aim of forcing Iraq to withdraw from Kuwait. Meanwhile, US Secretary of State James A. Baker III used arm-twisting methods in the Security Council to line up votes for UN military action against Iraq. In Baker's own words, he undertook the process of "cajoling, extracting, threatening and occasionally buying votes".

On November 29, 1990, the Council passed Resolution 678, authorizing the use of "all necessary means" (by implication also military means) to force Iraq to withdraw from Kuwait. There was nothing at all wrong with this, since the Security Council had been

set up by the UN Charter to prevent states from invading their neighbors. However, one can ask whether the response to Saddam Hussein's invasion of Kuwait would have been so wholehearted if oil had not been involved.

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In discussing Iraq, we mentioned oil as a motivation for western interest. Similar considerations hold also for Afghanistan. US-controlled oil companies have long had plans for an oil pipeline from Turkmenistan, passing through Afghanistan to the Arabian Sea, as well as plans for a natural gas pipeline from Turkmenistan through Afghanistan to Pakistan.

The September 11 terrorist attacks resulted in a spontaneous worldwide outpouring of sympathy for the United States, and within the US, patriotic support of President George

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[3] https://www.transcend.org/tms/2014/09/usauk-committed-genocide-against-iraq-people/
http://www.informationclearinghouse.info/article37511.htm

W. Bush at a time of national crisis. Bush's response to the attacks seems to have been to inquire from his advisors whether he was now free to invade Iraq. According to former counterterrorism chief, Richard Clarke, Bush was "obsessed" with Iraq as his principal target after 9/11.

The British Prime Minister, Tony Blair, was a guest at a private White House dinner nine days after the terrorist attacks on New York and Washington. Sir Christopher Meyer, former UK Ambassador to Washington, was also present at the dinner. According to Meyer, Blair said to Bush that they must not get distracted from their main goal - dealing with the Taliban and al-Quaeda in Afghanistan, and Bush replied: "I agree with you Tony. We must deal with this first. But when we have dealt with Afghanistan, we must come back to Iraq." Faced with the prospect of wars in both Iraq and Afghanistan, Blair did not protest, according to Meyer.

During the summer of 2002, Bush and Blair discussed Iraq by telephone. A senior official from Vice-President Dick Cheney's office who read the transcript of the call is quoted by the magazine Vanity Fair as saying: "The way it read was that come what may, Saddam was going to go; they said that they were going forward, they were going to take out the regime, and they were doing the right thing. Blair did not need any convincing. There was no 'Come on, Tony, we've got to get you on board'. I remember reading it and then thinking, 'OK, now I know what we're going to be doing for the next year.'" On June 1, 2002, Bush announced a new US policy which not only totally violated all precedents in American foreign policy but also undermined the United Nations Charter and international law6 . Speaking at the graduation ceremony of the US Military Academy at West Point he asserted that the United States had the right to initiate a preemptive war against any country that might in the future become a danger to the United States. "If we wait for threats to fully materialize", he said, "we will have waited too long." He indicated that 60 countries might fall into this category, roughly a third of the nations of the world.

The assertion that the United States, or any other country, has the right to initiate preemptive wars specifically violates Chapter 1, Articles 2.3 and 2.4, of the United Nations Charter. These require that "All members shall settle their disputes by peaceful means in such a manner that international peace, security and justice are not endangered", and that "All members shall refrain in their international relations from the threat or use of force against the territorial integrity of any state, or in any other manner inconsistent with the purposes of the United Nations." The UN Charter allows a nation that is actually under attack to defend itself, but only until the Security Council has had time to act.

Bush's principle of preemptive war was promptly condemned by the Catholic Church. Senior Vatican officials pointed to the Catholic teaching that "preventive" war is unjustifiable, and Archbishop Renato Martino, prefect of the Vatican Council for Justice and Peace, stated firmly that "unilateralism is not acceptable".

However, in the United States, the shocking content of Bush's West Point address was not fully debated. The speech was delivered only a few months after the 9/11 terrorist attacks, and the US supported whatever exceptional measures its President thought might be necessary for the sake of national security. American citizens, worried by the phenomenon of terrorism, did not fully appreciate that the principle of preemptive war could justify

almost any aggression, and that in the long run, if practiced by all countries, it would undermine the security of the United States as well as that of the entire world.

During the spring of 2003, our television and newspapers presented us with the spectacle of an attack by two technologically superior powers on a much less industrialized nation, a nation with an ancient and beautiful culture. The ensuing war was one-sided. Missiles guided by laser beams and signals from space satellites were more than a match for less sophisticated weapons. Speeches were made to justify the attack. It was said to be needed because of weapons of mass destruction (some countries are allowed to have them, others not). It was said to be necessary to get rid of a cruel dictator (whom the attacking powers had previously supported and armed). But the suspicion remained that the attack was resource-motivated. It was about oil, or at least largely about oil. The war on Iraq was also designed to destroy a feared enemy of Israel.

The Nobel Peace Prize winner, Maidread Corrigan Maguire estimates that US and UK actions between 1990 and 2012 killed 3.3 million people, including 750,000 children.

Against the historical background discussed above, we can appreciate the enormous hypocrisy of Obama's claim that the bombing of Iraq during his administration was "humanitarian".

7.3 Attacks on Iran, past and present

Iran has an ancient and beautiful civilization, which dates back to 7,000 BC, when the city of Susa was founded. Some of the earliest writing that we know of, dating from from approximately 3,000 BC, was used by the Elamite civilization near to Susa. Today's Iranians are highly intelligent and cul- tured, and famous for their hospitality, generosity and kindness to strangers. Over the centuries, Iranians have made many contributions to science, art and literature, and for hundreds of years they have not attacked any of their neighbors. Nevertheless, for the last 90 years, they have been the victims of foreign attacks and interventions, most of which have been closely related to Iran's oil and gas resources. The first of these took place in the period 1921-1925, when a British-sponsored coup overthrew the Qajar dynasty and replaced it by Reza Shah.

Reza Shah (1878-1944) started his career as Reza Khan, an army officer. Because of his high intelligence he quickly rose to become commander of the Tabriz Brigade of the Persian Cossacks. In 1921, General Edmond Ironside, who commanded a British force of 6,000 men fighting against the Bolshe- viks in northern Persia, masterminded a coup (financed by Britain) in which Reza Khan lead 15,000 Cossacks towards the capital. He overthrew the gov- ernment, and became minister of war. The British government backed this coup because it believed that a strong leader was needed in Iran to resist the Bolsheviks. In 1923, Reza Khan overthrew the Qajar Dynasty, and in 1925 he was crowned as Reza Shah, adopting the name Pahlavi.

Reza Shah believed that he had a mission to modernize Iran, in much the same way that Kamil Ata Turk had modernized Turkey. During his 16 years of rule in Iran, many roads were built, the Trans-Iranian Railway was constructed, many Iranians were sent

to study in the West, the University of Tehran was opened, and the first steps towards industrialization were taken. However, Reza Shahs methods were sometimes very harsh.

In 1941, while Germany invaded Russia, Iran remained neutral, perhaps leaning a little towards the side of Germany. However, Reza Shah was suf- ficiently critical of Hitler to offer safety in Iran to refugees from the Nazis. Fearing that the Germans would gain control of the Abadan oil fields, and wishing to use the Trans-Iranian Railway to bring supplies to Russia, Britain invaded Iran from the south on August 25, 1941. Simultaneously, a Russian force invaded the country from the north. Reza Shah appealed to Roosevelt for help, citing Iran's neutrality, but to no avail. On September 17, 1941, he was forced into exile, and replaced by his son, Crown Prince Mohammed Reza Pahlavi. Both Britain and Russia promised to withdraw from Iran as soon as the war was over. During the remainder of World War II, although the new Shah was nominally the ruler of Iran, the country was governed by the allied occupation forces.

Reza Shah, had a strong sense of mission, and felt that it was his duty to modernize Iran. He passed on this sense of mission to his son, the young Shah Mohammed Reza Pahlavi . The painful problem of poverty was every- where apparent, and both Reza Shah and his son saw modernization of Iran as the only way to end poverty.

In 1951, Mohammad Mosaddegh became Prime Minister of Iran through democratic elections. He was from a highly-placed family and could trace his ancestry back to the shahs of the Qajar dynasty. Among the many re- forms made by Mosaddegh was the nationalization of the Anglo-Iranian Oil Company's possessions in Iran. Because of this, the AIOC (which later became British Petroleum), persuaded the British government to sponsor a secret coup that would overthrow Mosaddegh. The British asked US President Eisenhower and the CIA to join M16 in carrying out the coup, claiming that Mosaddegh represented a communist threat (a ludicrous argument, considering Mosaddegh's aristo- cratic background). Eisenhower agreed to help Britain in carrying out the coup, and it took place in 1953. The Shah thus obtained complete power over Iran.

The goal of modernizing Iran and ending poverty was adopted as an almost-sacred mission by the young Shah, Mohammed Reza Pahlavi, and it was the motive behind his White Revolution in 1963, when much of the land belonging to the feudal landowners and the crown was distributed to land- less villagers. However, the White Revolution angered both the traditional landowning class and the clergy, and it created fierce opposition. In dealing with this opposition, the Shahs methods were very harsh, just as his fathers had been. Because of alienation produced by his harsh methods, and because of the growing power of his opponents, Shah Mohammed Reza Pahlavi was overthrown in the Iranian Revolution of 1979. The revolution of 1979 was to some extent caused by the British-American coup of 1953.

One can also say that the westernization, at which both Shah Reza and his son aimed, produced an anti-western reaction among the conservative elements of Iranian society. Iran was "falling between two stools", on the one hand western culture and on the other hand the country's traditional culture. It seemed to be halfway between, belonging to neither. Finally in 1979 the Islamic clergy triumphed and Iran chose tradition.

Meanwhile, in 1963, the US had secretly backed a military coup in Iraq that brought

Saddam Hussein's Ba'ath Party to power. In 1979, when the western-backed Shah of Iran was overthrown, the United States regarded the fundamentalist Shiite regime that replaced him as a threat to supplies of oil from Saudi Arabia. Washington saw Saddam's Iraq as a bulwark against the Shiite government of Iran that was thought to be threatening oil supplies from pro-American states such as Kuwait and Saudi Arabia.

In 1980, encouraged to do so by the fact that Iran had lost its US backing, Saddam Hussein's government attacked Iran. This was the start of an extremely bloody and destructive war that lasted for eight years, inflicting almost a million casualties on the two nations. Iraq used both mustard gas and the nerve gases Tabun and Sarin against Iran, in violation of the Geneva Protocol. Both the United States and Britain helped Saddam Hussein's government to obtain chemical weapons.

The present attacks on Iran by Israel and the United States, both actual and threatened, have some similarity to the war against Iraq, which was launched by the United States in 2003. In 2003, the attack was nominally motivated by the threat that nuclear weapons would be developed, but the real motive had more to do with a desire to control and exploit the petroleum resources of Iraq, and with Israel's extreme nervousness at having a powerful and somewhat hostile neighbor. Similarly, hegemony over the huge oil and gas reserves of Iran can be seen as one the main reasons why the United States is presently demonizing Iran, and this is combined with Israel's almost paranoid fear of a large and powerful Iran. Looking back on the "successful" 1953 coup against Mosaddegh, Israel and the United States perhaps feel that sanctions, threats, murders and other pressures can cause a regime change that will bring a more compliant government to power in Iran - a government that will accept US hegemony. But aggressive rhetoric, threats and provocations can escalate into full-scale war.

I do not wish to say that Iran's present government is without serious faults. However, any use of violence against Iran would be both insane and criminal. Why insane? Because the present economy of the US and the world cannot support another large-scale conflict; because the Middle East is already a deeply troubled region; and because it is impossible to predict the extent of a war which, if once started, might develop into World War III, given the fact that Iran is closely allied with both Russia and China. Why criminal? Because such violence would violate both the UN Charter and the Nuremberg Principles. There is no hope at all for the future unless we work for a peaceful world, governed by international law, rather than a fearful world, where brutal power holds sway.

7.4   Some contributions of Islamic culture

At a time when the corporate-controlled media of Europe and the United States are doing their utmost to fill us with poisonous Islamophobia, it is perhaps a useful antidote to remember the great role that Islamic civilization played in preserving, enlarging and transmitting to us the knowledge and culture of the ancient world.

After the burning of the great library at Alexandria and the destruction of Hellenistic civilization, most of the books of the classical Greek and Hellenistic philosophers were lost.

Figure 7.1: **An example of Iranian art**

However, a few of these books survived and were translated from Greek, first into Syriac, then into Arabic and finally from Arabic into Latin. By this roundabout route, fragments from the wreck of the classical Greek and Hellenistic civilizations drifted back into the consciousness of the West.

The Roman empire was ended in the 5th century A.D. by attacks of barbaric Germanic tribes from northern Europe. However, by that time, the Roman empire had split into two halves. The eastern half, with its capital at Byzantium (Constantinople), survived until 1453, when the last emperor was killed vainly defending the walls of his city against the Turks.

The Byzantine empire included many Syriac-speaking subjects; and in fact, beginning in the 3rd century A.D., Syriac replaced Greek as the major language of western Asia. In the 5th century A.D., there was a split in the Christian church of Byzantium; and the Nestorian church, separated from the official Byzantine church. The Nestorians were bitterly persecuted by the Byzantines, and therefore they migrated, first to Mesopotamia, and later to south-west Persia. (Some Nestorians migrated as far as China.)

During the early part of the middle ages, the Nestorian capital at Gondisapur was a great center of intellectual activity. The works of Plato, Aristotle, Hippocrates, Euclid, Archimedes, Ptolemy, Hero and Galen were translated into Syriac by Nestorian scholars, who had brought these books with them from Byzantium.

Among the most distinguished of the Nestorian translators were the members of a family called Bukht-Yishu (meaning "Jesus hath delivered"), which produced seven generations of outstanding scholars. Members of this family were fluent not only in Greek and Syriac, but also in Arabic and Persian.

In the 7th century A.D., the Islamic religion suddenly emerged as a conquering and proselytizing force. Inspired by the teachings of Mohammad (570 A.D. - 632 A.D.), the Arabs and their converts rapidly conquered western Asia, northern Africa, and Spain. During the initial stages of the conquest, the Islamic religion inspired a fanaticism in its followers which was often hostile to learning. However, this initial fanaticism quickly changed to an appreciation of the ancient cultures of the conquered territories; and during the middle ages, the Islamic world reached a very high level of culture and civilization.

Thus, while the century from 750 to 850 was primarily a period of translation from Greek to Syriac, the century from 850 to 950 was a period of translation from Syriac to Arabic. It was during this latter century that Yuhanna Ibn Masawiah (a member of the Bukht-Yishu family, and medical advisor to Caliph Harun al-Rashid) produced many important translations into Arabic.

The skill of the physicians of the Bukht-Yishu family convinced the Caliphs of the value of Greek learning; and in this way the family played an extremely important role in the preservation of the western cultural heritage. Caliph al-Mamun, the son of Harun al-Rashid, established at Baghdad a library and a school for translation, and soon Baghdad replaced Gondisapur as a center of learning.

The English word "chemistry" is derived from the Arabic words "al-chimia", which mean "the changing". The earliest alchemical writer in Arabic was Jabir (760-815), a friend of Harun al-Rashid. Much of his writing deals with the occult, but mixed with this

is a certain amount of real chemical knowledge. For example, in his Book of Properties, Jabir gives a recipe for making what we now call lead hydroxycarbonate (white lead), which is used in painting and pottery glazes:

Another important alchemical writer was Rahzes (c. 860 - c. 950). He was born in the ancient city of Ray, near Teheran, and his name means "the man from Ray". Rhazes studied medicine in Baghdad, and he became chief physician at the hospital there. He wrote the first accurate descriptions of smallpox and measles, and his medical writings include methods for setting broken bones with casts made from plaster of Paris. Rahzes was the first person to classify substances into vegetable, animal and mineral. The word "al-kali", which appears in his writings, means "the calcined" in Arabic. It is the source of our word "alkali", as well as of the symbol K for potassium.

The greatest physician of the middle ages, Avicinna, (Abu-Ali al Hussain Ibn Abdullah Ibn Sina, 980-1037), was also a Persian, like Rahzes. More than a hundred books are attributed to him. They were translated into Latin in the 12th century, and they were among the most important medical books used in Europe until the time of Harvey. Avicinina also wrote on alchemy, and he is important for having denied the possibility of transmutation of elements.

In mathematics, one of the most outstanding Arabic writers was al-Khwarizmi (c. 780 - c. 850). The title of his book, Ilm al-jabr wa'd muqabalah, is the source of the English word "algebra". In Arabic al-jabr means "the equating". Al-Khwarizmi's name has also become an English word, "algorism", the old word for arithmetic. Al-Khwarizmi drew from both Greek and Hindu sources, and through his writings the decimal system and the use of zero were transmitted to the West.

One of the outstanding Arabic physicists was al-Hazen (965-1038). He did excellent work in optics, and in this field he went far beyond anything done by the Greeks. Al-Hazen studied the reflection of light by the atmosphere, an effect which makes the stars appear displaced from their true positions when they are near the horizon; and he calculated the height of the atmospheric layer above the earth to be about ten miles. He also studied the rainbow, the halo, and the reflection of light from spherical and parabolic mirrors. In his book, On the Burning Sphere, he shows a deep understanding of the properties of convex lenses. Al-Hazen also used a dark room with a pin-hole opening to study the image of the sun during an eclipse. This is the first mention of the camera obscura, and it is perhaps correct to attribute the invention of the camera obscura to al-Hazen.

Another Islamic philosopher who had great influence on western thought was Averroes, who lived in Spain from 1126 to 1198. His writings took the form of thoughtful commentaries on the works of Aristotle. He shocked both his Muslim and his Christian readers by maintaining that the world was not created at a definite instant, but that it instead evolved over a long period of time, and is still evolving.

In the 12th century, parts of Spain, including the city of Toledo, were reconquered by the Christians. Toledo had been an Islamic cultural center, and many Muslim scholars, together with their manuscripts, remained in the city when it passed into the hands of the Christians. Thus Toledo became a center for the exchange of ideas between east and west; and it was in this city that many of the books of the classical Greek and Hellenistic

philosophers were translated from Arabic into Latin.

It is interesting and inspiring to visit Toledo. A tourist there can see ample evidence of a period of tolerance and enlightenment, when members of the three Abrahamic religions, Christianity, Judaism and Islam , lived side by side in harmony and mutual respect, exchanging important ideas which were to destined to become the foundations of our modern civilization. One can also see a cathedral, a mosque and a synagogue, in each of which craftsmen from all three faiths worked cooperatively to produce a beautiful monument to human solidarity.

7.5 Syria and Lebanon

World War II comes to Syria

Wartime regulations and blackouts began in 1939. After the fall of Paris in 1940, the Vichy government was in control of Lebanon, and Beirut was full of Italian and German troops. Describing this period, Bayard Dodge, President of the American University of Beirut, wrote: "The Vichy régeme in Beirut lasted from the early summer of 1940 until July 15, 1941. Prices rose, as petroleum products, sugar, rice and all sorts of imported goods became rare. Large supplies of grain disappeared and newspapers were filled with pro-German propaganda, which gained steadily in intensity. By May, 1941, the Germans had control of the entire region between the Mediterranean and the Persian Gulf. Everybody took it for granted that the German conquest of Greece and Crete would be followed by a similar invasion of Lebanon and Syria..."

President Dodge stayed in Beirut but most of the American and European members of the AUB faculty left for British-controlled Palestine with only a few hours notice. The students from outside the French mandated territory were sent home, but the university remained open for the remaining students. For thirteen months there was a virtual blitz, with bombardments night after night.

In her book, *Legacy to Lebanon*, Grace Dodge Guthrie has described her parent's experiences with the following words: "On June 12, 1940, a very ill soldier whom [my mother] had seen in the morning, died in the early afternoon. At 3:15 the next morning my parents heard planes flying low, severe antiaircraft attacks and machine-gun firing. Three large pieces of flying shrapnel, streaking red in the night, dropped in the garden, the porch roof, and extensively in the AUB grounds. When she visited the prisoners and the wounded in the military hospital, ambulances were arriving with badly wounded Lebanese, Colonials, and two British dead bodies.

"A year later, at 4:15 a.m. on June 16, 1941, [my parents] were roused by loud but distant gunfire off the point out at sea. Soon the sky glowed with bright flares, and the air was rent by rapid firing. Two French destroyers were repulsing an attack by five British boats off the point, and guns were firing on shore. Later that morning, most trucks, busses and cars were commandeered.

It was becoming increasingly difficult for people to find transport to evacuate... On

Figure 7.2: **Bayard Dodge, President of the American University of Beirut, and his fmily. Their residence was called Marquand House.**

23rd June, Mother reported 'the biggest battle yet: flares, machine- guns, antiaircraft guns, reconnaissance planes and big guns on shore. British are attacking villages, Abeih ([our] first summer home) etc. Much negotiation is going on between General Dentz and the British... One of our soldier patients told the doctor that many of his regiment went over to de Gaulle in South Lebanon.'

"On July 1st, a common occurrence during the war years, water and electricity were cut off all day. After bad raids all night, the Beirut radio went out. A shell burst on the AUB campus. Bombs and guns continued to shake the houses with earsplitting noise for six straight nights. Stores were burned and houses demolished. Masses of people were escaping to the mountains and the campus filling up at night with people seeking safety.

"On the morning of July 10th the French scuttled an old British ship near the St. Georges Hotel. A second ship was blown up at noon and a third British oil boat burned in the afternoon. My parents visited the port and watched the enormous clouds of black smoke and flames. The French High Command were burning papers and packing to go north."

The end of the fighting in Beirut came on July 14, 1941. President Dodge wrote: "In the middle of the night the university watchman picked up a piece of green paper, dropped from a British plane. He woke up the Director of Grounds and Buildings, who brought it to Marquand House. The paper was an ultimatum, which stated that unless General Dentz should stop his resistance before daybreak, the Free French and British would bombard Beirut.

"When Consul General Engert saw the ultimatum, he called on General Dentz, who, clad in his pajamas, talked with him for two hours and finally agreed to make an armistice.

Figure 7.3: **A map of Syria as it was when my family lived there. Tyre, Sidon and Biblos are ancient Phoenician cities.**

"The armistice was signed at Acre on July 14, 1941... On July 15th the Australian troops entered Beirut, and the next day the French and British Generals, Catroux and Wilson, made an official entry. When General de Gaulle reached the city, he and General Catroux very courteously called at Marquand House."

Mrs. Dodge wrote to her daughter Grace; "We'll never forget the day de Gaulle came for a tea party in our garden!"

Through General de Gaulle's influence, Lebanon obtained its independence, not only from France but also from Syria. In 1943 the first Lebanese elections were held. At the time the majority of Lebanese citizens were Christians, but Muslims formed a large minority. Government posts were carefully balanced to give representation to both groups.

7.6   Yemen

7.7   Politeness in multi-ethnic societies

The attack on Charlie Hebdo, in which 12 people were killed, claimed massive media attention worldwide. Everyone agreed that freedom of speech and democracy had been brutally attacked, and many people proclaimed "Je suis Charlie!", in solidarity with the murdered members of the magazine's staff.

In Denmark, it was proposed that the offending cartoons of the prophet Mohammad should be reprinted in major newspapers. However, in the United States, there was no such proposal, and in fact, US television viewers were not even allowed to see the drawings that had provoked the attack. How is this difference between Denmark and the US to be explained?

Denmark is a country with a predominantly homogeneous population, which only recently has become more diverse through the influx of refugees from troubled parts of the world. Thus, I believe, Denmark has not yet had time to learn that politeness is essential for preventing conflicts in a multi-ethnic society. On the other hand, the United States has lived with the problem for much longer.

During most of its history, the US has had substantial Spanish-speaking and Italian-speaking minorities, as well as great religious diversity. During the 1960's the civil rights movement fought against racial prejudice and gradually achieved most of its goals. Thus, over a very long period of time, the United States learned to avoid racial and religious insults in its media, and this hard-earned wisdom has allowed the very markedly multi-ethnic US society to function with a minimum of racial and religious conflicts.

Is this a lesson that the world as a whole needs to learn? I strongly believe that it is. Globally, we are in great need of a new ethic, which regards all humans as brothers and sisters, regardless of race, religion or nationality. Human solidarity will become increasingly important in the future, as stress from climate change and the vanishing of nonrenewable resources becomes more pronounced.

To get through the difficult time ahead of us, we will need to face the dangers and challenges of the future arm in arm, respecting each other's differing beliefs, and emphasizing

our common humanity rather than our differences.

7.8 Oil and conflicts in the Middle East

Before discussing the role of oil in the conflicts of the Middle East, it is perhaps worthwhile to look briefly at the general global fossil-fuel picture. Tables 9.1 and 9.2 show the current consumption and use of petroleum, while Table 9.3 illustrates the ultimately recoverable reserves of coal, oil and natural gas, with an indication of how long these resources would last if used at the present rate. Although one can argue about the exact figures, the essential features of the tables are beyond dispute, and several important conclusions can be drawn from them.

From Table 9.3, we can see that the global reserves of coal are very large, but that reserves of oil are so limited that at the 1990 rate of use they would last only 65 years.[4] One can predict that as the reserves of oil become exhausted, the price will rise to such an extent that production and consumption will diminish. Thus oil experts do not visualize a special date in the future after which oil will totally disappear, but rather a date at which the production and consumption of oil will reach a maximum and afterwards diminish because of scarcity of the resource and increase in price. Such a peak in the production of any nonrenewable resource is called a *Hubbert peak*, after Dr. M. King Hubbert, who applied the idea to oil reserves. Most experts agree that the Hubbert peak for oil will occur within a decade or two. Thus the era of cheap petroleum is rapidly approaching its end, and we must be prepared for the serious economic and political impacts of rising oil prices, as well as great changes in lifestyle in the industrialized countries. Halfway through the present century, petroleum will become too expensive and rare to be used as a fuel. It will be reserved almost exclusively for lubrication and as a starting material for the manufacture of plastics, paint, fertilizers and pharmaceuticals.

From Table 9.3 we can also see that the 1991 rate of energy use from fossil fuels was roughly 10.2 terawatts (TW). The total global rate of energy use at that time was 13.2 TW (as compared with roughly 1 TW in 1890). The 3.0 TW difference between fossil fuel use and total energy use in 1991 was distributed as follows: hydropower, 0.8 TW; nuclear, 0.7 TW; fuelwood, 0.9 TW; crop wastes, 0.4 TW; and dung, 0.2 TW. A terawatt is defined as 10^{12} Watts. With a global population of 6×10^9, 13.2 TW corresponds to 2.2 kilowatts per person. But global energy use is very unevenly distributed: North Americans use energy at the rate of 12 kilowatts per person, while in Bangladesh, the corresponding figure is only 0.1 kilowatts.

The contrast between energy use in the highly industrialized and less industrialized parts of the world can also be seen in Table 9.2. The US per-capita consumption of oil is currently 20 times that of China and 37 times the figure for India. One wonders what will

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[4]Notice that since 1 TWy = 5 Gb, it follows that 300 TWy = 1500 Gb. Thus the figure mentioned for the "Ultimately recoverable reserves" of oil in Table 9.3 is the same as the total at the bottom of the "Reserves and resources" column in Table 9.1

Table 7.1: *Oil production, reserves and resources in 1995 measured in billions of barrels (Gb). These data were originally published by Oil and Gas Journal and by US Geological Survey. 1 terawatt-year= 5Gb*

Country	Cumulative Production	Reserves	Undiscovered Resources	Reserves and Resources
Saudi Arabia	71.5	261.2	41.0	302.2
Iraq	22.8	112.5	45.0	157.5
Russia	92.6	100.0	68.0	168.0
Iran	42.9	93.0	22.0	115.0
UA Emirates	15.1	98.2	7.0	105.2
Kuwait	27.6	97.5	3.0	100.5
Venezuela	47.3	83.3	17.0	100.3
United States	165.8	50.7	49.0	99.7
Mexico	20.5	50.4	37.0	87.4
China	18.8	24.0	48.0	72.0
Kazakhstan	3.2	17.3	26.0	43.3
Canada	16.1	5.1	33.0	38.1
Libya	19.0	22.8	8.0	30.8
Nigeria	15.5	17.9	9.0	26.9
Norway	6.3	11.3	13.0	24.3
Indonesia	15.2	5.8	10.0	15.8
United Kingdom	12.3	4.6	11.0	15.6
Algeria	9.1	9.2	2.0	11.2
Totals	**621.6**	**1052.3**	**449.0**	**1513.8**

Table 7.2: *Main users of petroleum. (US Energy Information Agency, 2001.)*

Country	Yearly use in billions of barrels	Population (millions)	Per-capita yearly use in barrels
United States	7.17	276	26.0
China	1.82	1262	1.4
Germany	1.03	83	12.4
Japan	0.90	127	7.1
India	0.78	1014	0.8
France	0.74	59	12.5
Mexico	0.71	100	7.1
Canada	0.70	31	22.6
Italy	0.68	58	11.7
United Kingdom	0.63	60	10.5

happen when China and India, with their enormous populations, reach a rate of per-capita petroleum use approaching that of North America, Japan and Europe.

Petroleum accounts for 90% of the energy used in transportation, and it is also particularly important in agriculture. Thus it is worrying that we will encounter high and constantly increasing oil prices at just the moment when an unprecedentedly large global population will be putting pressure on the food supply. High oil prices will be reflected in high food costs. Even today we can see nations where famine occurs because their weak economies make the poorest countries unable to buy and import food. These vulnerable nations will be hit still harder by famine in the future.

Comparing Tables 9.1 and 9.2, we can see that the United States uses petroleum at the rate of more than 7 billion barrels (7 Gb) per year, while that country's estimated reserves and undiscovered resources are respectively 50.7 Gb and 49.0 Gb. Thus if the United States were to rely only on its own resources for petroleum, then, at the 2001 rate of use, these would be exhausted within 14 years. In fact, the United States already imports more than half of its oil. According to the "National Energy Policy" report (sometimes called the "Cheney Report" after its chief author) US domestic oil production will decline from 3.1 Gb/y in 2002 to 2.6 Gb/y in 2020, while US consumption will rise from 7.2 Gb/y to 9.3 Gb/y. Thus the United States today imports 57% of its oil, but the report predicts that by 2020 this will rise to 72%. The predicted increment in US imports of oil between 2002 and 2020 is greater than the present combined oil consumption of China and India.

It is clear from these figures that if the United States wishes to maintain its enormous rate of petroleum use, it will have to rely on imported oil, much of it coming from regions

Table 7.3: *Ultimately recoverable coal, oil and natural gas reserves.   1 TWy = 10^{12} Watt-year = 5 billion barrels of oil = 1 billion tons of coal. (From BP Statistical Review of World Energy, London, 1991). US ultimately recoverable reserves of oil and domestic consumption (in 2001) are shown for comparison. If the US used only its domestic oil, its reserves would soon be exhausted. However, the United States imports much of its petroleum from the Middle East.*

	Global reserves	1990 global rate of consumption	Years left at 1990 rate of use
Coal	6700 TWy	3.2 TW	2000 years
Oil	**300 TWy**	**4.6 TW**	**65 years**
Natural gas	300 TWy	2.4 TW	125 years
Total	7300 TWy	10.2 TW	(716 years)

	US reserves	2001 US rate of consumption	Years left at 2001 rate of use
Oil	**20 TWy**	**1.4 TW**	**14 years**

of the world that are politically unstable, or else unfriendly to America, or both. This fact does much to explain the massive US military presence in oil-rich regions of the world.

Speaking at a National Energy Summit, on March 19, 2001, Secretary of Energy Spencer Abraham stated that "America faces a major energy supply crisis over the next two decades. The failure to meet this challenge will threaten our nation's economic prosperity, compromise our security, and literally alter the way we lead our lives."

There is a close relationship between petroleum and war. James A. Paul, Executive Director of the Global Policy Forum, has described this relationship very clearly in the following words:

"Modern warfare particularly depends on oil, because virtually all weapons systems rely on oil-based fuel - tanks, trucks, armored vehicles, self-propelled artillery pieces, airplanes, and naval ships. For this reason, the governments and general staffs of powerful nations seek to ensure a steady supply of oil during wartime, to fuel oil-hungry military forces in far-flung operational theaters."

"Just as governments like the US and UK need oil companies to secure fuel for their global war-making capacity, so the oil companies need their governments to secure control over global oilfields and transportation routes. It is no accident, then, that the world's largest oil companies are located in the world's most powerful countries."

"Almost all of the world's oil-producing countries have suffered abusive, corrupt and undemocratic governments and an absence of durable development. Indonesia, Saudi Arabia, Libya, Iraq, Iran, Angola, Colombia, Venezuela, Kuwait, Mexico, Algeria - these and many other oil producers have a sad record, which includes dictatorships installed from abroad, bloody coups engineered by foreign intelligence services, militariization of government and intolerant right-wing nationalism."

Iraq, in particular, has been the scene of a number of wars motivated by the West's thirst for oil. During World War I, 1914-1918, the British captured the area (then known as Mesopotamia) from the Ottoman Empire after four years of bloody fighting. Although Lord Curzon[5] denied that the British conquest of Mesopotamia was motivated by oil, there is ample evidence that British policy was indeed motivated by a desire for control of the region's petroleum. For example, Curzon's Cabnet colleague Sir Maurice Hankey stated in a private letter that oil was "a first-class war aim". Furthermore, British forces continued to fight after the signing of the Murdos Armistice. In this way, they seized Mosul, the capital of a major oil-producing region, thus frustrating the plans of the French, who had been promised the area earlier in the secret Sykes-Picot Agreement. Lord Curzon was well aware of the military importance of oil, and following the end of the First World War he remarked: "The Allied cause has floated to victory on a wave of oil".

During the period between 1918 and 1930, fierce Iraqi resistance to the occupation was crushed by the British, who used poison gas, airplanes, incendiary bombs, and mobile armored cars, together with forces drawn from the Indian Army. Winston Churchill, who was Colonial Secretary at the time, regarded the conflict in Iraq as an important test of modern military-colonial methods.

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[5]a member of the British War Cabinet who became Foreign Minister immediately after the war

In 1932, Britain granted nominal independence to Iraq, but kept large military forces in the country and maintained control of it through indirect methods. In 1941, however, it seemed likely that Germany might try to capture the Iraqi oilfields, and therefore the British again seized direct political power in Iraq by means of military force. It was not only Germany that Britain feared, but also US attempts to gain access to Iraqi oil.

The British fear of US interest in Iraqi oil was soon confirmed by events. In 1963 the US secretly backed a military coup in Iraq that brought Saddam Hussein's Ba'ath Party to power.[6] In 1979 the western-backed Shah of Iran was overthrown, and the United States regarded the fundamentalist Shi'ite regime that replaced him as a threat to supplies of oil from Saudi Arabia. Washington saw Saddam's Iraq as a bulwark against the militant Shi'ite extremism of Iran that was threatening oil supplies from pro-American states such as Kuwait and Saudi Arabia.

In 1980, encouraged to do so by the fact that Iran had lost its US backing, Saddam Hussein's government attacked Iran. This was the start of a extremely bloody and destructive war that lasted for eight years, inflicting almost a million casualties on the two nations. Iraq used both mustard gas and the nerve gases Tabun and Sarin against Iran, in violation of the Geneva Protocol.

Both the United States and Britain helped Saddam Hussein's government to obtain chemical weapons. A chemical plant, called Falluja 2, was built by Britain in 1985, and this plant was used to produce mustard gas and nerve gas. Also, according to the Riegel Report to the US Senate, May 25, (1994), the Reagan Administration turned a blind eye to the export of chemical weapon precursors to Iraq, as well as anthrax and plague cultures that could be used as the basis for biological weapons. According to the Riegel Report, "records available from the supplier for the period 1985 until the present show that during this time, pathogenic (meaning disease producing) and toxigenic (meaning poisonous), and other biological research materials were exported to Iraq perusant to application and licensing by the US Department of Commerce."

In 1984, Donald Rumsfeld, Reagan's newly appointed Middle East Envoy, visited Saddam Hussein to assure him of America's continuing friendship, despite Iraqi use of poison gas. When (in 1988) Hussein went so far as to use poison gas against civilian citizens of his own country in the Kurdish village of Halabja, the United States worked to prevent international condemnation of the act. Indeed US support for Saddam was so unconditional that he obtained the false impression that he had a free hand to do whatever he liked in the region.

On July 25, 1990, US Ambassador April Glaspie met with Saddam Hussein to discuss oil prices and how to improve US-Iraq relations. According to the transcript of the meeting, Ms Galspie assured Saddam that the US "had no opinion on the Arab-Arab conflicts, like your border disagreement with Kuwait." She then left on vacation. Mistaking this conversation for a green light, Saddam invaded Kuwait eight days later.

By invading Kuwait, Hussein severely worried western oil companies and governments,

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[6]This was not the CIA's first sponsorship of Saddam: In 1959 he had been part of a CIA-authorized six-man squad that tried to assassinate the Iraqi Prime Minister, Abd al-Karim Qasim.

Figure 7.4: **Donald Rumsfeld and his close friend, Saddam Hussein**

since Saudi Arabia might be next in line. As George Bush senior said in 1990, at the time of the Gulf War, "Our jobs, our way of life, our own freedom and the freedom of friendly countries around the world would all suffer if control of the world's great oil reserves fell into the hands of Saddam Hussein."

On August 6, 1990, the UN Security Council imposed comprehensive economic sanctions against Iraq with the aim of forcing Iraq to withdraw from Kuwait. Meanwhile, US Secretary of State James A. Baker III used arm-twisting methods in the Security Council to line up votes for UN military action against Iraq. In Baker's own words, he undertook the process of "cajoling, extracting, threatening and occasionally buying votes".

On November 29, 1990, the Council passed Resolution 678, authorizing the use of "all necessary means" (by implication also military means) to force Iraq to withdraw from Kuwait. There was nothing at all wrong with this, since the Security Council had been set up by the UN Charter to prevent states from invading their neighbors. However, one can ask whether the response to Saddam Hussein's invasion of Kuwait would have been so wholehearted if oil had not been involved.

There is much that can be criticized in the way that the Gulf War of 1990-1991 was carried out. Besides military targets, the US and its allies bombed electrical generation facilities with the aim of creating postwar leverage over Iraq. The electrical generating plants would have to be rebuilt with the help of foreign technical assistance, and this help could be traded for postwar compliance. In the meantime, hospitals and water-purification plants were without electricity. Also, during the Gulf War, a large number of projectiles made of depleted uranium were fired by allied planes and tanks. The result was a sharp increase in cancer in Iraq. Finally, both Shi'ites and Kurds were encouraged by the Allies to rebel against Saddam Hussein's government, but were later abandoned by the allies and slaughtered by Saddam.

Figure 7.5: **Deaths of children under five years of age in Iraq, measured in thousands. This graph is based on a study by UNICEF, and it shows the effect of sanctions on child mortality. From UNICEF's figures it can be seen that the sanctions imposed on Iraq caused the deaths of more than half a million children.**

The most terrible misuse of power, however, was the US and UK insistence the sanctions against Iraq should remain in place after the end of the Gulf War. These two countries used their veto power in the Security Council to prevent the removal of the sanctions. Their motive seems to have been the hope that the economic and psychological impact would provoke the Iraqi people to revolt against Saddam. However that brutal dictator remained firmly in place, supported by universal fear of his police and by massive propaganda. The effect of the sanctions was to produce more than half a million deaths of children under five years of age, as is documented by the UNICEF data shown in Figure 1. The total number of deaths that the sanctions produced among Iraqi civilians probably exceeded a million, if older children and adults are included.

Ramsey Clark, who studied the effects of the sanctions in Iraq from 1991 onwards, wrote to the Security Council that most of the deaths "are from the effects of malnutrition including marasmas and kwashiorkor, wasting or emaciation which has reached twelve per cent of all children, stunted growth which affects twenty-eight per cent, diarrhea, dehydration from bad water or food, which is ordinarily easily controlled and cured, common communicable diseases preventable by vaccinations, and epidemics from deteriorating sanitary conditions. There are no deaths crueler than these. They are suffering slowly, helplessly, without simple remedial medication, without simple sedation to relieve pain, without mercy."

7.9 OPEC oil and climate change

In an amazing display of collective schizophrenia, our media treat oil production and the global climate emergency as though they were totally disconnected. But the use of all fossil fuels, including oil, must stop almost immediately if the world is to have a chance of avoiding uncontrollable and catastrophic climate change.

The recent Doha summit meeting of the Oil Producing and Exporting Countries (OPEC) aimed at reaching an agreement on limiting the production of oil. This aim did not stem from the climate emergency but rather a from desire to raise oil prices and profits. However, the OPEC meeting failed to reach an agreement. Production continues to be extremely high and prices low.[7]

Our high-energy lifestyles continue. Our profligate use of fossil fuels continues as though the life-threatening climate emergency did not exist. Meanwhile, temperatures in 2018 have totally smashed all previous records, and this is especially pronounced in the Arctic and Antarctic regions. Polar ice caps are melting in an alarmingly rapid and non-linear way. The rate of melting of the icecaps is far greater than predicted by conventional modeling which does not include feedback loops. Many island nations and coastal cities are threatened, not in the very distant future, but by the middle of our present century.

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[7]http://www.informationclearinghouse.info/article44427.htm
http://www.truth-out.org/news/item/35202-antarctica-on-the-brink-nasa-emeritus-   scientist-warns-of-dramatic-loss-of-glaciers
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https://www.newscientist.com/article/2084835-unprecedented-global-warming-as-2016- approaches-1-5-c-mark/

Figure 7.6: **Pipeline wars. The thirst for oil has been a strong motivating force for wars in the Middle East. A second motive has been Israel's wish to have military hegemony in the region.**

7.10   September 11, 2001

On the morning of September 11, 2001, two hijacked airliners were deliberately crashed into New York's World Trade Center, causing the collapse of of three skyscrapers and the deaths of more than three thousand people. Almost simultaneously, another hijacked airliner was driven into the Pentagon in Washington DC, and a fourth hijacked plane crashed in a field in Pennsylvania. The fourth plane probably was to have made a suicide attack on the White House or the Capitol, but passengers on the airliner became aware what was happening through their mobile telephones, and they overpowered the hijackers.

Blame for the September 11 attacks soon centered on the wealthy Saudi Arabian Islamic extremist, Osama bin Laden, and on his terrorist organization, al-Quaeda. In a later statement acknowledging responsibility for the terrorist attacks, bin Ladin gave as his main reasons firstly the massive US support for Israel, a country that, in his view, was committing atrocities against the Palestinians, and secondly the presence of US troops in Saudi Arabia.

Like Saddam Hussein, Osama bin Ladin was an ex-protegé of the CIA, by whom he had previously been armed, trained, and supported. The history of bin Ladin's relationship with the CIA began in 1979, when the CIA, acting through Pakistan's Inter-Services Intelligence Agency, began to train and arm the Mujaheddin, an international force of Islamic fundamentalists who were encouraged to attack Afghanistan's secular socialist government. US National Security Advisor Zbigniew Bryzinski anticipated that the Soviets would respond by sending troops to protect the socialist government of Afghanistan, and he believed that the resulting war would be the Soviet Union's version of Viet Nam: It would be a war that would fatally weaken the Soviet Union. Thus he saw the war that he was provoking in Afghanistan as an important step in the liberation of Eastern Europe. "What is most important in the history of the world?", Polish-born Bryzinski asked in a 1998 interview, "The Taliban, or the collapse of the Soviet empire? Some stirred-up Muslims, or the liberation of central Europe...?" It was, in fact, these same "stirred-up Muslims" who guided two hijacked aircraft into the Twin Towers on September 11, 2001.

Bin Ladin's father was the head of an extremely wealthy Saudi Arabian family, owner of a very large construction company, with close ties both to the Saudi royal family and the Bush family in America. Through his father's construction company, Osama bin Ladin became involved in building roads and bases for the Mujaheddin in Pakistan and Afghanistan. He also recruited Mujaheddin fighters and solicited support for them. After three years of fighting with covert US support, the Mujaheddin succeeded in defeating the Soviets and in gaining control of Afghanistan. Over eight years, the CIA had spent almost three billion dollars to support and train Islamic militants.

Despite his father's close connections with the Saudi ruling family, Osama bin Laden became progressively more radical in his views, which were influenced by the Wahhabi sect[8]. He wished to expel the US from the Middle East, and especially to expel US troops

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[8]The Wahhabi sect of Islam was founded by Abdul Wahhab (1703-1792). It is known for extremely

from Saudi Arabia. He also dreamed of leading a popular revolt to overthrow the Saudi rulers. He perhaps also visualized the formation of an Islamic superstate with control of much of the world's oil.

After the defeat of Soviet troops in Afghanistan, Osama bin Laden returned to Saudi Arabia, where he worked in his family's construction business. However, in 1991 he was expelled from Saudi Arabia for anti-government activities. He took refuge in Sudan, where he spent the next five years.

Bin Ladin is suspected of arranging a bomb attack on the World Trade Center in 1993, and the bombings of two US embassies in Africa in 1998, as well as an attack on the USS Cole in Yemen in 2000. When Sudan became unsafe for Osama and his organization, he moved to Afghanistan, where the Taliban movement had gained power. Because of his connection with the Mujaheddin, he was welcomed by the Taliban.

The Taliban began as predominantly Pashtun students of the religious madrasa schools of Pakistan, where an extreme Saudi-style Islamic fundamentalism was taught. In fact, the word "Taliban" means "student". Many of the Taliban had been born in refugee camps in Pakistan, and had thus lived with war all their lives. They became an ultraconservative militia, and when they gained control of much of Afghanistan, they reversed many of the liberties and reforms that had been achieved by the previous secular government. In particular, the position of Afghan women was greatly worsened by the Taliban, and production of heroin was much increased.

In discussing Iraq, we mentioned oil as a motivation for western interest. Similar considerations hold also for Afghanistan. US-controlled oil companies have long had plans for an oil pipeline from Turkmenistan, passing through Afghanistan to the Arabian Sea, as well as plans for a natural gas pipeline from Turkmenistan through Afghanistan to Pakistan.

The September 11 terrorist attacks resulted in a spontaneous worldwide outpouring of sympathy for the United States, and within the US, patriotic support of President George W. Bush at a time of national crisis. Bush's response to the attacks seems to have been to inquire from his advisors whether he was now free to invade Iraq. According to former counterterrorism chief, Richard Clarke, Bush was "obsessed" with Iraq as his principal target after 9/11.

The British Prime Minister, Tony Blair, was a guest at a private White House dinner nine days after the terrorist attacks on New York and Washington. Sir Christopher Meyer, former UK Ambassador to Washington, was also present at the dinner. According to Meyer, Blair said to Bush that they must not get distracted from their main goal - dealing with the Taliban and al-Quaeda in Afghanistan, and Bush replied: "I agree with you Tony. We must deal with this first. But when we have dealt with Afghanistan, we must come back to Iraq." Faced with the prospect of wars in both Iraq and Afghanistan, Blair did not protest, according to Meyer.

During the summer of 2002, Bush and Blair discussed Iraq by telephone. A senior official from Vice-President Dick Cheney's office who read the transcript of the call is

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strict observance of the Koran, and it flourishes mainly in Saudi Arabia.

quoted by the magazine Vanity Fair as saying: "The way it read was that come what may, Saddam was going to go; they said that they were going forward, they were going to take out the regime, and they were doing the right thing. Blair did not need any convincing. There was no 'Come on, Tony, we've got to get you on board'. I remember reading it and then thinking, 'OK, now I know what we're going to be doing for the next year.'"

On June 1, 2002, Bush announced a new US policy which not only totally violated all precedents in American foreign policy but also undermined the United Nations Charter and international law[9]. Speaking at the graduation ceremony of the US Military Academy at West Point he asserted that the United States had the right to initiate a preemptive war against any country that might in the future become a danger to the United States. "If we wait for threats to fully materialize," he said, "we will have waited too long." He indicated that 60 countries might fall into this category, roughly a third of the nations of the world.

The assertion that the United States, or any other country, has the right to initiate preemptive wars specifically violates Chapter 1, Articles 2.3 and 2.4, of the United Nations Charter. These require that "All members shall settle their disputes by peaceful means in such a manner that international peace, security and justice are not endangered", and that "All members shall refrain in their international relations from the threat or use of force against the territorial integrity of any state, or in any other manner inconsistent with the purposes of the United Nations." The UN Charter allows a nation that is actually under attack to defend itself, but only until the Security Council has had time to act.

Bush's principle of preemptive war was promptly condemned by the Catholic Church. Senior Vatican officials pointed to the Catholic teaching that "preventive" war is unjustifiable, and Archbishop Renato Martino, prefect of the Vatican Council for Justice and Peace, stated firmly that "unilateralism is not acceptable". However, in the United States, the shocking content of Bush's West Point address was not fully debated. The speech was delivered only a few months after the 9/11 terrorist attacks, and the US supported whatever exceptional measures its President thought might be necessary for the sake of national security. American citizens, worried by the phenomenon of terrorism, did not fully appreciate that the principle of preemptive war could justify almost any aggression, and that in the long run, if practiced by all countries, it would undermine the security of the United States as well as that of the entire world.

During the spring of 2003, our television and newspapers presented us with the spectacle of an attack by two technologically superior powers on a much less industrialized nation, a nation with an ancient and beautiful culture. The ensuing war was one-sided. Missiles guided by laser beams and signals from space satellites were more than a match for less sophisticated weapons. Speeches were made to justify the attack. It was said to be needed because of weapons of mass destruction (some countries are allowed to have them, others not). It was said to be necessary to get rid of a cruel dictator (whom the attacking powers had previously supported and armed). But the suspicion remained that the attack was resource-motivated. It was about oil.

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[9]He had previously abrogated a number of important treaties.

Figure 7.7: **The "shock and awe" bombardment of Iraq.**

Figure 7.8: **Israel's takeover of Palistinian lands.**

7.11 Collective punishment and the blockade of Gaza

On Wednesday, November 14, 2012, Ahmed Jabari, leader of the military wing of Hamas, was assassinated by a targeted Israeli missile. Hours earlier, Jabas had received a draft of a permanent peace agreement with Israel. The assassination of Jabari must have been carefully planned in order for his whereabouts to have been known so accurately. The probable motive for the killing was to provoke the response that did indeed follow: the firing of Hamas rockets towards Israel. Benjamin Netanyahu's government responded to the rockets with a massive attack on civilian targets in Gaza, a response that also seems to have been carefully planned in advance, the timing being motivated by the nearness of elections in Israel.

Under the Fourth Geneva Convention, collective punishment is war crime. Article 33 states that "No protected person may be punished for an offense that he or she did not personally commit." Articles 47-78 also impose substantial obligations on occupying powers, with numerous provisions for the general welfare of the inhabitants of an occupied territory.

Thus Israel violated the Geneva Conventions by its collective punishment of the civilian population of Gaza in retaliation for the largely ineffective Hamas rocket attack which the Jabari assassination provoked. The larger issue, however, is the urgent need for lifting of Israel's brutal blockade of Gaza, which has created what Noam Chomsky calls the "the world's largest open-air prison".

Francis A. Boyle, Professor of International Law at the University of Illinois, states that "What we're seeing in Gaza now, is pretty much slow-motion genocide against the 1.5 million people who live in Gaza... If you read the 1948 Genocide Convention, it clearly says that one instance of genocide is the deliberate infliction of conditions of life calculated to bring about the physical destruction of a people in whole or in part... And that's exactly what has been done since the imposition of the blockade by Israel. "

Because of its limitless military and financial backing of Israel, the United States shares the blame for allowing Israel to create an Apartheid state even more gruesome than the one that the world unanimously condemned in South Africa.

7.12 An attack on Iran could escalate

Despite the willingness of Iran's new President, Hassan Rouhani to make all reasonable concessions to US demands, Israeli pressure groups in Washington continue to demand an attack on Iran. But such an attack might escalate into a global nuclear war, with catastrophic consequences.

As we approach the 100th anniversary World War I, we should remember that this colossal disaster escalated uncontrollably from what was intended to be a minor conflict. There is a danger that an attack on Iran would escalate into a large-scale war in the Middle East, entirely destabilizing a region that is already deep in problems.

The unstable government of Pakistan might be overthrown, and the revolutionary Pak-

istani government might enter the war on the side of Iran, thus introducing nuclear weapons into the conflict. Russia and China, firm allies of Iran, might also be drawn into a general war in the Middle East. Since much of the world's oil comes from the region, such a war would certainly cause the price of oil to reach unheard-of heights, with catastrophic effects on the global economy.

In the dangerous situation that could potentially result from an attack on Iran, there is a risk that nuclear weapons would be used, either intentionally, or by accident or miscalculation. Recent research has shown that besides making large areas of the world uninhabitable through long-lasting radioactive contamination, a nuclear war would damage global agriculture to such a extent that a global famine of previously unknown proportions would result.

Thus, nuclear war is the ultimate ecological catastrophe. It could destroy human civilization and much of the biosphere. To risk such a war would be an unforgivable offense against the lives and future of all the peoples of the world, US citizens included.

To accept money from agents of a foreign power to perform actions that put one's own country in danger is, by definition, an act of treason. Why are members of the US Senate and House of Representatives, who demonstrably have accepted money from agents of a foreign power, the State of Israel, not accused of treason when they are bribed to take actions that put their country in danger? If members of the US government should vote for an attack on Iran, they would be traitors not only to the United States, but to all of humanity, and indeed traitors to all living things.

Possibly as early as this autumn, Israel may start a large-scale war in the Middle East and elsewhere by bombing Iran. The consequences are unforeseeable, but there are several ways in which the conflict could escalate into a nuclear war, particularly if the US supports the Israeli attack, and if Pakistan, Russia and China become involved.

Why is the threat especially worrying? Because of the massive buildup of U.S. naval forces in the Persian Gulf. Because of Netanyahu's government's stated intention to attack Iran, despite opposition from the people of Israel. Because of President Obama's declarations of unconditional support for Israel; and because Pakistan, a nuclear power, would probably enter the war on the side of Iran.

Most probably, a military attack on Iran by Israel would provoke an Iranian missile attack on Tel Aviv, and Iran might also close the Strait of Hormuz. The probable response of the U.S. would be to bomb Iranian targets, such as shore installations on the Persian Gulf. That might well provoke Iran to sink one or more U.S. ships by means of rockets, and if that should happen, the U.S. public would demand massive retaliation against Iran.

Meanwhile, in Pakistan, the unpopularity of the U.S.-Israel alliance, as well as the memory of numerous attrocities, might lead to the overthrow of Pakistan's less-than-stable government. Israels response might be a preemptive nuclear attack on Pakistan's nuclear installations. One reads that Russia has already prepared for the conflict by massing troops and armaments in Armenia, and China may also be drawn into the conflict.

In this tense situation, there would be a danger that a much larger nuclear exchange could occur because of a systems failure or because of an error of judgement by a military or political leader. A thermonuclear war would be the ultimate environmental disaster.

Recent research has shown that thick clouds of smoke from firestorms in burning cities would rise to the stratosphere, where they would spread globally and remain for a decade, blocking the hydrological cycle, and destroying the ozone layer. A decade of greatly lowered temperatures would also follow. Global agriculture would be destroyed. Human, plant and animal populations would perish.

We must also consider the very long-lasting effects of radioactive contamination. One can gain a small idea of what it would be like by thinking of the radioactive contamation that has made large areas near to Chernobyl and Fukushima permanently uninhabitable, or the testing of hydrogen bombs in the Pacific in the 1950's, which continues to cause leukemia and birth defects in the Marshall Islands more than half a century later. In the event of a thermonuclear war, the contamination would be enormously greater.

We have to remember that the total explosive power of the nuclear weapons in the world today is 500,000 times as great as the power of the bombs that destroyed Hiroshima and Nagasaki. What is threatened today is the complete breakdown of human civilization and the destruction of much of the biosphere.

The common human culture that we all share is a treasure to be carefully protected and handed down to our children and grandchildren. The beautiful earth, with its enormous richness of plant and animal life, is also a treasure, almost beyond our power to measure or express. What enormous arrogance and blasphemy it is for our leaders to think of risking these in a thermonuclear war! '

7.13   Israel, Iran and the NPT

The NPT was designed to prevent the spread of nuclear weapons beyond the five nations that already had them; to provide assurance that "peaceful" nuclear activities of non-nuclear-weapon states would not be used to produce such weapons; to promote peaceful use of nuclear energy to the greatest extent consistent with non-proliferation of nuclear weapons; and finally, to ensure that definite steps towards complete nuclear disarmament would be taken by all states, as well steps towards comprehensive control of conventional armaments (Article VI).

The non-nuclear-weapon states insisted that Article VI be included in the treaty as a price for giving up their own ambitions. The full text of Article VI is as follows:

"Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a Treaty on general and complete disarmament under strict international control."

Several nuclear weapon states, notably the United States, are grossly violating Article VI.

The NPT has now been signed by 187 countries and has been in force as international law since 1970. However, Israel, India, Pakistan, and Cuba have refused to sign, and North Korea, after signing the treaty, withdrew from it in 1993.

According to Wikipedia, Israel's first Prime Minister, David Ben-Gurion was "nearly

obsessed with obtaining nuclear weapons", and under his administration, work on obtaining these weapons for Israel was started in 1949 under his administration.

The Wikipedia article states that "In 1949 Israeli scientists were invited to the Saclay Nuclear Research Centre, this cooperation leading to a joint effort including sharing of knowledge between French and Israeli scientists especially those with knowledge from the Manhattan Projec... Progress in nuclear science and technology in France and Israel remained closely linked throughout the early fifties....There were several Israeli observers at the French nuclear tests and the Israelis had unrestricted access to French nuclear test explosion data.

The article continues: "When Egyptian President Gamal Abdel Nasser nationalized the Suez Canal, France proposed Israel attack Egypt and invade the Sinai as a pretext for France and Britain to invade Egypt posing as 'peacekeepers' with the true intent of seizing the Suez Canal. In exchange, France would provide the nuclear reactor as the basis for the Israeli nuclear weapons program. Shimon Perez, sensing the opportunity on the nuclear reactor, accepted."

According to Wikipedia, "Top secret British documents obtained by BBC Newsnight show that Britain made hundreds of secret shipments of restricted materials to Israel in the 1950s and 1960s. These included specialist chemicals for reprocessing and samples of fissile material, uranium-235, in 1959, and plutonium in 1966, as well as highly enriched lithium-6, which is used to boost fission bombs and fuel hydrogen bombs. The investigation also showed that Britain shipped 20 tons of heavy water directly to Israel in 1959 and 1960 to start up the Dimona reactor."

Here we see both France and Britain as gross violators of the NPT, since the NPT forbids nations possessing nuclear weapons helping other nations to obtain them. The United States government knew what was happening, but prevented the knowledge from becoming public.

Israel completed its first nuclear weapons in the early 1960's. The country is now thought to have 100 to 300 of them, including hydrogen bombs and neutron bombs. Israel's government maintains a policy of "nuclear opacity", meaning that while visibly possessing nuclear weapons, it denies having them.

Mordechai Vanunu, whistleblower and martyr

Mordechai Vanunu was working as a technician at the Israeli reactor installation Dimona, where he observed work on the construction nuclear weapons. As he thought more and more about what he was doing, his conscience began to bother him. In 1986, on a trip to England, he told the British press what he knew about the Israeli nuclear weapons program.

The government of Israel was furious, and arranged a classical "honey trap" in which a female agent of Mossad used sex to lure Vanunu to Italy, where he was drugged and kidnapped. The drugged prisoner was transported to Israel and tried for treason. In fact one of Vanunu's motives had been to save his country from destruction in a nuclear war. Whistleblowers are often the best patriots.

Vanunu spent 18 years in prison, the first 11 of which were in solitary confinement. Released in 2004, he thought that he would be free to leave the country, but he was soon re-arrested.

Today, he is free to move within Israel but his movements and contacts are severely restricted. Vanunu is often considered to be a prisoner of conscience similar to Nelson Mandela, Chelsea Manning, Julian Assange and Edward Snowdon. The fact that Israel has an apartheid system even worse than the one that formerly oppressed South Africa strengthens the the similarity between Vanunu and Mandela.

Suggestions for further reading

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Chapter 8

INEQUALITY, OLIGARCHY, AND CLIMATE CHANGE

"Every Night & every Morn,
Some to Misery are Born.
Every Night & every Morn,
Some are Born to sweet delight.
Some are Born to sweet delight,
Some are Born to Endless Night."

William Blake

"Whatever happens, we have got
The Maxim gun, and they have not."

Hilaire Beloc

8.1 Intolerable economic inequality

The excessive inequality that we can see today, both within countries and between countries, has many harmful effects, and these are experienced by both poor and rich. For example, crime, drug use, and mental illness are much more common in very unequal societies.

On a global scale, the vast chasm of economic inequality between countries blocks efforts to make the United Nations more effective, since rich countries fear that a more effective UN will rob them of their privileged position.

We must also remember that inequality between nations is often maintained by means of military force, regime-change, and interference by powerful nations in the internal affairs of weaker ones.

Oxfam's report on inequality

A recent report by Oxfam[1] has revealed that the wealth of the poorest half of the world's population has fallen by a trillion dollars since 2010, a drop of 38%. Meanwhile, the wealth of the richest 62 people in the world has increased to 1.76 trillion dollars. In fact, the wealthiest 62 individuals now own more than the poorest half of the world's population. Enormous contrasts exist today, not only between nations, but also within nations.

Winnie Byanyima, Oxfam's International Executive Director stated that "It is simply unacceptable that the poorest half of the world's population owns no more than a few dozen super-rich people who could fit onto one bus. World leaders' concern about the escalating inequality has so far not translated into concrete action; the world has become a much more unequal place, and the trend is accelerating. We cannot continue to allow hundreds of millions of people to go hungry while resources that could be used to help them are sucked up by those at the top."

Speaking at the Davos Forum in Switzerland, she continued: "I challenge the governments and elites at Davos to play their part in in ending the era of tax havens, which is fueling economic inequality and preventing hundreds of millions of people from lifting themselves out of poverty. Multinational companies and wealthy elites are playing by different rules than everyone else, refusing to pay the taxes that society needs to function. The fact that 188 of 201 leading companies have a presence in at least one tax haven shows that it it time to act."

Oxfam estimates that globally, 7.6 trillion dollars of individual's wealth sits offshore, and this includes as much as 38% of African financial wealth.

Persistent effects of colonialism

Part of the extreme economic inequality that exists in today's world is due to colonial and neocolonial wars.

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[1]https://www.oxfam.org/en/research/economy-1

The Industrial Revolution opened up an enormous gap in military strength between the industrialized nations and the rest of the world. Taking advantage of their superior weaponry, Europe, the United States and Japan rapidly carved up the remainder of the world into colonies, which acted as sources of raw materials and food, and as markets for manufactured goods. Between 1800 and 1914, the percentage of the earth under the domination of colonial powers increased to 85 percent, if former colonies are included.

The English economist and Fabian, John Atkinson Hobson (1858-1940), offered a famous explanation of the colonial era in his book "Imperialism: A Study" (1902). According to Hobson, the basic problem that led to colonial expansion was an excessively unequal distribution of incomes in the industrialized countries. The result of this unequal distribution was that neither the rich nor the poor could buy back the total output of their society. The incomes of the poor were insufficient, and rich were too few in number. The rich had finite needs, and tended to reinvest their money. As Hobson pointed out, reinvestment in new factories only made the situation worse by increasing output.

Hobson had been sent as a reporter by the Manchester Guardian to cover the Second Boer War. His experiences had convinced him that colonial wars have an economic motive. Such wars are fought, he believed, to facilitate investment of the excess money of the rich in African or Asian plantations and mines, and to make possible the overseas sale of excess manufactured goods. Hobson believed imperialism to be immoral, since it entails suffering both among colonial peoples and among the poor of the industrial nations. The cure that he recommended was a more equal distribution of incomes in the manufacturing countries.

Neocolonialism?

In his book, *Neocolonialism, The Last Stage of Imperialism* (Thomas Nielsen, London, 1965), Kwami Nkrumah defined neocolonialism with the following words: "The essence of neocolonialism is that the State which is subject to it is, in theory independent, and has all the outward trappings of international sovereignty. In reality its economic system and thus its political policy is directed from the outside. The methods and form of this direction can take various shapes. For example, in an extreme case, the troops of the imperial power may garrison the territory of the neocolonial State and control the government of it. More often, however, neocolonial control is exercised through monetary means... The struggle against neocolonialism is not aimed at excluding the capital of the developed world from operating in less developed countries. It is aimed at preventing the financial power of the developed countries from being used in such a way as to impoverish the less developed."

The resource curse

The way in which the industrialized countries maintain their control over less developed nations can be illustrated by the "resource curse", i.e. the fact that resource-rich developing countries are no better off economically than those that lack resources, but are cursed with corrupt and undemocratic governments. This is because foreign corporations extracting

Figure 8.1: **A late 19th century French cartoon showing England, Germany, Russia, France and Japan slicing up the pie of China.** (Public domain)

Figure 8.2: **A cartoon showing Cecil Rhodes' colonial ambitions for Africa. The thread in his hands represents a proposed Cape-Town-to-Cairo telegraph line. He wanted to "paint the map British red", and declared, "If I could, I would annex other planets."** (Public domain)

local resources under unfair agreements exist in a symbiotic relationship with corrupt local officials.

One might think that taxation of foreign resource-extracting firms would provide developing countries with large incomes. However, there is at present no international law governing multinational tax arrangements. These are usually agreed to on a bilateral basis, and the industrialized countries have stronger bargaining powers in arranging the bilateral agreements.

Manufacture and export of small arms

Another important poverty-generating factor in the developing countries is war - often civil war. The five permanent members of the U.N. Security Council are, ironically, the five largest exporters of small arms. Small arms have a long life. The weapons poured into Africa by both sides during the Cold War are still there, and they contribute to political chaos and civil wars that block development and cause enormous human suffering.

The United Nations website on Peace and Security through Disarmament states that "Small arms and light weapons destabilize regions; spark, fuel and prolong conflicts; obstruct relief programmes; undermine peace initiatives; exacerbate human rights abuses; hamper development; and foster a 'culture of violence'."

An estimated 639 million small arms and light weapons are in circulation worldwide, one for every ten people. Approximately 300,000 people are killed every year by these weapons, many of them women and children.

Examples of endemic conflict

In several regions of Africa, long-lasting conflicts have prevented development and caused enormous human misery. These regions include Ethiopia, Eritiria, Somalia (Darfur), Chad, Zimbabwe and the Democratic Republic of Congo. In the Congo, the death toll reached 5.4 million in 2008, with most of the victims dying of disease and starvation, but with war as the root cause. In view of these statistics, the international community can be seen to have a strong responsibility to stop supplying small arms and ammunition to regions of conflict. There is absolutely no excuse for the large-scale manufacture and international sale of small arms that exists today.

The plight of indigenous peoples

Readers of Charles Darwin's book describing *The Voyage of the Beagle* will remember his horrifying account of General Rosas' genocidal war against the Amerind population of Argentina. Similar genocidal violence has been experienced by indigenous peoples throughout South and Central America, and indeed throughout the world. In general, the cultures of indigenous peoples require much land, and greed for this land is the motive for violence against them. However, the genetic and cultural heritage of indigenous peoples can po-

Figure 8.3: **Children sleeping in Mulberry Street, New York City, 1890 (Jacob Riis photo)** (Public domain)

tentially be of enormous value to humanity, and great efforts should be made to protect them.

The resurgence of infectious disease

Tropical diseases

Endemic disease is strongly linked to poverty. Great improvements in reducing the effects of diseases like HIV/AIDS, malaria, schistosomiasis, trichoniosis, and river blindness could be made if pharmaceutical companies could be induced to do more research on tropical diseases and to provide drugs to developing countries at affordable prices. Other important measures would be universal vaccination programs, and the provision of safe water to all. It is in the interests of developed countries to promote health in the developing world, because air travel can quickly spread epidemics from one region to another.

HIV/AIDS

In 2004, there were approximately 39.4 million people living with HIV, 4.9 million new HIV infections, and 3.1 million deaths due to AIDS. It is estimated that in five populous countries, Nigeria, Ethiopia, Russia, India and China, the number of people infected with

Figure 8.4: **20,000 children die each day from starvation.** (Public domain)
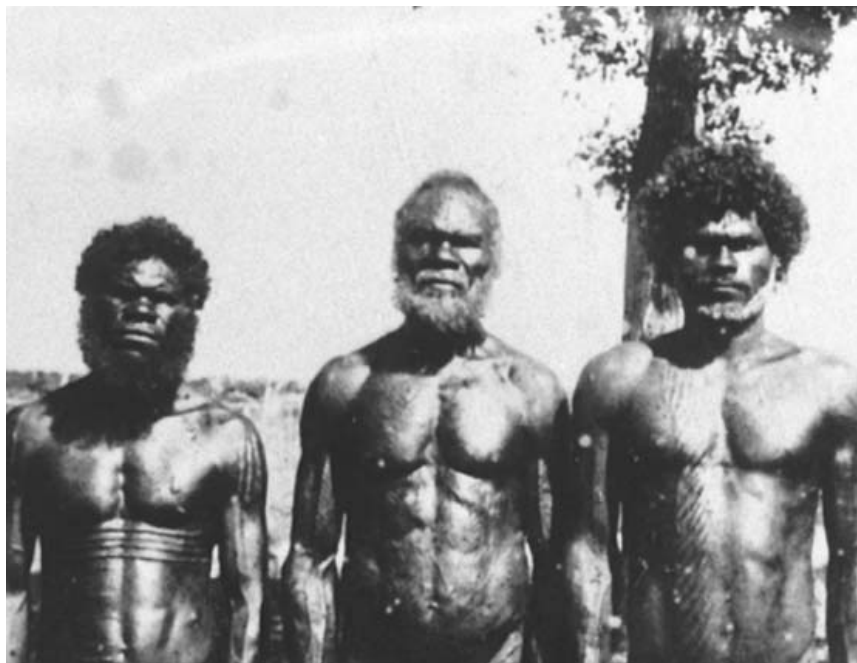
Figure 8.5: **Men from Bathurst Island in Australia's Northern Territories. Indigenous people everywhere in the world are under great pressure from those who desire their land. Indigenous cultures and languages are in danger of being lost.** (Wikipedia)

HIV/AIDS will grow from 14-23 million currently to 50-75 million by 2010. 95% of those living with HIV/AIDS do not know that they are infected with the disease.

Tuberculosis

Approximately 2 billion people (one third of the world's population!) are infected with TB, often in a latent form. 90% of the burden of TB falls on the developing countries; on India alone, 30%. Roughly 2 million people die from TB each year. It is the number one killer of women of childbearing age.

Malaria

Every year there are 300 million cases of malaria, and it causes about one million deaths. There are roughly 10 new cases of malaria every second, 90% of which are in Africa. A quarter of all childhood deaths in Africa are due to malaria.

Slavery

Debt slavery

At the moment, the issue of debt slavery is very topical because of the case of Greece; but it is an issue that has a far more general significance.

Usury, the charging of interest on loans, has a history of being forbidden by several major religions, including not only the three Abrahamic religions, Judaism, Christianity and Islam, but also the ancient Vedic Scriptures of India.

Perhaps the reason for these religious traditions can be found in the remarkable properties of exponential growth. If any quantity, for example indebtedness, is growing at the rate of 3% per year, it will double in 23.1 years; if it is growing at the rate of 4% per year, the doubling time is 17.3 years. For a 5% growth rate, the doubling time is 13.9 years, if the growth rate is 7%, the doubling time is only 9.9 years. It follows that if a debt remains unpaid for a few years, most of the repayments will go for interest, rather than for reducing the amount of the debt.

In the case of the debts of third world countries to private banks in the industrialized parts of the world and to the IMF, many of the debts were incurred in the 1970's for purposes which were of no benefit to local populations, for example purchase of military hardware. Today the debts remain, although the amount paid over the years by the developing countries is very many times the amount originally borrowed. Third world debt can be regarded as a means by which the industrialized nations extract raw materials from developing countries without any repayment whatever. In fact, besides extracting raw materials, they extract money.

Child labour and child slavery

The reform movement's efforts, especially those of the Fabians, overcame the worst horrors of early 19th century industrialism, but today their hard-won achievements are being undermined and lost because of uncritical and unregulated globalization. Today, a factory owner or CEO, anxious to avoid high labor costs, and anxious to violate environmental regulations merely moves his factory to a country where laws against child labor and rape of the environment do not exist or are poorly enforced. In fact, he must do so or be fired, since the only thing that matters to the stockholders is the bottom line. One might say (as someone has done), that Adam Smith's invisible hand is at the throat of the world's peoples and at the throat of the global environment.

The movement of a factory from Europe or North America to a country with poorly enforced laws against environmental destruction, child labor and slavery puts workers into unfair competition. Unless they are willing to accept revival of the unspeakable conditions of the early Industrial Revolution, they are unable to compete.

Today, child labor accounts for 22% of the workforce in Asia, 32% in Africa, and 17% in Latin America. Large-scale slavery also exists today, although there are formal laws against it in every country. There are more slaves now than ever before. Their number is estimated to be between 12 million and 27 million. Besides outright slaves, who are bought and sold for as little as 100 dollars, there many millions of workers whose lack of options and dreadful working conditions must be described as slavelike.

Enforcement, in all countries, of laws against child labor would help to stabilize the world's rapidly growing population. When children are regarded as a source of income, or are sold into slavery or prostitution, parents aim for very large families. Thus, slavery or slavelike exploitation of children is a factor behind the global population explosion.

Political and geopolitical consequences of inequality

The intolerable economic inequality of today's world is closely linked with the problem of war:

- Military force is used to maintain neocolonialism and unfair trade relationships between countries.

- Billionaires and corporations use their enormous wealth to dominate governments and media. When this happens, democracy is replaced by oligarchy, and motives of profit take the place of social and ecological goals. The military-industrial complex also gains control of governmental budgets.

- The enormous amounts of money used for war could have been used for education, infrastructure, public health (including information and materials for family planning), sanitary drinking water, and social services.

- An effective system of international law is needed for the abolition of war. But at present, economic inequality between countries is so great that rich countries fear effective global governance because they fear taxation.

Benefits of equality

Interestingly, TED Talks (ideas worth spreading) was recently under fire from many progressive groups for censoring a short talk by the adventure capitalist, Nick Hanauer, entitled "Income Inequality". In this talk, Hanauer says exactly the same thing as John Hobson, but he applies the ideas, not to colonialism, but to current unemployment in the United States. Hanauer says that the rich are unable to consume the products of society because they are too few in number. To make an economy work, demand must be increased, and for this to happen, the distribution of incomes must become much more equal than it is today in the United States.

TED has now posted Hanauer's talk, and the interested reader can find another wonderful TED talk dealing with the same issues from the standpoint of health and social problems. In a splendid lecture entitled "How economic inequality harms societies", Richard Wilkinson demonstrates that there is almost no correlation between gross national product and a number of indicators of the quality of life, such as physical health, mental health, drug abuse, education, imprisonment, obesity, social mobility, trust, violence, teenage pregnancies and child well-being. On the other hand he offers comprehensive statistical evidence that these indicators are strongly correlated with the degree of inequality within countries, the outcomes being uniformly much better in nations where income is more equally distributed.

Warren Buffet famously remarked, "There's class warfare, all right. But it's my class, the rich class, that's making war, and we're winning." However, the evidence presented by Hobson, Hanauer and Wilkinson shows conclusively that no one wins in a society where inequality is too great, and everyone wins when incomes are more evenly distributed.

We must decrease economic inequality

In his Apostolic Exhortation, "Evangelii Gaudium", Pope Francis said:

"In our time humanity is experiencing a turning-point in its history, as we can see from the advances being made in so many fields. We can only praise the steps being taken to improve peoples welfare in areas such as health care, education and communications. At the same time we have to remember that the majority of our contemporaries are barely living from day to day, with dire consequences. A number of diseases are spreading. The hearts of many people are gripped by fear and desperation, even in the so-called rich countries. The joy of living frequently fades, lack of respect for others and violence are on the rise, and inequality is increasingly evident. It is a struggle to live and, often, to live with precious little dignity."

"This epochal change has been set in motion by the enormous qualitative, quantitative, rapid and cumulative advances occurring in the sciences and in technology, and by their

instant application in different areas of nature and of life. We are in an age of knowledge and information, which has led to new and often anonymous kinds of power."

"Just as the commandment 'Thou shalt not kill' sets a clear limit in order to safeguard the value of human life, today we also have to say 'thou shalt not' to an economy of exclusion and inequality. Such an economy kills. How can it be that it is not a news item when an elderly homeless person dies of exposure, but it is news when the stock market loses two points? This is a case of exclusion. Can we continue to stand by when food is thrown away while people are starving? This is a case of inequality. Today everything comes under the laws of competition and the survival of the fittest, where the powerful feed upon the powerless. As a consequence, masses of people find themselves excluded and marginalized: without work, without possibilities, without any means of escape."

"In this context, some people continue to defend trickle-down theories which assume that economic growth, encouraged by a free market, will inevitably succeed in bringing about greater justice and inclusiveness in the world. This opinion, which has never been confirmed by the facts, expresses a crude and naive trust in the goodness of those wielding economic power and in the sacralized workings of the prevailing economic system. Meanwhile, the excluded are still waiting."

In a recent speech, Senator Bernie Sanders quoted Pope Francis extensively and added: "We have a situation today, Mr. President, incredible as it may sound, where the wealthiest 85 people in the world own more wealth than the bottom half of the world's population."[2]

The social epidemiologist Prof. Richard Wilkinson, has documented the ways in which societies with less economic inequality do better than more unequal societies in a number of areas, including increased rates of life expectancy, mathematical performance, literacy, trust, social mobility, together with decreased rates of infant mortality, homicides, imprisonment, teenage births, obesity and mental illness, including drug and alcohol addiction.[3] We must also remember that according to the economist John A. Hobson, the basic problem that led to imperialism was an excessively unequal distribution of incomes in the industrialized countries. The result of this unequal distribution was that neither the rich nor the poor could buy back the total output of their society. The incomes of the poor were insufficient, and rich were too few in number.

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[2]https://www.youtube.com/watch?v=9_LJpN893Vg
https://www.oxfam.org/en/tags/inequality
https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/cr-even-it-up-extreme-inequality-291014-en.pdf
[3]https://www.youtube.com/watch?v=cZ7LzE3u7Bw
https://en.wikipedia.org/wiki/Richard_G._Wilkinson

Figure 8.6: **Zaatari refugee camp for Syrian refugees in Jordan which only contains a population of 80,000 out of the 1.3 million in the country. It is expected that climate change will contribute to the refugee crisis and the problem of famine. International cooperation is needed to meet this emergency.** (Public domain)
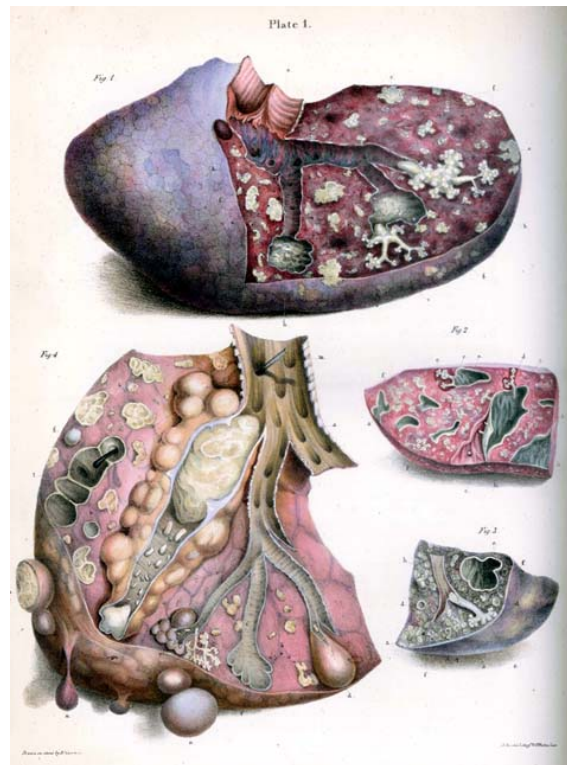
Figure 8.7: **The amount of money needed to effectively combat diseases such as tuberculosis is a tiny fraction of the colossal sums spent on wars and armament.** (Public domain)

Figure 8.8: **A village school.** (Rediff.com)

8.2 Corporate oligarchy and the decay of democracy

8.3 Unequal impacts of climate change

8.4 Climate change denial

The October 2018 IPCC Report

The world's leading scientists met at the Forty-Eighth Session of the IPCC and First Joint Session of Working Groups I, II, and III, 1-5 October 2018 in Incheon, Republic of Korea and openly declared that civilization is on track for collapse because of reckless use of fossil fuels, unless immediate action is taken to drastically cut the extraction and use of fossil fuels.

The report finds that limiting global warming to 1.5ºC would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050.

In a recent article, climate expert Dr. Andrew Glickson wrote: "The train has left the station and global heating is advancing toward +2 and then toward+4 degrees Celsius, as projected by the IPCC and in the words of Joachim Hans Schellnhuber, Germany's chief climate scientist, signifies the breakdown of civilization. Largely ignored or watered down by much of the mainstream media , betrayed by most political parties, including those who used to regard climate change as "the greatest moral issue of our time", the population continues to be distracted by bread and circuses. Nowadays even some of the Greens appear to consider plastic bags and the tampon tax as greater vote winners than the demise of the biosphere."

Why did Professor Noam Chomsky call the US Republican Party "The most dangerous organization in the history of the world"? In the primary that preceded the 2016 presidential election, every single Republican candidate with a chance of being nominated was a climate change denier. All received amazingly generous checks from giant fossil fuel organizations. When elected, Donald Trump not only pulled the United States out of the Paris Agreement; he also sabotaged the Environmental Protection Agency to such an extent that the carefully collected facts on climate change that the agency had accumulated had to be secretly saved by scientists to prevent their destruction by the Trump administration. Furthermore, Donald Trump not only subsidizes giant coal corporations. He also has sabotages renewable energy initiatives in the United States.

Figure 8.9: **Is this the person to whom we ought to entrust the future of our planet? When elected, Donald Trump not only pulled the United States out of the Paris Agreement; he also sabotaged the Environmental Protection Agency to such an extent that the carefully collected facts on climate change that the agency had accumulated had to be secretly saved by scientists to prevent their destruction by the Trump administration. Furthermore, Donald Trump's administration not only subsidizes giant coal corporations. It also has sabotages renewable energy initiatives in the United States.**

Figure 8.10: **Donald Trump has also contributed to the groth of racial prejuduce and a culture of violence.**

8.5 The fossil fuel industry's denial campaign

The Wikipedia article on climate change denial describes it with the following words: "Although scientific opinion on climate change is that human activity is extremely likely to be the primary driver of climate change, the politics of global warming have been affected by climate change denial, hindering efforts to prevent climate change and adapt to the warming climate. Those promoting denial commonly use rhetorical tactics to give the appearance of a scientific controversy where there is none."

It is not surprising that the fossil fuel industry supports, on a vast scale, politicians and mass media that deny the reality of climate change. The amounts of money at stake are vast. If catastrophic climate change is to be avoided, coal, oil and natural gas "assets" worth trillions of dollars must be left in the ground. Giant fossil fuel corporations are desperately attempting to turn these "assets' into cash.

According to a recent article published in "The Daily Kos"[4], companies like Shell and Exxon, knew, as early as the 1970s, how their combustible products were contributing to irreversible warming of the planet, became public knowledge over the last few years.

A series of painstakingly researched articles[5] published in 2015 by the Pulitzer-prize winning Inside Climate News revealed an industry totally aware and informed for decades about the inevitable warming certain to occur as more and more carbon dioxide from the

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[4]ww.dailykos.com/stories/2018/9/23/1797888/-The-Oil-Companies-not-only-knew-fossil-fuels-caused-climate-change-they-knew-how-bad-it-would-get?detail=emaildkre

[5]https://insideclimatenews.org/news/15092015/Exxons-own-research-confirmed-fossil-fuels-role-in-global-warming

burning of fossil fuels was released into the atmosphere.

The article states that "In fact, the oil industry, and Exxon in particular, had the best climate models available, superior to those relied on by scientific community.[6] And armed with the foreknowledge developed through those models, Exxon and the other oil companies planned and executed an elaborate, cynical long term strategy: to invest hundreds of millions of dollars in a comprehensive propaganda effort designed to raise doubts about the existence and cause of climate change, a phenomenon they well knew was irrefutable, based on their own research. By 2016 the industry's lobbying to discredit the science of climate change had surpassed two billion dollars.

"Meanwhile, as newly discovered documents reported in The Guardian[7] attest, the same companies were preparing projections of what type of world they would be leaving for the rest of humanity. In the 1980s, oil companies like Exxon and Shell carried out internal assessments of the carbon dioxide released by fossil fuels, and forecast the planetary consequences of these emissions. In 1982, for example, Exxon predicted that by about 2060, CO_2 levels would reach around 560 parts per million - double the preindustrial level - and that this would push the planet's average temperatures up by about 2°C over then-current levels (and even more compared to pre-industrial levels)."[8]

Existential Risk to Human Civilization

Here are some excerpts from a 44-page report entitled *What Lies Beneath: The Understanding of Existential Climate Risk*, by David Spratt and Ian Dunlop[9]:

"In 2016, the World Economic Forum survey of the most impactful risks for the years ahead elevated the failure of climate change mitigation and adaptation to the top of the list, ahead of weapons of mass destruction, ranking second, and water crises, ranking third. By 2018, following a year characterised by high-impact hurricanes and extreme temperatures, extreme-weather events were seen as the single most prominent risk. As the survey noted: "We have been pushing our planet to the brink and the damage is becoming increasingly clear.

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[6]https://insideclimatenews.org/news/18092015/exxon-confirmed-global-warming-consensus-in-1982-with-in-house-climate-models

[7]https://www.theguardian.com/environment/climate-consensus-97-per-cent/2018/sep/19/shell-and-exxons-secret-1980s-climate-change-warnings

[8]See also https://truthout.org/articles/self-immolation-as-the-world-burns-an-earth-day-report/
https://countercurrents.org/2018/04/29/the-methane-time-bomb-and-the-future-of-the-biosphere/
https://countercurrents.org/2018/08/07/hothouse-earth-evidence-for-ademise-of-the-planetary-life-support-system/
https://www.independent.co.uk/environment/global-warming-temperature-rise-climate-change-end-century-science-a8095591.html
http://www.lifeworth.com/deepadaptation.pdf
https://www.independent.co.uk/news/business/news/bp-shell-oil-global-warming-5-degree-paris-climate-agreement-fossil-fuels-temperature-rise-a8022511.html

[9]https://www.breakthroughonline.org.au/

Figure 8.11: **Exxon's 1982 internal projections of the future increase in carbon dioxide levels.**

"Climate change is an existential risk to human civilisation: that is, an adverse outcome that would either annihilate intelligent life or permanently and drastically curtail its potential.

"Temperature rises that are now in prospect, after the Paris Agreement, are in the range of 3-5 °C. At present, the Paris Agreement voluntary emission reduction commitments, if implemented, would result in planetary warming of 3.4 °C by 2100, without taking into account "long-term" carbon- cycle feedbacks. With a higher climate sensitivity figure of 4.5 °C, for example, which would account for such feedbacks, the Paris path would result in around 5 °C of warming, according to a MIT study.

" A study by Schroder Investment Management published in June 2017 found - after taking into account indicators across a wide range of the political, financial, energy and regulatory sectors - the average temperature increase implied for the Paris Agreement across all sectors was 4.1 °C.

"Yet 3 °C of warming already constitutes an existential risk. A 2007 study by two US national security think-tanks concluded that 3 °C of warming and a 0.5 metre sea-level rise would likely lead to "outright chaos" and "nuclear war is possible", emphasising how "massive non-linear events in the global environment give rise to massive nonlinear societal event".

" The Global Challenges Foundation (GCF) explains what could happen: "If climate change was to reach 3 °C, most of Bangladesh and Florida would drown, while major coastal cities - Shanghai, Lagos, Mumbai - would be swamped, likely creating large flows of climate refugees. Most regions in the world would see a significant drop in food production and increasing numbers of extreme weather events, whether heat waves, floods or storms. This likely scenario for a 3 °C rise does not take into account the considerable risk that self-reinforcing feedback loops set in when a certain threshold is reached, leading to an ever increasing rise in temperature. Potential thresholds include the melting of the Arctic permafrost releasing methane into the atmosphere, forest dieback releasing the carbon currently stored in the Amazon and boreal forests, or the melting of polar ice caps that would no longer reflect away light and heat from the sun."

"Warming of 4 °C or more could reduce the global human population by 80% or 90%, and the World Bank reports "there is no certainty that adaptation to a 4 °C world is possible.

"Prof. Kevin Anderson says a 4 °C future 'is incompatible with an organized global community, is likely to be beyond 'adaptation', is devastating to the majority of ecosystems, and has a high probability of not being stable'.

"This is a commonly-held sentiment amongst climate scientists. A recent study by the European Commission's Joint Research Centre found that if the global temperature rose 4 °C, then extreme heatwaves with "apparent temperatures" peaking at over 55 °C will begin to regularly affect many densely populated parts of the world, forcing much activity in the modern industrial world to stop. [10]

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[10]Apparent temperatures refers to the Heat Index, which quantifies the combined effect of heat and humidity to provide people with a means of avoiding dangerous conditions.

"In 2017, one of the first research papers to focus explicitly on existential climate risks proposed that "mitigation goals be set in terms of climate risk category instead of a temperature threshold", and established a "dangerous" risk category of warming greater than 1.5 ^oC, and a "catastrophic" category for warming of 3 ^oC or more. The authors focussed on the impacts on the world's poorest three billion people, on health and heat stress, and the impacts of climate extremes on such people with limited adaptation resources. They found that a 2 ^oC warming "would double the land area subject to deadly heat and expose 48% of the population (to deadly heat). A 4 ^oC warming by 2100 would subject 47% of the land area and almost 74% of the world population to deadly heat, which could pose existential risks to humans and mammals alike unless massive adaptation measures are implemented."

"A 2017 survey of global catastrophic risks by the Global Challenges Foundation found that: "In high-end [climate] scenarios, the scale of destruction is beyond our capacity to model, with a high likelihood of human civilization coming to an end."

"84% of 8000 people in eight countries surveyed for the Foundation considered climate change a 'global catastrophic risk'.

"Existential risk may arise from a fast rate of system change, since the capacity to adapt, in both the natural and human worlds, is inversely proportional to the pace of change, amongst other factors. In 2004, researchers reported on the rate of warming as a driver of extinction...

"At 4 ^oC of warming "the limits for adaptation for natural systems would largely be exceeded throughout the world".

"Ecological breakdown of this scale would ensure an existential human crisis. By slow degrees, these existential risks are being recognised. In May 2018, an inquiry by the Australian Senate into national security and global warming recognised "climate change as a current and existential national security risk... defined as 'one that threatens the premature extinction of Earth-originating intelligent life or the permanent and drastic destruction of its potential for desirable future development'".

8.6 The refugee crisis

Climate change as genocide

Climate change does not affect all parts of the world equally. The harshest effects of the extreme weather that we are already experiencing are disproportionately felt by the poorest people of the world.

In March, 2017. the Security Council was informed [11] that 20 million people in four countries, Nigeria, Somalia, South Sudan and Yemen, were in danger of dying unless provided with immediate help. The cost of the necessary aid was estimated to be $4.4 billion. The developed world's response has been a shrug of indifference. By the midsummer. 2017 only a tenth of the amount needed had been raised.

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[11]by Stephen O'Brian, UN Under Secretary General for Humanitarian Affairs

Figure 8.12: **A starving child in Somalia.**

Conflicts and famine are interlinked. The struggle for food produces conflicts; and famine is often used as an instrument of war. Food aid, when available, is often deliberately blocked or destroyed by warring factions. Boko Haram in Nigeria, al-Shabaab in Somalia, assorted militias and the government in South Sudan, and Saudi-backed forces in Yemen all interfered with the delivery of aid supplies.

In the future, the effects of rising temperatures and reduced rainfall will disproportionately affect poor farmers of Africa, the Middle East, South Asia, and Latin America. If the more affluent parts of the world continue to produce greenhouse gasses in a business-as-usual scenario, and if they continue to ignore calls for help from starving people, these actions will amount to genocide.

The United Nations High Commission on Refugees

In an article on *Climate Change and Disasters* the United Nations High Commission on Refugees makes the following statement:

"The Earth's climate is changing at a rate that has exceeded most scientific forecasts. Some families and communities have already started to suffer from disasters and the consequences of climate change, forced to leave their homes in search of a new beginning.

"For UNHCR, the consequences of climate change are enormous. Scarce natural resources such as drinking water are likely to become even more limited. Many crops and some livestock are unlikely to survive in certain locations if conditions become too hot and dry, or too cold and wet. Food security, already a concern, will become even more

challenging.

"People try to adapt to this situation, but for many this will mean a conscious move to another place to survive. Such moves, or the effects of climate change on natural resources, may spark conflict with other communities, as an increasing number of people compete for a decreasing amount of resources.

"Since 2009, an estimated one person every second has been displaced by a disaster, with an average of 22.5 million people displaced by climate- or weather-related events since 2008 (IDMC 2015). Disasters and slow onsets, such as droughts in Somalia in 2011 and 2012, floods in Pakistan between 2010 and 2012, and the earthquake in Nepal in 2015, can leave huge numbers of people traumatized without shelter, clean water and basic supplies."

Populations displaced by sea level rise

In a recent article[12] discussed the long-term effects of sea level rise and the massive refugee crisis that it might create. By 2060, about 1.4 billion people could be climate change refugees, according to the paper, and that number could reach 2 billion by 2100.

The lead author, Prof. Emeritus Charles Geisler of Cornell University says: "The colliding forces of human fertility, submerging coastal zones, residential retreat, and impediments to inland resettlement is a huge problem. We offer preliminary estimates of the lands unlikely to support new waves of climate refugees due to the residues of war, exhausted natural resources, declining net primary productivity, desertification, urban sprawl, land concentration, 'paving the planet' with roads and greenhouse gas storage zones offsetting permafrost melt."

We should notice that Prof. Geisler's estimate of 2 billion climate refugees by 2100 includes all causes, not merely sea level rise. However, the number of refugees from sea level rise alone will be very large, since all the world's coastal cities, and many river deltas will be at risk.

Populations displaced by drought and famine

Climate change could produce a refugee crisis that is "unprecedented in human history", Barack Obama has warned as he stressed global warming was the most pressing issue of the age.

Speaking at an international food conference in Milan, the former US President said rising temperatures were already making it more difficult to grow crops and rising food prices were "leading to political instability".

If world leaders put aside "parochial interests" and took action to reduce greenhouse gas emissions by enough to restrict the rise to one or two degrees Celsius, then humanity would probably be able to cope.

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[12]Geisler C. et al,, *Impediments to inland resettlement under conditions of accelerated sea level rise* , Land Use Policy, Vol **55**, July 2017, Pages 322-330
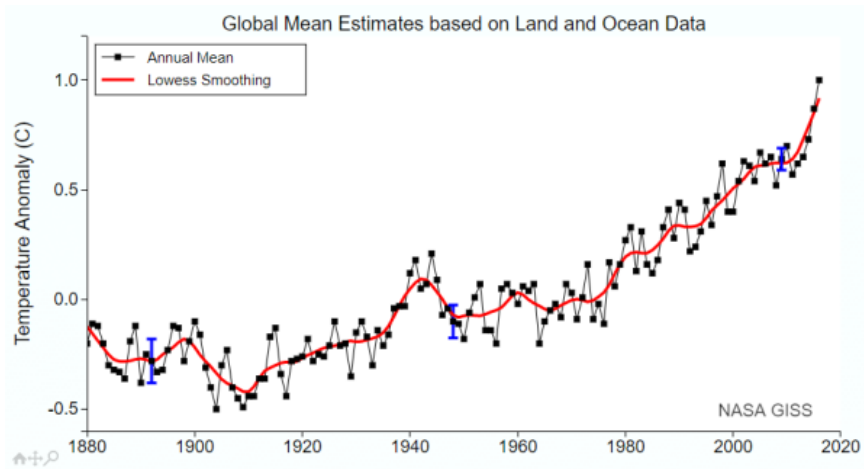
Figure 8.13: **This figure shows an alarming upward turn in the average global temperature**

Failing to do this, Mr Obama warned, increased the risk of "catastrophic" effects in the future, "not only real threats to food security, but also increases in conflict as a consequence of scarcity and greater refugee and migration patterns".

"If you think about monsoon patterns in the Indian subcontinent, maybe half a billion people rely on traditional rain patterns in those areas,"

Populations displaced by rising temperatures

A new study published in Nature: Climate Change has warned that up to 75% of the world's population could face deadly heat waves by 2100 unless greenhouse gas emissions are rapidly controlled.[13]. The following is an excerpt from the article:

"Here we conducted a global analysis of documented lethal heat events to identify the climatic conditions associated with human death and then quantified the current and projected occurrence of such deadly climatic conditions worldwide. We reviewed papers published between 1980 and 2014, and found 783 cases of excess human mortality associated with heat from 164 cities in 36 countries.

"Based on the climatic conditions of those lethal heat events, we identified a global threshold beyond which daily mean surface air temperature and relative humidity become deadly. Around 30% of the world's population is currently exposed to climatic conditions exceeding this deadly threshold for at least 20 days a year.

"By 2100, this percentage is projected to increase to 48% under a scenario with drastic reductions of greenhouse gas emissions and 74% under a scenario of growing emissions. An increasing threat to human life from excess heat now seems almost inevitable, but will be greatly aggravated if greenhouse gases are not considerably reduced." [14]

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[13]Mora, C. et al., *Global risk of deadly heat*, Nature: Climate Change, 19 June 2017
[14]See also https://phys.org/news/2017-08-deadly-south-asia-century.html and

Populations displaced by war

A recent article in *The Guardian*[15] discusses the relationship between climate change and war, Here are some excerpts from the article:

"Climate change is set to cause a refugee crisis of 'unimaginable scale', according to senior military figures, who warn that global warming is the greatest security threat of the 21st century and that mass migration will become the 'new normal'.

"The generals said the impacts of climate change were already factors in the conflicts driving a current crisis of migration into Europe, having been linked to the Arab Spring, the war in Syria and the Boko Haram terrorist insurgency.

"Military leaders have long warned that global warming could multiply and accelerate security threats around the world by provoking conflicts and migration. They are now warning that immediate action is required.

"'Climate change is the greatest security threat of the 21st century,' said Maj Gen Muniruzzaman.

"Muniruzzaman, chairman of the Global Military Advisory Council on climate change and a former military adviser to the president of Bangladesh. He said one meter of sea level rise will flood 20% of his nation. 'We're going to see refugee problems on an unimaginable scale, potentially above 30 million people.'

"Previously, Bangladesh's finance minister, Abul Maal Abdul Muhith, called on Britain and other wealthy countries to accept millions of displaced people.

"Brig Gen Stephen Cheney, a member of the US Department of State's foreign affairs policy board and CEO of the American Security Project, said: 'Climate change could lead to a humanitarian crisis of epic proportions. We're already seeing migration of large numbers of people around the world because of food scarcity, water insecurity and extreme weather, and this is set to become the new normal'.

Political reactions to migration

Brexit

Across the developed world, the reaction to threatened migration of refugees from climate change has been less than generous, to say the least. The recent decision of Britain to leave the European Union was motivated largely by the fear of British workers that EU laws would force their country to accept large numbers of refugees.

Swings to the right in Europe

In Germany, Angela Merkel's generous policies towards refugees have cost her votes, while an openly racist party, the Alternative for Germany (AfD) party, has gained in strength.

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https://cleantechnica.com/2017/09/28/extreme-heatwaves-like-recent-lucifer-heatwave-become-normal-europe-2050s/

[15]Thursday, 1 December, 2016

Frauke Petry, 40, the party's leader, has said border guards might need to turn guns on anyone crossing a frontier illegally. The party's policy platform says "Islam does not belong in Germany" and calls for a ban on the construction of mosques.

In September, 2017, eight people from the neo-Nazi Freital Group were put on trial in Dresden for bomb attacks on homes for asylum applicants. Hundreds of similar assaults occur in Germany every year, but they had never before been tried as terrorism in a federal court.

In the German election, which took place on Sunday, October 1, 2017, Angela Merkel won a fourth term as Chancellor, but her party won only 33% of the votes, a percentage much reduced from the 41% won in the election of 2013. Angela Merkel was paying a high price for her refugee-friendly policies.

Meanwhile the far right anti-immigration AfD party made a historic breakthrough, winning 13.5% of the vote, thus becoming the first overtly nationalist party to sit in the Bundestag in 60 years. The Greens have already complained that "Nazis have returned to parliament". In fact, members of the AfD party have begun to say that Germans should stop being ashamed of their country's Nazi past.

In France, the National Front is a nationalist party that uses populist rhetoric to promote its anti-immigration and anti-European Union positions. The party favors protectionist economic policies and would clamp down on government benefits for immigrants.

Similarly, in the Netherlands, the anti-European Union, anti-Islam Party for Freedom has called for closing all Islamic schools and recording the ethnicity of all Dutch citizens. In early November, the party was leading in polls ahead of next year's parliamentary elections.

Other far-right anti-immigrant parties in Europe include Golden Dawn (Greece), Jobbic (Hungary), Sweden Democrats (Sweden), Freedom Party (Austria), and People's Party - Our Slovakia (Slovakia). All of these parties have gained in strength because of the widespread fear of immigration.

Populism in the United States

The election of Donald Trump, who ran for President in 2016 on an openly racist and anti-immigrant platform, can also be seen as the result of fear of immigration, especially on the part of industrial workers.

A more humane response to the refugee crisis

In the long-term future, climate change will make the refugee crisis much more severe. Heat and drought will make large regions of the world uninhabitable, and will threaten many populations with famine. The severity of the refugee crisis will depend on how quickly we reduce greenhouse gas emissions.

While making many parts of the world uninhabitable, long-term climate change will make other regions more suitable for human habitation and agriculture. For example,

farming will become more possible in Siberia, Greenland, the Canadian Arctic, Alaska and Patagonia. A humane response to the refugee crisis could include the generous opening of these regions to refuges.

The global population of humans is currently increasing by almost a billion people every decade. Global population must be stabilized, and in the long run, gradually reduced. Money currently wasted (or worse than wasted) on armaments could be used instead to promote universal primary health care, and with it, universal access to the knowledge and materials needed for family planning.

Finally, reduced consumption of meat, particularly beef, would shorten the food chain thus make more food available for famine relief.

8.7 Inequality as a hindrance to global governance

8.8 The role of the media

Introduction

Throughout history, art was commissioned by rulers to communicate, and exaggerate, their power, glory, absolute rightness etc, to the populace. The pyramids gave visual support to the power of the Pharaoh; portraits of rulers are a traditional form of propaganda supporting monarchies; and palaces were built as symbols of power.

Modern powerholders are also aware of the importance of propaganda. Thus the media are a battleground where reformers struggle for attention, but are defeated with great regularity by the wealth and power of the establishment. This is a tragedy because today there is an urgent need to make public opinion aware of the serious problems facing civilization, and the steps that are needed to solve these problems. The mass media could potentially be a great force for public education, but often their role is not only unhelpful - it is negative.

It is certainly possible to find a few television programs and newspaper articles that present the facts about climate change in a realistic way. For example *The Guardian* gives outstanding climate change coverage. However, the mass media could do very much more. One has to conclude that the media are neglecting their great responsibilities at a time of acute crisis for human civilization and the biosphere. The same can be said of our educational systems at both both the primary and advanced levels. We urgently need much more public education about the severe dangers that we face today.

Television as a part of our educational system

In the mid-1950's, television became cheap enough so that ordinary people in the industrialized countries could afford to own sets. During the infancy of television, its power was underestimated. The great power of television is due to the fact that it grips two

senses simultaneously, both vision and hearing. The viewer becomes an almost-hypnotized captive of the broadcast.

In the 1950's, this enormous power, which can be used both for good and for ill, was not yet fully apparent. Thus insufficient attention was given to the role of television in education, in setting norms, and in establishing values. Television was not seen as an integral part of the total educational system. It is interesting to compare the educational systems of traditional cultures with those of modern industrial societies.

In traditional societies, multigenerational families often live together in the same dwelling. In general, there is a great deal of contact between grandparents and grandchildren, with much transmission of values and norms between generations. Old people are regarded with great respect, since they are considered to be repositories of wisdom, knowledge, and culture.

By contrast, modern societies usually favor nuclear families, consisting of only parents and children. Old people are marginalized. They live by themselves in communities or homes especially for the old. Their cultural education knowledge and norms are not valued because they are "out of date". In fact, during the life of a young person in one of the rapidly-changing industrial societies of the modern world, there is often a period when they rebel against the authority of their parents and are acutely embarrassed by their parents, who are "so old-fashioned that they don't understand anything".

Although the intergenerational transmission of values, norms, and culture is much less important in industrial societies than it is in traditional ones, modern young people of the West and North are by no means at a loss over where to find their values, fashions and role models. With every breath, they inhale the values and norms of the mass media. Totally surrounded by a world of television and film images, they accept this world as their own.

Neglect of climate change in the mass media

The predicament of humanity today has been called "a race between education and catastrophe": How do the media fulfil this life-or-death responsibility? Do they give us insight? No, they give us pop music. Do they give us an understanding of the sweep of evolution and history? No, they give us sport. Do they give us an understanding of the ecological catastrophes that threaten our planet because of unrestricted growth of population and industries? No, they give us sit-coms and soap operas. Do they give us unbiased news? No, they give us news that has been edited to conform with the interests of powerful lobbys. Do they present us with the urgent need to leave fossil fuels in the ground? No, they do not, because this would offend the powerholders. Do they tell of the danger of passing tipping points after which human efforts to prevent catastrophic climate change will be useless? No, they give us programs about gardening and making food.

A consumer who subscribes to the "package" of broadcasts sold by a cable company can often search through all 95 channels without finding a single program that offers insight into the various problems that are facing the world today. What the viewer finds instead is a mixture of pro-establishment propaganda and entertainment. Meanwhile the neglected global problems are becoming progressively more severe.

In general, the mass media behave as though their role is to prevent the peoples of the world from joining hands and working to change the world and to save it from thermonuclear war, environmental catastrophes and threatened global famine. The television viewer sits slumped in a chair, passive, isolated, disempowered and stupefied. The future of the world hangs in the balance, the fate of children and grandchildren hangs in the balance, but the television viewer feels no impulse to work actively to change the world or to save it. The Roman emperors gave their people bread and circuses to numb them into political inactivity. The modern mass media seem to be playing a similar role.

Climate change denial in mass media

The Wikipedia article on climate change denial describes it with the following words: "Although scientific opinion on climate change is that human activity is extremely likely to be the primary driver of climate change, the politics of global warming have been affected by climate change denial, hindering efforts to prevent climate change and adapt to the warming climate. Those promoting denial commonly use rhetorical tactics to give the appearance of a scientific controversy where there is none."

It is not surprising that the fossil fuel industry supports, on a vast scale, politicians and mass media that deny the reality of climate change. The amounts of money at stake are vast. If catastrophic climate change is to be avoided, coal, oil and natural gas "assets" worth trillions of dollars must be left in the ground. Giant fossil fuel corporations are desperately attempting to turn these "assets' into cash.

Showing unsustainable lifestyles in mass media

Television and other mass media contribute indirectly to climate change denial by showing unsustainable lifestyles. Television dramas show the ubiquitous use of gasoline-powered automobiles and highways crowded with them. just as though there did not exist an urgent need to transform our transportation systems. Motor racing is shown. A program called "Top Gear" tells viewers about the desirability of various automobiles. In general, cyclists are not shown. In television dramas, the protagonists fly to various parts of the world. The need for small local self-sustaining communities is not shown.

Advertisements in the mass media urge us to consume more, to fly, to purchase large houses, and to buy gasoline-driven automobiles, just as though such behavior ought to be the norm. Such norms are leading us towards environmental disaster.

Alternative media

Luckily, the mass media do not have a complete monopoly on public information. With a little effort, citizens who are concerned about the future can find alternative media. These include a large number of independent on-line news services that are supported by subscriber donations rather than by corporate sponsors. *YouTube* videos also represent

Figure 8.14: **Al Gore. 45th Vice President of the United States (Wikipedia).**

an extremely important source of public information. Below we discuss a few outstanding people who have made extremely important *YouTube* videos on climate change.

Al Gore

Albert Arnold Gore Jr. served as the 45th Vice President of the United States from January 1985 to January 1993. He then ran for the office of President, but was defeated by George W. Bush in a controversial election whose outcome was finally decided by the US Supreme Court[16].

Al Gore is the founder and current Chairman of the Alliance for Climate Protection. He was one of the first important political figures to call attention to the problem of steadily increasing CO_2 levels in the atmosphere and the threat of catastrophic climate change. He produced the highly influential documentary film *An Inconvenient Truth*[17]. Because of his important efforts to save the global environment, Al Gore shared the 2007 Nobel Peace

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[16]Many people believe that Al Gore won the election.
[17]https://www.youtube.com/watch?v=I-SV13UQXdk

Figure 8.15: **Sir David Attenborough: "Disaster. It's a terrible thing to say, isn't it?"**

Prize with the International Panel on Climate Change.

Al Gore's TED talk: The Case for Optimism on Climate Change

In 2016, Al Gore gave an important talk to a TED audience[18]. in which he pointed out the an economic tipping point has just been passed. Solar energy and wind energy are now cheaper than energy form fossil fuels. This means that economic forces alone can drive a rapid transition to 100% renewable energy. Investors will realize that renewables represent an unparalleled investment opportunity.

Sir David Attenborough

In a 2011 interview in The Guardian, Sir David Attenborough was asked: "What will it take to wake people up about climate change?". He replied "Disaster. It's a terrible thing to say, isn't it? And even disaster doesn't always do it. I mean, goodness me, there have been disasters in North America, with hurricanes, and one thing and another, and floods; and still a lot of people would deny it, and say it's nothing to do with climate change. Well it visibly has to do with climate change!"

Sir David Attenborough's almost unbelievably enormous and impressive opus of television programs about the natural world have helped to raise public awareness of the importance of the natural environment. He also has made a number of television programs specifically related to questions such as saving threatened species, the dangers of exploding global populations, and the destruction of forests for the sake of palm oil plantations.

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[18]https://www.youtube.com/watch?v=I-SV13UQXdk

Let us return to The Guardian's 2011 interview with Sir David. Had it been made in the autumn of 2017, the interview would certainly have included a discussion of recent hurricanes of unprecedented power and destructiveness, such as Harvey, Irma and Maria, as well as 2017's wildfires and Asian floods. It is possible that such events, which will certainly become more frequent and severe during the next few years, will provide the political will needed to silence climate change denial, to stop fossil fuel extraction, and to promote governmental policies favoring renewable energy.

Although the mass media almost have entirely neglected the link between climate change and recent disastrous hurricanes, floods droughts and wildfires, many individuals and organizations emphasized the cause and effect relationship. For example, UK airline billionaire Sir Richard Branson, whose Caribbean summer residence was destroyed by Hurricane Irma said:

"Look, you can never be 100 percent sure about links, But scientists have said the storms are going to get more and more and more intense and more and more often. We've had four storms within a month, all far greater than that have ever, ever, ever happened in history, Sadly, I think this is the start of things to come. Climate change is real. Ninety-nine percent of scientists know it's real. The whole world knows it's real except for maybe one person in the White House."

May Boeve, executive director of the NGO 350.org, said "With a few exceptions, the major TV networks completely failed to cover the scientifically proven ways that climate change is intensifying extreme weather events like hurricanes Harvey and Irma. That's not just disappointing, it's dangerous. We won't be able to turn this crisis around if our media is asleep at the wheel."

Commenting on the destruction of Puerto Rico by Hurricane Maria, historian Juan Cole wrote: "When you vote for denialist politicians, you are selecting people who make policy. The policy they make will be clueless and will actively endanger the public. Climate change is real. We are causing it by our emissions. If you don't believe that, you are not a responsible steward of our infrastructure and of our lives."

When interviewed by Amy Goodman of *Democracy Now*, musician Stevie Wonder said: "... we should begin to love and value our planet, and anyone who believes that there is no such thing as global warming must be blind or unintelligent."

Another well-known musician, Byoncé, added: "The effects of climate change are playing out around the world every day. Just this past week, we've seen devastation from the monsoon in India...and multiple catastrophic hurricanes. Irma alone has left a trail of death and destruction from the Caribbean to Florida to Southern United States. We have to be prepared for what comes next..."

In her September 2017 publication *Season of Smoke*[19], prizewinning author Naomi Klein wrote:

"We hear about the record-setting amounts of water that Hurricane Harvey dumped on Houston and other Gulf cities and towns, mixing with petrochemicals to pollute and poison

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[19]https://theintercept.com/2017/09/09/in-a-summer-of-wildfires-and-hurricanes-my-son-asks-why-is-everything-going-wrong/

on an unfathomable scale. We hear too about the epic floods that have displaced hundreds of thousands of people from Bangladesh to Nigeria (though we don't hear enough). And we are witnessing, yet again, the fearsome force of water and wind as Hurricane Irma, one of the most powerful storms ever recorded, leaves devastation behind in the Caribbean, with Florida now in its sights.

"Yet for large parts of North America, Europe, and Africa, this summer has not been about water at all. In fact it has been about its absence; it's been about land so dry and heat so oppressive that forested mountains exploded into smoke like volcanoes. It's been about fires fierce enough to jump the Columbia River; fast enough to light up the outskirts of Los Angeles like an invading army; and pervasive enough to threaten natural treasures, like the tallest and most ancient sequoia trees and Glacier National Park.

"For millions of people from California to Greenland, Oregon to Portugal, British Columbia to Montana, Siberia to South Africa, the summer of 2017 has been the summer of fire. And more than anything else, it's been the summer of ubiquitous, inescapable smoke.

"For years, climate scientists have warned us that a warming world is an extreme world, in which humanity is buffeted by both brutalizing excesses and stifling absences of the core elements that have kept fragile life in equilibrium for millennia. At the end of the summer of 2017, with major cities submerged in water and others licked by flames, we are currently living through Exhibit A of this extreme world, one in which natural extremes come head-to-head with social, racial, and economic ones."

It seems likely that the climate-linked disasters of 2018 and 2019 will be even more severe than those that we have witnessed during 2017. But will such disasters be enough to wake us up?

The BBC has recently announced that Sir David Attenborough is currently producing a new series, *Blue Planet II*, which will focus on environmental issues.[20]

"My hope is that the world is coming to its senses ... I'm so old I remember a time when ... we didn't talk about climate change, we talked about animals and species extermination," Sir David told Greenpeace in an interview, "For the first time I'm beginning to think there is actually a groundswell, there is a change in the public view. I feel many more people are concerned and more aware of what the problems are. Young people - people who've got 50 years of their life ahead of them - they are thinking they ought to be doing something about this. That's a huge change."

Leonardo DiCaprio

Leonardo DiCaprio has won many awards for his work as an actor, writer and producer in both television and films. These include 50 awards from 167 nominations. DiCaprio has been nominated for six Academy Awards, four British Academy Film Awards and nine Screen Actors Guild Awards, winning one award each from them and three Golden Globe Awards from eleven nominations.

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[20]http://www.bbcearth.com/blueplanet2/

Figure 8.16: **Leonardo DiCaprio as a young actor.**

In accepting his Best Actor award at the 2016 Oscars ceremony, DiCaprio said:

"Climate change is real, it is happening right now. It is the most urgent threat facing our entire species, and we need to work collectively together and stop procrastinating. We need to support leaders around the world who do not speak for the big polluters, but who speak for all of humanity, for the indigenous people of the world, for the billions and billions of underprivileged people out there who would be most affected by this. For our children's children, and for those people out there whose voices have been drowned out by the politics of greed."

Leonardo DiCaprio has used his great success as an actor in the service of environmental causes. In 1997, following the box office success of *Titanic*, he set up the Leonardo DiCaprio Foundation, which is devoted to environmental causes. He chaired the national Earth Day celebrations in 2000 during which he interviewed US President Bill Clinton, with whom he discussed the actions needed to avoid catastrophic climate change. In 2007 he had a major role in *The 11th Hour*, a documentary about people's relationship to nature and global warming. He also co-produced and co-wrote the film.

DiCaprio's most influential film on climate change is *Before the Flood*[21]. This film, released in 2016, is a 1 hour and 36 minute documentary in which Leonardo DiCaprio travels to many countries to let viewers observe the already visible effects of global warming. He also talks with many of the world's leaders, including Pope Francis I, US Presidents Bill Clinton and Barack Obama, and UN Secretary General Ban Ki-moon.

Thom Hartmann

Thom Hartmann was born in 1951 in Lansing Michigan. He worked as a disk jockey during his teens, and, after a highly successful business career, he sold his businesses and devoted his energies to writing, humanitarian projects and public education. His influential book, *Last Hours of Ancient Sunlight* was published by Three Rivers Press in 1997 and republished in a revised edition in 2004. In 2013, Hartmann published another extremely important book on the same theme: *The Last Hours of Humanity: Warming the World To Extinction*[22].

Hartmann has hosted a nationally syndicated radio show, The Thom Hartmann Program, since 2003 and a nightly television show, The Big Picture, since 2008.

Concerning Hartmann's radio show, Wikipedia states that "As of March 2016, the show was carried on 80 terrestrial radio stations in 37 states as well as on Sirius and XM satellite radio. A community radio station in Africa, Radio Builsa in Ghana, also broadcasts the show. Various local cable TV networks simulcast the program. In addition to Westwood One, the show is now also offered via Pacifica Audioport to non-profit stations in a non-profit compliant format and is simulcast on Dish Network channel 9415 and DirecTV channel 348 via Free Speech TV. The program is carried on Radio Sputnik in London, England."

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[21]http://www.get.filmovie.us/play.php?movie=tt5929776t
[22]https://www.amazon.com/Last-Hours-Humanity-Warming-Extinction/dp/1629213640

Figure 8.17: **Thom Hartmann speaks to the 2010 Chicago Green Festival (Wikipedia).**

"Sen. Bernie Sanders (I-VT) appears every Friday during the first hour of the show titled 'Brunch with Bernie'. Ellen Ratner of the Talk Radio News Service provides Washington commentary daily. Victoria Jones who is the White House correspondent for Talk Radio News Service appears occasionally as does Dr. Ravi Batra an economics professor at SMU."

Together with Leonardo DiCaprio, Thom Hartman recently produced and narrated an extremely important short film entitled *Last Hours*[23]. This film, draws a parallel between the Permian-Triassic mass extinction, and the danger of a human-induced 6th mass extinction. Various experts who appear in the film confirm that our release of CO_2 into the atmosphere is similar to the greenhouse gasses produced by volcanic eruptions prior to the Permian event. The methane hydrate feedback loop is also discussed. The film should be seen by everyone concerned with the future of human civilization and the biosphere. Concerned citizens should also urgently see Hartman and DiCaprio's short films *Carbon*, *Green World Rising* and *Reforestation*, also available on YouTube .

James Hansen

James Hansen was born in 1941 in Denison, Iowa. He was educated in physics, mathematics and astronomy at the University of Iowa in the space sciences program initiated James Van Allen. He graduated with great distinction. The studies of the atmosphere and temperature of Venus which Hansen made under Van Allen's supervision lead him to become extremely concerned about similar effects in the earth's atmosphere.

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[23]https://www.youtube.com/watch?v=2bRrg96UtMc

Figure 8.18: **Prof. James Hansen**

From 1962 to 1966, James Hansen participated in the National Aeronautical and Space Administration graduate traineeship and, at the same time, between 1965 and 1966, he was a visiting student at the Institute of Astrophysics at the University of Kyoto and in the Department of Astronomy at the University of Tokyo. Hansen then began work at the Goddard Institute for Space Studies in 1967. He began to work for the Goddard Institute for Space Studies in 1967. Between 1981 and 2913, he was hear of the Goddard Institute of Space Studies in New York, and since 2014, he has been the director of the Program on Climate Science, Awareness and Solutions at Columbia University's Earth Institute.

Hansen continued his work with radiative transfer models, attempting to understand the Venusian atmosphere. Later he applied and refined these models to understand the Earth's atmosphere, in particular, the effects that aerosols and trace gases have on Earth's climate. Hansen's development and use of global climate models has contributed to the further understanding of the Earth's climate. In 2009 his first book, Storms of My Grandchildren, was published.

James Hansen has refined climate change models, focusing on the balance between aerosols and greenhouse gases. He believes that there is a danger that climate change will become much more rapid if the balance shifts towards the greenhouse gases.

Hansen's Congressional testimony leads to broad public awareness of the dangers

In 1988, Prof. Hansen was asked to testify before the US Congress on the danger of uncontrolled climate change. The testimony marked the start of broad public awareness of the seriousness of the danger, and it was reported in a front page article by the New York Times. However, Hansen believes that governmental energy policies still favor fossil fuels. Therefore he has participated in public demonstrations and he was even arrested in 2011 together with more than a thousand other activists for protesting outside the White House.

James Hansen's TED talk and book

In 2012 he presented a TED Talk: *Why I Must Speak Out About Climate Change.* This talk is easily available on the Internet, and it should be required viewing for everyone who is concerned with the earth's future.

Hansen's book, *Storms of My Grandchildren: The Truth About The Coming Climate Catastrophe, and Our Last Chance To Save Humanity* was published in New York by Bloomsbury Publishing in 2009.

8.9 Ethics for the future

The Encyclical of Pope Francis

Despite the worrying nature of the threats that we are facing, there are reasons for hope. One of the greatest of these is the beautiful, profound and powerful encyclical that has just been released by Pope Francis.

When he accepted the responsibility for leading the world's 1.2-billion-strong Catholic Church, Cardinal Bergoglio of Argentina adopted the name Francis, after the universally loved Saint Francis of Assisi, whose life of simplicity, love for the poor, and love of nature he chose as the model for his Papacy. The Pope's inspiring encyclical letter "Laudato Si' " takes its name from a canticle of Saint Francis, that begins with the words "Praise be to you, my Lord, through our sister, mother Earth, who sustains and governs us..."

We can remember that Saint Francis regarded birds and animals as his brothers and sisters. He even thought of the sun, moon, clouds, rain and water as brothers and sisters. Like his chosen namesake, Pope Francis stresses the unity of all of nature, and our kinship with all of creation. Francis appeals to love. We can be saved through love.

His encyclical is addressed not only to Catholics, but also to all men and women of good will, and almost all of its 102 pages appeal to moral sensibilities and rational arguments that can be shared by all of us. Pope Francis stresses that the natural world that sustains us is in grave danger from our ruthless exploitation and greed-driven destruction of all the beauty and life that it contains: animals, forests, soil, and air.

Pope Francis tells us that the dictates of today's economists are not sacred: In the future, if we are to survive, economics must be given both a social conscience and an ecological conscience. Nor are private property and profits sacred. They must be subordinated to the common good, and the preservation of our global commons.

Less focus on material goods need not make us less happy. The quality of our lives can be increased, not decreased, if we give up our restless chase after power and wealth, and derive more of our pleasures from art, music and literature, and from conversations with our families and friends, Please read this great encyclical in its entirety. It can give us hope and courage as we strive to make the changes that are needed to avert an ecological mega-catastrophe.

Don Joao Mamede Filho is the Bishop of the Diocesis of Umuarama, commented: " 'Laudato Si', considered by environmentalists all around the world as the Green Encyclical, has become a work read by Christians and non-Christians alike in all corners of the world. In it, Pope Francis calls on us all to take care of our 'Common Home' and all that exists in it.

"In his call, the Pope reaffirms that the planet is a common good that must be preserved and guarded. Therefore, it is our duty to refrain from any human activity that may degrade, pollute or pose any kind of threat or risk to our planet and those who inhabit it.

"'Laudato Si' also presents a strong and persisting plea for a shift towards a new energy and development model, leaving fossil fuels behind. Since these energy sources are responsible for the highest emissions of greenhouse gases, they pollute, render climate

changes more intense, bring on diseases, and kill.

"It is important to remember that, at the beginning of Creation, an organic relationship between all living beings was established. All that exists is connected and coexists in a sustainable and wholesome manner. However, by choosing dirty energy sources such as fossil fuels, which leave trails of destruction behind them, we disconnect ourselves from our surroundings and ignore the harm they may cause us and to our fellow creatures."

The message of Henry David Thoreau

In the distant future (and perhaps even in the not-so-distant future) industrial civilization will need to abandon its relentless pursuit of unnecessary material goods and economic growth. Modern society will need to re-establish a balanced and harmonious relationship with nature. In preindustrial societies harmony with nature is usually a part of the cultural tradition. In our own time, the same principle has become central to the ecological counter-culture while the main-stream culture thunders blindly ahead, addicted to wealth, power and growth.

In the 19th century the American writer, Henry David Thoreau (1817-1862), pioneered the concept of a simple life, in harmony with nature. Today, his classic book, Walden, has become a symbol for the principles of ecology, simplicity, and respect for nature.

Thoreau was born in Concord Massachusetts, and he attended Harvard from 1833 to 1837. After graduation, he returned home, worked in his family's pencil factory, did odd jobs, and for three years taught in a progressive school founded by himself and his older brother, John. When John died of lockjaw in 1842, Henry David was so saddened that he felt unable to continue the school alone.

Nonviolent civil disobedience

Thoreau refused to pay his poll tax because of his opposition to the Mexican War and to the institution of slavery. Because of his refusal to pay the tax (which was in fact a very small amount) he spent a night in prison. To Thoreau's irritation, his family paid the poll tax for him and he was released. He then wrote down his ideas on the subject in an essay entitled The Duty of Civil Disobedience, where he maintains that each person has a duty to follow his own individual conscience even when it conflicts with the orders of his government.

In his essay, Thoreau said: "A common and natural result of an undue respect for law is that you may see a file of soldiers, colonel, captain, corporal, privates, powder-monkeys, and all marching in admirable order over hill and dale to the wars, against their wills, ay, against their common sense and consciences, which makes it very steep marching indeed, and produces a palpitation of the heart. They have no doubt that it is a damnable business in which they are concerned; they are all peaceably inclined. Now, what are they? Men at all? or small movable forts and magazines, at the service of some unscrupulous man in power?"

"Under a government that which imprisons any unjustly", Thoreau wrote, "the true place for a just man is in prison." Civil Disobedience influenced Tolstoy, Gandhi and Martin Luther King, and it anticipated the Nuremberg Principles.

Harmony with nature

Thoreau became the friend and companion of the transcendentalist writer Ralph Waldo Emerson (1803 1882), who introduced him to a circle of New England writers and thinkers that included Ellery Channing, Margaret Fuller and Nathaniel Hawthorne.

Nathaniel Hawthorne described Thoreau in the following words: "Mr. Thorow [sic] is a keen and delicate observer of nature, a genuine observer, which, I suspect, is almost as rare a character as even an original poet; and Nature, in return for his love, seems to adopt him as her especial child, and shows him secrets which few others are allowed to witness. He is familiar with beast, fish, fowl, and reptile, and has strange stories to tell of adventures, and friendly passages with these lower brethren of mortality. Herb and flower, likewise, wherever they grow, whether in garden, or wild wood, are his familiar friends. He is also on intimate terms with the clouds and can tell the portents of storms. It is a characteristic trait, that he has a great regard for the memory of the Indian tribes, whose wild life would have suited him so well; and strange to say, he seldom walks over a plowed field without picking up an arrow-point, a spear-head, or other relic of the red men, as if their spirits willed him to be the inheritor of their simple wealth."

Walden, an experiment in simple living

At Emerson's suggestion, Thoreau opened a journal, in which he recorded his observations concerning nature and his other thoughts. Ultimately the journal contained more than 2 million words. Thoreau drew on his journal when writing his books and essays, and in recent years, many previously unpublished parts of his journal have been printed.

From 1845 until 1847, Thoreau lived in a tiny cabin that he built with his own hands. The cabin was in a second-growth forest beside Walden Pond in Concord, on land that belonged to Emerson. Thoreau regarded his life there as an experiment in simple living. He described his life in the forest and his reasons for being there in his book Walden,

"Most of the luxuries", Thoreau wrote, "and many of the so-called comforts of life, are not only not indispensable, but positive hindrances to the elevation of mankind. With respect to luxuries, the wisest have ever lived a more simple and meager life than the poor. The ancient philosophers, Chinese, Hindoo, Persian, and Greek, were a class than which none has been poorer in outward riches, none so rich in inward."

Elsewhere in Walden, Thoreau remarks, "It is never too late to give up your prejudices", and he also says, "Why should we be in such desperate haste to succeed, and in such desperate enterprises? If a man does not keep pace with his companions, perhaps it is because he hears a different drummer." Other favorite quotations from Thoreau include "Rather than love, than money, than fame, give me truth", "Beware of all enterprises that

Figure 8.19: **Henry David Thoreau (1817-1862). Public domain, Wikimedia Commons**

require new clothes", "Most men lead lives of quiet desperation" and "Men have become tools of their tools."

Thoreau's closeness to nature can be seen from the following passage, written by his friend Frederick Willis, who visited him at Walden Pond in 1847, together with the Alcott family: "He was talking to Mr. Alcott of the wild flowers in Walden woods when, suddenly stopping, he said: 'Keep very still and I will show you my family.' Stepping quickly outside the cabin door, he gave a low and curious whistle; immediately a woodchuck came running towards him from a nearby burrow. With varying note, yet still low and strange, a pair of gray squirrels were summoned and approached him fearlessly. With still another note several birds, including two crows flew towards him, one of the crows nestling upon his shoulder. I remember that it was the crow resting close to his head that made the most vivid impression on me, knowing how fearful of man this bird is. He fed them all from his hand, taking food from his pocket, and petted them gently before our delighted gaze; and then dismissed them by different whistling, always strange and low and short, each wild thing departing instantly at hearing his special signal."

Thoreau's views on religion

Towards the end of his life, when he was very ill, someone asked Thoreau whether he had made his peace with God. "We never quarreled", he answered.

In an essay published by the Atlantic Monthly in 1853, Thoreau described a pine tree in Maine with the words: "It is as immortal as I am, and perchance will go to as high a heaven, there to tower above me still." However, the editor (James Russell Lowell) considered the sentence to be blasphemous, and removed it from Thoreau's essay.

In one of his essays, Thoreau wrote: "If a man walk in the woods for love of them half of each day, he is in danger of being regarded as a loafer; but if he spends his whole day as a speculator, shearing off those woods and making the earth bald before her time, he is esteemed an industrious and enterprising citizen."

A few more things that Thoreau said

It is the beauty within us that makes it possible for us to recognize the beauty around us. The question is not what you look at, but what you see.

Simplify your life. Don't waste the years struggling for things that are unimportant. Don't burden yourself with possessions. Keep your needs and wants simple and enjoy what you have. Don't destroy your peace of mind by looking back, worrying about the past. Live in the present. Simplify!

Go confidently in the direction of your dreams. Live the life you've imagined.

Happiness is like a butterfly; the more you chase it, the more it will elude you, but if you turn your attention to other things, it will come and sit softly on your shoulder.

Rather than love, than money, than fame, give me truth.

The mass of men lead lives of quiet desperation.

You must live in the present, launch yourself on every wave, find your eternity in each moment. Fools stand on their island of opportunities and look toward another land. There is no other land; there is no other life but this

Be not simply good, be good for something,

Books are the treasured wealth of the world and the fit inheritance of generations and nations.

If you have built castles in the air, your work need not be lost; that is where they should be. Now put the foundations under them.

If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music he hears, however measured or far away.

The greatest compliment that was ever paid me was when one asked me what I thought, and attended to my answer.

We need the tonic of wildness...At the same time that we are earnest to explore and learn all things, we require that all things be mysterious and unexplorable, that land and sea be indefinitely wild, unsurveyed and unfathomed by us because unfathomable. We can never have enough of nature.

Gandhian economics

In his autobiography, Mahatma Gandhi says: "Three moderns have left a deep impression on my life and captivated me: Raychandbhai (the Indian philosopher and poet) by his living contact; Tolstoy by his book 'The Kingdom of God is Within You'; and Ruskin by his book 'Unto This Last'." Ruskin's book, "Unto This Last", which Gandhi read in 1904, is a criticism of modern industrial society. Ruskin believed that friendships and warm interpersonal relationships are a form of wealth that economists have failed to consider. He felt that warm human contacts are most easily achieved in small agricultural communities, and that therefore the modern tendency towards centralization and industrialization may be a step backward in terms of human happiness. While still in South Africa, Gandhi

founded two religious Utopian communities based on the ideas of Tolstoy and Ruskin, Phoenix Farm (1904) and Tolstoy Farm (1910).

Because of his growing fame as the leader of the Indian civil rights movement in South Africa, Gandhi was persuaded to return to India in 1914 and to take up the cause of Indian home rule. In order to reacquaint himself with conditions in India, he travelled tirelessly, now always going third class as a matter of principle.

During the next few years, Gandhi worked to reshape the Congress Party into an organization which represented not only India's Anglicized upper middle class but also the millions of uneducated villagers who were suffering under an almost intolerable burden of poverty and disease. In order to identify himself with the poorest of India's people, Gandhi began to wear only a white loincloth made of rough homespun cotton. He traveled to the remotest villages, recruiting new members for the Congress Party, preaching non-violence and "firmness in the truth", and becoming known for his voluntary poverty and humility. The villagers who flocked to see him began to call him "Mahatma" (Great Soul).

Disturbed by the spectacle of unemployment and poverty in the villages, Gandhi urged the people of India to stop buying imported goods, especially cloth, and to make their own. He advocated the reintroduction of the spinning wheel into village life, and he often spent some hours spinning himself. The spinning wheel became a symbol of the Indian independence movement, and was later incorporated into the Indian flag.

The movement for boycotting British goods was called the "Swadeshi movement". The word Swadeshi derives from two Sanskrit roots: Swa, meaning self, and Desh, meaning country. Gandhi described Swadeshi as "a call to the consumer to be aware of the violence he is causing by supporting those industries that result in poverty, harm to the workers and to humans or other creatures."

Gandhi tried to reconstruct the crafts and self-reliance of village life that he felt had been destroyed by the colonial system. "I would say that if the village perishes, India will perish too", he wrote, "India will be no more India. Her own mission in the world will get lost. The revival of the village is only possible when it is no more exploited. Industrialization on a mass scale will necessarily lead to passive or active exploitation of the villagers as problems of competition and marketing come in. Therefore we have to concentrate on the village being self-contained, manufacturing mainly for use. Provided this character of the village industry is maintained, there would be no objection to villagers using even the modern machines that they can make and can afford to use. Only they should not be used as a means of exploitation by others."

"You cannot build nonviolence on a factory civilization, but it can be built on self-contained villages... Rural economy as I have conceived it, eschews exploitation altogether, and exploitation is the essence of violence... We have to make a choice between India of the villages that are as ancient as herself and India of the cities which are a creation of foreign domination..."

"Machinery has its place; it has come to stay. But it must not be allowed to displace necessary human labour. An improved plow is a good thing. But if by some chances, one man could plow up, by some mechanical invention of his, the whole of the land of India, and control all the agricultural produce, and if the millions had no other occupation, they
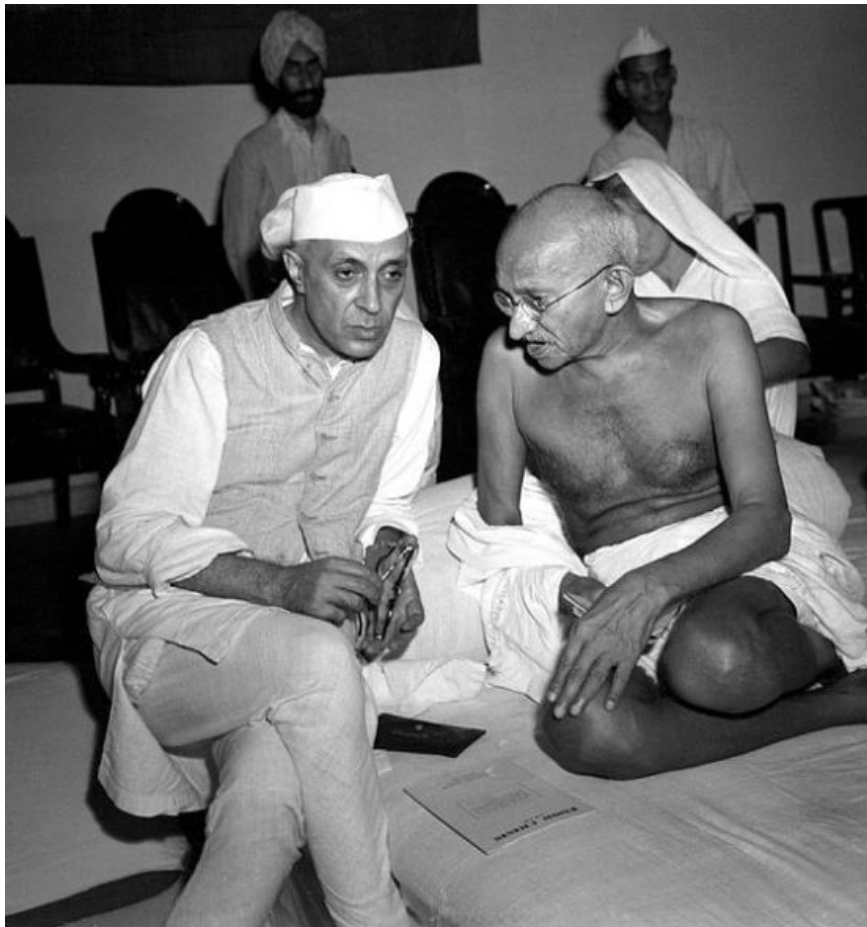
Figure 8.20: **Gandhi with Rashtrapati Jawaharlal Nehru, during a meeting of the All India Congress, Bombay, India. Today, it is Nehru's economic policy of industrialization and urbanization rather than Gandhi's that dominates India, but it is Gandhi's model that is sustainable. Author: Credited to Dave Davis, Acme Newspictures Inc., correspondent. Photo taken by Max Desfor, who gave it to Dave Davis. Wikimedia Commons**

would starve, and being idle, they would become dunces, as many have already become. There is hourly danger of many being reduced to that unenviable state."

In these passages we see Gandhi not merely as a pioneer of nonviolence; we see him also as an economist. Faced with misery and unemployment produced by machines, Gandhi tells us that social goals must take precedence over blind market mechanisms. If machines are causing unemployment, we can, if we wish, and use labor-intensive methods instead. With Gandhi, the free market is not sacred; we can do as we wish, and maximize human happiness, rather than maximizing production and profits.

Mahatma Gandhi was assassinated by a Hindu extremist on January 30, 1948. After his death, someone collected and photographed all his worldly goods. These consisted of a pair of glasses, a pair of sandals, a pocket watch and a white homespun loincloth. Here, as in the Swadeshi movement, we see Gandhi as a pioneer of economics. He deliberately reduced his possessions to an absolute minimum in order to demonstrate that there is no connection between personal merit and material goods. Like Veblen, Mahatma Gandhi told us that we must stop using material goods as a means of social competition. We must start to judge people not by what they have, but by what they are.[24]

Gandhi's vision of an "India of villages" rather than an "India of cities" has much in common with the Transition Town movement, which we will discuss next.

Transition Towns

The Transition Town Movement of today is a response to the end of the fossil fuel era and the threat of economic collapse. It can be thought of as a modern branch of the Cooperative Movement. In 2006, the Transition Town of Totnes in Devon, England was the first to use this name, which implied a transition from globalism, consumerism and growth to a sustainable, local and self-sufficient economy. The ideal was to produce locally all the necessary food for the town, and as much of other necessities as possible. In this way, the energy expenditures involved in transportation could be avoided.

Today there are more than a thousand Transition Towns and they are located in 43 countries. Many of them have local currencies which are legal tender within the town. If the pioneers of this movement are right in saying that this is the only sustainable model for the future, we may wonder whether mega-cities will be able to survive in the long-term future.[25]

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[24]https://en.wikipedia.org/wiki/Gandhian_economics
http://bollier.org/blog/gandhian-economics-and-commons
http://caravan.squat.net/ICC-en/Krrs-en/ghandi-econ-en.htm
http://www.mkgandhi.org/ebks/untothislast.pdf
https://en.wikipedia.org/wiki/Unto_This_Last
http://www.efm.bris.ac.uk/het/ruskin/ruskin
[25]https://en.wikipedia.org/wiki/Degrowth
http://commondreams.org/views/2015/07/31/we-are-all-greece
http://www.localfutures.org/
http://www.powells.com/biblio/7-9780871566430-2

Figure 8.21: **Totnes, Devon, England: a transition town. Author: Manfred Heyde, Wikimedia Commons**

We must not use possessions for social competition!

There is something ethically wrong with using material goods for the purpose of social competition at a time when excessive consumption is destroying our planet. Also, in our century, the world's resources are nearing exhaustion, and roughly 40,000 children die every day from starvation or from poverty-related diseases..

The whole structure of western society seems designed to push its citizens towards ever-increasing levels of consumption. The mass media hold before us continually the ideal of a personal utopia filled with material goods. Every young man in a modern industrial society feels that he is a failure unless he fights his way to the "top"; and in recent years, women too have been drawn into this competition.

Of course not everyone can reach the top; there would not be room for everyone; but society urges all us to try, and we feel a sense of failure if we do not reach the goal. Thus, modern life has become a struggle of all against all for power and possessions.

One of the central problems in reducing consumption is that in our present economic and social theory, consumption has no upper bound; there is no definition of what is enough; there is no concept of a state where all of the real needs of a person have been satisfied. In our growth-oriented present-day economics, it is assumed that, no matter how much a person earns, he or she is always driven by a desire for more.

The phrase "conspicuous consumption" was invented by the Norwegian-American economist Thorstein Veblen (1857-1929) in order to describe the way in which our society uses economic waste as a symbol of social status. In "The Theory of the Leisure Class", first published in 1899, Veblen pointed out that it wrong to believe that human economic behavior is rational, or that it can be understood in terms of classical economic theory. To understand it, Veblen maintained, one might better make use of insights gained from anthropology, psychology, sociology, and history.

The sensation caused by the publication of Veblen's book, and the fact that his phrase, "conspicuous consumption", has become part of our language, indicate that his theory did not completely miss its mark. In fact, modern advertisers seem to be following Veblen's advice: Realizing that much of the output of our economy will be used for the purpose of establishing the social status of consumers, advertising agencies hire psychologists to appeal to the consumer's longing for a higher social position.

When possessions are used for the purpose of social competition, demand has no natural upper limit; it is then limited only by the size of the human ego, which, as we know, is boundless. This would be all to the good if unlimited economic growth were desirable. But today, when further industrial growth implies future collapse, western society urgently needs to find new values to replace our worship of power, our restless chase after excitement, and our admiration of excessive consumption.

The voice of Henry David Thoreau is also a useful and wise one. "Most of the luxuries", Thoreau wrote, "and many of the so-called comforts of life, are not only not indispensable, but positive hindrances to the elevation of mankind. With respect to luxuries, the wisest have ever lived a more simple and meager life than the poor. The ancient philosophers, Chinese, Hindoo, Persian, and Greek, were a class than which none has been poorer in outward riches, none so rich in inward."

Benefits of equality

The Industrial Revolution opened up an enormous gap in military strength between the industrialized nations and the rest of the world. Taking advantage of their superior weaponry, Europe, the United States and Japan rapidly carved up the remainder of the world into colonies, which acted as sources of raw materials and food, and as markets for manufactured goods. Between 1800 and 1914, the percentage of the earth under the domination of colonial powers increased to 85 percent, if former colonies are included.

The English economist and Fabian, John Atkinson Hobson (1858-1940), offered a famous explanation of the colonial era in his book "Imperialism: A Study" (1902). According to Hobson, the basic problem that led to colonial expansion was an excessively unequal distribution of incomes in the industrialized countries. The result of this unequal distribution was that neither the rich nor the poor could buy back the total output of their society. The incomes of the poor were insufficient, and rich were too few in number. The rich had finite needs, and tended to reinvest their money. As Hobson pointed out, reinvestment in new factories only made the situation worse by increasing output.

Hobson had been sent as a reporter by the Manchester Guardian to cover the Second Boer War. His experiences had convinced him that colonial wars have an economic motive. Such wars are fought, he believed, to facilitate investment of the excess money of the rich in African or Asian plantations and mines, and to make possible the overseas sale of excess manufactured goods. Hobson believed imperialism to be immoral, since it entails suffering both among colonial peoples and among the poor of the industrial nations. The cure that he recommended was a more equal distribution of incomes in the manufacturing countries.

Interestingly, TED Talks (ideas worth spreading) was recently under fire from many

progressive groups for censoring a short talk by the adventure capitalist, Nick Hanauer, entitled "Income Inequality". In this talk, Hanauer says exactly the same thing as John Hobson, but he applies the ideas, not to colonialism, but to current unemployment in the United States. Hanauer says that the rich are unable to consume the products of society because they are too few in number. To make an economy work, demand must be increased, and for this to happen, the distribution of incomes must become much more equal than it is today in the United States.

TED has now posted Hanauer's talk, and the interested reader can find another wonderful TED talk dealing with the same issues from the standpoint of health and social problems. In a splendid lecture entitled "How economic inequality harms societies", Richard Wilkinson demonstrates that there is almost no correlation between gross national product and a number of indicators of the quality of life, such as physical health, mental health, drug abuse, education, imprisonment, obesity, social mobility, trust, violence, teenage pregnancies and child well-being. On the other hand he offers comprehensive statistical evidence that these indicators are strongly correlated with the degree of inequality within countries, the outcomes being uniformly much better in nations where income is more equally distributed.

Warren Buffet famously remarked, "There's class warfare, all right. But it's my class, the rich class, that's making war, and we're winning." However, the evidence presented by Hobson, Hanauer and Wilkinson shows conclusively that no one wins in a society where inequality is too great, and everyone wins when incomes are more evenly distributed.

We must decrease economic inequality

In his Apostolic Exhortation, "Evangelii Gaudium", Pope Francis said:

"In our time humanity is experiencing a turning-point in its history, as we can see from the advances being made in so many fields. We can only praise the steps being taken to improve people's welfare in areas such as health care, education and communications. At the same time we have to remember that the majority of our contemporaries are barely living from day to day, with dire consequences. A number of diseases are spreading. The hearts of many people are gripped by fear and desperation, even in the so-called rich countries. The joy of living frequently fades, lack of respect for others and violence are on the rise, and inequality is increasingly evident. It is a struggle to live and, often, to live with precious little dignity."

"This epochal change has been set in motion by the enormous qualitative, quantitative, rapid and cumulative advances occurring in the sciences and in technology, and by their instant application in different areas of nature and of life. We are in an age of knowledge and information, which has led to new and often anonymous kinds of power."

"Just as the commandment 'Thou shalt not kill' sets a clear limit in order to safeguard the value of human life, today we also have to say 'thou shalt not' to an economy of exclusion and inequality. Such an economy kills. How can it be that it is not a news item when an elderly homeless person dies of exposure, but it is news when the stock market loses two points? This is a case of exclusion. Can we continue to stand by when food is

thrown away while people are starving? This is a case of inequality. Today everything comes under the laws of competition and the survival of the fittest, where the powerful feed upon the powerless. As a consequence, masses of people find themselves excluded and marginalized: without work, without possibilities, without any means of escape."

"In this context, some people continue to defend trickle-down theories which assume that economic growth, encouraged by a free market, will inevitably succeed in bringing about greater justice and inclusiveness in the world. This opinion, which has never been confirmed by the facts, expresses a crude and naive trust in the goodness of those wielding economic power and in the sacralized workings of the prevailing economic system. Meanwhile, the excluded are still waiting."

In a recent speech, Senator Bernie Sanders quoted Pope Francis extensively and added: "We have a situation today, Mr. President, incredible as it may sound, where the wealthiest 85 people in the world own more wealth than the bottom half of the world's population."[26]

The social epidemiologist Prof. Richard Wilkinson, has documented the ways in which societies with less economic inequality do better than more unequal societies in a number of areas, including increased rates of life expectancy, mathematical performance, literacy, trust, social mobility, together with decreased rates of infant mortality, homicides, imprisonment, teenage births, obesity and mental illness, including drug and alcohol addiction.[27] We must also remember that according to the economist John A. Hobson, the basic problem that led to imperialism was an excessively unequal distribution of incomes in the industrialized countries. The result of this unequal distribution was that neither the rich nor the poor could buy back the total output of their society. The incomes of the poor were insufficient, and rich were too few in number.

Culture and internationalism

Cultural and educational activities have a small ecological footprint, and therefore are more sustainable than pollution-producing, fossil-fuel-using jobs in industry. Furthermore, since culture and knowledge are shared among all nations, work in culture and education leads societies naturally towards internationalism and peace.

Economies based on a high level of consumption of material goods are unsustainable and will have to be abandoned by a future world that renounces the use of fossil fuels in order to avoid catastrophic climate change, a world where non-renewable resources such as metals will become increasingly rare and expensive. How then can full employment be maintained?

The creation of renewable energy infrastructure will provide work for a large number of

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[26]https://www.youtube.com/watch?v=9_LJpN893Vg
https://www.oxfam.org/en/tags/inequality
https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/cr-even-it-up-extreme-inequality-291014-en.pdf
[27]https://www.youtube.com/watch?v=cZ7LzE3u7Bw
https://en.wikipedia.org/wiki/Richard_G._Wilkinson

people; but in addition, sustainable economies of the future will need to shift many workers from jobs in industry to jobs in the service sector. Within the service sector, jobs in culture and education are particularly valuable because they will help to avoid the disastrous wars that are currently producing enormous human suffering and millions of refugees, wars that threaten to escalate into an all-destroying global thermonuclear war.[28]

Human nature has two sides: It has a dark side, to which nationalism and militarism appeal; but our species also has a genius for cooperation, which we can see in the growth of culture. Our modern civilization has been built up by means of a worldwide exchange of ideas and inventions. It is built on the achievements of many ancient cultures. China, Japan, India, Mesopotamia, Egypt, Greece, the Islamic world, Christian Europe, and the Jewish intellectual traditions all have contributed. Potatoes, corn, squash, vanilla, chocolate, chilli peppers, and quinine are gifts from the American Indians.[29]

We need to reform our educational systems, particularly the teaching of history. As it is taught today, history is a chronicle of power struggles and war, told from a biased national standpoint. We are taught that our own country is always heroic and in the right. We urgently need to replace this indoctrination in chauvinism by a reformed view of history, where the slow development of human culture is described, giving credit to all who have contributed. When we teach history, it should not be about power struggles. It should be about how human culture was gradually built up over thousands of years by the patient work of millions of hands and minds. Our common global culture, the music, science, literature and art that all of us share, should be presented as a precious heritage - far too precious to be risked in a thermonuclear war.

We have to extend our loyalty to the whole of the human race, and to work for a world not only free from nuclear weapons, but free from war. A war-free world is not utopian but very practical, and not only practical but necessary. It is something that we can achieve and must achieve. Today their are large regions, such as the European Union, where war would be inconceivable. What is needed is to extend these.

Nor is a truly sustainable economic system utopian or impossible. To achieve it, we should begin by shifting jobs to the creation of renewable energy infrastructure, and to the fields of culture and education. By so doing we will support human solidarity and avoid the twin disasters of catastrophic war and climate change.

Caring for our children

We give our children loving care, but it makes no sense do so and at the same time to neglect to do all that is within our power to ensure that they and their descendants will inherit an earth in which they can survive. We also have a responsibility to all the other living organisms with which we share the gift of life.

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[28]http://www.fredsakademiet.dk/library/need.pdf
http://eruditio.worldacademy.org/issue-5/article/urgent-need-renewable-energy
[29]http://eruditio.worldacademy.org/article/evolution-cooperation
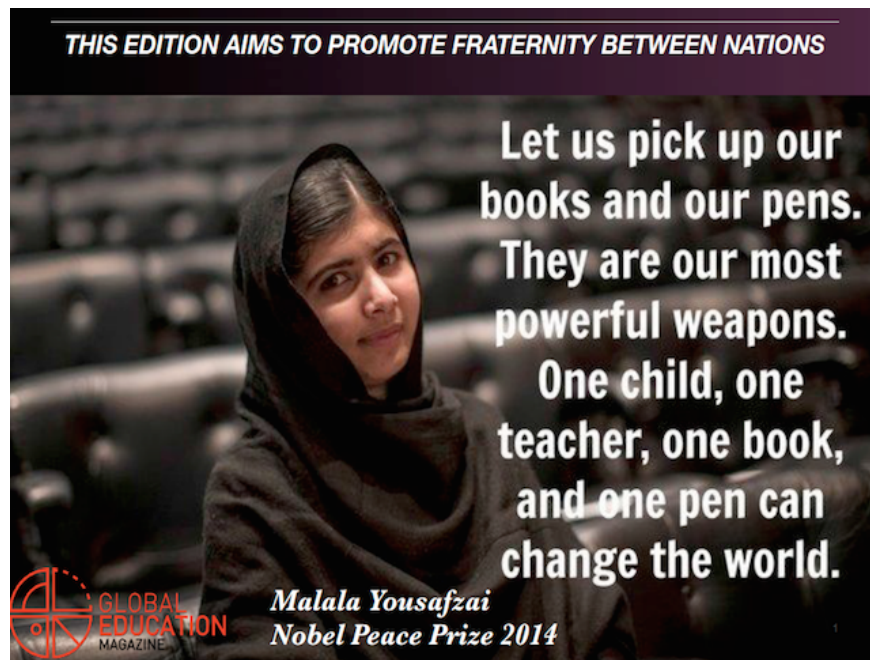
Inaction is not an option. We have to act with courage and dedication, even if the odds are against success, because the stakes are so high. The mass media could mobilize us to action, but they have failed in their duty. Our educational system could also wake us up and make us act, but it too has failed us. The battle to save the earth from human greed and folly has to be fought in the alternative media. Hence this book, printed by a small peace-oriented Swedish publisher, and hence urgent the tone of this final chapter.

We need a new economic system, a new society, a new social contract, a new way of life. Here are the great tasks that history has given to our generation: We must achieve a steady-state economic system. We must restore democracy. We must decrease economic inequality. We must break the power of corporate greed. We must leave fossil fuels in the ground. We must stabilize and ultimately reduce the global population. We must eliminate the institution of war. And finally, we must develop a more mature ethical system to match our new technology.

Our duty to the biosphere

We need to learn from long-established cultures

The era of colonialism has left the industrialized countries with a rather arrogant attitude towards other cultures. Although formal political colonialism has almost entirely vanished, many of the assumptions of the colonial era persist and are strongly supported by the mainstream mass media. It is assumed by many people in the industrialized North that if the developing countries would only learn mass production, modern farming techniques and a modern lifestyle, all would be well. However, a sustainable global future may require a transfer of knowledge, techniques and attitudes in precisely the opposite direction - from pre-industrial societies to highly industrialized ones. The reason for this is that the older societies have cultures that allow them to live in harmony with nature, and this is exactly what the highly industrial North must learn to do.

Industrialism and the rapid development of science and technology have given some parts of the world a 200-year period of unbroken expansion and growth, but today this growth is headed for a collision with a wall-like barrier - limits set by the carrying capacity of the global environment and by the exhaustion of non-renewable resources. Encountering these limits is a new experience for the the industrialized countries. By contrast, pre-industrial societies have always experienced limits. The industrialized world must soon replace the economics of growth with equilibrium economics. Pre-industrial societies have already learned to live in equilibrium - in harmony with nature.

Like biodiversity, cultural diversity is an extremely valuable resource, and for similar reasons. A large genetic pool gives living organisms the flexibility needed to adapt to changes in the environment. Similarly, cultural diversity can give humans the flexibility needed to cope with change. In the changed world of today (changed by the invention of thermonuclear weapons and by the extraordinary growth of global population and commerce) we urgently need to learn to live in harmony, in harmony with ourselves, in harmony with nature, and in harmony with other members of our species. We can do this if we draw

on the full human heritage of cultural diversity. We can draw not only on the knowledge and wisdom of presently existing societies, but also on the experiences and ideas of societies of the past.

- **The Pythagorean concept of harmony:** In the ancient world, the concept of harmony was developed to a high level by the Pythagoreans. The Pythagoreans used the idea of harmony to understand medicine, music, mathematics and ethics. A description of Pythagorean ideals can be found on this website in Chapter 2 of *Science and Society*.

- **The concept of harmony in Chinese civilization:** Chinese civilization is very ancient, and it has made many extremely important contributions to the cultural heritage of the world - for example, the invention of paper, ink, printing and the magnetic compass. Agriculture began in China as early as 6,000 B.C. The art of working in bronze was developed in China during the Shang dynasty (1,500 B.C. - 1,100 B.C.) and it reached a high pitch of excellence in the Chou dynasty (1,100 B.C. - 250 B.C.).

  In the Chou period, many of the cultural characteristics which we recognize as particularly Chinese were developed. During this period, the Chinese evolved a code of behavior based on politeness and ethics. Much of this code of behavior is derived from the teachings of K'ung Fu-tzu (Confucius), a philosopher and government official who lived between 551 B.C. and 479 B.C.. The "Golden Rule" was known to K'ung Fu-tzu, but was formulated in a negative way: "Do not do to others anything that you would not like them do to you".

  The rational teachings of K'ung Fu-tzu were complemented by the more mystical and intuitive doctrines of Lao-tzu and his followers. Lao-tzu lived at about the same time as K'ung Fu-tzu, and he founded the Taoist religion. The Taoists believed that unity with nature could be achieved by passively blending oneself with the forces of nature.

  On the whole, politicians and scholars followed the practical teachings of K'ung Fu-tzu, while poets and artists became Taoists. The intuitive sensitivity to nature inspired by Taoist beliefs allowed these artists and poets to achieve literature and art of unusual vividness and force with great economy of means. The Taoist religion has much in common with Buddhism, and its existence in China paved the way for the spread of Buddhism from India to China and Japan.

  Taoist and Confucian teachings each emphasized a particular aspect of harmony. Taoism emphasized harmony with nature, while Confucianism taught harmonious relationships between humans. Thus in China, harmony became an ideal advocated by both traditions. The Chinese respect for harmony as an ideal can be seen, for example, in the beautiful Temple of Divine Harmony in Beijing.

- **India:** Evidence of a very early river-valley civilization in India has been found at a site called Mohenjo-Daro. However, in about 2,500 B.C., this early civilization

was destroyed by some great disaster, perhaps a series of floods; and for the next thousand years, little is known about the history of India. During this dark period between 2,500 B.C. and 1,500 B.C., India was invaded by the Indo-Aryans, who spoke Sanskrit, a language related to Greek. The Indo-Aryans partly drove out and partly enslaved the native Dravidians. However, there was much intermarriage between the groups, and to prevent further intermarriage, the Indo-Aryans introduced a caste system sanctioned by religion.

According to Hindu religious belief, the soul of a person who has died is reborn in another body. If, throughout his life, the person has faithfully performed the duties of his caste, then his or her soul may be reborn into a higher caste. Finally, after existing as a Brahman, the soul may be so purified that it can be released from the cycle of death and rebirth.

In the 6th century B.C., Gautama Buddha founded a new religion in India. Gautama Buddha was convinced that all the troubles of humankind spring from an excessive attachment to earthly things. He felt that the only escape from sorrow is through the renunciation of earthly desires. He also urged his disciples to follow a high ethical code, the Eightfold Way. Among the sayings of Buddha are the following:

"Hatred does not cease by hatred at any time; hatred ceases by love."

"Let a man overcome anger by love; let him overcome evil by good."

"All men tremble at punishment. All men love life. Remember that you are like them, and do not cause slaughter."

Both Hindu and Buddhist traditions emphasize the unity of all life on earth. Hindus regard killing an animal as a sin, and many try to avoid accidentally stepping on insects as they walk. (The Hindu and Buddhist picture of the relatedness of all life on earth has been confirmed by modern biological science. We now know that all living organisms have the same fundamental biochemistry, based on DNA, RNA, proteins and polysaccharides, and we know that our own human genomes are more similar to than different from the genomes of our close relations in the animal world.)

The peoples of the industrialized nations urgently need to acquire a non-anthropocentric element in their ethics, similar to reverence for all life found in the Hindu and Buddhist traditions, as well as in the teachings of Saint Francis of Assisi and Albert Schweitzer. We need to learn to value other species for their own sakes, and not because we expect to use them for our own economic goals.

The Buddhist concept of karma has great value in human relations. The word "karma" means simply "action". In Buddhism, one believes that actions return to the actor. Good actions will be returned, and bad actions will also be returned. This is obviously true in social relationships. If we behave with kindness and generosity to our neighbors, they will return our kindness. Conversely, a harmful act may lead to a vicious circle of revenge and counter-revenge which can only be broken

by returning good for evil. However the concept of karma has a broader and more abstract validity beyond the direct return of actions to the actor.

When we perform a good action, we increase the total amount of good karma in the world. If all people similarly behave well, the the world as a whole will become more pleasant and more safe. Human nature seems to have a built-in recognition of this fact, and we are rewarded by inner happiness when we perform good and kind actions. In his wonderful book, "Ancient Wisdom, Modern World", the Dalai Lama says that good actions lead to happiness and bad actions to unhappiness even if our neighbors do not return these actions. Inner peace, he tells us, is incompatible with bad karma and can be achieved only through good karma, i.e. good actions.

There is a great deal of similarity between the Buddhist concept of karma and some of the ethical principles of Christianity, particularly principles that appear in the Sermon on the Mount. Also Buddha's saying "Hatred does not cease by hatred at any time; hatred ceases by love" echoes the Christian principle of returning good for evil. Both are aimed at stopping vicious circles of revenge and counter-revenge, such as those that can now be observed in the Middle East.

More details about the Chinese and Indian civilizations can be found in Chapter 4 of *Science and Society*

- **Bhutan** Before the doors of Bhutan were cautiously opened to visitors in 1974, the country remained aloof from the modern world. One of the most striking characteristics of the ancient Bhutanese culture was that most of the actions of its citizens were done from a sense of duty and tradition, rather than for economic reasons. The citizens of Bhutan derived great happiness from these actions. For example, caring for the elderly was to them not only a duty but also a great source of pleasure. It is doubtful whether modernization will increase the happiness of the Bhutanese.

- **Harmony with nature in the Native American culture:** The attitude towards nature of the Sioux can be seen from the following quotations from *Land of the Spotted Eagle* by the Lakota (Western Sioux) chief, Standing Bear (ca. 1834 - 1908):

  "The Lakota was a true lover of Nature. He loved the earth and all things of the earth... From Waken Tanka (the Great Spirit) there came a great unifying life force that flowered in and through all things – the flowers of the plains, blowing winds, rocks, trees, birds, animals – and was the same force that had been breathed into the first man. Thus all things were kindred and were brought together by the same Great Mystery."

  "Kinship with all creatures of the earth, sky, and water was a real and active principle. For the animal and bird world there existed a brotherly feeling that kept the Lakota safe among them. And so close did some of the Lakota come to their feathered and furred friends that in true brotherhood they spoke a common tongue."

  "The animal had rights – the right of man's protection, the right to live, the right to multiply, the right to freedom, and the right to man's indebtedness – and in

recognition of these rights the Lakota never enslaved the animal, and spared all life that was not needed for food and clothing."

"This concept of life was humanizing and gave to the Lakota an abiding love. It filled his being with the joy and mystery of things; it gave him reverence for all life; it made a place for all things in the scheme of existence with equal importance to all. The Lakota could despise no creature, for all were one blood, made by the same hand, and filled with the essence of the Great Mystery."

A similar attitude towards nature can be found in traditional Inuit cultures.

- **St. Francis of Assisi (1181-1226) and Mahatma Gandhi (1869-1948):** There are similarities between the doctrines of these two great ethical teachers. Both came from wealthy families, but during the course of their lives they acquired strong sympathy with the poor and rejected excessive attachment to worldly goods. Both dressed in the simplest possible rough homespun clothes. (Gandhi said, "Live simply that others may simply live.") Both taught peace between humans and kindness to all life. St. Francis is said to have preached sermons to the birds; Gandhi personally took care of sick animals in his ashram.

- **Respect for nature in African cultures:** In some parts of Africa, a man who plans to cut down a tree offers a prayer of apology, telling the tree why necessity has forced him to harm it. This pre-industrial attitude is something from which the industrialized North could learn. In industrial societies, land "belongs" to some one, and the owner has the "right" to ruin the land or to kill the communities of creatures living on it if this happens to give some economic advantage, in much the same way that a Roman slaveowner was thought to have the "right" to kill his slaves. Pre-industrial societies have a much less rapacious and much more custodial attitude towards the land and towards its non-human inhabitants.

- **Preservation of the land for future generations:** Many traditional agricultural societies have an ethical code that requires them to preserve the fertility of the land for future generations. This recognition of a duty towards the distant future is in strong contrast to the shortsightedness of modern economists. For example, John Maynard Keynes has been quoted as saying "In the long run, we will all be dead", meaning that we need not look that far ahead. By contrast, members of traditional agricultural societies recognize that their duties extend far into the distant future, since their descendants will still be alive.

The pre-industrial societies and ethical teachers mentioned above have much to tell us about how to achieve harmony with ourselves, harmony with nature, and harmony with other members of our own species. Of course is is necessary to learn from the best aspects of each culture and not the worst. Also we must remember that the population of the world is now so large that a complete return to a pre-industrial way of life would not be possible. However, some of the values and attitudes of pre-industrial cultures can help us to an awareness of what it will take to achieve a truly sustainable global society.

The advertising-driven orgies of consumerism that characterize modern market economies cannot be extended into the distant future because of limitations that will be imposed by exhaustion of non-renewable resources and by the limited carrying capacity of the global environment. Therefore we need to stop using material goods as a measure of merit. Gandhi deliberately reduced his possessions to a minimum in order to demonstrate that merit and goods are not synonymous. St. Francis did the same. We can learn from them, and from the values of pre-industrial societies, to stop worshiping the false ideals, *Power, Dominance, Growth*, and *Profit*. Instead we must learn to live in *Harmony*.

Education for a harmonious future

Our educational system must reflect the kind of world that we want for the future. What kind of world do we want? We want a world where war is abolished as an institution, and where the enormous resources now wasted on war are used constructively. We want a world where a stable population of moderate size lives in comfort and security, free from fear of hunger or unemployment. We want a world where peoples of all countries have equal access to resources, and an equal quality of life. We want a world with a new economic system, not designed to produce unlimited growth, but aiming instead at meeting the real needs of the human community in equilibrium with the global environment. We want a world of changed values, where extravagance and waste are regarded as morally wrong; where kindness, wisdom and beauty are admired; and where the survival of other species than our own is regarded as an end in itself, not just a means to our own ends.

In our reverence for the intricate beauty and majesty of nature, and our respect for the dignity and rights of other humans, we can feel united with the great religious and philosophical traditions of mankind, and with the traditional wisdom of our ancestors.

Pictures sent back by the astronauts show the earth as it really is - a small, fragile, beautiful planet, drifting on through the dark immensity of space - our home, where we must learn to live in harmony with nature and with each other.

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Chapter 9

FEDERALISM AND GLOBAL GOVERNANCE

9.1   A personal note

I have been a World Federalist ever sinbe 1954. Sixty-four years ago, I graduated from MIT and went on to do postgraduate work in theoretical physics at the University of Chicago. At that time, my political opinions were not very different from those of my parents, who were Eisenhower-supporting Republicans. I was very much against the institution of war, and in favor of world government. However, I thought that the establishment of a world authority would have to wait until most of the the member states had decent governments.

At the University of Chicago, the general atmosphere was quite liberal, and I may have been influenced by it. But what really changed my mind was hearing a speech by a World Federalist named Vernon Nash. Besides convincing me that a world government ought to be a federation, he also made me see that if we waited until all the member states had governments of which we could approve, we would have waited too long. We need global governance precisely because of faults in the governments of the nations of the world.

Vernon Nash had once been in favor of abolishing the United Nations and starting again from scratch with a World Constitutional Convention. He had justified this position by saying "No one has ever got across a ditch of any size in two jumps". However, other World Federalists had later made him see how impractical his position was, and he finally agreed that gradual reform of the UN was the best way to go forward.

After studying the writings of the World Federalists, I reached beliefs that are very close to the ones that I hold today. I recently expressed these ideas in an article in Cadmus, a journal of the World Academy of Art and Science. You can find the article by typing "John Scales Avery, Cadmus" into a search engine.

But what are the reforms that are needed? After the horrors of World War II, the United Nations was founded to eliminate the institution of war. However, the UN Charter drafted in 1945 was far too weak to achieve this goal because it was a confederation rather than a federation. This was very similar to what happened during the early history of the

Figure 9.1: **Alexander Hamilton believed that "To coerce the states is one of the maddest projects that was ever devised."**

United States: First a confederation was tried, but it soon proved to be too weak, and it was replaced by the present US federal constitution. The debates that occurred at that time are very relevant to UN reform today.

George Mason, one of the architects of the federal constitution of the United States, believed that "such a government was necessary as could directly operate on individuals, and would punish those only whose guilt required it", while James Madison (another drafter of the U.S. federal constitution) remarked that the more he reflected on the use of force, the more he doubted "the practicability, the justice and the efficacy of it when applied to people collectively, and not individually".

Finally, Alexander Hamilton, in his Federalist Papers, discussed the Articles of Confederation with the following words: "To coerce the states is one of the maddest projects that was ever devised... Can any reasonable man be well disposed towards a government which makes war and carnage the only means of supporting itself - a government that can exist only by the sword? Every such war must involve the innocent with the guilty. The single consideration should be enough to dispose every peaceable citizen against such a government... What is the cure for this great evil? Nothing, but to enable the... laws to operate on individuals, in the same manner as those of states do."

In other words, the essential difference between a confederation and a federation, both of them unions of states, is that a federation has the power to make and to enforce laws that act on individuals, rather than attempting to coerce states (in Hamilton's words, "one of the maddest projects that was ever devised.")

Other reforms are also needed: If the UN is to become an effective World Federation, it will need a reliable source of income to make the organization less dependent on wealthy countries, which tend to give support only to those interventions of which they approve. A promising solution to this problem is the so-called "Tobin tax", named after the Nobel-laureate economist James Tobin of Yale University. Tobin proposed that international currency exchanges should be taxed at a rate between 0.1 and 0.25 percent. He believed that even this extremely low rate of taxation would have the beneficial effect of damping speculative transactions, thus stabilizing the rates of exchange between currencies. When asked what should be done with the proceeds of the tax, Tobin said, almost as an afterthought, "Let the United Nations have it."

The volume of money involved in international currency transactions is so enormous that even the tiny tax proposed by Tobin would provide the United Nations with between 100 billion and 300 billion dollars annually. By strengthening the activities of various UN agencies, the additional income would add to the prestige of the United Nations and thus make the organization more effective when it is called upon to resolve international political conflicts.

The budgets of UN agencies, such as the World Health Organization, the Food and Agricultural Organization, UNESCO and the UN Development Programme, should not just be doubled but should be multiplied by a factor of at least fifty. With increased budgets the UN agencies could sponsor research and other actions aimed at solving the world's most pressing problems - AIDS, drug-resistant infections diseases, tropical diseases, food insufficiencies, pollution, climate change, alternative energy strategies, population stabilization, peace education, as well as combating poverty, malnutrition, illiteracy, lack of safe water and so on. Scientists would would be less tempted to find jobs with arms-related industries if offered the chance to work on idealistic projects. The United Nations could be given its own television channel, with unbiased news programs, cultural programs, and "State of the World" addresses by the UN Secretary General.

In addition, the voting system of the United Nations General Assembly needs to be reformed, and the veto power in the Security Council need to be abolished (or alternatively, the Security Council could be abolished).

So in 1954, convinced that war could only be eliminated by making the United Nations into a federation, I became an active World Federalist. In fact, during my stay at the University of Chicago, I became the Membership Chairman for the Chicago Area of the World Association of World Federalists.

Figure 9.2: **James Tobin. When asked what should be done with the proceeds of the tax, Tobin said, almost as an afterthought, "Let the United Nations have it."**

9.2 Strengthening the United Nations

It is becoming increasingly clear that the concept of the absolutely sovereign nation-state is a dangerous anachronism in a world of thermonuclear weapons, instantaneous communication, and economic interdependence. Probably our best hope for the future lies in developing the United Nations into a World Federation. The strengthened United Nations should have a legislature with the power to make laws that are binding on individuals, and the ability to arrest and try individual political leaders for violations of these laws. The world federation should also have the power of taxation, and the military and legal powers necessary to guarantee the human rights of ethnic minorities within nations.

In 1945, the victors of World War II gathered in San Francisco to draft the United Nations Charter. The tragic experiences of two world wars, during which the lives of 26 million soldiers and 64 million civilians were lost, had convinced them that security based on national military forces must be replaced by a system of collective security. The first paragraph of the Charter states that the primary purpose of the organization is "to maintain international peace and security, and to that end to take effective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression and other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace."

In practice, the United Nations has developed several effective modes of action - peacekeeping, peacemaking, peacebuilding, preventative diplomacy and peace enforcement. Even though the organization has been hampered by Cold War tensions and frequently paralysed by vetos in the Security Council, it nevertheless has made substantial contributions to global peace by resolving small-scale conflicts and by preventing large-scale ones. The term peacekeeping, in its narrow sense, is applied to operations where U.N. military personnel, often unarmed or only lightly armed, form a buffer between hostile forces in order to maintain a cease-fire. Peacemaking refers to U.N. assistance in the settlement of disputes or the resolution of conflicts.

The term peacebuilding was coined in recent years, and it denotes broad and fundamental efforts to create global conditions which promote peace. Thus peacebuilding includes all areas of international cooperation, including economic, social and humanitarian concerns. For example, U.N. action on problems of poverty, population, pollution, human rights, and the control of terrorism, narcotics and infectious disease all come under the heading of peacebuilding. In addition, the U.N. sometimes acts through preventative diplomacy, an example being the Secretary-General's recent negotiation of an agreement on arms inspection in Iraq. The term peace enforcement denotes active military intervention by the United Nations to stop aggression of one nation against another, for example in the Korean War or the Gulf War. During the half century which has passed since the founding of the United Nations, the need for effective government at the global level has greatly increased. Modern weapons have become so destructive that war is no longer an acceptable method for resolving international disputes. For this reason, and because of the enormous increase in global economic interdependence, we can no longer afford to have unlimited national

sovereignty, with anarchy at the global level.

We can clearly see that in the long run, security can only be achieved by an effective system of international law. The United Nations is the only institution whose authority and structure are suited to constructing and enforcing such a system of law at the global level. U.N. membership includes all nations; and the U.N. has had half a century of experience in addressing global problems.

The impartiality and neutrality of the Secretary-General are accepted and recognized, whereas regional organizations such as NATO cannot claim the same degree of impartiality. Thus it is urgent that the present U.N. Charter be made to function more justly and more effectively; and in the long run, the weaknesses of the present U.N. Charter must be corrected.

There are numerous reasons why, during the comming century, war must be abolished as a social institution; and a few of these reasons are as follows: It is extremely important that research funds be used to develop renewable energy sources and to solve other urgent problems now facing humankind, rather than for developing new and more dangerous weapons systems. In spite of the end of the Cold War, the world still spends roughly 1.7 trillion U.S. dollars per year on armaments. At present, more than 40 percent of all research funds are used for projects related to the arms industry.

Since the Second World War, in spite of the best efforts of the U.N., there have been over 150 armed conflicts; and on any given day, there are an average of 12 wars somewhere in the world. While in earlier epochs it may have been possible to confine the effects of war mainly to combatants, in recent decades the victims of war have increasingly been civilians, and especially children.

Civilian casualties often occur through malnutrition and through diseases which would be preventable in normal circumstances. Because of the social disruption caused by war, normal supplies of food, safe water and medicine are interrupted, so that populations become vulnerable to famine and epidemics. In the event of a nuclear war, starvation and disease would add greatly to the loss of life caused by the direct effects of nuclear weapons.

The indirect effects of war and the threat of war are also enormous. For example, the World Health Organization lacks funds to carry through an antimalarial programme on as large a scale as would be desirable; but the entire programme could be financed for less than the world spends on armaments in a single day. Five hours of world arms spending is equivalent to the total cost of the 20-year WHO programme which resulted, in 1979, in the eradication of smallpox. With a diversion of funds consumed by three weeks of the military expenditures, the world could create a sanitary water supply for all its people, thus eliminating the cause of more than half of all human illness.

It is often said that we are economically dependent on war-related industries; but if this is so, it is a most unhealthy dependence, analogous to drug-dependence or alcoholism. From a purely economic point of view, it is clearly better to invest in education, roads, railways, reforestation, retooling of factories, development of disease-resistant high-yield wheat varieties, industrial research, research on utilization of solar and geothermal energy, and other elements of future-oriented economic infrastructure, rather than building enormously costly warplanes and other weapons. At worst, the weapons will contribute to the

destruction of civilization. At best, they will become obsolete in a few years and will be scrapped. By contrast, investment in future-oriented infrastructure can be expected to yield economic benefits over a long period of time.

It is instructive to consider the example of Japan and of Germany, whose military expenditures were severely restricted after World War II. The impressive post-war development of these two nations can very probably be attributed to the restrictions on military spending which were imposed on them by the peace treaty.

As bad as conventional arms and conventional weapons may be, it is the possibility of a nuclear war that still poses the greatest threat to humanity. One argument that has been used in favor of nuclear weapons is that no sane political leader would employ them. However, the concept of deterrence ignores the possibility of war by accident or miscalculation, a danger that has been increased by nuclear proliferation and by the use of computers with very quick reaction times to control weapons systems.

With the end of the Cold War, the danger of a nuclear war between superpowers has diminished; but because of nuclear proliferation, there is still a substantial danger of such a war in the Middle East or in the India- Pakistan dispute, as well as the danger of nuclear blackmail by terrorists or political fanatics.

Recent nuclear power plant accidents remind us that accidents frequently happen through human and technical failure, even for systems which are considered to be very "safe". We must also remember the time scale of the problem. To assure the future of humanity, nuclear catastrophe must be avoided year after year and decade after decade. In the long run, the safety of civilization cannot be achieved except by the abolition of nuclear weapons, and ultimately the abolition of the institution of war.

In the long run, because of the terrible weapons which have been produced through the misuse of science, and because of the even more destructive weapons which are likely to be devised in the future, the only way that we can insure the survival of civilization is to abolish war as an institution. It seems likely that achievement of this goal will require revision and strengthening of the United Nations Charter. The Charter should not be thought of as cast in concrete for all time. It needs instead to grow with the requirements of our increasingly interdependent global society. We should remember that the Charter was drafted and signed before the first nuclear bomb was dropped on Hiroshima; and it also could not anticipate the extraordinary development of international trade and communication which characterizes the world today. Among the weaknesses of the present U.N. Charter is the fact that it does not give the United Nations the power to make laws which are binding on individuals. At present, in international law, we treat nations as though they were persons: We punish entire nations by sanctions when the law is broken, even when only the leaders are guilty, even though the burdens of the sanctions fall most heavily on the poorest and least guilty of the citizens, and even though sanctions often have the effect of uniting the citizens of a country behind the guilty leaders. To be effective, the United Nations needs a legislature with the power to make laws which are binding on individuals, and the power to to arrest individual political leaders for flagrant violations of international law.

Another weakness of the present United Nations Charter is the principle of "one nation one vote" in the General Assembly. This principle seems to establish equality between

nations, but in fact it is very unfair: For example it gives a citizen of China or India less than a thousandth the voting power of a citizen of Malta or Iceland. A reform of the voting system is clearly needed.

The present United Nations Charter contains guarantees of human rights, but there is no effective mechanism for enforcing these guarantees. In fact there is a conflict between the parts of the Charter protecting human rights and the concept of absolute national sovereignty. Recent history has given us many examples of atrocities committed against ethnic minorities by leaders of nation-states, who claim that sovereignty gives them the right to run their internal affairs as they wish, free from outside interference.

One feels that it ought to be the responsibility of the international community to prevent gross violations of human rights, such as the use of poison gas against civilians (to mention only one of the more recent political crimes); and if this is in conflict with the notion of absolute national sovereignty, then sovereignty must yield. In fact, the concept of the absolutely sovereign nation-state as the the supreme political entity is already being eroded by the overriding need for international law. Recently, for example, the Parliament of Great Britain, one of the oldest national parliaments, acknowledged that laws made by the European Community take precedence over English common law.

Today the development of technology has made global communication almost instantaneous. We sit in our living rooms and watch, via satellite, events taking place on the opposite side of the globe. Likewise the growth of world trade has brought distant countries into close economic contact with each other: Financial tremors in Tokyo can shake New York. The impact of contemporary science and technology on transportation and communication has effectively abolished distance in relations between nations. This close contact and interdependence will increasingly require effective international law to prevent conflicts. However, the need for international law must be balanced against the desirability of local self-government. Like biological diversity, the cultural diversity of humankind is a treasure to be carefully guarded. A balance or compromise between these two desirable goals could be achieved by granting only a few carefully chosen powers to a strengthened United Nations with sovereignty over all other issues retained by the member states.

The United Nations has a number of agencies, such as the World Health Organization, the Food and Agricultural Organization, and UNESCO, whose global services give the UN considerable prestige and de facto power. The effectiveness of the UN as a global authority could be further increased by giving these agencies much larger budgets. In order to do this, and at the same time to promote the shift from fossil fuels to renewable energy sources, it has been proposed that the U.N. be given the power to tax CO_2 emissions.

The amount of money which could thus be made available for constructive purposes is very large; and a slight increase in the prices of fossil fuels could make a number of renewable energy technologies economically competitive. It has also been proposed that the United Nations should be given the power to impose a small tax on international currency transactions. The amount of money involved in these transactions is so large that even a few hundredths of a percent in tax on each transaction would be sucient to solve the financial problems of the United Nations. A United Nations tax on air travel has also been proposed.

The United Nations regular budget in 1992 amounted to 1.03 billion U.S. dollars. In addition, UNICEF, the U.N. Development Programme, and the World Food Programme used several billion dollars, but funds for these agencies were raised by voluntary contributions. Finally, in 1992, peacekeeping operations cost the U.N. 2.7 billion dollars. These sums seem very small when they are compared with the 1.7 trillion dollars which the world spends annually on armaments; and the reluctance of some nations to pay their dues to the U.N. seems shortsighted. It may be that the nations which starve the U.N. financially do so deliberately, in order to make the organization easier to control. They can then give financial support selectively to those interventions of which they approve. For this reason, the provision of a reliable income for the United Nations would have the effect of freeing it from undue influence by any nation, making it more impartial. Impartiality may prove to be the key factor required to give the U.N. the moral authority needed to settle disputes and to maintain peace with a minimum use of force.

The task of building a global political system which is in harmony with modern technology will require our best efforts, but it is not impossible. We can perhaps gain the courage needed for this task by thinking of the history of slavery. The institution of slavery was a part of human culture for so long that it was considered to be an inevitable consequence of human nature; but today slavery has been abolished almost everywhere in the world. The example of the dedicated men and women who worked to abolish slavery can give us courage to approach the even more important task which faces us today - the abolition of war.

9.3 Making the United Nations into a World Federation

A federation of states is, by definition, a limited union where the federal government has the power to make laws that are binding on individuals, but where the laws are confined to interstate matters, and where all powers not expressly delegated to the federal government are retained by the individual states. In other words, in a federation each of the member states runs its own internal affairs according to its own laws and customs; but in certain agreed-on matters, where the interests of the states overlap, authority is specifically delegated to the federal government.

Since the federal structure seems well suited to a world government with limited and carefully-defined powers that would preserve as much local autonomy as possible, it is worthwhile to look at the histories of a few of the federations. There is much that we can learn from their experiences.

9.4 The Success of Federations

Historically, the federal form of government has proved to be extremely robust and successful. Many of today's nations are federations of smaller, partially autonomous, member

states. Among these nations are Argentina, Australia, Austria, Belgium, Brazil, Canada, Germany, India, Mexico, Russia, Spain, South Africa and the United States.

The Swiss Federation is an interesting example, because it's regions speak three different languages: German, French and Italian. In 1291, citizens of Uri, Schwyz and Unterwalden, standing on the top of a small mountain called Rütli, swore allegiance to the first Swiss federation with the words "we will be a one and only nation of brothers". During the 14th century, Luzern, Zürich, Glarus, Zug and Bern also joined. Later additions during the 15th and 16th centuries included Fribourg, Solothurn, Basel, Schaffhausen and Appenzell. In 1648 Switzerland declared itself to be an independent nation, and in 1812, the Swiss Federation declared its neutrality. In 1815, the French-speaking regions Valais, Neuchatel and Genéve were added, giving Switzerland its final boundaries.

In some ways, Switzerland is a very advanced democracy, and many issues are decided by the people of the cantons in direct referendums. On the other hand, Switzerland was very late in granting votes to women (1971), and it was only in 1990 that a Swiss federal court forced Appenzell Innerrhoden to comply with this ruling. Switzerland was also very late in joining the United Nations (10 September, 2002).

The Federal Constitution of United States of America is one of the most important and influential constitutions in history. It later formed a model for many other governments, especially in South America. The example of the United States is especially interesting because the original union of states formed by the Articles of Confederation in 1777 proved to be too weak, and it had to be replaced eleven years later by a federal constitution.

During the revolutionary war against England the 13 former colonies sent representatives to a Continental Congress, and on May 10, 1776, the Congress authorized each of the colonies to form its own local provincial government. On July 4, 1776 it published a formal Declaration of Independence. The following year, the Congress adopted the Articles of Confederation defining a government of the new United States of America. The revolutionary war continued until 1783, when the Treaty of Paris was signed by the combatants, ending the war and giving independence to the United States. However, the Articles of Confederation soon proved to be too weak. The main problem with the Articles was that laws of the Union acted on its member states rather than on individual citizens.

In 1887, a Constitutional Convention was held in Philadelphia with the aim of drafting a new and stronger constitution. In the same year, Alexander Hamilton began to publish the Federalist Papers, a penetrating analysis of the problems of creating a workable government uniting a number of semi-independent states. The key idea of the Federalist Papers is that the coercion of states is neither just nor feasible, and that a government uniting several states must function by acting on individuals. This central idea was incorporated into the Federal Constitution of the United States, which was adopted in 1788. Another important feature of the new Constitution was that legislative power was divided between the Senate, where the states had equal representation regardless of their size, and the House of Representatives, where representation was proportional to the populations of the states. The functions of the executive, the legislature and the judiciary were separated in the Constitution, and in 1789 a Bill of Rights was added.

George Mason, one of the architects of the federal constitution of the United States,

Figure 9.3: **Alexander Hamilton, author of the "Federalist Papers". He pointed out that the coercion of states is neither just nor feasible, and that a government uniting several states must function by acting on individuals. Public Domain, Wikimedia Commons**

believed that "such a government was necessary as could directly operate on individuals, and would punish those only whose guilt required it", while James Madison (another drafter of the U.S. federal constitution) remarked that the more he reflected on the use of force, the more he doubted "the practicability, the justice and the efficacy of it when applied to people collectively, and not individually". Finally, Alexander Hamilton, in his Federalist Papers, discussed the Articles of Confederation with the following words: "To coerce the states is one of the maddest projects that was ever devised... Can any reasonable man be well disposed towards a government which makes war and carnage the only means of supporting itself - a government that can exist only by the sword? Every such war must involve the innocent with the guilty. The single consideration should be enough to dispose every peaceable citizen against such a government... What is the cure for this great evil? Nothing, but to enable the... laws to operate on individuals, in the same manner as those of states do."

Because the states were initially distrustful of each other and jealous of their independence, the powers originally granted to the US federal government were minimal. However, as it evolved, the Federal Government of the United States gradually became stronger, and bit by bit it became involved in an increasingly wide range of activities.

The formation of the federal government of Australia is interesting because it illustrates the power of ordinary citizens to influence the large-scale course of events. In the 19th century, the six colonies British that were later to be welded into the Commonwealth of Australia imposed tariffs on each other, so that citizens living near the Murray River (for example) would have to stop and pay tolls each time they crossed the river. The

tolls, together with disagreements over railways linking the colonies, control of river water and other common concerns, finally became so irritating that citizens' leagues sprang up everywhere to demand federation. By the 1890's such federation leagues could be found in cities and towns throughout the continent. In 1893, the citizens' leagues held a conference in Corowa, New South Wales, and proposed the "Corowa Plan", according to which a Constitutional Convention should be held. After this, the newly drafted constitution was to be put to a referendum in all of the colonies. This would be the first time in history that ordinary citizens would take part in the nation-building process. In January, 1895, the Carawa Plan was adopted by a meeting of Premiers in Hobart, and finally, despite the apathy and inaction of many politicians, the citizens had their way: The first Australian federal election was held March, 1901, and on May 9, 1901, the Federal Parliament of Australia opened. Australia was early in granting votes for women (1903). Its voting system has evolved gradually. Today there is a system of compulsory voting by citizens for both the Australian House of Representatives and the Australian Senate.

The successes and problems of the European Union provide invaluable experience as we consider the measures that will be needed to make the United Nations into a federation. On the whole, the EU has been an enormous success, demonstrating beyond question that it is possible to begin with a very limited special-purpose federation and to gradually expand it, judging at each stage whether the cautiously taken steps have been successful. The European Union has today made war between its member states virtually impossible. This goal, now achieved, was in fact the vision that inspired the leaders who initiated the European Coal and Steel Community in 1950.

The European Union is by no means without its critics or without problems, but, as we try to think of what is needed for United Nations reform, these criticisms and problems are just as valuable to us as are the successes of the EU.

Countries that have advanced legislation protecting the rights of workers or protecting the environment complain that their enlightened laws will be nullified if everything is reduced to the lowest common denominator in the EU. This complaint is a valid one, and two things can be said about it: Firstly, diversity is valuable, and therefore it may be undesirable to homogenize legislation, even if uniform rules make trade easier. Secondly, if certain rules are to be made uniform, it is the most enlightened environmental laws or labor laws that ought to be made the standard, rather than the least enlightened ones. Similar considerations would hold for a reformed and strengthened United Nations.

Another frequently heard complaint about the EU is that it takes decision-making far away from the voters, to a remote site where direct political will of the people can hardly be felt. This criticism is also very valid. Often, in practice, the EU has ignored or misunderstood one of the basic ideas of federalism: A federation is a compromise between the desirability of local self-government, balanced against the necessity of making central decisions on a few carefully selected issues.

As few issues as possible should taken to Bruxelles, but there are certain issues that are so intrinsically transnational in their implications that they must be decided centrally. This is the principle of subsidiarity, so essential for the proper operation of federations - local government whenever possible, and only a few central decisions when absolutely

necessary. In applying the principle of subsidiarity to a world government of the future, one should also remember that UN reform will take us into new and uncharted territory. Therefore it is prudent to grant only a few carefully chosen powers, one at a time, to a reformed and strengthened UN, to see how these work, and then to cautiously grant other powers, always bearing in mind that wherever possible, local decisions are the best.

9.5 Weakness of the U.N. Charter and Steps Towards a World Federation

Laws must be made binding on individuals

Among the weaknesses of the present U.N. Charter is the fact that it does not give the United Nations the power to make laws which are binding on individuals. At present, in international law, we treat nations as though they were persons: We punish entire nations by sanctions when the law is broken, even when only the leaders are guilty, even though the burdens of the sanctions fall most heavily on the poorest and least guilty of the citizens, and even though sanctions often have the effect of uniting the citizens of a country behind the guilty leaders. To be effective, the United Nations needs a legislature with the power to make laws which are binding on individuals, and the power to to arrest individual political leaders for flagrant violations of international law.

The present United Nations Charter is similar to the United States Articles of Confederation, a fatally weak union that lasted only eleven years, from 1777 to 1788. Like it, the UN attempts to act by coercing states. Although the United Nations Charter has lasted almost sixty years and has been enormously valuable, its weaknesses are also apparent, like those of the Articles. One can conclude that the proper way to reform the United Nations is to make it into a full federation, with the power to make and enforce laws that are binding on individuals.

The International Criminal Court, which was established when the Rome Treaty came into force in 2002, is a step in the right direction. The ICC's jurisdiction extends only to the crime of genocide, crimes against humanity, war crimes, and (at some time in the future) the crime of aggression. In practice, the ICC is open to the criticisms that it is often unable to enforce its rulings and that it lacks impartiality. Nevertheless, the establishment of the ICC is a milestone in humanity's efforts to replace the brutal military force of powerful governments by the rule of law. For the first time in history, individuals are being held responsible for violating international laws.

The voting system of the U.N. General Assembly must be reformed

Another weakness of the present United Nations Charter is the principle of "one nation one vote" in the General Assembly. This principle seems to establish equality between nations, but in fact it is very unfair: For example it gives a citizen of China or India less than a thousandth the voting power of a citizen of Malta or Iceland. A reform of the voting

Figure 9.4: **Logo of the International Criminal Court. Although it functions imperfectly today, the ICC is an extremely important step towards effective global governance, because it enforces international laws acting on individuals rather than on states. Public Domain, Wikimedia Commons**

system is clearly needed. (A recent and detailed discussion of these issues has been given by Dr. Francesco Stipo, Reference 1.)

One possible plan (proposed by Bertrand Russell) would be for final votes to be cast by regional blocks, each block having one vote. The blocks might be: 1) Latin America 2) Africa 3) Europe 4) North America 5) Russia and Central Asia 6) China 7) India and Southeast Asia 8) The Middle East and 9) Japan, Korea and Oceania.

Today, Ambassadors and Permanent Representatives at the United Nations are appointed by national governments. However, in the long-term future, this system may evolve into a more democratic one, where citizens will vote directly for their representatives, as they do in many federations, such as Australia, Germany, the United States and the European Union.

The United Nations must be given the power to impose taxes

If the UN is to become an effective World Federation, it will need a reliable source of income to make the organization less dependent on wealthy countries, which tend to give support only to those interventions of which they approve. A promising solution to this problem is the so-called "Tobin tax", named after the Nobel-laureate economist James Tobin of Yale University. Tobin proposed that international currency exchanges should be taxed at a rate between 0.1 and 0.25 percent. He believed that even this extremely low rate of taxation would have the beneficial effect of damping speculative transactions, thus stabilizing the rates of exchange between currencies. When asked what should be done with the proceeds of the tax, Tobin said, almost as an afterthought, "Let the United Nations have it."

The volume of money involved in international currency transactions is so enormous that even the tiny tax proposed by Tobin would provide the United Nations with between 100 billion and 300 billion dollars annually. By strengthening the activities of various UN agencies, the additional income would add to the prestige of the United Nations and thus make the organization more effective when it is called upon to resolve international political conflicts.

The budgets of UN agencies, such as the World Health Organization, the Food and Agricultural Organization, UNESCO and the UN Development Programme, should not just be doubled but should be multiplied by a factor of at least twenty. With increased budgets the UN agencies could sponsor research and other actions aimed at solving the world's most pressing problems - AIDS, drug-resistant infections diseases, tropical diseases, food insufficiencies, pollution, climate change, alternative energy strategies, population stabilization, peace education, as well as combating poverty, malnutrition, illiteracy, lack of safe water and so on. Scientists would would be less tempted to find jobs with arms-related industries if offered the chance to work on idealistic projects. The United Nations could be given its own television channel, with unbiased news programs, cultural programs, and "State of the World" addresses by the UN Secretary General.

Besides the Tobin tax, other measure have been proposed to increase the income of the United Nations. For example, it has been proposed that income from resources of the
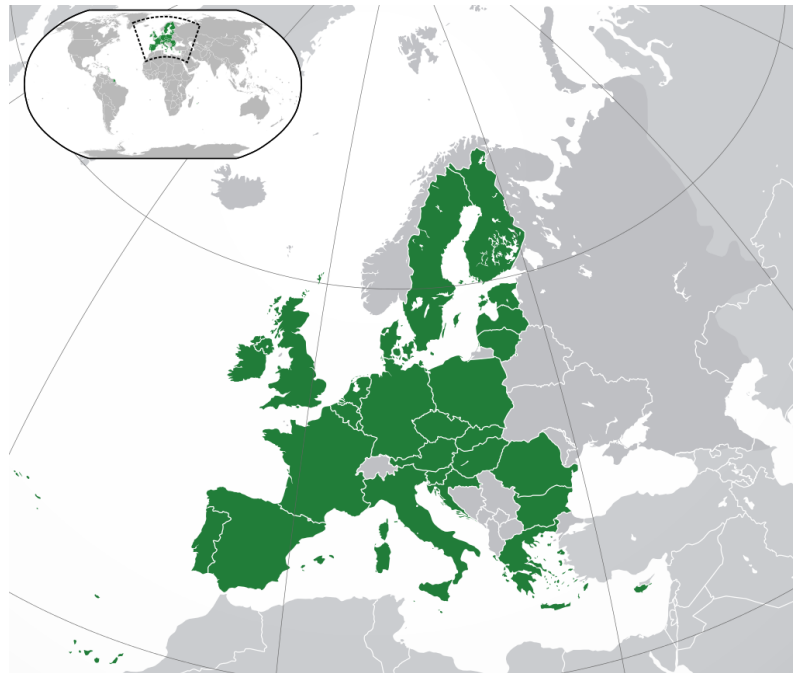
Figure 9.5: **A map of the European Union. Existing federations like the EU can give us insights as we work to develop the United Nations into a federation. Uploaded by Mapclean. [CC BY-SA 3.0], Wikimedia Commons**

sea bed be given to the UN, and that the UN be given the power to tax carbon dioxide emissions. All of the proposals for giving the United Nations an adequate income have been strongly opposed by a few nations that wish to control the UN through its purse strings, especially by the United States, which has threatened to withdraw from the UN if a Tobin tax is introduced. However, it is absolutely essential for the future development of the United Nations that the organization be given the power to impose taxes. No true government can exist without this power. It is just as essential as is the power to make and enforce laws that are binding on individuals.

The United Nations must be given a standing military force

At present, when the United Nations is called upon to meet an emergency, such as preventing genocide, an *ad hoc* force must be raised, and the time required to do this often means that the emergency action is fatally delayed. The UN should immediately be given a standing force of volunteers from all nations, ready to meet emergencies. The members of this force would owe their primary loyalty to the UN, and one of its important duties would be to prevent gross violations of human rights.

In the perspective of a longer time-frame, we need to work for a world where national armies will be very much reduced in size, where the United Nations will have a monopoly on heavy armaments, and where the manufacture or possession of nuclear weapons, as

well as the export of arms and ammunition from industrialized countries to the developing countries, will be prohibited. (See reference 3).

Looking towards the future, we can foresee a time when the United Nations will have the power to make and enforce international laws which are binding on individuals. Under such circumstances, true police action will be possible, incorporating all of the needed safeguards for lives and property of the innocent.

One can hope for a future world where public opinion will support international law to such an extent that a new Hitler or Saddam Hussein or a future Milosevic will not be able to organize large-scale resistance to arrest - a world where international law will be seen by all to be just, impartial and necessary - a well-governed global community within which each person will owe his or her ultimate loyalty to humanity as a whole.

The veto power in the Security Council must be eliminated

We should remember that the UN Charter was drafted and signed before the first nuclear bomb was dropped on Hiroshima; and it also could not anticipate the extraordinary development of international trade and communication which characterizes the world today. The five permanent members of the Security Council, China, France, Russia, the United Kingdom and the United States, were the victors of World War II, and were given special privileges by the Charter as it was established in 1945, among these the power to veto UN actions on security issues. In practice, the veto power of the P5 nations has made the UN ineffective, and it has become clear that changes are needed. If the Security Council is retained in a World Federation, the veto power must be eliminated.

Subsidiarity

The need for international law must be balanced against the desirability of local self-government. Like biological diversity, the cultural diversity of humankind is a treasure to be carefully guarded. A balance or compromise between these two desirable goals can be achieved by granting only a few carefully chosen powers to a World Federation with sovereignty over all other issues retained by the member states. This leaves us with a question: Which issues should be decided centrally, and which locally?

The present United Nations Charter contains guarantees of human rights, but there is no effective mechanism for enforcing these guarantees. In fact there is a conflict between the parts of the Charter protecting human rights and the concept of absolute national sovereignty. Recent history has given us many examples of atrocities committed against ethnic minorities by leaders of nation-states, who claim that sovereignty gives them the right to run their internal affairs as they wish, free from outside interference. One feels that it ought to be the responsibility of the international community to prevent gross violations of human rights, such as genocide; and if this is in conflict with the concept of national sovereignty, then sovereignty must yield.

In the future, overpopulation and famine are likely to become increasingly difficult and painful problems in several parts of the world. Since various cultures take widely different

attitudes towards birth control and family size, the problem of population stabilization seems to be one which should be decided locally. At the same time, aid for local family planning programs, as well as famine relief, might appropriately come from global agencies, such as WHO and FAO. With respect to large-scale migration, it would be unfair for a country which has successfully stabilized its own population, and which has eliminated poverty within its own borders, to be forced to accept a flood of migrants from regions of high fertility. Therefore the extent of immigration should be among those issues to be decided locally.

Security, and controls on the manufacture and export of armaments will require an effective authority at the global level.

The steps needed to convert the United Nations into a World Federation can be taken cautiously, one at a time. Having see the results of of a particular step, one can move on to the next. The establishment of the International Criminal Court is an important first step towards a system of international laws that acts on individuals. Another important step would be to give the UN a much larger and more reliable source of income. The establishment of a standing UN emergency military force is another step that ought to be taken in the near future.

9.6   Obstacles to a World Federation

It is easy to write down what is needed to convert the United Nations into a World Federation. But will not the necessary steps towards a future world of peace and law be blocked by the powerholders of today? Not everyone wants peace. Not everyone wants international law.[1]

The United Nations was established at the end of the most destructive war the world had ever seen, and its horrors were fresh in the minds of the delegates to the 1945 San Francisco Conference. The main purpose of the Charter that they drafted was to put an end to the institution of war. It was hoped that as a consequence, the UN would also end the colonial era, since war is needed to maintain the unequal relationships of colonialism. Neither of these things happened. War is still with us, and war is still used to maintain the intolerable economic inequalities of neocolonialism. The fact that military might is still used by powerful industrialized nations to maintain economic hegemony over less developed countries has been amply documented by Professor Michael Klare in his books on Resource Wars.

Today 2.7 billion people live on less than $2 a day - 1.1 billion on less than $1 per day. 18 million of our fellow humans die each year from poverty-related causes. In 2006, 1.1 billion people lacked safe drinking water, and waterbourne diseases killed an estimated 1.8 million people. The developing countries are also the scene of a resurgence of other infectious diseases, such as malaria, drug-resistant tuberculosis and HIV/AIDS. [2]

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[1]The interested reader can find the "Hague Invasion Act" described on the Internet

[2]It would be wrong to attribute poverty in the developing world entirely to war, and to exploitation by the industrialized countries. Rapid population growth is also a cause of poverty. Nevertheless, the enor-

Meanwhile, in 2011, world military budgets reached a total of 1.7 trillion dollars (i.e. 1.7 million million dollars). This amount of money is almost too large to be imagined. The fact that it is being spent means that many people are making a living from the institution of war. Wealthy and powerful lobbies from the military-industrial complex are able to influence mass media and governments. Thus the institution of war persists, although we know very well that it is a threat to civilization and that it responsible for much of the suffering that humans experience.

Today's military spending of almost two trillion US dollars per year would be more than enough to finance safe drinking water for the entire world, and to bring primary health care and family planning advice to all. If used constructively, the money now wasted (or worse than wasted) on the institution of war could also help the world to make the transition from fossil fuel use to renewable energy systems.

The way in which some industrialized countries maintain their control over less developed nations can be illustrated by the "resource curse", i.e. the fact that resource-rich developing countries are no better off economically than those that lack resources, but are cursed with corrupt and undemocratic governments. This is because foreign corporations extracting local resources under unfair agreements exist in a symbiotic relationship with corrupt local officials.

As long as enormous gaps exist between the rich and poor nations of the world, the task turning the United Nations into an equitable and just federation will be blocked. Thus we are faced with the challenge of breaking the links between poverty and war. Civil society throughout the world must question the need for colossal military budgets, since, according to the present UN Charter, as well as the Nuremberg Principles, war is a violation of international law, except when sanctioned by the Security Council. By following this path we can free the world from the intolerable suffering caused by poverty and from the equally intolerable suffering caused by war.

9.7 Governments of large nations compared with global government

The problem of achieving internal peace over a large geographical area is not insoluble. It has already been solved. There exist today many nations or regions within each of which there is internal peace, and some of these are so large that they are almost worlds in themselves. One thinks of China, India, Brazil, Australia, the Russian Federation, the United States, and the European Union. Many of these enormous societies contain a variety of ethnic groups, a variety of religions and a variety of languages, as well as striking contrasts between wealth and poverty. If these great land areas have been forged into peaceful and cooperative societies, cannot the same methods of government be applied globally?

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mous contrast between the rich and poor parts of the world is partly the result of unfair trade agreements imposed by means of "regime change" and "nation building", i.e. interference backed by military force.

Today there is a pressing need to enlarge the size of the political unit from the nation-state to the entire world. The need to do so results from the terrible dangers of modern weapons and from global economic interdependence. The progress of science has created this need, but science has also given us the means to enlarge the political unit: Our almost miraculous modern communications media, if properly used, have the power to weld all of humankind into a single supportive and cooperative society.

Suggestions for further reading

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Appendix A

THE EARTH CONSTITUTION ORGANIZATION'S PROPOSAL

Here are some excerpts from a proposed Earth Constitution. The full text can be found on the following link: http://earth-constitution.org/constitution/english/

A.1 Preamble

- Realizing that Humanity today has come to a turning point in history and that we are on the threshold of an new world order which promises to usher in an era of peace, prosperity, justice and harmony;

- Aware of the interdependence of people, nations and all life;

- Aware that man's abuse of science and technology has brought Humanity to the brink of disaster through the production of horrendous weaponry of mass destruction and to the brink of ecological and social catastrophe;

- Aware that the traditional concept of security through military defense is a total illusion both for the present and for the future;

- Aware of the misery and conflicts caused by ever increasing disparity between rich and poor;

- Conscious of our obligation to posterity to save Humanity from imminent and total annihilation;

- Conscious that Humanity is One despite the existence of diverse nations, races, creeds, ideologies and cultures and that the principle of unity in diversity is the basis for a new age when war shall be outlawed and peace prevail; when the earth's total resources shall be equitably used for human welfare; and when basic human rights and responsibilities shall be shared by all without discrimination;

- Conscious of the inescapable reality that the greatest hope for the survival of life on earth is the establishment of a democratic world government;

We, citizens of the world, hereby resolve to establish a world federation to be governed in accordance with this constitution for the Federation of Earth.

A.2   Article 1 - Broad functions of the World Government

The broad functions of the Federation of Earth shall be

1. To prevent war, secure disarmament, and resolve territorial and other disputes which endanger peace and human rights.
2. To protect universal human rights, including life, liberty, security, democracy, and equal opportunities in life.
3. To obtain for all people on earth the conditions required for equitable economic and social development and for diminishing social differences.
4. To regulate world trade, communications, transportation, currency, standards, use of world resources, and other global and international processes.
5. To protect the environment and the ecological fabric of life from all sources of damage, and to control technological innovations whose effects transcend national boundaries, for the purpose of keeping Earth a safe, healthy and happy home for humanity.
6. To devise and implement solutions to all problems which are beyond the capacity of national governments, or which are now or may become of global or international concern or consequence.

A.3   Article 2 - Basic Structure of World Federation and World Government

1. The Federation of Earth shall be organized as a universal federation, to include all nations and all people, and to encompass all oceans, seas and lands of Earth, inclusive of non-self governing territories, together with the surrounding atmosphere.
2. The World Government for the Federation of Earth shall be non-military and shall be democratic in its own structure, with ultimate sovereignty residing in all the people who live on Earth.
3. The authority and powers granted to the World Government shall be limited to those defined in this Constitution for the Federation of Earth, applicable to problems and affairs which transcend national boundaries, leaving to national governments jurisd iction over the internal affairs of the respective nations but consistent with the authority of the World Government to protect universal human rights as defined in this World Constitution.

4. The basic direct electoral and administrative units of the World Government shall be World Electoral and Administrative Districts. A total of not more than 1000 World Electoral and Administrative Districts shall be defined, and shall be nearly equal i n population, within the limits of plus or minus ten percent.

5. Contiguous World Electoral and Administrative Districts shall be combined as may be appropriate to compose a total of twenty World Electoral and Administrative Regions for the following purposes, but not limited thereto: for the election or appointmen t of certain world government officials; for administrative purposes; for composing various organs of the world government as enumerated in Article IV; for the functioning of the Judiciary, the Enforcement System, and the Ombudsmus, as well as for the fun ctioning of any other organ or agency of the World Government.

6. The World Electoral and Administrative Regions may be composed of a variable number of World Electoral and Administrative Districts, taking into consideration geographic, cultural, ecological and other factors as well as population.

7. Contiguous World Electoral and Administrative Regions shall be grouped together in pairs to compose Magna-Regions.

8. The boundaries for World Electoral and Administrative Regions shall not cross the boundaries of the World Electoral and Administrative Districts, and shall be common insofar as feasible for the various administrative departments and for the several or gans and agencies of the World Government. Boundaries for the World Electoral and Administrative Districts as well as for the Regions need not conform to existing national boundaries, but shall conform as far as practicable.

9. The World Electoral and Administrative Regions shall be grouped to compose at least five Continental Divisions of the Earth, for the election or appointment of certain world government officials, and for certain aspects of the composition and function ing of the several organs and agencies of the World Government as specified hereinafter. The boundaries of Continental Divisions shall not cross existing national boundaries as far as practicable. Continental Divisions may be composed of a variable numbe r of World Electoral and Administrative Regions.

A.4 Article 3 - Organs of the World Government

The organs of the World Government shall be

1. The World Parliament.
2. The World Executive.
3. The World Administration.
4. The Integrative Complex.
5. The World Judiciary.
6. The Enforcement System.
7. The World Ombudsmus.

A.5 Article 4 - Grant of Specific Powers to the World Government

The powers of the World government to be exercised through its several organs and agencies shall comprise the following:

1. Prevent wars and armed conflicts among the nations, regions, districts, parts and peoples of Earth.
2. Supervise disarmament and prevent re-armament; prohibit and eliminate the design, testing, manufacture, sale, purchase, use and possession of weapons of mass destruction, and prohibit or regulate all lethal weapons which the World Parliament may decide.
3. Prohibit incitement to war, and discrimination against or defamation of conscientious objectors.
4. Provide the means for peaceful and just solutions of disputes and conflicts among or between nations, peoples, and/or other components within the Federation of Earth.
5. Supervise boundary settlements and conduct plebiscites as needed.
6. Define the boundaries for the districts, regions and divisions which are established for electoral, administrative, judicial and other purposes of the World Government.
7. Define and regulate procedures for the nomination and election of the members of each House of the World Parliament, and for the nomination, election, appointment and employment of all World Government officials and personnel.
8. Codify world laws, including the body of international law developed prior to adoption of the world constitution, but not inconsistent therewith, and which is approved by the World Parliament.
9. Establish universal standars for weights, measurements, accounting and records.
10. Provide assistance in the event of large scale calamities, including drouth, famine, pestilence, flood, earthquake, hurricane, ecological disruptions and other disasters.
11. Guarantee and enforce the civil liberties and the basic human rights which are defined in the Bill of Rights for the Citizens of Earth which is made a part of this World Constitution under Article 12.
12. Define standards and promote the worldwide improvement in working conditions, nutrition, health, housing, human settlements, environmental conditions, education, economic security, and other conditions defined under Article 13 of this World Constituti on.
13. Regulate and supervise international transportation, communications, postal services, and migrations of people.
14. Regulate and supervise supra-national trade, industry, corporations, businesses, cartels, professional services, labor supply, finances, investments and insurance.
15. Secure and supervise the elimination of tariffs and other trade barriers among nations, but with provisions to prevent or minimize hardship for those previously protected by tariffs.

16. Raise the revenues and funds, by direct and/or indirect means, which are necessary for the purposes and activities of the World Government.

17. Establish and operate world financial, banking, credit and insurance institutions designed to serve human needs; establish, issue and regulate world currency, credit and exchange.

18. Plan for and regulate the development, use, conservation and re-cycling of the natural resources of Earth as the common heritage of Humanity; protect the environment in every way for the benefit of both present and future generations.

19. Create and operate a World Economic Development Organization to serve equitably the needs of all nations and people included within the World Federation.

20. Develop and implement solutions to transnational problems of food supply, agricultural production, soil fertility, soil conservation, pest control, diet, nutrition, drugs and poisons, and the disposal of toxic wastes.

21. Develop and implement means to control population growth in relation to the life-support capacities of Earth, and solve problems of population distribution.

22. Develop, protect, regulate and conserve the water supplies of Earth; develop, operate and/or coordinate transnational irrigation and other water supply and control projects; assure equitable allocation of trans- national water supplies, and protect ag ainst adverse trans-national effects of water or moisture diversion or weather control projects within national boundaries.

23. Own, administer and supervise the development and conservation of the oceans and sea-beds of Earth and all resources thereof, and protect from damage.

24. Protect from damage, and control and supervise the uses of the atmosphere of Earth.

25. Conduct inter-planetary and cosmic explorations and research; have exclusive jurisdiction over the Moon and over all satellites launched from Earth.

26. Establish, operate and/or coordinate global air lines, ocean transport systems, international railways and highways, global communication systems, and means for interplanetary travel and communications; control and administer vital waterways.

27. Develop, operate and/or coordinate transnational power systems, or networks of small units, integrating into the systems or networks power derived from the sun, wind, water, tides, heat differentials, magnetic forces, and any other source of safe, eco logically sound and continuing energy supply.

28. Control the mining, production, transportation and use of fossil sources of energy to the extent necessary to reduce and prevent damages to the environment and the ecology, as well as to prevent conflicts and conserve supplies for sustained use by suc ceeding generations.

29. Exercise exclusive jurisdiction and control over nuclear energy research and testing and nuclear power production, including the right to prohibit any form of testing or production considered hazardous.

30. Place under world controls essential natural resources which may be limited or unevenly distributed about the Earth. Find and implement ways to reduce wastes and find ways to minimize disparities when development or production is insufficient to supply everybody with all that may be needed.

31. Provide for the examination and assessment of technological innovations which are or may be of supranational consequence, to determine possible hazards or perils to humanity or the environment; institute such controls and regulations of technology as may be found necessary to prevent or correct widespread hazards or perils to human health and welfare.

32. Carry out intensive programs to develop safe alternatives to any technology or technological processes which may be hazardous to the environment, the ecological system, or human health and welfare.

33. Resolve supra-national problems caused by gross disparities in technological development or capability, capital formation, availability of natural resources, educational opportunity, economic opportunity, and wage and price differentials. Assist the processes of technology transfer under conditions which safeguard human welfare and the environment and contribute to minimizing disparities.

34. Intervene under procedures to be defined by the World Parliament in cases of either intra-state violence and intra-state problems which seriously affect world peace or universal human rights.

35. Develop a world university system. Obtain the correction of prejudicial communicative materials which cause misunderstandings or conflicts due to differences of race, religion, sex, national origin or affiliation.

36. Organize, coordinate and/or administer a voluntary, non-military World Service Corps, to carry out a wide variety of projects designed to serve human welfare.

37. Designate as may be found desirable an official world language or official world languages.

38. Establish and operate a system of world parks, wild life preserves, natural places, and wilderness areas.

39. Define and establish procedures for initiative and referendum by the Citizens of Earth on matters of supra-national legislation not prohibited by this World Constitution.

40. Establish such departments, bureaus, commissions, institutes, corporations, administrations, or agencies as may by needed to carry out any and all of the functions and powers of the World Government.

41. Serve the needs of humanity in any and all ways which are now, or may prove in the future to be, beyond the capacity of national and local governments.

A.6   Article 5 - The World Parliament

Sec. A - Functions and Powers of the World Parliament

The functions and powers of the World Parliament shall comprise the following:

1. To prepare and enact detailed legislation in all areas of authority and jurisdiction granted to the World Government under Article IV of this World Constitution.
2. To amend or repeal world laws as may be found necessary or desirable.

3. To approve, amend or reject the international laws developed prior to the advent of World Government, and to codify and integrate the system of world law and world legislation under the World Government.

4. To establish such regulations and directions as may be needed, consistent with this world constitution, for the proper functioning of all organs, branches, departments, bureaus, commissions, institutes, agencies or parts of the World Government.

5. To review, amend and give final approval to each budget for the World Government, as submitted by the World Executive; to devise the specific means for directly raising funds needed to fulfill the budget, including taxes, licenses, fees, globally acco unted social and public costs which must be added into the prices for goods and services, loans and credit advances, and any other appropriate means; and to appropriate and allocate funds for all operations and functions of the World Government in accordance with approved budgets, but subject to the right of the Parliament to revise any appropriation not yet spent or contractually committed.

6. To create, alter, abolish or consolidate the departments, bureaus, commissions, institutes, agencies or other parts of the World Government as may be needed for the best functioning of the several organs of the World Government, subject to the specific provisions of this World Constitution.

7. To approve the appointments of the heads of all major departments, commissions, offices, agencies and other parts of the several organs of the World Government, except those chosen by electoral or civil service procedures.

8. To remove from office for cause any member of the World Executive, and any elective or appointive head of any organ, department, office, agency or other part of the World Government, subject to the specific provisions in this World Constitution concerning specific offices.

9. To define and revise the boundaries of the World Electoral and Administrative Districts, the World Electoral and Administrative Regions and Magna Regions, and the Continental Divisions.

10. To schedule the implementation of those provisions of the World Constitution which require implementation by stages during the several stages of Provisional World Government, First Operative Stage of World Government, Second Operative Stage of World Government, and Full Operative Stage of World Government, as defined in Articles XVII and XIX of this World Constitution.

11. To plan and schedule the implementation of those provisions of the World Constitution which may require a period of years to be accomplished.

Sec. B - Composition of the World Parliament

1. The World Parliament shall be composed of three houses, designated as follows:

   - The House of Peoples, to represent the people of Earth directly and equally;
   - The House of Nations, to represent the nations which are joined together in the Federation of Earth; and a

- House of Counsellors with particular functions to represent the highest good and best interests of humanity as a whole.

2. All members of the World Parliament, regardless of House, shall be designated as Members of the World Parliament.

Sec. C - The House of Peoples

1. The House of Peoples shall be composed of the peoples delegates directly elected in proportion to population from the World Electoral and Administrative Districts, as defined in Article 2-4.
2. Peoples delegates shall be elected by universal adult suffrage, open to all persons of age 18 and above.
3. One peoples delegate shall be elected from each World Electoral and Administrative District to serve a five year term in the House of Peoples. Peoples delegates may be elected to serve successive terms without limit. Each peoples delegate shall have one vote.
4. A candidate for election to serve as a peoples delegate must be at least 21 years of age, a resident for at least one year of the electoral district from which the candidate is seeking election, and shall take a pledge of service to humanity.

Sec. D - The House of Nations

1. The House of Nations shall be composed of national delegates elected or appointed by procedures to be determined by each national government on the following basis:

    (a) One national delegate from each nation of at least 100,000 population, but less than 10,000,000 population.
    (b) Two national delegates from each nation of at least 10,000,000 population, but less than 100,000,000 population.
    (c) Three national delegates from each nation of 100,000,000 population or more.

2. Nations of less than 100,000 population may join in groups with other nations for purposes of representation in the House of Nations.
3. National delegates shall be elected or appointed to serve for terms of five years, and may be elected or appointed to serve successive terms without limit. Each national delegate shall have one vote.
4. Any person to serve as a national delegate shall be a citizen for at least two years of the nation to be represented, must be at least 21 years of age, and shall take a pledge of service to humanity.

Sec. E - The House of Counsellors

1. The House of Counsellors shall be composed of 200 counsellors chosen in equal numbers from nominations submitted from the twenty World Electoral and Administrative Regions, as defined in Article II-5 and II-6, ten from each Region.
2. Nominations for members of the House of Counsellors shall be made by the teachers and students of universities and colleges and of scientific academies and institutes within each world electoral and administrative region. Nominees may be persons who are off campus in any walk of life as well as on campus.
3. Nominees to the House of Counsellors from each World Electoral and Administrative Region shall, by vote taken among themselves, reduce the number of nominees to no less than two times and no more than three times the number to be elected.
4. Nominees to serve as members of the House of Counsellors must be at least 25 years of age, and shall take a pledge of service to humanity. There shall be no residence requirement, and a nominee need not be a resident of the region from which nominated or elected.
5. The members of the House of Counsellors from each region shall be elected by the members of the other two houses of the World Parliament from the particular region.
6. Counsellors shall be elected to serve terms of ten years. One-half of the members of the House of Counsellors shall be elected every five years. Counsellors may serve successive terms without limit. Each Counsellor shall have one vote.

Sec. F - Procedures of the World Parliament

1. Each house of the World Parliament during its first session after general elections shall elect a panel of five chairpersons from among its own members, one from each of five Continental Divisions. The chairpersons shall rotate annually so that each w ill serve for one year as chief presiding officer, while the other four serve as vice-chairpersons.
2. The panels of Chairpersons from each House shall meet together, as needed, for the purpose of coordinating the work of the Houses of the World Parliament, both severally and jointly.
3. Any legislative measure or action may be initiated in either House of Peoples or House of Nations or both concurrently, and shall become effective when passed by a simple majority vote of both the House of Peoples and of the House of Nations, except in those cases where an absolute majority vote or other voting majority is specified in this World Constitution.
4. In case of deadlock on a measure initiated in either the House of Peoples or House of Nations, the measure shall then automatically go to the House of Counsellors for decision by simple majority vote of the House of Counsellors, except in the cases where other majority vote is required in this World Constitution. Any measure may be referred for decision to the House of Counsellors by a concurrent vote of the other two houses.

5. The House of Counsellors may initiate any legislative measure, which shall then be submitted to the other two houses and must be passed by simple majority vote of both the House of Peoples and House of Nations to become effective, unless other voting majority is required by some provision of this World Constitution.

6. The House of Counsellors may introduce an opinion or resolution on any measure pending before either of the other two houses; either of the other houses may request the opinion of the House of Counsellors before acting upon a measure.

7. Each house of the World Parliament shall adopt its own detailed rules of procedure, which shall by consistent with the procedures set forth in this World Constitution, and which shall be designed to facilitate coordinated functioning of the three houses.

8. Approval of appointments by the World Parliament or any house thereof shall require simple majority votes, while removals for cause shall require absolute majority votes.

9. After the full operative stage of World Government is declared, general elections for members of the World Parliament to the House of Peoples shall be held every five years. The first general elections shall be held within the first two years following the declaration of the full operative stage of World Government. Until the full operative stage of World Government is declared, elections for members of the World Parliament to the House of Peoples may be conducted whenever feasible in relation to the campaign for ratification of this World Constitution.

10. Regular sessions of the House of Peoples and House of Nations of the World Parliament shall convene on the second Monday of January of each and every year.

11. Each nation, according to its own procedures, shall appoint or elect members of the World Parliament to the House of Nations at least thirty days prior to the date for convening the World Parliament in January.

12. The House of Peoples together with the House of Nations shall elect the members of the World Parliament to the House of Counsellors during the month of January after the general elections. For its first session after general elections, the House of Co unsellors shall convene on the second Monday of March, and thereafter concurrently with the other two houses.

13. Bi-elections to fill vacancies shall be held within three months from occurrence of the vacancy or vacancies.

14. The World Parliament shall remain in session for a minimum of nine months of each year. One or two breaks may be taken during each year, at times and for durations to be decided by simple majority vote of the House of Peoples and House of Nations sitting jointly.

15. Annual salaries for members of the World Parliament of all three houses shall be the same, except for those who serve also as members of the Presidium and of the Executive Cabinet.

16. Salary schedules for members of the World Parliament and for members of the Presidium and of the Executive Cabinet shall be determined by the World Parliament.

Figure A.1: **Dr. Roger Kotila, President, Democratin World Federalists and Earth Federation activist.**

Appendix B

THE 2018 NEW SHAPE AWARDS

B.1 Global Governance and Global Institutions

Global Governance and the Emergence of Global Institutions for the 21st Century

by Augusto Lopez-Claros, Arthur Lyon Dahl, Maja P.C.E. Groff

Abstract

This proposal builds upon structures for international cooperation existing at least since the creation of the UN. The proposed institutions and processes aim to strike a balance between overly ambitious proposals with little chance of acceptance, and more politically feasible ones that fail to solve the multiple problems of today's world.

We propose revisions to the UN Charter that provide the legal basis for a new system of global governance, supplemented by other reforms not requiring Charter amendment.

The powers, composition and voting method of the General Assembly (GA) are revised, giving it some powers to legislate with direct effect on member states, mainly in the areas of security, maintenance of peace and management of the global environment. These powers would be explicitly enumerated in the revised Charter, also specifying those which remain vested with member states. The system of representation in the GA is revised to enhance its democratic legitimacy.

A Second Chamber is proposed, deriving its authority directly from the global citizenry; its representatives would serve as advocates of particular issues of global concern, rather than representing the interests of their respective states. At the outset, the chamber would have advisory powers, but would be gradually integrated into the international constitutional order, attached to the GA, thus creating a bicameral world legislature.

An Executive Council, composed of 24 members, elected by the GA and operating under its jurisdiction, would replace the UN Security Council. Its focus would shift to implementation, management and effective operation of the UN. The veto power of the five permanent members of the current Security Council would be eliminated. An executive arm
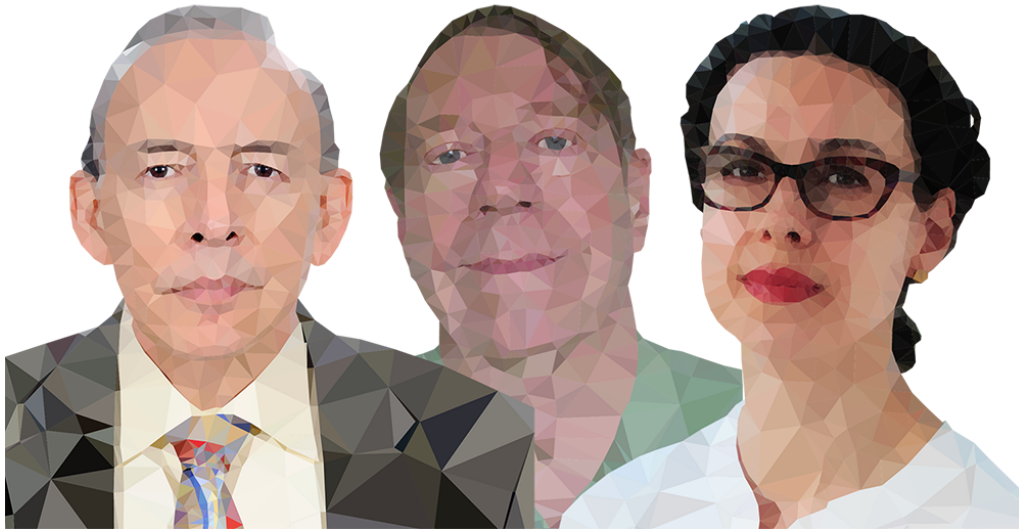
Figure B.1: **A photograph of the authors.**

of the new UN, the Council would have broad authority to monitor, supervise and direct
various aspects of its work in security, conflict prevention and management of the global
environment, as well as other areas of priority identified by the GA. The Executive Council
would provide general oversight and ensure good governance, transparency, efficiency and
coherence of an effective, new UN system. The Secretary General would chair the Executive
Council, facilitating continuity within the UN system and linking to the UN Secretariat.

A UN International Security Force would be created, deriving its ultimate authority
from the GA via the Executive Council. This two-part Force would consist of a Standing
Force and a Security Force Reserve, both composed of volunteers. The Standing Force
would be a full-time body of professionals, numbering from 500,000 to 1,000,000 as deter-
mined by the GA. The Force would provide for security and promote peace around the
world, firmly anchored in the notion that force may at times be necessary to deliver justice
and the rule of law. It would also address one of the main flaws of our current UN system:
namely, the absence of a reliable, legitimate international mechanism to enforce decisions
made by the Security Council. Subject to a number of safeguards, the International Secu-
rity Force will be vital to enhancing the credibility of the UN, and to preventing conflicts
and maintaining peace and security throughout the world.

The peaceful settlement of international disputes and enforcement of international law
will become mandatory, giving the International Court of Justice (ICJ) compulsory juris-
diction over all substantive matters pertaining to the interpretation and/or enforcement
of international law for all UN members, overturning the current requirement for states'
agreement to adjudicate. A revised Charter would also make acceptance of the statute of
the International Criminal Court (ICC) mandatory. An International Human Rights Tri-
bunal would be established for systematic, binding adjudication and review, significantly
strengthening the existing weak and non-binding human rights oversight mechanisms. The

substantive rights adjudicated by the international Tribunal will include key UN human rights treaties, many of which currently have non-binding individual complaint mechanisms.

To reassure the people of the world that basic individual rights will not be violated in the exercise of the UN's strengthened mandate, a new Bill of Rights prescribing parameters for UN action would include fundamental human rights protections to be applied and interpreted by a new, specialized chamber of the ICJ.

Recognizing that a strengthened UN system with a broader set of responsibilities and institutions would need reliable funding, we propose a mechanism linking national contributions to the UN budget to a fixed proportion of indirect tax collection, similar to mechanisms currently operating in the EU. Additional funding mechanisms will be explored balancing universal participation and the ability to pay.

Implementation will require UN Charter reform, building on existing Charter amendment provisions, and mechanisms for built-in flexibility through future amendments. Most of the broader UN system of bodies, commissions, programmes and specialized agencies will be retained, evolving under the new system as necessary.

A World Conference on Global Institutions in 2020 is proposed as a starting point for the reform process.

Beyond the above structural components, we address specific challenges to the global order as examples of implementation. Effective security requires general disarmament, and we propose a binding, staged approach to reduce armaments to only those needed for internal security. To address growing income inequality and begin global management of the world's resources will require a new multilateral specialized agency. The corruption undermining effective governance requires a global response through new international implementation and enforcement tools for existing mechanisms. Education will be an important support to the reforms.

The model corrects the failures in the present UN Charter that prevent its security function from operating effectively, enabling the UN to implement the decisions taken in the global interest. It creates a legally-binding international legislative function, beginning with security, maintenance of peace, and management of the global environment, given significant current and emerging global challenges and risks, as climate change accelerates and population growth threatens planetary carrying capacity and boundaries. It places the core values necessary for a global community at the heart of international governance and action, builds on the existing positive accomplishments in global governance and international consensus, and opens the door to widespread civic participation and acceptance.

Description

This proposal builds upon current international structures established in 1944-45 with the adoption of the United Nations (UN) Charter and the creation of various specialized UN agencies. It would be politically unrealistic not to focus on the reform and substantial strengthening of the UN system which, despite its flaws, involves remarkable participation by virtually all of the world's nations and provides a range of significant consultation and

cooperation mechanisms. Further, as certain basic Charter features still remain largely or wholly unimplemented - e.g., Chapter VI on peaceful dispute settlement and Art. 43 relevant to collective security-focusing on fully realizing such Charter attributes would consolidate existing points of universal agreement. Fundamentally improving existing structures seems the sensible way to proceed.

The UN itself was built upon earlier, progressive attempts to solve key issues of global governance, including core problems of international peace and security, viz. the 1899 and 1907 Hague Peace Conferences, the League of Nations and the Kellogg-Briand Pact. The Charter's Chapter XVIII contains formal provisions for reform, and informal reform mechanisms have also developed to enhance significantly UN operations-e.g., with respect to peace-keeping. A general Charter review conference was anticipated within ten years of its adoption (Art. 109(3)), but, as of today, comprehensive Charter review and reform remain unrealized.

One challenge in proposals for addressing multiple current predicaments is striking a balance between those that are so ambitious that they have a negligible chance of being seriously considered and those that are seen as more "politically feasible". The latter might involve tweaking at the edges of current UN-based systems of governance, without offering meaningful solutions to urgent contemporary problems. Moreover, what may seem politically impracticable at one point may be viewed differently a few years later, for instance, after a severe crisis. The European Union (EU) and the current UN system that emerged in the aftermath of World War II are prime examples.[1]

This proposal envisages a number of significant revisions to the UN Charter constituting the legal basis for enhanced mechanisms of international cooperation and global governance, supplemented by other reforms not requiring formal Charter amendment. Parts of this proposal build on the monumental work on Charter revision by Clark and Sohn in the 1950s-60s,[2] adapted to the needs of a drastically changed world, facing a much broader set of global challenges. Space limitations constrain us to focus here on the core reforms proposed. In the next stage further details of the proposal will be provided, including the specifics of Charter amendments.

The General Assembly.

We propose a substantial revision of the powers, composition and voting method of the General Assembly (GA) (Arts 9-22 of the Charter). The GA should be accorded certain powers to legislate in areas having a direct effect on member states, including international peace and security and global environmental management, while other issues, such as global financial surveillance, would remain under the purview of relevant specialized UN agencies. The GA could take on additional legislative powers in progressive steps, subject to review every five years. Powers delegated to the GA would be explicitly laid out and enumerated in the revised Charter. A revised Article 2 on Purposes and Principles, would also provide clarity regarding which powers would remain with member states and not delegated to the Assembly, following the EU model of subsidiarity. The GA would retain its considerable power of nonbinding recommendation in areas affecting the welfare of the world's peoples.

As the current system of one-country-one-vote undermines the representativeness and legitimacy of the Assembly, we propose a new plan of representation for the 193 UN member states based on relative population size, but subject to a ceiling on the number of representatives for the most populous states, and a floor of at least one representative for the UN members with populations under 1 million. The three largest countries would have 40 representatives each; the next 5 largest countries 20 representatives; the next 11 largest 10 representatives; the next 15 largest 5; the next 22 largest 4; the next 31 largest 3; the next 66 largest 2; and the smallest 40 countries 1 representative each. To avoid creating an unwieldy body, an overall ceiling on the number of representatives is set at 758. (See color map provided as an attachment). [3]

To select the Assembly's representatives, we propose the gradual introduction of full popular vote, in three separate stages: in the first, lasting eight years or two four-year terms of the GA, representatives would be chosen by their respective national legislatures or, in their absence, according to procedures within other duly constituted governance structures; in the second, also of eight years, half of the deputies would be chosen by popular vote within given countries; in the third stage, all deputies would be chosen by popular national vote.[4] Decisions on procedural matters would be made by a majority of representatives present and voting; particularly sensitive issues would require potentially larger majorities and include, in some cases, at least two-thirds of the representatives of the 19 most populous nations.

A Second Chamber.

We propose the creation of a Second Chamber deriving its authority directly from organized global citizenry.[5] The kernel for this proposal originates in the May 2000 UN Millennium NGO Forum, where 1,400 individuals representing a broad spectrum of civil society organizations came together to consult and present recommendations to the Millennium Summit of heads of state.

Rather than representing their respective states, the members of this Second Chamber would serve as advocates of particular issues of global concern-the environment, human rights, world peace and security, and corruption, to name a few. NGOs could be accredited for membership using an enhanced version of current UN accreditation procedures under ECOSOC or otherwise. Initially, this Chamber would be largely advisory, but because its members would not be constrained by national interests and priorities, diverse coalitions could emerge and the Chamber's very existence could contribute to finding creative solutions to global problems. The power, ingenuity and efficacy of coordinated transnational civil society movements, including "smart coalitions" with like-minded states, have proven remarkably successful-e.g., in the creation of the International Criminal Court (ICC) and the Land Mines Treaty.

Following the model of the Land Mines Treaty, a "single negotiating text method" could be adopted to create the Chamber. Initial efforts to establish it would include consultations among like-minded, sympathetic stakeholders, assisted by a core group of supportive states. Experience with the ICC has shown that, while desirable, it would not

be essential to have the consent of the great powers to establish this institution. Any state could join this initiative and citizens would be likely to urge their governments to support this Second Chamber. As the Chamber gained democratic legitimacy, it could be integrated into the international constitutional order, attached to the GA to create a bicameral world legislature. In the first instance the UN Charter need not be revised to create this Chamber, but it could rather be constituted as an advisory body to the GA.

If this Chamber and the GA are to exercise effectively their responsibilities in the global interest, they will need complementary advisory bodies with specialized scientific, technical, and other expertise. For example, a broad scientific advisory body would be needed to provide authoritative reports on the state of the planet, building on the existing Intergovernmental Panel on Climate Change and the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, but extending to chemicals and plastics, radioactive materials and wastes, land use, water, oceans, and energy. An Office of Technology Assessment could prepare reports on emerging or problematic technologies that may require global legislative action, such as balancing freedom of communications and security, or geo-engineering. An Office of Ethical Assessment could alert legislators to the ethical impact of issues under consideration, such as human rights or implications for future generations.

UN Executive Council. Charter reform would replace the Security Council with an Executive Council composed of 24 members elected by the GA and operating under the jurisdiction of the GA.[6] Its focus would be implementation, management and effective operation of the UN, providing general oversight and ensuring good governance, transparency, efficiency and coherence of an effective new UN system, including through administrative and other system reforms.

The composition and organization of the Executive Council would reflect principles used in determining the national composition and representation of the GA. The three most populous states would be permanent members; eight of the 16 next largest nations would be represented in four-year rotations; the remaining 13 members would be chosen by the Assembly from the other member nations, also in four-year rotations. Instead of the veto power held by current permanent Security Council members, decisions of the Executive Council on important substantive matters-as defined in an amended Article 27(3) of the UN Charter-would be by a vote of 16 of the 24 representatives, including a majority of the eight members of the Council with the highest populations, and a majority of the 16 other members of the Council. As the executive arm of the new UN, the Executive Council, responsible ultimately to the GA, would have broad authority to monitor, supervise and direct international work in security, conflict prevention and management of the global environment, in particular, and other priority areas identified by the GA. The Secretary General would chair the Executive Council, linking to the UN Secretariat and providing coherence and continuity within the UN system.

International Security Force.

This proposal envisages the creation of a UN International Security Force (ISF), deriving its ultimate authority from the GA via the Executive Council. A "Security Force" in a

state of readiness and available to the UN Security Council for Chapter VII action was envisioned in the Charter through the conclusion of agreements "as soon as possible", as stipulated in Article 43. These agreements were never concluded. Clear terms for the establishment of a new Standing Force, with parameters of readiness and operation, would at last implement a mechanism envisioned in the 1945 Charter.

The existence of such a force does not preclude national forces maintaining internal order, but it does make available to the UN "effective means for the prevention and removal of threats to the peace, for the suppression of acts of aggression or other breaches of the peace [including through modern peace-keeping activities], and for ensuring compliance with the revised Charter and the laws and regulations enacted thereunder."[7] The ISF would consist of both Standing and Reserve Forces, both composed of volunteers, with the former a full-time force of 500,000 to 1,000,000 professionals, or as determined by the GA.

Various provisions for the ISF would include: broad geographic representation in senior leadership; an eight-year limit on terms of service of enlisted personnel; no more than three percent of personnel belonging to a particular member state in all three branches of the ISF (land, air and sea) and the officer corps; units to be stationed on bases worldwide, to avoid over-concentration of personnel in particular locations and ensuring prompt action in the event of threats to peace and order; no base to be located within the eight most populous states with the highest representation in the GA; a ceiling of 10 percent (and a floor of 5 percent) on the number of personnel stationed on a particular base, except when the ISF is called to action. The GA would vote annually for a budget ensuring pay and compensation and access to the latest weapons, equipment, and supplies to ensure effective action.[8]

Without organized units, but composed of 1,200,000 to 2,400,000 personnel, and having the same geographical limitations as the Standing Force, the Reserve Force would consist of individuals partially trained and subject to call for service with the Standing Force. Except for periods of training, Reserve members would remain on stand-by in the member countries. The military direction of the ISF would be subject to civilian authority under control of the Executive Council and the GA.

Acknowledging that force may at times be necessary to deliver justice and the rule of law, the ISF, aside from providing for security and promoting peace in various parts of the world, would address one of the main flaws of the current UN system: namely, the absence of a truly international mechanism to enforce certain decisions made by the Security Council, as envisioned, inter alia, in Article 43 of the current Charter. An additional amendment would enshrine the "Responsibility to Protect" (R2P) doctrine for collective action to protect minorities and others threatened by mass atrocity or genocide. All actions of the ISF would be subject to objective criteria, careful procedural control and the oversight of independent international experts. An oversight body would set protocols, make recommendations (e.g., specialized training or operational improvements for the ISF), and generally monitor the implementation of actions of the ISF and review its collective security operations, including those related to R2P.

By preventing conflicts and maintaining world peace and security, and subject to the above safeguards, the ISF could be vital in enhancing the credibility of the UN. Equally

important, such a mechanism of collective security would significantly reduce the pressure on countries to maintain expensive militaries, as experienced in the EU. Military expenditures are "unproductive" (according to the IMF) in relation to countries' unmet needs and do not benefit productivity and economic efficiency. Reductions in military spending at the national level could be re-allocated to education, public health, infrastructure and other productive areas, resulting in a real "peace dividend."[9] Total world military spending in 2016 was about US$1.7 trillion. A Standing Force of some 800,000 might cost some US$70 billion on an annual basis.[10] According to the Institute for Economics and Peace the conservatively estimated total economic impact of violence to the world economy in 2015 was $13.6 trillion, equivalent to 13.3 percent of world GDP or $1,876 per person per year. Clearly, the establishment and implementation of an effective ISF could have vast security and economic ramifications, releasing substantial resources to promote economic and social development and shared prosperity. During the transition, particular attention would be paid to reallocating military human and economic resources to peaceful purposes. (See also, below, under Disarmament.)

Mandatory Settlement of International Disputes and Enforcement of International Law.

Another notably unrealized attribute of the Charter is Chapter VI on the Pacific Settlement of Disputes, which has not been implemented as anticipated in 1945. Along with Chapter XIV and the annexed Statute of the International Court of Justice (ICJ), Chapter VI should be transformed into obligatory and binding procedures for the peaceful settlement of international disputes, before collective security action or other coercive measures are contemplated.

The GA or Executive Council could submit particular international disputes directly to the ICJ, if extrajudicial dispute resolution processes such as mediation or conciliation have been judged unsuccessful. The jurisdiction of the ICJ over international legal disputes would be mandatory for all UN members, overturning the current arbitral approach of the ICJ which requires states' agreement.[11] The ICJ would henceforth have compulsory jurisdiction over all substantive matters pertaining to the interpretation and/or enforcement of international law, thus covering the substantive matters outlined in Art. 36(1) and (2) of the Court's statute, and other matters deemed appropriate within the revised Charter system, including the interpretation and application of a UN Bill of Rights (see below) and the revised Charter itself.

Reforms are also needed to both the Statute and procedural rules of the ICJ, in order to make it more modern, fair, and effective. To protect the Court's independence and impartiality, the tenure of the 15 ICJ judges would be limited to one nine-year term and the practice of appointing ad hoc judges from the states party to litigation would be abolished. The judges of the reformed ICJ would be elected by the GA from candidate lists provided by the Executive Council, recommended by members of the highest courts of justice of member states, associations of international lawyers, and legal academics. Other reforms would enhance the Court's advisory functions, powers to collect evidence, compel testimony, set

meaningful time-tables, oblige compliance with orders of the court,[12] grant access to interested parties (including civil society groups) to intervene, submit amicus briefs or even trigger proceedings in certain contexts, and capacity to employ additional, diversified court-management staff and clerks having expertise in specialized areas of international law. Enforcement of the judgements of the ICJ would also be supported by the GA through sanctions or other measures, and failing these and as a last resort, action by the ISF to guarantee compliance.

A revised Charter Chapter on the peaceful settlement of disputes would include clear procedures in relation to the sequencing and timing of the range of dispute-resolution mechanisms currently listed in Art. 33(1)-"negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice"-striking a balance between some flexible choice as to method and an obligation to engage in peaceful solutions in a timely manner. To facilitate the efficacy of such mechanisms, an additional standing body, a global Mediation and Conciliation Commission would be created, whose decisions would not be binding, except with the consent of the parties.

A revised Charter would also make acceptance of the jurisdiction of the ICC mandatory for all member states of the UN, with the Executive Council (with GA authorization) also referring situations to the ICC, if necessary. The revised Charter should universally oblige member states to fully cooperate with ICC investigations, assist in the execution of its arrest warrants and comply with its decisions.

With strengthened international judicial bodies and mechanisms, there will be a heightened need for a skilled and well-trained international judiciary, to lend legitimacy to and confidence in its genuine impartiality and detachment from national political concerns. A modern and well-resourced International Judicial Training Institute is proposed, possibly under the Hague Academy of International Law. The Institute will undertake important, intensive international, national and regional capacity-building and training activities with respect to international law-e.g., regarding the responsibility of national courts to conduct effective and genuine national proceedings under the ICC Rome Statute, and concerning international human rights norms, now subject to binding review (see below).

Appointed by the Executive Council and confirmed by the GA, a new office of Attorney-General of the UN system would perform functions similar to those provided nationally, e.g., to be guardian of the rule of law, to serve as independent legal advisor to Executive and legislative bodies on the constitutionality and legality of proposed action or legislation, to advise regarding types of international litigation pursued before various international courts in the global public interest, and to ensure proper administration of justice-including independence of the judiciary-across the international system.

International Human Rights Tribunal.

We argue that, since the adoption of the current UN Charter, global acceptance of international human rights norms has reached a stage of maturity such that they should now be susceptible to systematic, binding adjudication and review by regional and international

authorities, significantly strengthening the currently weak and non-binding human rights oversight mechanisms. Although human rights are presently conceived as one of three main "pillars" of the UN system, they receive only three percent of the UN budgetary allocation. The international human rights system must be a priority within the new global governance model, as must a well-designed International Human Rights Tribunal, modelled on the European Court of Human Rights, with a "margin of appreciation" doctrine appropriate to existing international cultural and social diversity. The substantive rights adjudicated by the International Tribunal will include key UN human rights treaties, many of which currently have non-binding individual complaint mechanisms; when national appeals have been exhausted, individual plaintiffs may seek recourse at either regional human rights courts or the international Tribunal, to ensure regional complementarity and respect for diversity.

UN Bill of Rights.

The world's people will desire reassurance that individual rights will not be violated in the exercise of the UN's strengthened mandate. A new Bill of Rights (annexed to the Charter) prescribing limits to UN action would protect fundamental human rights, including: the right of fair trial for persons accused of violating provisions in the revised Charter or regulations and laws emanating therefrom, protection from excessive bail, cruel or unusual punishment and unreasonable search and seizure, prohibition of the death penalty, freedom of conscience and religion, freedom of speech, the press and expression, and freedom of association and assembly. Application and interpretation of the Bill of Rights could be the responsibility of a new, specialized chamber of the ICJ.

A New Funding Mechanism.

A strengthened UN system, with a broader set of responsibilities and strengthened institutions, would need a reliable source of funding entirely free of domestic political developments. A funding mechanism is proposed similar to that currently operating in the EU, where member states collect and allocate automatically to the EU budget a share of all VAT collections. Total world GDP at market prices in 2016 was US$75.5 trillion. Every 0.1 percent of GDP contribution to the UN budget would generate US$75.5 billion, a sizable sum. A possible tax base could be generated from a share of VAT or indirect taxes on goods and services collected in each member country. Another possibility is the equitably designed tax proposed by James Tobin on spot currency transactions, with the greatest burden falling on high-income countries. A hybrid system involving contributions from all member states (encouraging universal participation), but with due consideration for variations in income per capita across UN members should be explored. The business community could be a strong advocate for the creation of a dependable system of UN revenue generation, given the large economic costs of instability in many parts of the world.

To achieve a properly resourced and enhanced UN system, a high level panel of experts

should be convened to explore additional international revenue-generation mechanisms, including a tax on cross-border financial transactions, a global progressive wealth tax on individuals, a global tax on mineral/resource extraction or other workable ideas, based on existing effective international schemes (e.g., that of the International Maritime Organisation).

Mechanisms of Charter Reform.

UN Charter reform could be attempted via the existing Charter amendment provisions (Chapter XVIII). A civil society coalition, joined by "like-minded states," could propose an urgent General Conference for Charter review under Article 109(3). If the General Conference or its proposed Charter reforms are blocked by members of the Security Council (especially permanent members), the GA, with the support of an international civil society coalition, could first urge passage of rapid amendments to Chapter XVIII to remove the requirement that Charter amendments need the agreement of all permanent members of the Security Council, or seek informal amendment to these provisions through practice-that is, through the will of a significant majority of governments of the world, as represented in the GA. If these efforts are not effective, the majority of the GA's states can form a new, enhanced body (e.g., via a new Charter) amongst themselves, outside of the current UN structure, using the mechanism followed to establish the ICC, without the support of certain permanent members of the Security Council.

Further Amendments to the Charter.

In a rapidly changing world with evolving needs, the formula for subsequent Charter amendment should be updated. Future revisions would be adopted by a vote of two-thirds of all representatives in the GA (whether or not present or voting) or by two-thirds of the members attending a General Conference held for this purpose, with obligatory General Conferences of UN Members to review and amend the Charter at least every 10 years. For the amendment to come into effect, ratification by two-thirds of the member nations, and two-thirds of the 19 most populous member nations would be required.

Other UN Agencies.

While the Security Council would be replaced with an Executive Council, nothing in this proposal envisages the elimination of the array of UN bodies, commissions, programmes, and specialized agencies which have served well in promoting human welfare and prosperity. Indeed, in an increasingly interdependent community of nations, facing a broad range of unresolved global problems, the need for effective clusters of specialized agencies is more urgent than ever and likely to intensify. A strengthened UN with a revised Charter, greater responsibilities in the area of security, peace and management of the global commons, and a larger, steadier source of funding, will create new opportunities for international cooperation in many areas, including climate change and the environment, global

finance, human rights, poverty alleviation, income inequality, job creation, nuclear prolif-
eration, corruption, terrorism, and drug trafficking, among others. Enhancing the effec-
tiveness of specialized UN agencies-including the possible amendment of their charters-can
be addressed, inter alia, by the Executive Council with its management/system coherence
mandate, in connection with the General Conferences to review the UN Charter, and/or a
possible new Bretton Woods conference. For example, inadequacies in our global financial
architecture-including, for instance, poorly regulated financial markets-were central to the
2008-09 world financial crisis and costly associated disruptions. Few are confident that the
vulnerabilities exposed by that crisis have been adequately addressed and that the global
economy is thus protected from even greater financial shocks.

A World Conference on Global Institutions. We support proposals to convene a confer-
ence in 2020, to mark the 75th anniversary of the creation of the UN, aimed at raising the
issue of the reforms needed to adapt our system of global governance to current needs and
challenges, which, if unaddressed, could well plunge the world into unprecedented crises at
huge economic and human costs.

The 1944 Bretton Woods conference which led to the creation of a new international
financial system was a highly successful example of effective international cooperation. The
World Conference we have in mind would be even more ambitious, reflecting the global
nature of the challenges we face. Unlike Bretton Woods, the World Conference would bring
together not only representatives from government, but also civil society and the business
community. It would be a rallying point, but also the start of a gradual process intended to
build momentum and consensus around the reforms identified in this proposal. Building the
institutions to underpin a functional system of global governance in coming decades could
well be the most important project of this century, requiring the imagination, persistence
and confidence that, sooner rather than later, we will need to make the transition to vastly
enhanced mechanisms of binding international cooperation to avoid untold human suffering
and catastrophe.

Disarmament. Integral to the fundamental transition to the peaceful settlement of
international disputes, a full collective security model for the global use of force and an
international order based on the genuine rule of law, is a clear and ambitious process of
disarmament. We recommend a binding, staged approach to the disarmament of all states
for a reduction of armaments to those that are strictly necessary for a narrow conception
of self-defense, an obligation which can be deduced from language and intent of the current
UN Charter (under which the international use of force is limited to self-defense or duly
authorized collective security action). A revised Charter would make this norm clearer
and binding on all states, with the corollary duty for states to disarm to appropriate levels
within a certain time frame. A special, independent Standing Committee on Disarmament
would implement and monitor this obligation. Its first task would be a scientific anal-
ysis, without political interference, of the self-defense needs of each country, taking into
account the existence of the new International Security Force. After the determination of
appropriate limits, a staged approach of disarmament to required levels would then pro-
ceed, monitored by a thorough inspection system by independent experts empowered by
the Standing Committee, with a two-year preparatory period and then a 10-year phase of

disarmament proper for most countries, depending on the weapons and equipment in need of decommissioning. All disarmament, particularly of the "great powers," would follow a path of simultaneous execution by all nations, disarming proportionately. The work of the Standing Committee would include a review and re-tooling of the UN Office for Disarmament Affairs, the Conference on Disarmament and other UN bodies or treaties linked to disarmament issues (e.g., the International Atomic Energy Agency, the Arms Trade Treaty, the Treaty on the Prohibition of Nuclear Weapons and other multilateral treaties outlawing or regulating specific weaponry), to build on the acquired expertise and agreed norms, and to implement the binding obligations of states under the revised Charter and existing instruments. It is anticipated that nuclear weapons would be universally banned as immoral weapons of mass destruction (see the Treaty on the Prohibition of Nuclear Weapons, recently adopted by 122 states),[13] just as biological and chemical weapons have already been, in effect, universally outlawed.

Inequality and Management of the World's Resources. Growing income inequality between and within countries is a significant global challenge, as exemplified by UN Sustainable Development Goal 10. Income gaps are widening in many countries, while aspirations are growing and climate change disproportionately threatens the poor. Sixty states with a total population of over one billion are falling behind, if not actually failing, driving economic migration. Climate-induced migration will accelerate. Recipient countries are already experiencing a political backlash from this unmanaged international crisis.

Filling this gap requires a new multilateral organization with the primary mandate to help redress global income inequalities, in a way that existing international economic institutions for poverty alleviation, financial system surveillance and trade regulation have not been able to do. This will require novel approaches for funding, beyond those already used by institutions such as the IMF and the World Bank with mixed impact at best. Countries often sit on vast untapped natural resources which cannot be monetized because of mismanagement, lack of trust, institutional weaknesses, or corruption. Vast private-sector resources might potentially be available through public-private partnerships under the aegis of a new, credible organization with a GA mandate. This organization could also be given authority for management of some resources beyond national jurisdictions, such as high seas fisheries and those found on the international seabed, presently a source of growing insecurity. Once confidence is built in the global capacity to manage natural resources and ensure their equitable distribution, states may be ready to widen the scope of global management of the planet's resources where required to maintain and possibly improve planetary carrying capacity, and to remain within planetary boundaries.

Tackling Corruption. To reduce a major impediment to effective governance, transparency, economic development, and the proper allocation of public funds, corruption in governments and the private sector must be effectively addressed globally. New international implementation and enforcement tools are needed to give effect to existing international Conventions in this field, as well as the drafting of new instruments, as necessary.[14] A special Chamber at the ICC, the ICJ and/or the International Human Rights Tribunal could provide binding juridical oversight on international laws addressing corruption, prosecuting individuals and bodies violating certain norms, when nations are unwilling or

unable to carry out such prosecutions. A companion technical training/implementation body would offer training and monitor national implementation, also providing innovative and unprecedented internationalized or "hybrid" ad hoc technical bodies for review and enforcement audits/prosecutions at the national level.

Education. To progress to an international system based on universal suffrage, peace and human rights, the highest priority must be allotted to the provision of adequate universal education, including international civics formation, worldwide for all, in line with the Quality Education Goal 4 of the 2030 SDGs. If national governments cannot provide universal access to quality basic education, the international community should provide it. The current UN News Service should be significantly expanded to furnish impartial and quality information on UN programmes and processes to populations worldwide, ensuring that this knowledge is commonplace and enhanced UN powers are understood.

Motivation

Core Values.

The amended UN Charter will give central place to the fundamental human rights of all persons, the principle of binding international rule of law, the peaceful settlement of disputes, collective disarmament and security, certain core principles of environmental stewardship and sustainability, and other values deemed fundamental to the new international order.

One of the first tasks of the reformed GA will be to compile and enumerate the core values enshrining the good of all humankind and the equal value of all human beings, drawn from the significant current acquis of international law, both "soft" and "hard." These will be made explicit in legally-binding texts to serve as the basis for legislation, judicial review and enforcement, with the frame of the revised UN Charter serving as a global constitution. (The 2030 Agenda and its SDGs provide a globally-accepted example of the application of core values and their implementation, exemplifying a framework for adapting and focusing international governance structures, mechanisms and programmes). This consolidated document will represent the coherent declaration of core values, rights and responsibilities for international governance and sustainability, complemented by a clear definition of the remaining scope for national autonomy, and an individual Bill of Rights.

Core values will be implemented dynamically by legislative and judicial interpretation, through legally binding acts of the GA in its areas of responsibility, and the international judicial mechanisms emerging from this proposal. Norms of equality before the law, protection by law from arbitrary abuse of power and other fundamental values inherent in established rule-of-law structures will be implemented throughout the system. An Office of Ethical Assessment advisory to the GA would ensure that it is apprised of the relevant core values underlying proposed legislation.

The envisioned bicameral, reformed legislative dimension of the UN will manifest values of democracy and consultation, proportionally representing the world's populations in the

reformed GA, and engaging recognized advocates of the global public interest in the Second Chamber.

Strong provisions against international criminality and corruption, beyond national responsibilities or enforcement capacities, will give the international community for the first time the necessary tools to fight criminal disregard for core values, and to prosecute individuals and groups responsible. With such mechanisms and core values in place, the new international system will necessarily drive the creation of a new generation of uncompromised leadership, subject to the highest standards, whose efforts are devoted to good governance and the public good.

The core values of the common identity and interdependence of humankind, as well as those enshrined in the revised Charter, should also be incorporated in all international educational tools, and reflected, as much as possible, in national constitutions and education. They should be essential components in the training of heads of state and their cabinets, international civil servants, contributors to global institutions, and the personnel responsible for enforcement mechanisms, so that much implementation of values is internalized in individual ethics and a responsible conscience. Relevant resource materials should be made available to all educational systems, and modern media used for their global distribution; an enhanced UN News Service can assist in this process, as it functions to build appropriate levels of popular understanding of international governance institutions.

The focus on wealth inequality within the frame of the larger proposal, for the first time seeking to address systematically national and international extremes of wealth and poverty, would further change the current, inefficient international order based on spending for a militarized notion of security, to focus on the well-being and practical needs of all individuals and populations of the world. The new rationalized and effective international order would be oriented toward individual well-being and values of "human security," with a corollary international "right to peace," secured, inter alia, through greatly strengthened Charter provisions for collective security and disarmament.

Decision-Making Capacity.

The proposed Security Council reform will significantly enhance decision-making capacity in international governance, as the use or threat of the use of the veto power has regularly caused crippling delays. Abolition of the veto has been proposed multiple times in Charter history to enhance UN decision-making on crucial issues, most recently and prominently in humanitarian crises, where permanent members possessing the veto have been requested to abstain from its use.

With reform of the GA, there will now be a duly-constituted, legitimate and representative body to take decisions on crucial issues of peace, security and environment in particular (and on other matters in the future). As with other legislative bodies at the national level, the GA will convene a suite of specialized committees on issues of core concern, such as collective security action, enforcement of international judgments, climate change, etc., with the assistance of specialized, technical experts, as proposed. The Second Chamber, composed of members of global civil society, will be a strong catalytic force driving UN

decision-making, exerting active and vigorous pressure for ongoing change, innovation and reform. The Second Chamber will act as a watchdog on UN governmental decision-making and operations, applying scrutiny to hold governments and the international institution to account and to force it to take decisions on pressing issues.

The new Executive Council role, with its management function, will be preoccupied with taking regular and wide-ranging operational decisions in its oversight and coordination mandate for the entire UN system. A key task of the Executive Council will indeed be to enhance decision-making effectiveness throughout the system, including through internal management, leadership and administrative reforms.

The professionalization, systematization and clear lines of control and accountability of the International Security Force, subject to protocols and objective criteria for its deployment and use, will likewise remedy the inefficient, under-resourced, ad hoc system currently used to conduct peace-keeping and collective security operations.

The strengthened role of international judicial authorities will significantly enhance decision-making processes in the international system, as courts will be tasked with deciding upon issues of core concern to states, individuals, and the international community, which too often now represent festering conflicts with no hope of decisive resolution. Likewise, binding protocols on the peaceful settlement of disputes will allow staged and clear decisions on issues related to international peace and security.

We see addressing systemic corruption issues as necessary to ensure the requisite capacities for high quality and responsible decision-making in the public interest at national and international levels-which are, of course, interdependent.

Effectiveness.

With the foundations for this step already established in the existing system, the proposal suggests a substantial advance in establishing genuine, comprehensive rule-of-law at the international level. The international community would be equipped with the supplementary architecture and tools required to ensure that international decisions and policies are implemented and observed. Binding adjudication, compulsory, universal jurisdiction of the key international courts, and an effective range of enforcement mechanisms, including the use of the International Security Force as a last resort, will ensure that there is no ambiguity in the enforceability of international law, decisions of international tribunals, and implementation of the terms of the UN Charter itself-including its prohibitions on the use of force, save under narrow exceptions.

Ensuring adequate financing for international institutions will be a highly significant reform toward substantial gains in effectiveness of the UN and related bodies. Currently, effectiveness and the scope of operations are hampered by paltry, inconsistent funding. The ambitious and comprehensive collective security and disarmament components of the proposal will likewise free resources for international (and national) institutions in service of the public good, allowing for a true peace dividend. The disarmament agency, with robust and comprehensive inspection functions, will facilitate implementation of a general international disarmament process, overcoming traditional security dilemmas and costly

arms races among states.

The Executive Council, with core management duties, is primarily focused on operational efficacy and the coherent implementation of policy and programming decisions taken by the GA.

Tackling corruption is key to ensuring efficacy in global governance, as its prevalence perverts lines of implementation of international norms at the national level, leads to diversion of resources and constitutes a general drain on the system. The proposal suggests a model of complementary prosecution/oversight for addressing corruption at the national level, following the successful model of the ICC in this respect.

Ongoing system efficacy will be safeguarded with mandatory five-year reviews of GA powers, a ten-year mandatory General Conference for review of the UN Charter and, if necessary, bypassing the Security Council if it chooses to block meaningful Charter reform in the first instance. Various individuals and bodies in the reformed UN institutions can regularly make suggestions for system reform and enhancement, based on operational experience.

Finally, the UN will now be a body with significantly enhanced democratic and representative legitimacy, with reformed legislative chambers, an elected Executive Council, a well-trained, independent international judiciary, and a UN Bill of Rights, to heighten the willingness of all actors to cooperate and comply with its decisions and accept its global management responsibilities. The focus on international basic education and quality access to information on UN institutions and activities will likewise strengthen this dynamic of legitimacy and participation in an international "social contract" for more effective governance.

Resources and Financing. The proposal recognizes fully that the institutions underpinning the new mechanisms of global governance must be adequately resourced to provide a steady, predictable source of funding to finance its multiple operations. It proposes a system of funding which involves a level of automaticity that insulates the UN from the uncertainties associated with member state budgetary discretion. By allocating directly to the UN budget a fixed share of national revenue collection-the current practice in the EU-the UN is empowered to reliably implement its work program and formulate its strategies in a medium-term framework. The proposal argues that while there are, in principle, multiple sources of such funding, one practical way to proceed is to link budgetary contributions to national indirect taxes on goods and services, such as the VAT, because these are in place in virtually every country in the world and mechanisms already exist for their collection, significantly reducing the need to develop new revenue collection machinery. While it would be tempting to shift the burden of financing to high-income countries, universal participation in funding by all countries is an important principle, to encourage ownership by all member states of the new governance system. If the system of funding envisaged is linked to national income, wealthier states will automatically make larger contributions in absolute terms than lower-income members. Additional sources of international funding based on principles of equity and progressive taxation, such as those suggested by some contemporary prominent economists (e.g., a global wealth tax), or those based on successful models employed by international organizations (e.g., the IMO) will also be explored.

Adequate and predictable funding will allow the UN to build a highly professional staff, including the creation of the International Security Force.

General Security.

Our proposal addresses the issue of security from multiple perspectives. First, it calls for the creation of an International Security Force acting on behalf of the international community as reflected in the deliberations of the GA and Executive Council, under whose authority it would operate. While recognizing the need for national forces to safeguard internal national security, it brings about the creation of a tool for the prevention of international aggression and other threats to peace and ensures compliance with the revised Charter. Creating an International Security Force would be an important confidence-building measure, enhancing the credibility of the UN in fulfilling its security responsibilities. It would also ensure, through the creation of a true system of collective security, a better allocation of global economic and financial resources, with states empowered to redirect resources now allocated to the maintenance of excessively large military establishments to socially productive ends. Total world military spending in 2016 was approximately US$1.7 trillion. A Standing Force of some 800,000 might cost US$70 billion annually. According to the Institute for Economics and Peace, the conservatively estimated total economic impact of violence to the world economy in 2015 was $13.6 trillion, equivalent to 13.3 percent of world GDP or $1,876 per person per year. Clearly, the establishment of a workable International Security Force could have vast security and economic benefits, releasing substantial resources to promote economic and social development and shared prosperity, based on a model of "human security."

Second, this proposal calls for the mandatory and peaceful settlement of international disputes and the enforcement of international law. In particular, it grants compulsory jurisdiction of the ICJ over international legal disputes for all UN members, departing from the current system requiring states' agreement to adjudicate. Revisions to the Charter would also make mandatory acceptance by all UN members of the statute of the ICC. Third, the proposal argues for a significant strengthening of the current system of non-binding human rights oversight mechanisms through creation of an International Human Rights Tribunal. Fourth, a new Bill of Rights attached to the Charter would include fundamental human rights protections in specified areas. Finally, the proposal envisages a process of international disarmament, consistent with the transition to a global security model firmly anchored in the principle of collective security, the dignity of persons, and the rule of law.

Flexibility.

The proposed institutional mechanisms have levels of built-in review and revision procedures to ensure that international governance can be adapted to changing conditions and accumulated experience applied. Governance mechanisms should develop organically in response to needs, form following function, with change considered normal and necessary.

At the constitutional level, obligatory periodic review of the Charter will open the door

for necessary revisions, and for relevant principles underlying widely accepted customary and soft law to be codified in the foundation text.

The Executive Council has the mandate to review UN system performance, ensure good governance and management, and make necessary adjustments through administrative and UN system reforms.

As unnecessary posts are abolished and new needs defined, institutional flexibility requires complementary procedures for social security and human resource management to protect the rights of international civil servants and facilitate optimal use of their capacities. This can reduce bureaucratic blockage and resistance to change.

Some flexibility will be required in gradually implementing the proposal components, depending on the willingness of governments to accommodate necessary changes. While collective adoption by consensus would be ideal, provisions are included to sidestep any blockage by recalcitrant governments and enable the larger community of common interests to go forward, while gradually building the trust necessary for more radical changes (e.g., confidence-building is a major component of the disarmament proposals).

Accountability and Transparency.

The core values provide the foundation for accountability at all levels, and the framework for legislative, executive and judicial action for their application. Charter revision will incorporate provisions for transparency and public access to information. As collective consultative bodies, the GA and Executive Council provide some protection from individual abuse of power and the ability of any one country to block international action. The revised Charter will create higher standards of government accountability and mechanisms for international action where necessary to intervene against security threats, abuse of power and human rights violations at the national level.

Once the GA is fully elected by popular vote, it will be directly accountable to its universal electorate through regular renewal of its membership. The Executive Council has the mandate to ensure accountability within the UN system. The Second Chamber provides a formal channel for civil society and global stakeholders to address accountability within and across the system.

A better educated global public electing its representatives to the GA will also provide a fundamental level of accountability, and should come to see the core values as essential criteria for the selection of candidates for international governance responsibilities.

An international press and media system freed from national hindrances and interference could express the diversified views of humankind and stimulate open, responsible and constructive debate on issues facing humanity, investigating abuses, ensuring transparency, and supporting general public education. The GA will need to legislate on the necessary standards, responsibilities and safeguards for an independent world press and associated media, especially given the advent of universal media access and the temptation to manipulate public opinion for partisan political and ideological ends. The media can, rather, become a tool for increased public participation in international governance, a potential already exploited prior to Rio+20 and for the 2030 Agenda.

References

1. The creation of something like the EU in 1938 would have been considered unthinkable. The European Coal and Steel Community, however, came into being in 1951, paving the way for the 1957 Treaty of Rome and the developments that followed. Some would argue that the creation of the EU was made possible by the untold human suffering and economic collapse associated with World War II.

2. See Clark and Sohn, World Peace Through World Law, Third Edition, 1966.

3. The country groupings are based on various population thresholds set, respectively, at 300, 160, 70, 40, 20, 10 and 1 million people. We have run other simulations. Inclusion of GDP measures to account for economic size tends to make the distribution of representatives top-heavy, with China and the United States accounting for a very large share of the Assembly's membership.

4. As of the 1990s the political science literature suggests an emerging "consensus" that (market-based) democratic societies might be the "sole feasible social structure." See, e.g., Wouters, J., Bart De Meester, & Ryngaert, C. 2004. Democracy and International Law, Leuven: Leuven Interdisciplinary Research Group on International Agreements and Development, p. 4.

5. See Mathews, Jessica T. 1997. "Power Shift", Foreign Affairs, Volume 76, No. 1, 50-66. Three excellent examples of effective coalitions of like-minded states and non-state actors aimed at precipitating reforms involved the International Campaign to Ban Landmines, the Coalition for the International Criminal Court and the adoption of Responsibility to Protect doctrine as a global norm.

6. Security Council membership expanded in 1965 from 11 to 15 members. Since then membership in the UN has risen from 117 to 193 countries, leading to a substantial drop in the presence in the Council of nonpermanent members and, thus, undermining its representative legitimacy.

7. See Clark and Sohn, World Peace Through World Law, Third Edition, 1966, p. 321.

8. While it would be inappropriate for the ISF to employ weapons of mass destruction or other weapons considered to violate international humanitarian law, it should be empowered to destroy such weapon systems, and to prevent their manufacture and use.

9. In this respect, it is not unrealistic to think that more countries might also wish to follow in the footsteps of Costa Rica which more than 50 years ago abolished its military, without any adverse repercussions for its security. A national police force has been more than effective in keeping the domestic peace, dealing with local crime, violations of traffic laws, and the like.

10. This figure assumes that about one third of this would go toward funding the pay and benefits of the Standing Force. The annual cost of UN peace-keeping operations today is about US$8-9 billion. 11. At present, the ICJ has mandatory jurisdiction over UN members by consent; to date, only 71 states have recognized the compulsory ICJ jurisdiction, undermining its ability to be a true enforcer of international law.

Proposed Number of UN General Assembly Representatives

Number of Representatives by Country

- 40
- 20
- 10
- 5
- 4
- 3
- 2
- 1
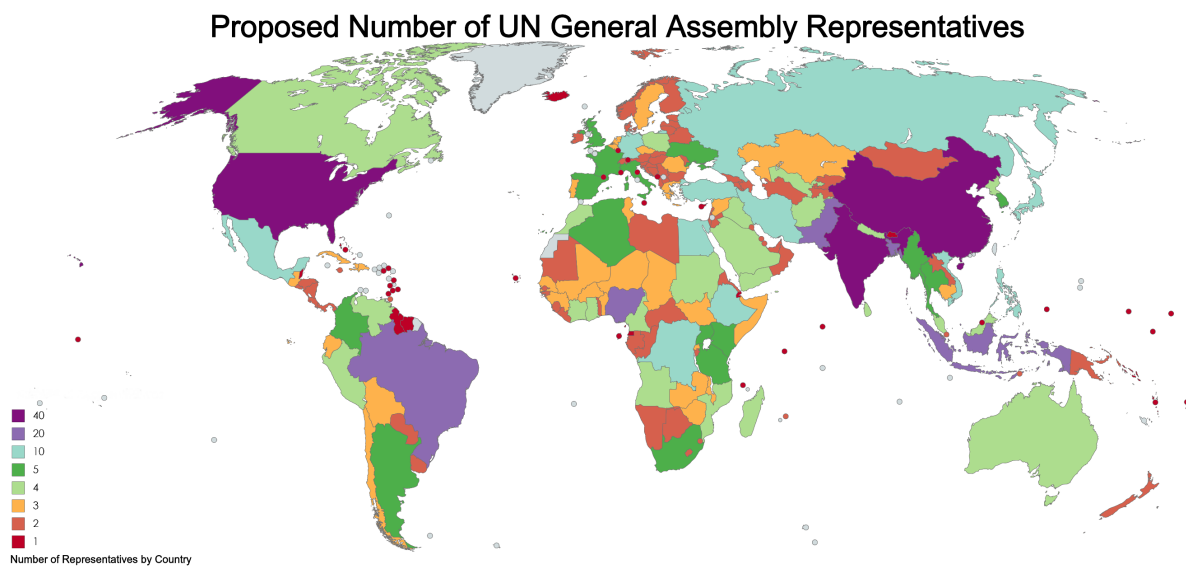
11. The reformed ICJ could also be empowered to order compliance with binding decisions resulting from inter-state arbitration, e.g., decisions issued by arbitral tribunals convened under the Permanent Court of Arbitration.

12. Schell has noted that "nuclear disarmament is the minimum technical requirement for real safety from extinction." He argues that "we must lay down our arms, relinquish sovereignty, and found a political system for the peaceful settlement of international disputes." Schell, Jonathan. 1982. The Fate of the Earth, Jonathan Cape, London, p. 226.

13. E.g., the 2003 United Nations Convention Against Corruption and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.

Figure B.2: **Natalie Samarasinghe**

B.2   A Truly Global Partnership

A truly global partnership - helping the UN to do itself out of a job

by Natalie Samarasinghe

Abstract

It is often said that the UN's founders would not recognize the world in 2017 - a world in which people fear climate change, cyber attacks and extremism [1]; in which too much affluence, too many lives preserved, could be our downfall.

Arguably the most profound transformation has been the creation of an international community far beyond their imagination. Companies now have wider spheres of influence than states. Civil society movements can mobilize millions of supporters. Two decades before social media, UN Secretary-General Boutros-Ghali referred to CNN as the 16th member of the UN Security Council.

Sadly, there remains much that the war-weary generation of 1945 would recognize: from big power tensions to the threat of nuclear war, from corrosive nationalism to mass displacement. And as the setters of the Global Challenges Prize recognize, states continue to play an essential role, not least in creating the conditions for others to act.

Efforts to improve global governance must, therefore, tackle old and new challenges, and address emerging and long-standing realities.

A blank sheet?

The task at hand - designing a more effective governance model that is implementable in the foreseeable future - is as urgent as it is difficult. We do not have the luxury of a blank sheet.

Seeking a fast, wholesale transformation would be risky, threatening the hard-won gains of the past century, as well as those whose lives depend on the UN. It would be unlikely to meet the Prize criterion of acceptability without an unwieldy process of consultation, risking poor compromises or, worse, the creation of a two-speed system with only some states subscribing to the new model.

Moreover, many of the constraints on the UN's founders remain in place. The organization reflects realpolitik as much as it does principle, tempering universal membership with privileges for the powerful. It is this bargain, however flawed, that has underpinned its achievements and longevity.

It took two world wars to create the UN. Reforming it has proved challenging, even during times of opportunity, such as the immediate post-Cold War period. At present, when principled political leadership is in short supply, reform might even be dangerous - a chance for leaders to dismantle what we have.

At the same time, we need transformational change now, given the scale and immediacy of the challenges we face. We also need a vision for the future, as the UN continues to fade in its impact and legitimacy.

This proposal addresses this dilemma through changes that will make the UN more effective in the short term, while creating the conditions for a more sustainable and equitable system of global governance in the future.

What should stay, what should go

First, we must identify the areas that are most ripe for - and in need of - reform, as well as areas that should be supported or left alone:

The democracy deficit - despite the rise of other actors, the international system remains stubbornly state-centric, with businesses and NGOs on the sidelines. The mantra that they

will lead delivery of the Sustainable Development Goals (SDGs) and Paris Agreement rings hollow in the absence of their formal inclusion in governance. This is particularly the case for young people. Half the world's population is under 30 but they are largely excluded from policymaking, even though they will bear the brunt of poor decisions made today.

The development deficit - development work accounts for roughly 75% of total UN funding ($26bn), two-thirds of its staff (50,000), and more than 1,000 offices. This work made sense when the UN was the only actor on the ground. Today, it is rarely necessary or effective. A host of studies have shown that other actors are often more successful, more cost-effective and more in tune with local needs. This work also hampers the UN's ability to provide its crucial "backstop" functions. [2]

The "backstop" benefit - the UN's role as the world's "backstop" remains vital. While its peace and security record is patchy at best, other organizations have rarely performed better, nor have they been prepared to act in many situations. The UN's political work is also not easily replicated. And millions of people rely on its humanitarian assistance, which others are unlikely to match.

The universality benefit - the UN's added value is perhaps most clear in its shaping of the international system, through the development of laws and standards that govern everything from aviation safety to human rights. Its normative role and convening power, its technical expertise and its transformative ideas remain peerless. [3]

The reform red herring - while Security Council reform invariably occupies the limelight, proposals are highly unlikely to meet the Prize's criteria of efficacy or acceptability. It is not for lack of ideas that progress remains elusive. No magic reform - structural (eg composition), procedural (eg veto) or conceptual (eg R2P) - can make up for a lack of political will and fiercely guarded privilege.

This proposal adopts an alternative approach: eroding the Council's importance and remit over time through more effective crisis prevention by a system that encompasses several actors who are more influential than the Council's members.

A new shape

Two major transformations are proposed to address the two deficits set out above, along with a number of supporting reforms (see next section) that also serve to boost the benefits:

A four-way governance structure in all UN funds, programmes and agencies bringing together states, businesses, NGOs and young people. This would take as a model the International Labour Organization (ILO) [4] in terms of decision-making, but use a different method of appointment, with candidates participating in transparent selection processes aimed at raising standards and improving accountability.

A global capacity-building drive that sees the UN transfer the bulk of its development-related tasks to non-state stakeholders, who would bid competitively for contracts. This would be a priority for the reconstituted UN agencies, building on existing partnerships and proposals.

Descriotion of the model

TRANSFORMATION 1: Four-way governance structure

At present, UN funds, programmes and agencies ("agencies") are governed by states. This has led to a number of problems, including: severe funding shortfalls, as states have made contributions voluntary in many agencies; inertia on reform, as states protect their interests (national offices, high-level staff positions, etc); and a reluctance to engage other actors meaningfully. The knee-jerk answer to calls for change has been the expansion of the UN's agenda to incorporate ever more tasks. States rarely decide to close a poorly-performing programme, preferring instead to create a "coordination" or "evaluation" mechanism to promote efficiency.

The result has been a system that is overstretched but unwieldy, underfunded but wasteful. In light of increasing demands on the system, states are belatedly looking to businesses and NGOs to support financing and delivery of programmes. But current structures offer few incentives for them to do more, not least a voice in formal decision-making.

Multi-partner governance models are becoming increasingly common - the Global Fund to Fight AIDS, Tuberculosis and Malaria; GAVI, the Vaccine Alliance; and the UN Global Compact all have UN, business and civil society representatives on their boards. The most fruitful model, though, is the ILO, which has had a tripartite structure since its inception in 1919. As one of the UN's specialized agencies, it offers an example of shared governance and decision-making that is more likely to be acceptable to states, and which has demonstrated its ability to deliver positive outcomes.

This proposal recommends a four-way governance structure where the number of members is doubled, with states making up half, and representatives of business, civil society and youth organizations making up the other half (or close to 50%). While increasing the number of actors involved in decision-making often slows down the process, it can also improve the outcome.

Assessments of the ILO by various governments and academics have noted that the interplay between different constituencies has increased "interest accommodation" and provided pathways through stale debates. Greater ownership by local actors and the identification of local issues during negotiations have also helped to speed up implementation once agreement has been reached. This is often a source of delay following purely intergovernmental negotiations. [5]

The structure

While each UN body has distinct arrangements, each specialized agency (e.g. the Food & Agriculture Organization - FAO) tends to have a "general conference" or "assembly" of member states who elect from within their number a "governing body" or "executive committee/board". UN funds and programmes (e.g. the World Food Programme - WFP) often have only the latter, elected by a supra-body such as a specialized agency or the UN Economic & Social Council (ECOSOC).

To facilitate the inclusion of new stakeholders with the least possible resistance from states, it is proposed that the only changes to governance structures would be:

The widening of the definition of "member" to include a total number of for- and non-profit organizations equal to the number of member statesResultant changes to the voting and other arrangements (e.g. for committee membership), with thresholds and proportions maintained except to reflect the increased number of members

Appointment and election of non-state representatives (NSRs)

Step 1

In order to be eligible, for-profit NSRs must be members of the UN Global Compact who are classified as "active" (currently over 10,000 companies and organisations). Non-profit NSRs must be accredited to ECOSOC (currently just over 4,500 non-governmental organisations and other institutions). The requirement to have passed existing processes provides a measure of scrutiny and acceptability to states.

Youth organizations can be either for-profit or non-profit organizations. To qualify, the organization's objects and purposes must explicitly relate to young people and the organization must commit to fielding only representatives aged 30 or younger.

Step 2

Prospective NSRs must then register their interest on a new online portal, similar in style to the UN-Business Action Hub [6] and the partnership portals of UN bodies like the Refugee Agency (UNHCR). This would require them to accept the UN's Supplier Code of Conduct and provide a statement outlining their ability to make a meaningful contribution to particular areas of UN work, at the policy or delivery level, or both.

It would also require them to accept assessments of their performance (see below), as well as an agency membership fee should they be elected/appointed (see "Argumentation" section for details).

In addition, a small registration fee, based on a sliding scale similar to the UN Global Compact's suggested contributions, would be applied to discourage non-serious applicants and to help maintain the portal:

Less than USD 50 million revenue = USD 250 (suggested minimum)
USD 50 million - USD 250 million = USD 2,500 - 5,000
USD 250 million - USD 1 billion = USD 5,000 - 10,000
USD 1 billion - USD 5 billion = USD 10,000 - 15,000
Greater than USD 5 billion = USD 15,000+

Step 3

The member states of the various agencies would then elect/appoint NSRs from the pool of those registered.

For general conferences, NSRs would be elected in corresponding numbers to member states. So, for example, if an agency has 193 member states, 64 for-profit, 64 non-profit

and 64 youth NSRs would be elected. To be elected, NSRs must secure a two-thirds vote, which is the general UN system threshold applied for the admission of new members.

Each of the five UN regional groups would put forward 20 candidates for each category, to avoid the fielding of "clean slates" and to ensure geographic balance. A group of experts (see below) would also act as a vetting mechanism, flagging up misconduct and potential risks such as pending legal proceedings. Their advice would be non-binding but delivered publicly to encourage states to pay heed.

Membership would be reviewed at a general conference on a five-yearly basis, with NSRs allowed to stand again for one further five-year term. This would provide a long enough framework for NSRs to make a meaningful contribution, allow them to step down if circumstances change, and serve as a formal point at which assessments of their performance are considered.

Step 4

For governing bodies, the existing appointment and election processes of each UN body would remain in place except for the increased number of representatives.

So, for example, WFP's Executive Board currently comprises 36 states, 18 elected by ECOSOC and 18 by the FAO Council. Under this new model, it would comprise 72 members, 36 states and 36 NSRs.

18 of them (six for-profit, six non-profit and six youth) would be elected by ECOSOC from candidates registered on the portal. The other 18 (six for-profit, six non-profit and six youth) would be elected from the FAO's NSR membership, which would be determined using the process for general conferences outlined above.

Working methods, powers and functions

For general conferences, the ILO provides a positive model in terms of working methods, with the various constituencies functioning somewhat as political parties do in a national legislature: meeting separately for informal discussions on strategy, holding caucuses and voting separately. This would complement the emphasis on regional coordination practiced by states. The diversity of interests would also allow for the emergence of issue-based coalitions that could help break down the silos that currently impede agencies' work.

The powers and functions of the general conferences and governing bodies would remain the same, with the exception of one additional task: reviewing which tasks currently undertaken by the UN entity should be transferred to other actors - this is the second proposed transformation.

Lighting the spark

Reforms to UN agency membership do not require amendment of the UN Charter, which is notoriously difficult to achieve. They can be instituted by their members, who would need to be convinced that the proposed changes, which would dilute their decision-making

power to some extent, are desirable. Prospective NSRs, meanwhile, also need to be enticed to register.

The main incentive for states is burden-sharing in terms of financing, risk, delivery and accountability. If one agency were able to reach full funding, reduce its workload and improve its effectiveness - and the perception of its member states - this would certainly encourage others to follow suit.

For NSRs the main incentive is a meaningful role in decision-making that affects their operating context. Businesses stand to gain contracts to deliver handed-over UN tasks, while NGOs stand to gain funding to deliver the work they were set up to do.

To start the process, a mass mobilization campaign involving business, civil society and youth organisations will be necessary, to build up support among UN member states. Given that the proposals are grounded in precedents and existing examples, do not require additional state funding, and leave states in the driving seat on paper, it should be possible to attract support.

TRANSFORMATION 2: global capacity-building drive

This transformation involves the UN transferring tasks that can be performed by other actors, thereby:

- Building local and national capacity, ownership, engagement and accountability
- Formalizing what is already the reality on the ground in many situations
- Empowering developing countries, further eroding the notion of "donors" and "recipients"
- Providing businesses and NGOs with contracts, and helping to coordinate and upscale their efforts
- Addressing the unsustainable growth in the UN's workload, and the incompatibility on the ground of various functions it is expected to perform - political, humanitarian, development and human rights
- Enabling the UN to focus on tasks that cannot be easily taken on by others, such as forging political solutions to crises and dealing with complex emergencies

Some of these tasks, particularly on the development side, will be easy and quick to transfer, as they are already contracted out by the UN. Others will require a process of knowledge sharing and capacity-building, as well as support in the form of funding and staff.

Proposals to scale back the UN's non-emergency work have been steadily gaining traction. The Secretary-General's report to the 2016 World Humanitarian Summit featured a commitment to be "as local as possible, as international as necessary", which would see the UN providing greater support to local actors and not seeking to replace or duplicate their efforts. This, in turn, would enable the UN to better respond when local and national capacities are not sufficient, and additional expertise, resources and capacity are required.

The leading role of non-state stakeholders in financing and delivering the SDGs and Paris Agreement has not only been embraced. It has been recognized as the only means

by which they can be realized. However, stakeholder involvement has been piecemeal and limited, with vast differences between UN agencies.

The UN Children's Fund (UNICEF) is one example of good practice. It works with thousands of partners, including private sector companies, investors, academic institutions and civil society groups, whose support includes everything from funding (nearly 30% of UNICEF's budget) to in-kind services such as aid distribution, evaluation and research. Partners gain expertise, experience and exposure. With strict guidelines on procurement and a strong focus on the UN Principles of Partnership, these collaborations have also served to strengthen accountability and transparency on both sides.

This proposal seeks to formalize and expand the current practice of partnership.

The process

The first stage will involve UN agencies identifying which of their current tasks can be transferred. The participation of NSRs in agency decision-making, and the prospect of UN funding, staff and expertise being shared and/or transferred to national and local actors, should serve to encourage and incentivize states. However, there is nothing to say that this process could not occur in the absence of Transformation 1.

The second stage will be drawing up tenders for these tasks, which would be similar to current procurement processes. The tenders would be posted on a UN-wide portal, which would combine the various different portals currently in use. Ideally, it would be the same portal used for registering stakeholders.

The third stage will involve a competitive tender process open to those who have registered as stakeholders. This would provide a baseline of requirements, as well as a commitment to accept and facilitate performance assessments, including through dedicating a proportion of project funding to evaluation. While the procurement structures will differ for the various UN agencies, the expertise of non-tendering NSRs should be leveraged.

The fourth stage will involve planning meetings with UN and successful suppliers to determine a timeframe and process for task handover that minimizes disruption and risk to beneficiaries. This will also involve discussion of the supplier's funding and staffing needs. Consultations with beneficiaries and local communities will form an essential part of this process, allowing for a measure of civic acceptance of tender outcomes and encouraging good behavior from suppliers.

The fifth stage will involve delivery, with the aim of the UN providing support until it is no longer needed. This process may involve ongoing funding for the task, or support to create alternative sources of funding. It may also involve the transfer of staff to the supplier. Concurrently, feedback and assessment processes will begin (see below and "Argumentation" section).

SUPPORTING REFORMS

The new stakeholder portal

In addition to supporting the above transformations, the new portal for registering stakeholders would serve three important functions:

Combining similar existing portals, thus increasing efficiency and reducing cost and administrationCombining existing codes of conduct and voluntary principles, thus raising the bar for stakeholders Formalizing stakeholder engagement with the UN, thus increasing transparency and, through the acceptance of expert and public scrutiny (a requirement for registration), strengthening accountability.

The portal would initially be funded by a new UN Global Compact fee, and maintained through stakeholder registration fees as detailed above.

Membership dues for NSRs

As per the registration requirement, NSRs would agree to pay membership dues if elected to UN agencies. These would be based on their ability to pay, using a scale of assessment similar to that used for member states. This would see the wealthiest NSRs pay the most, and the poorest NSRs pay only a token amount, in order to maintain the principle of contribution.

Instituting dues would significantly boost the unrestricted income of UN agencies, many of which rely entirely on voluntary contributions that are often earmarked. This, in turn, would enable better planning and allow for swifter mobilization during emergencies. At present, several agencies have severe funding shortfalls (the Refugee Agency is missing two-thirds of its budget), and UN appeals are only partially met, particularly for situations that are not receiving media attention.

If 10 companies with a revenue of \$5bn gave 0.01% as an annual membership due, \$500 million would be raised - a larger amount than all but one country (the United States) have pledged to the Refugee Agency for the budget year 2017.

A useful consultation exercise to establish the details of the formula used to assess membership dues could be based on the World Health Organization's successful practice of Negotiated Pledges, which involved a series of dialogues between that organisation and its partners, through which consensus over funding commitments was reached. The initiative lead to increased voluntary contributions of core funding and a significant improvement in funding predictability.

Expert monitoring system

Involving NSRs requires processes to be put in place to increase transparency and accountability. The registration system (above) is one such measure. Public feedback (below) is another. But expert input will also be required.

Experts should provide vetting during NSR election processes. Through regular assessments, and the ability to investigate allegations of misconduct, they should also help

inform procurement decisions.

The Special Procedures of the UN Human Rights Council provide a model that is ripe for expansion. Described by former Secretary-General Kofi Annan as the "jewel in the crown", Special Procedures consist of experts (sometimes called "Special Rapporteurs") and working groups that are mandated to scrutinize human rights issues related to particular themes (such as modern slavery and violence against women) and particular countries.

What distinguishes them is their independence from the UN system, and their freedom to investigate any matter that falls within their mandate. Some can also receive complaints and petitions from the public.

At present Special Procedures receive little support from the UN and no remuneration. Using money from the UN Global Compact fee, this system could be expanded and reinforced so that it can better deliver its current tasks, and develop the capacity to monitor stakeholders who have accepted scrutiny as a condition of registering with the UN.

This measure should be acceptable to states as no changes to Special Procedure mandates would be required, nor additional funding from states. The mandates would also continue to be set up and reviewed by the member states of the Human Rights Council.

Public feedback and scrutiny

The two transformations outlined above are aimed at addressing the democratic deficit in global governance. However, it is important to distinguish between civil society and the public, and to ensure that people are able to participate directly in decisions and work that affects them, and not only through representatives. It is also vital to ensure that those affected are consulted during the process of task handover from the UN to stakeholders.

Public input should be sought at all stages - through consultations in advance, ongoing feedback and monitoring, and assessments. This input should become an integral part of planning and evaluation, and should shape outcomes if it is to be meaningful.

To support the above transformations, this must include the ability to: provide feedback on NSRs and suppliers; to flag good and bad practice and performance, and to encourage good behavior through "naming and shaming" and "naming and praising". To meet the requirement of meaningful participation, this feedback will be made publicly available alongside expert assessments, and states will be required to take this into account when selecting NSRs and suppliers.

To be truly inclusive, this feedback needs to be gathered in different ways, using different means. The various tools already in use by UN agencies provide options. Examples include UNICEF'S U Report (a real-time social messaging tool) and WFP's Mobile Vulnerability Analysis and Mapping tool, which gathers data through phone surveys. The costs would be built into the tender process, with consultation a requirement.

UN Global Compact membership fee

At present, there are over 12,000 members of which 10,000 are rated as active. They include more than 8,000 companies and 4,000 other organizations. There is no fee for membership

although a small voluntary contribution is suggested based on revenue.

It is proposed that a small fee be levied on members, based on a scale of assessment, to support:

- The initial setting up of the stakeholder registration portal
- The expansion in the Special Procedures system
- The UN's "backstop" functions, in particular the Office of the UN High Commissioner for Human Rights and the UN Secretary-General's mediation infrastructure, which should serve to enhance the stable environment that business requires
- Civil society participation in UN activities, to increase representation of the poorest and most vulnerable

According to the Global Compact Secretariat, about 40% of FTSE 500 companies are members. In 2015, the FTSE 500 had a value of $32,387bn. [7] If one assumes that none of the FTSE 100 are members, which is not the case, thus reducing the value by $16,245bn, and then applies a fee of 0.01% to the remaining 40%, the resulting revenue would be $64.5bn, more than the entire cost of the UN system annually.

This is not intended to suggest that this amount would be raised, although it is certainly a financing model that should be seriously considered. Rather this estimated example illustrates the possibilities of a Global Compact fee.

UN offices focused on core functions

Reducing UN activity in the development sphere will enable it to focus on the political, human rights and peace and security work that cannot easily be replicated or transferred to others. These activities should become the focus of UN offices around the world. The head of these offices would be delinked from the development system and answerable to the UN Secretary-General. They would be tasked with ensuring that all UN activity in their territory meets broader UN objectives and supports task handover and stakeholder coordination.

This builds on several reform proposals produced in the wake of UN failures to protect civilians on the ground. In 2009 in Sri Lanka, UN actors were found to have prioritized humanitarian access (although this never materialized) over raising human rights concerns. Similar charges are now being leveled against the UN office in Myanmar.

Transparent and inclusive appointment processes

Finally, no amount of reforms can make up for poor leadership. At present, the appointment processes for UN agency heads and other senior managers vary greatly in quality. To support the above transformations, and to increase performance and accountability more generally, consistent appointment processes should be instituted. These should be grounded in best practice from across the UN system, and reflect the recommendations of the UN's Joint Inspection Unit, which have been endorsed by states. [8]

At a minimum, appointment processes should include: a job description with clear criteria, a timeline and description of the recruitment process, a shortlist of candidates

(which must include women), an interview process that enables all stakeholders to engage with candidates, and a final selection process that involves all stakeholders. Due regard should be given to geographic diversity without constraints that limit posts to particular regions, as is currently often the case. A single term of office should also be seriously considered to improve performance and accountability.

Motivation

Both transformations seek to address the democratic deficit in global governance, in terms of decision-making and delivery. At present, the participation of other stakeholders - businesses, investors, foundations, NGOs, academic institutions, the media and public - is generally limited and tokenistic. This is unsustainable for a number of reasons:

- The UN is overstretched and underfunded at a time when needs are rapidly increasing. Its unique political, humanitarian, human rights and peace and security work is suffering as resources are diverted to its underperforming development work

- There is a risk that stakeholders filling the vacuum do so in a manner that is, at best, ad hoc and uncoordinated, and at worst, opaque and unaccountable

- Continued exclusion of stakeholders is a security risk. It can lead to unrest and violence on the one hand, and poor behavior from states on the other, as they seek to maintain control

Conversely, where engagement has been successful, the international community has been able to make headway on some of the most tricky issues - the Montreal Protocol that led to the phasing out of CFCs, is one example; the Ottawa Convention banning landmines is another.

More recently, the Paris Agreement offers a potential model for the future. The languishing process to produce a traditional one-size fits all treaty was replaced by a more flexible and inclusive arrangement through discussions involving a wide range of stakeholders. The response from within and outside America to President Trump's decision to withdraw from the agreement demonstrates the extent to which the agreement has been embraced by local and national actors. At the same time, the UN provided the forum for the agreement, and gave it the stamp of global approval and legitimacy.

The proposals above seek to formalize, and in doing so, enhance cooperation and coordination between states and other stakeholders, through processes that encourage better behavior, more transparency and greater accountability.

In crafting these proposals, the following principles have been applied:

- Harnessing prevailing global trends and political realities to create a more effective and inclusive UN in the short- to medium-term, and a more sustainable and equitable system of global governance in the future

- Ensuring there are incentives for all parties: states (burden- and cost-sharing, and increased national capacity), businesses (formalized participation in decision-making and delivery, access to contracts), and NGOs (formalized participation in decision-making and delivery, funding support)

- Formalizing and enhancing, through coordination and up-scaling, the informal roles currently played by non-state actors, thereby also increasing scrutiny of their activities

- Encouraging participation by instituting rules and conditions that are voluntary as the pursuit of participation is itself voluntary

- Taking existing structures, rules and processes as starting points, to increase ease and speed of acceptance and implementation

- Seeking accountability through transparency, better leadership and public participation

The proposals also seek to meet the *Global Challenges Prize* criteria:

Core Values

In order to be guided by the good of all humankind and by respect for the equal value of all human rights, a governance model must reflect humankind. The quadripartite structure enables people and organizations to sit alongside states in terms of decision-making and delivery. Not beholden to short-term election cycles, these actors will have more scope to act in the long-term collective interest.

The transfer of UN functions back to national and local actors will increase the need for, and incentive to, respect human rights. The creation of transparency and accountability processes, meanwhile, will enhance scrutiny of organizations that have too often remained in the shadows.

Decision-Making Capacity

The experience of the ILO has shown that while the participation of multiple stakeholders can make certain processes slower, these are productive and not crippling delays, focusing on the interplay between international decisions and national actions - often the sticking point for inaction - and ensuring broad acceptance of outcomes. This interplay should also raise the quality of decision, with states prioritizing a nationally-determined agenda, businesses able to provide a longer-term risk perspective, and NGOs seeking the realization of principles. The requirement to take expert and public input into account should further improve the quality, buy-in and implementation of decisions.

Effectiveness

The two transformations seek to mitigate two major risks - the democratic and delivery deficits in global governance - whilst improving necessary and well-functioning parts of the current system. The democratization of governance structures is both an end in itself and a means to increase effective handling of global challenges and risks.

Involving stakeholders in decision-making and delivery will lead to better outcomes and support implementation through closer alignment of international, national and local actions and priorities. By reducing inequalities between countries through capacity-building; by increasing the accountability of non-state actors; and by empowering the public and young people, the system also serves to address some of the factors that cause instability.

Meanwhile, the UN system retains its core of expertise and capacity. With additional funding to strengthen these functions, its performance in the areas of peace and security, human rights and humanitarian assistance should improve.

Resources and Financing

Currently over 8,000 businesses and 4,000 NGOs are engaged with the UN through the Global Compact and ECOSOC accreditation. In addition, thousands of other individuals and institutions work with its funds, programmes and agencies. And millions of people worldwide are affected by its work. There is no shortage of candidates for the quadripartite system and the supporting mechanisms.

Equally, there is no shortage of money, as the estimate provided above for the UN Global Compact fee shows. Such a fee could support many of the UN's core functions and, if seriously pursued, the system itself.

The case could be made for a "fully-costed" approach to corporate social responsibility on ethical, practical and business grounds. It is hard to argue against support for an organisation credited by many with 72 years of relative global stability that has enabled many businesses to flourish. The business case for ethical trading is also becoming more and more pronounced, exemplified by the Global Compact 100 index outperforming the FTSE All World index in recent years.

The introduction of NSR membership dues will also go a long way to address the funding shortfall in UN funds, programmes and agencies. This funding would enable planning, including the work needed to institute the task transfer process. This process would see staff migrate along with functions, providing recipient countries and communities with capacity and expertise, as well as funding and, in due course, control.

Trust and Insight

Transparency is a key feature of the proposed system, as it supports accountability and public buy-in and participation. This includes expert and public scrutiny of decision-making, delivery, appointments and membership, and the publication of information on the stakeholder registration portal. The requirement for feedback to be taken into account should further serve to enhance trust and a perception of meaningful participation by those affected by decisions and programmes.

With stakeholders involved both in policy-making and operational activities, these two processes will be more closely aligned and in tune with what is needed on the ground. When information is transparent and public, companies and NGOs, which rely on "clients", demonstrate a propensity towards taking on board feedback.

At a macro level, the creation of cross-sector cross-border partnerships should serve, over time, to improve relations between the various partners, and reposition interdependence as something positive.

Flexibility

This model significantly increases flexibility, moving UN agencies away from delivering tasks simply because that is what they were set up to do, moving NGOs away from projects that reflect competition for funding rather than needs, and moving businesses away from narrow profit-focused activities that do not apply their capabilities creatively. The very nature of partnerships that are responsive to public feedback is flexible. The model also enables the UN to build up resources in its areas of core competence, allowing it anticipate and respond to issues in a much more fluid and effective manner.

Protection against the Abuse of Power

The transfer of power to the national and local level is at the core of this proposal. The functions retained by the UN are already governed by checks and balances which, although imperfect, remain largely acceptable to the majority of states.

The biggest risk, therefore, in this new model is the favoring of particular stakeholders and the exclusion of others. A number of processes have been designed to mitigate this risk:

- The creation of a set of minimum standards, including respect for diversity, that stakeholders who seek agency membership or contracts must fulfill
- A high threshold (two-thirds) for NSR membership and a vetting process
- Expert and public assessments of performance and conduct, which must be taken into account
- The integration of public participation at all stages of implementation, including a requirement to consult with all groups of stakeholders
- Transparent decision-making processes and the publication of expert and public assessments to promote naming and shaming/praising
- Transparent and merit-based processes for the appointment of senior staff

Accountability

The new model seeks to increase peer and public accountability through an inclusive decision-making process, merit-based and competitive contracts, transparency of decision-making, and public participation at all stages. The system will serve to give people a framework for holding businesses and NGOs accountable, as well as increasing avenues for state accountability, particularly important for people who are not able to participate fully in national decision-making processes.

Conclusion

There is a shortcut to improving global governance: political will. It is the UN's member states that call the shots, setting the organization's priorities and budget. If they chose to, they could look beyond narrow national interests and give the UN the authority and resources it needs to serve the long-term interests of the world.

This is a big "if", so insurmountable that typical solutions to this challenge focus on the UN's structures, not its members' policies, notably enlargement of the Security Council. It is debatable whether this would have the desired effect. While more representation might add to its legitimacy - an important consideration - a larger membership may not make the Council more effective or progressive, if the voting records of regional powers, the likely candidates for new seats, are a guide.

In any case, this debate remains academic. Member states cannot agree on what a new Council should look like. Even if they could, changing the Council's composition requires amendment of the UN Charter, which in turn needs the backing of its five permanent members. They are in no rush to do so.

In this proposal, the absence of political will, epitomised by the Security Council, is overcome by putting in place reforms that require no Charter amendment, no additional financing by states. Instead they require simply an opening, for new stakeholders to contribute in a more meaningful, coordinated and transparent way. Any state that is serious about improving the UN's effectiveness, increasing national capacity and doing more with less, should support them.

The nub, of course, is that over time, the reforms suggested would serve to level further the playing field between states and other actors. As UN agencies devolve tasks and eventually close, only a narrow core of activities would be carried out by the organization. With more and more actors working - successfully - on prevention, saving succeeding generations from the scourge of war would no longer be up to the powers of a bygone era.

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B.3 AI-supported global governance

AI-supported global governance through bottom-up deliberation

by Soushiant Zanganehpour

Figure B.3: **Soushiant Zanganehpour**

Absreact

The founding purpose of our current international governance system was to prevent interstate violence and large-scale conflict, creating the conditions for collective prosperity.

Since its inception, the world has not seen another world war and the system has helped prevent numerous conflicts while inculcating shared norms of cooperation and progress.

That said, today's reality is very different from when our global governance system was built. We face man-made species endangering existential crises that transcend individual races, national interests, and sovereignty. But, today's institutions are poorly designed to building experimental, self-sacrificing solutions and alliances for prioritizing collective preservation above a narrow set of national interests. Our norms, operating assumptions, and legal jurisprudence prioritize national interests above all else. Cooperation and progress under are framed as zero-sum calculus, breaking down the ability of leaders to make necessary concessions for long-term collective progress.

The resulting limitations of our governance structures have created dangerous undermanaged macro risks that threaten our survival and future prosperity. We need new actors, new operating assumptions, and norms to help reframe our priorities to protect humanity-first, and nations second.

An update to our global governance system must start with building new digital tools and institutions at the city, national and international levels, allowing citizens to directly ideate, build strong proposals with support of AI, debate and build consensus with insights mined from millions of conversations by AI, and vote the best proposals into existence. Furthermore, new special economic and political zones will be created to test and institutionalize the results of the new decision-making protocols. After considerable testing and iterations, a movement can help spread these tools and institutions to complement or replace existing governance institutions and decision-making protocols and processes.

The digital tools for a new governance model include:

Blockchain global idntity

- Immutable, verifiable identity, operating on a public blockchain

- Facilitates incorruptible liquid democracy protocol, sentiment capture, participation in e-parliaments, and other key functions of new institutions, providing fidelity to institutions

- A necessary building block for a decentralized, direct, deliberative global democracy

Citizen sentiment tracker

- A polling service at the local, national and international levels leveraging anonymized blockchain ID, helping shed light in real-time about how people feel about certain issues and how they believe those should be dealt with.

AI-augmented proposal development tool

- Tool combines anonymisation with ai-augmentation and crowd intelligence to help identify, create and build consensus around new bottom-up solutions for complex, multi-stakeholder challenges.

- Helping increase likelihood of participation, and quality of ideas inputted

AI-based budget simulator & trade-off analysis tool

- AI-based budget simulators and tradeoff analysis tools, leveraging real-time data, helping highlight the potential implications of supporting one proposal versus another.

AI-supported mass policy deliberation tool

- Through data mining and computation, AI and machine learning unveil patterns of synergy and agreement amongst disparate and opposed constituent groups, helping create the building blocks for creative, multi-stakeholder solutions.

Implementation & Impact Tracker

- Transparent real-time workflow sharing where approved proposals sit relative to being implemented.

- Reveals degree to which a "promise inflation" exists; the % of promises being inflated by representatives or those in charge of executing approved proposals

- Real-time dashboard showing the potential intended and unintended implications and impacts of various implemented solutions.

The new institutions include:

Digital City, Country, and World

- A digital environment and testing ground for building solutions to existing local, national and international challenges and policies

- Injected with real-time raw data about developments in cities, nations, the world

- Allows for the creation and modeling of creative policy solutions in a safe environment

- Suggestions that have large backing and consensus on these platforms will compete against existing solutions crafted by today's leaders for acceptance In the future, will be the basis by which new public policies are initially conceived and stress tested, before deep development and feasibility at local, national or international stages prior to implementation.

Ministry of Ideas - City, Country, and World

- Local, national and transnational institution, providing relevant solutions concerning how best to steward our commons

- Collects the most popular ideas from digital environments (city, nation, world) or small-scale physical pilots for further deliberation.

Global Library of Societies Solutions - City, Country, World

- A repository of all past policies explored by cities, nations and global coalitions to deal with different systemic challenges.

- Shares the success or failure of experiments and policies.

- Includes data sets and impact reports.

Parliament for Citizens - City, Country, World

- An institution where the most popular proposals from the various ministries of ideas are discussed and deliberated.

- Allows for distributed sourcing of expertise and creative ideas concerning different issues we face locally, nationally or internationally to provide feedback and ideas.

- Open to constituents from a mix of territorial and Internet-based jurisdictions, helping legitimize the internet as a sovereign jurisdiction.

- Allows for the functioning of a direct, deliberative liquid democracy protocol.

- Will influence the trajectory, content, and approach of different local, national and international public policy solutions that are consequential to the stewardship of global commons.

- Helps current leaders see the delta between their interpretation of the public will and the public's direct articulation of that will.

- The basis for future consensus formation and policy-making in the long-term.

Global Parliament of Mayors

- A new institution where the majority of legislation and policies proposed are solutions co-created by different mayors only with the majority approval of their constituents (evidenced through citizen sentiment capture tool).

- Provides institutional authority to mayors to decide over their territory.

- Gives them the opportunity to compete to build better solutions to global challenges, ones that nation states are unwilling or unable to create.

Crowd-Justice

- An open-source judicial system and platform reimagined around the internet era.

- Allows for dispute resolution at scale, using algorithms to source the right experts for the right problem around the world.

- An opt-in protocol, decisions are legally-binding (unlike ICJ).

- Exponentially more cost-effective and incorruptible than centralized legal systems.

Description

Context

The current global governance system and its associated institutions were founded in the aftermath of two world wars. The system's primary purpose was to uphold the required pillars for long lasting peace between nations. These included enshrining national sovereignty, creating the conditions to pursue shared security, and global social and economic prosperity.

The system and its institutions encourage diverse nations to cooperate while pursuing objectives that protect their sovereignty and interests. The notion of national sovereignty and each nations inalienable right to pursue its national interests as they deem fit are key operating assumptions for the correct functioning of the system. Progress in the system relies on coalition-building and the alignment of national interests with that of a collective. Sometimes different nations' goals align, most often, interests are incompatible with the majority. Concessions towards the common good are perceived to be zero-sum tradeoffs, depending on how well your national economy is postured vis-a-vis the particular issue. For example, trade or climate change quotas are good examples of this zero-sum dynamic. There are a limited number of tools available within the system to help nudge a nation towards prioritizing the interests of the collective above those they have predetermined. The use or threat of force as tool to influence a nations preferences, negotiating posture or choice of alliances, or as a means for reconciling disputes is highly unacceptable. Other tools for influencing a nations perception of a their 'best' interests include dialogue, negotiations, trade, treaties, incentives, investments, and sometimes economic sanctions. Most international norms or agreements created within this system are voluntary, opt-in declarations that are non-binding and unenforceable.

Current Systemic Dysfunction

The founding purpose of our current governance system was to prevent inter-state violence and large scale conflict. Creating the conditions for mutual-shared prosperity was to be a natural consequences of this primary goal.

At the time, the threat of inter-state war (e.g. Hiroshima/Nagasaki, WW2, Cold War) was the largest man-made existential threat possible. Natural disasters were relative anomalies that did not threaten humanity in any consequential manner. The global commons (air, pollution, water, oceans, space, etc.) were also insignificant priorities and poorly understood phenomena. Issues of commons management - ensuring public safety and health and air quality, creating reliable infrastructure, managing pollution, creating and conserving ecosystems, parks and shared spaces, establishing social norms - were managed within the realm of responsibility of the nation-state. National sovereignty was the baseline used to determine how best to deal with global commons.

Despite episodic challenges with this system, the world has not seen another world war (yet) and the system has helped prevent numerous conflicts while inculcating shared norms of cooperation and global progress.

Though the goals around preventing interstate conflict have mostly been accomplished, today's reality is very different from the historical context from which our current global governance system was invented.

For example, over the past decades, the nature of conflict and threats to humanity's progress have changed from interstate to intrastate violence. The genocides in Serbia, Darfur, South Sudan, to crimes against humanity in Syria, Israel-Palestine, to the Rohingya in Myanmar, are all proxies of how poorly equipped the current system is to deal with new forms of collective challenges.

Even more troubling, we face species endangering and humanity-altering existential crises, which are mostly man-made, the likes of which we have never faced before collectively. These phenomena transcend individual races, national interests, and national sovereignty. They are equal opportunity disasters waiting to be unleashed on us collectively.

Unfortunately, our norms, operating assumptions, and legal jurisprudence prioritize national interests above all else. Today our leaders proudly convey they are "(name any country) First!" over and above the systemic global challenges we all face as a species. Defending 'X' interest above all else and bargaining on zero-sum winner-takes-most trade-offs between nations is what the current system optimizes for. Cooperation and progress under the current framework are framed as zero-sum calculus, breaking down the ability of leaders to make necessary concessions for long-term collective progress.

Today's international institutions are poorly suited to building experimental or creative win-win solutions to the global commons problems we face. We need new solutions, potentially self-sacrificing ones, for prioritizing species preservation above a narrow set of national self-interests and benefiting all of humanity.

Consequently, there are dangerous emerging under-managed macro risks stemming from the limitations of our governance structures. Our system is no longer fit for our new age and we need new actors, new operating assumptions and norms to help reframe our priorities and uphold humanity-first, and nations second.

New Context and Operating Environment - The Case for Decentralization and Disintermediation

The nation state is no longer the only nor most appropriate vehicle for global problem-solving to elevate the human condition. In fact, finding far reaching, win-win solutions by competitive nation states in today's maze of a governance framework appears to be beyond the capabilities of the design of the system.

In today's system it is nearly impossible to persuade decision-makers to prioritize the long-term consequences of their actions and commit to self-sacrificing solutions that benefit the greater good; they are too worried such actions will lead to career suicide and opt instead to preserve the longevity of their careers over collective best interests. Consequently, leaders and their governments are losing credibility rapidly for their inability to tackle and solve some of the world's greatest challenges.

In 2017, the Edelman Trust Barometer surveyed thousands of people across dozens of countries about their level of trust in business, media, government, and NGOs. For the first time in 17 years they found a decline in trust across all four of these institutions. In two-thirds of the 28 countries surveyed, the general population did not trust the four institutions to "do what is right" - the average level of trust in all four institutions combined was below 50%. The study also revealed a staggering lack of confidence in leadership: 71% said government officials are not at all or somewhat credible, and 63% said the same about CEOs.

Today our biggest challenge is not scientific or technical, it is political and systemic. We organize our pursuit of our collective interest through representative democracy and command-and-control centralised organizational governance models that operate on the inalienable right of the nation state to pursue its self-interest and sovereignty.

Though there are certain advantages and efficiencies that we derive from organizing politics around centralized hierarchies that concentrate power and afford mass participation through representation, the costs of maintaining such structures are beginning to outweigh their benefits.

For example, in centralized systems, the concentration of power and decision-making at the top, segments people into the powerful and the powerless leaving the majority feeling powerless, with deep sense of resignation and resentment. Power in such systems is a scarce commodity, worth fighting for, leading people to compete over its access, exacerbating the worst attributes of human nature: personal ambition, mistrust, fear, greed, politics. Concentrated power is corruptible and can lead to deep levels of cognitive bias and group think when smaller concentrations of like minded people decide on behalf of others. The speed of decision making can also be significantly delayed when other possibilities existing in our digital age.

New research is beginning to shed light on a number of negative social and economic problems directly attributed to how we organize ourselves. These include:

- High levels of voter apathy. In mature democracies, there are the highest levels of reported voter apathy. In the 2014 US congressional elections, only 20% of the US

voting youth (18-24 YO) participated. Most those that did not participate expressed that if you are young and nobody shares your views, the only other option is to protest or not vote at all.

- The proliferation of protest movements. Since the 2008 financial crises, the frequency of protest movements demanding political alternatives (e.g. Arab Spring, Occupy) has proliferated, mobilizing millions of people onto streets.

- Public systematic silenced. A Princeton University study concluded that the U.S. is not a functioning democracy anymore. Using data drawn from over 1,800 policy initiatives from 1981 to 2002, experts concluded that "...economic elites and organized groups representing business interests have substantial independent impacts on U.S. government policy", "while mass-based interest groups and average citizens have little or no independent influence", and the "rich, well-connected individuals on the political scene now steer the direction of the country, regardless of or even against the will of the majority of voters."

- High levels of employee disengagement. A Recent Gallup study revealed that in the private sector we witness the highest levels employee disengagement; 70% of U.S. employees consider themselves disengaged at work (resembling similar trends globally) which is a source of lost productivity, which produces a high cost on the economy. McKinsey estimates the bottom-line impact of disengagement costs the US economy over half a trillion dollars a year.

As evidence mounts, we're beginning to recognize that command-and-control centralized organizational models and by extension, representative democracy is less well suited for our times. We are outgrowing old operating assumptions and protocols for collective organization, governance and problem-solving.

Emerging technologies, trends and implications

Thanks to the pace of change ushered in by the internet, the conditions required for global cooperation could be achieved without reliance on intermediation nor facilitation through our existing institutions, but instead through new institutions that allow for greater and more direct citizen-participation. New institutions combined with digital tools can help create new decision-making protocols to help build bottom-up alternative competing policies and solutions, allowing new ideas to be deliberated widely over internet platforms, for consensus to be built around the most powerful solutions. In the short run, the best ideas that surface from these new institutions can act as normative alternatives to the existing solution set we have, and we can invest in lobbying for them to be seriously considered and institutionalized. In the longer term, these new institutions will replace our current governance systems wholeheartedly because they are cheaper to operate, more participatory, create better quality solutions for ensuring collective prosperity.

The internet today has become the primary mechanism for mobilizing power and the masses, the primary means by which to wage asymmetric conflict, and an important shaper

of belief systems. It is also the primary means by which global economic activity will be conducted.

On the internet, communities are no longer principally defined by geography or proximity; broad territorial distinctions are less and less important to both social and economic life.

The diffusion of technology is breaking down hierarchies and creating new power structures daily. The rise of cryptocurrencies using decentralized computation server spaces as immutable ledgers compete against central banks creating new definitions of value are good examples of this. The rise of sharing economy ventures competing against traditional incumbents with antiquated business models supported by antiquated regulations also support signal more changes to come.

Technology is amplifying our collective capacity to include new voices, create informed opinion, analyze, build consensus and decide, all with rapidly reduced reaction times. Half the cellular devices being sold now are smartphones, which make up about 80 percent of all internet usage. The phones, in turn, are helping people change the way they spend and manage money; identify, make, and maintain friendships; participate as citizens; become educated; stay healthy; keep up to date with news; and be entertained, incite revolutions, and seek new disruptive innovation.

As internet penetration rates proliferate, bottom-up, citizen-led organizations become empowered because the means of distributing views are so inexpensive.

Simultaneously, we're moving into an era of ubiquitous sensing where the combination of sensors and data-gathering mechanisms, unlimited memory, and massive processing capabilities, is growing the planet's pool of data exponentially yearly.

Experts estimate that over the next 10 years' there will be 150 billion networked measuring sensors, 20 times more than people on Earth, producing data. in 2016 we collectively produced as much data as in the entire history of humankind up until 2015. By 2027, thanks to the proliferation of sensing devices, the amount of data we produce collectively will double every 12 hours.

Digital is becoming the basis for most of our interactions and the more we interact with digital tools, the more we expect them to shape our experiences as consumers, employees, and citizens. As data grows, demands for accessing that data will grow as well, and eventually, people will demand policies be created using indisputable data sources.

These developments combined are creating the conditions for a) deeper interconnection - where networks form and link all their members allowing for rapid resource sharing; b) Disintermediation - where middlemen are progressively undercut and disappearing; and, c) Decentralization - where networks redistribute power to disparate parts of society and concentration of power becomes more and more difficult. As a consequence, unlike previous era's, this new era is one where the power of the individual and the group grows daily and institutions are less powerful.

Virtually every sector impacted by the information revolutions has seen one powerful, transformational trend shift expectations, and thus its likely that changes to government and organizational governance models will be profound as well.

We are inheriting this new reality faster than expected but we live at time where two

competing velocities are clashing against one another. In our physical and social worlds, we're experiencing uneven and disruptive economic growth, fear of change, and anxiety about immigration and integration. In our digital and technological world, networks and connections are getting faster, cheaper, and smarter. The two competing forces - technology which is increasing exponentially and governance models designed to handle linear growth - are pulling institutions apart, holding the world back.

On this rapidly shifting ground, leaders are acting before thinking and creating laws or regulations views that have profound impacts on the nature of our societies without leveraging technologies or inviting broad, far-reaching public debate. They are able to continue doing so because we manage the world using antiquated institutions that are riddled with structural limitations. Our governance models are outdated and extremely slow, not taking advantage of modern tools for more agile, diverse, and inclusive decision-making.

Every aspect of democracy has been changed by the advent of the internet and new technology, except perhaps how citizens directly influence the operations of our governments through the selection of our representatives. Voters could have much more power much more often.

Centralized command-and-control organizational governance models and mass participation through intermediation had advantages when the model was first conceived, but in an age of instant digital communication, it appears more a roadblock to progress than an enabler of the expression of broad public will. In today's political environment, in any instance where intermediation is the model, the representatives and intermediaries are extremely difficult to access, engage and influence. Their focus appears more to be on empire and career building than on civic duty. There are also quite limited routes to exercising accountability over their actions. The effort required to keep them accountable is often not worth the effort expended. People, therefore, resign themselves to the status quo, become disengaged and distrustful of entire institutions. For example, we see the rise of unchecked political dishonesty as a new operating norm. Misleading voters to advance one's political agenda has always been around but in the past, we had relevant tools for maintaining some degree of accountability. Today it appears those tools don't work, and dishonesty is met with no consequences and no counterbalance. We see new heights of populism and opportunism. For example, in the Brexit campaigns and following the referendum, into the first hour of the referendum decision, the 'Leave' campaign already backtracked on one of their major campaign pledges: To contribute the money the UK saves leaving the EU to their national healthcare system, the NHS. In the US presidential elections, Trump made many promises including to build the wall with Mexican money, have a plan for getting rid of ISIS in his first 30 days in office, to repeal Obamacare, to even put Hillary Clinton in jail and drain the swamp, none of which have been executed.

In today's consumer and technology-driven world, people are increasingly catered to and provided customized solutions. The more they experience this, the less tolerance they have for being bystanders, accepting latency in reaction times by institutions, or being told what to do from the top.

The convergence and access to different exponential technologies are reshaping human

behavior, opening new areas to human understanding, enabling new forms of creative expression, empowering new means of economic activity, and inspiring new thinking about the way lives and governments and businesses should be organized. These consequently, are putting significant pressures on our 19th and 20th-century institutions to radically reform or be replaced.

These combined make for a new foundation for developing a different operating context through which we navigate problems, identify solutions, build consensus and institutionalize proposals to global challenges we all face.

Creating new realms of sovereignty

Society is changing. In this new era, the rules are unwritten, the terminology ill-defined, and few doctrines exist to help us navigate future challenges.

Historically, when new unexpected and unwelcome realities surfaced, the international community mobilized to recognize systemic changes and built new norms and institutions to counter-balance the growth of negative systemic externalities. For example, when the nature of violent conflict changed from primarily interstate to intrastate and when the world witnessed episodes of genocide and crimes against humanity (e.g. conflicts in Bosnia-Herzegovina and Croatia, Rwanda, Darfur), the UN Security Council led the establishment of two separate temporary ad hoc tribunals to hold individuals accountable for atrocities, and later created a permanent international criminal court. We also created new international norms, such as the Right to Protect (R2P) principle.

In the same vein, to help us deal productively with systemic limitations of our institutions, that threaten our species' survival and prosperity, we must recognize that the ground has shifted beneath our feet and our operating assumptions are no longer valid. We can't rely on the wisdom of the past or the institutions that were created then to help solve tomorrow's problems. We need the courage to evolve out of old operating assumptions about how the world should be organized and managed, and whose priorities are the most important.

We must create new realms of sovereignty and new digital tools, institutions and decision-making norms and protocols aimed at highlighting bottom-up voices in cities, nations, and on the international level to help provide strong, rational and logical counter-balance of solutions that compete with those produced by our existing institutions, helping influence and change our collective understanding of what our goals should be and how best to prioritize humanity-preservation over national interests.

New institutions and realms of sovereignty cannot replicate the same systemic dysfunctions and limitations of past models. For example, they can't and should not be designed around the notion of selecting intermediaries to represent our collective best interests. They should be adapted for emerging and expected cultural norms and technological possibilities, not be constrained by yesterday's cultural legacies. Reform of the existing system and its institutions should also not be the focus of these interventions, though that may naturally occur as a consequence of their success and adoption.

The Path Forward - Foundations of New Governance Model

Enshrining the Legitimacy of Cities

In addition to creating new institutions, the importance of cities, which are currently under-represented in governance models and structures, will need to be amplified as they will be the epicenter of future governance power and clout.

Cities currently generate 80% of global GDP, and this proportion is expected to increase even more. Already more than 50% of the global population lives in cities, and experts predict the number will increase to 60% by 2020, and 75% by 2030. Fast expanding cities and shanty towns in the developing world is where virtually all future population growth will take place.

Rapid urbanization and expanding city limits will lead organically to the continued emergence of "megacities".

Due to massive population growth and density and growing economic power, cities will eventually eclipse nations in terms of economic and political importance and can provide leapfrogging opportunities for society to grow out of the limited existing governance structures we have. Cities don't have the same narrow interests and are not insulated from the decisions-taken as elites representing nation states often do. They have to live with the consequences of poor decisions and therefore often choose differently. Nation states are independent, competitive, and separated by territorial boundaries while cities are interdependent, cooperative and increasingly forge positive win-win partnerships. The city may be the most crucial form of political organization of the future in the coming decades.

Cities currently face limits to their ability to address universal problems such as climate change or to pursue other national or global goals. This can change, however: new institutions can help popularize, formalize and institutionalize creative ideas and solutions to difficult societal problems and global challenges originating from mayors or their constituents. What succeeds in one megacity can quickly become a global standard. Given their scale, this kind of domino effect can affect massive numbers of people.

Building and Legitimizing New Institutions

In the coming decade, efforts to increase internet access and broadband speeds are going to bring 3 billion new minds online. They will eventually expect to be involved in governance decisions. According to Historian Francis Fukuyama, in most countries, once a middle class begins to form and begin earning approximately $6,000 USD per capita per year, they begin to demand political participation.

According to Sun Microsystems co-founder, Bill Joy, "no matter who you are, the smartest people in the world don't work for you. Even if you get the best and the brightest to work for you, there will always be an infinite number of other, smarter people employed by others. It's better to create an ecology that gets all the world's smartest people toiling in your garden for your goals." This is especially true about policy making and governance for our era. The pertinent and niche types of knowledge required to help build nuanced

and creative solutions to 21st-century problems reside outside the boundaries of any one organization, government or institution. The central challenge and opportunity for our future governance system will be to design institutions in a manner that they incentivize, harness and access pertinent and diverse knowledge regularly, leveraging the wisdom of crowds for policy making and other core functions.

Consequently, the plan to update global governance systems starts with building new digital tools and accompanying institutions at the city, national and international level that allow citizens to directly ideate, build strong proposals with support of AI, debate and build consensus with insights mined from millions of conversations by AI, and vote the best proposals into existence. Alongside this, we will create new legal jurisdictions (special economic and political zones) where these tools and institutions can pilot and institutionalize the results of the new decision-making protocols. After a period of considerable testing and technological and methodological iterations, we will begin building a movement to spread these tools and institutions to complement or replace existing governance institutions and decision-making protocols and processes.

The overarching goal is to create alternative forms of sovereignty, across the local, national and international spheres, to challenge or complement the authority and sovereignty of nation states to make decisions about our collective well-being.

Tools and Institutions for Future Governance Model

New digital tools include:

Blockchain verified global identity card

- Immutable, verifiable identity, operating on a public blockchain.

- Similar technology as Estonia's e-Residency or Democracy.Earth

- Facilitates incorruptible liquid democracy protocol, sentiment capture, participation in e-parliaments, and other key functions of new institutions.

- Verifies identity providing fidelity and integrity to other necessary institutions (voting, etc.).

- Is a necessary building block for a decentralized, direct, deliberative global democratic platform for managing global challenges and negative externalities concerning the global commons.

- Can help administer broad participation of citizens in policy formation or referenda at 1/1000 the current costs.

Citizen sentiment tracker

- A polling service at the local, national and international levels leveraging anonymized blockchain ID, helping shed light in real-time about how people feel about certain issues and how they believe those should be dealt with.

- Captures sentiment in a neutral way.

- Results put on the blockchain, are immutable and verifiable.

- Can be immediately used to scour the world about people's opinions regarding existing global challenges and how different solutions for those challenges rank.

- Can reveal the delta between solutions proposed by leaders and the public's support of those solutions on each issue.

AI-augmented proposal and policy development tool

- A concept similar in application, technology, and methodology to swae.io

- Tool combined anonymisation with ai-augmentation and crowd intelligence to help identify, create and build consensus around new bottom-up solutions for complex, multi-stakeholder challenges.

- Tool anonymizes users but links them back to their blockchain based ID, helping verify their identity but limiting any negative implications associated with proposing creative ideas publicly, provides access to AI augmenting tools (fact-finding, language improvement, structural suggestions) to help improve quality of proposals, and crowdsources the deliberation of proposals to leverage the wisdom of crowds.

- Will dramatically increase participation, increasing quality of ideas inputted for consideration.

- Used to develop proposals for how certain complex problems we face should be solved.

- E.g. *How should the EU remain intact? How do we build a carbon tracking system that does not penalize economic growth? How do we build more mutuality in trade agreements? How Proposals for reconciling global inequality? How to build resilience against the coming technological unemployment wave?*

AI-based budget simulator & Trade-off analysis tool

- In situations where complex agreements are difficult to reach, or competing good quality ideas exist for a limited set of resources, AI-based budget simulators, and tradeoff analysis tools, leveraging real-time data, help shed light on the potential implications of supporting one proposal versus another.

- Can help groups discover hidden areas of synergy and agreement.

AI-supported mass policy deliberation tool

- A concept similar in application, technology, and methodology to pol.is

- Allows for nuanced policy deliberation and the sourcing of nods of solutions at scale.

- AI and machine learning, by conducting deep data mining and computation, discover patterns of synergy and agreement amongst disparate and opposed constituent groups, catalyzing the creation of building blocks for creative, multi-stakeholder problem-solving Integrated into all new forms of policy creation, and deliberation.

Implementation & Impact Tracker

- Transparent real-time workflow sharing where the successful proposals sit relative to being implemented.

- Codifies what agreements were made, and what people have actually done.

- Creates workflows assigns responsibilities and allows people to input updates to agreements that were approved.

- Crowd-created, using the same deliberation and input methodology as Wikipedia.

- Reveals the degree to which there is a "promise inflation" - the % of promises being inflated by existing representatives or those in charge of executing on approved proposals.

- Real-time dashboard for all to see the potential intended and unintended implications and impacts of various implemented solutions.

New Global Institutions Include:

Digital City, Country, and World

- For example, dWorld; or, dCanada, dChina, dNorway; or dSao Paolo, dParis, dDubai

- A digital environment and testing ground for building solutions to existing local, national and international challenges and policiesInjected with real-time raw data about developments in cities, nations, the world.

- Allows for the creation and modeling of creative policy solutions in a safe environment.

- Allows users to test potential implications of one policy vs. another using ai, budgeting simulators, algorithms, and computation, faster than traditional approaches and without significant investment.

- Will be a fertile laboratory of ideas, to help influence future decision makers.

- Suggestions that have large backing and consensus on these platforms will compete against existing solutions crafted by today's leaders for acceptance Initially a semi-formal institution for creating nuanced proposals from different citizens and constituent groups about how best to deal with existing global challenges.

- Gives people a power and constructive means for critiquing existing solutions and lends people a voice in local, national and interactional matters of concern.

- In the future, will be the basis by which new public policies are initially conceived and stress tested, before deep development and feasibility at local, national or international stages prior to implementation.

Ministry of Ideas - City, Country, and World

- An institution that collects the most popular ideas from digital environments (city, nation, world) or small-scale physical pilots for further deliberation.

- Could include popular experimental ideas for potential pilots/consideration.

- Ideas proposed can also concern matters of intergovernmental and regional concern (MENA, ASEAN, EU, etc.)

- A local, national and transnational institution, providing relevant solutions concerning how best to steward our commons, operating in an open-source protocol, and creative commons legal framework.

- All votes, policies created, are registered onto the blockchain and entered into the global library of solutions to catalyze future solutions, and inspire others to build on top of these ideas.

- Scores for each policy solution derived through citizens and deliberated in the same manner as Wikipedia.

- Will counterbalance existing policy proposals tabled by 'leaders' and 'experts' for dealing with the challenges we face globally or regionally.

- Can help bridge the delta between what people want and what leaders think people want.

Global Library of Societies Solutions - City, Country, World

- An unbiased repository of all past policies explored by cities, nations and global coalitions to deal with different systemic challenges.

- Shares the success or failure of experiments and policies.

- Includes data sets and any impact reports conducted post-hoc on specific policies.

- Can become a building block to the creation of new creative solutions to today's problems and a source of wisdom to help us make better resourcing allocation decisions, avoiding unnecessary duplication.

Parliament for Citizens - City, Country, World

- An institution where the most popular proposals from the various ministries of ideas are discussed and deliberated extensively.

- Allows for distributed sourcing of expertise and creative ideas concerning different issues we face locally, nationally or internationally to provide feedback and ideas.

- Would be open constituents from a mix of territorial and Internet-based jurisdictions

- Would help legitimize the internet as a sovereign jurisdiction including the opinions of transnational citizens.

- An institution that would allow for the functioning of a direct, deliberative liquid democracy protocol

- Provides citizens from around the world direct access to building solutions that are practical and reflect their will (assuming citizens have a hard time competing against their representatives).

- Can help influence the trajectory, content, and approach of different local, national and international public policy solutions that are consequential and material to the proper stewardship and management of the global commons.

- Helps current leaders see the delta between their interpretation of the public will, and the public's direct articulation of that will; Helps eliminate reasons for pursuing national interest at all cost, if we can show the public has a different national interest in mind.

- Would be the basis for future consensus formation and policy-making in the long-term.

Global Parliament of Mayors

- A new institution, with important caveats; the majority of legislation and policies developed and proposed by this institution are solutions co-created by different mayors only with the majority approval of their constituents (evidenced through citizen sentiment capture tool).

- Does not recreate the structural limitations of current governance system by relying solely on representation and intermediation.

- Allows for the public to play a decisive role in determining disadvantages of old systems (intermediated representation in a time of instant communication and distributed expertise)

- Provides institutional authority to mayors to decide over their territory. Gives them the opportunity to compete to build better solutions to global challenges, ones that nation states are unwilling or unable to create.

Crowd-Justice - distributed-expertize dispute resolution Institution

- An open-source judicial system and platform reimagined around the internet era.

- Allows for dispute resolution at scale, using algorithms to source the right experts for the right problem around the world.

- Jurors and researchers from the crowd are rewarded a fee for their services.

- Is an opt-in dispute resolution platform, where final decisions are legally binding (unlike current ICJ).

- Exponentially more cost-effective and incorruptible/immutable than centralized legal systems.

- Integrated into all new institutions of policy creation, deliberation, and accountability mechanisms.

Motivation

Core Values

The assumptions this new model rests on believe that constituencies consisting of diverse global citizens

- Are less immune to the negative impacts created ineffective solutions to global challenges than existing leaders;

- Are more prepared to make concessions that are equitably distributed and proportional in order to realize find solutions to tomorrow's problems;

- Have vested interests in ensuring the future of humanity and generations survive and are better able to express those intensions and cooperate with others who share their values to build humanity preservation solutions than existing leaders, because they can go outside of imposed territorial, political and economic limitations of our current governance and global organizational structures.

The model allows for these assumptions to be validated by creating a competitive governance layer between existing structures and potential future structures, moving us away from only participating by voting on binary decisions made by intermediaries that prioritize narrow sets of interests. This allows citizens to build coalitions with those that have interests and value sets that are similar to theirs, transcending territorial and national economic and political interests.

Decision-Making Capacity

The future organizational governance model proposed incorporates the core and essential decision-making steps necessary for a well functioning governance system. These include:

- Immutable sentiment capture

- Bottom-up ideation and deliberation

- Consensus capture and formation

- Institutionalization

- Accountability and Impact measurement

- Dispute resolution

The new governance system creates the conditions for efficient, transparent and effective decentralization to flourish across boundaries alongside protocols for rational consensus formation, at 1000x a faster pace and 1000x less costs than our current centralized decision-making models. The new system allows for a far greater number of participants and inputs, deeper and more consequential engagement, the creation of more creative solutions, and more compelling and effective options to select from than our linear and centralized governance models produce today.

The new system does not have the same degree of latency designed into it as the current system.

In the short term the institutions proposed will act as a normative counter balance to our current institutions and leaders postures towards international cooperation. As participation increases and new use cases are discovered, in the long-term, these institutions will gain a greater degree of popularity and will compete to become the basis for multi-stakeholder complex problem solving and policy formation for society.

This new system is much more efficient, and cultural appropriate to our future digital world.

Effectiveness

The ultimate goal of this system is to prove decentralization, distributed authority and wisdom of the crowds can be methodologically designed to create more coherent, better quality, creative and more suitable solutions to our current and future problems. High levels of participation in policy design, consensus formation, and later high success rates for policy adoption, and limited instances of policy failure will be the proxies for measuring how much more capable this system is to create lasting complex, multi-stakeholder solutions than the existing governance system.

A key assumption the new governance model rests comes from results captured from successful citizen assembly experiments that aimed to make consequential electoral reform decisions in Canada and the Netherlands. To date, these have been the most intensive participatory and deliberative process yet implemented and included diverse members with opposing viewpoints. In them, examiners found that even when constituents from ideologically opposed camps strongly disagreed on the content or ideological foundations of a particular reform proposal, and even when their side lost the reform vote, they fully respected the other sides right to seek the changes they expressed and committed to adopting those policies - which they fundamentally disagreed with - almost entirely because they believed in the immutability and integrity of the process for arriving at the solution it ultimately did. In other words, a fully transparent and participatory process that to them appeared to be impartial, incorruptible, and immutable, allowing all sides' views to be considered equally, was the necessary condition for accepting to adopt any solution that the process created, even when the solution did not conform to one side's ideological viewpoints. The examiners also conducted tests on participants of this group and tested a control group that did not undergo the same experience and same degree of participation in expressing their preferences for electoral reform. They found that participants in the citizen assembly expressed the sentiment that their trust of all other participants, irrespective of political orientation, grew significantly more than the views expressed by non-participants of others in their closed experiment.

Finally, examiners used political engagement proxies to measure the degree of engagement expressed amongst participants and non-participants of citizen assemblies, to highlight any significant differences. Examiners predetermined four political engagement proxies: 1) attitudes, 2) interest, 3) attention, and 4) information, and found that on all of these proxies, there was a significant increase among citizen assembly participants whereas these changes in these proxies with the control group were absent. Examiners also noticed a significant delta and differences between the two groups.

These results help inform the design of the new governance system, lead us to believe that the solutions created will enjoy greater adoption and less policy failure because the process and institutions we are proposing to create help constituents to arrive at solutions in a much more participatory, fair, transparent, agile, collaborative, and equitable manner than today's current model.

In the future, the new forms of ideation, deliberation, consensus formation, and voting will have more integrity, trust, and stickiness making them more appealing than current

models, helping increase their likelihood of adoption as a possible means for decision-making in the future.

Resources and Financing

Financing options can include one or a combination of the following options:

- Proof of concept - Donations and grants from key foundations, institutions, and HNWI can act as seed and pilot funding until important proof points can be verified

- Self-financing - citizen who value and use the system, voluntarily pay into its maintenance fees. In some progressive countries, citizens receive a tax rebate for their contributions

- ICO - the institutions that are exchanging value can create a token pegged to a popular cryptocurrency in order to create the necessary liquidity to fund the system and fund the implementation of various solutions developed by it.

- Eventually, taxes diverted to funding this system as people recognize using this system over other systems is a fundamental requirement for the creation of policies or the management of local, national policy in a decentralized manner.

In the short-term, these new institutions will provide a platform for bottom-up, citizen-led input into the creation of solutions to city-specific, national and international challenges. They will effectively debate and counterbalance what these institutions should be doing, helping bring to the forefront the will of the people. They can be financed through grants and other contributions and their solutions piloted in special economic and political zones set up specifically for experimentation purposes.

In the long term, as participation increases in these institutions, they will organically build popularity and authority, competing against other realms of institutional sovereignty. Future financing options can include tax contributions from cities and nations, tax rebates for solutions developed through these platforms, the creation of a unique cryptocurrency and liquidity created through and Initial Coin Offering (ICO). In the future, through creative financing mechanisms, these institutions will build the legitimacy to compete against existing institutions for the creation of solutions to local, national and international challenges requiring multi-stakeholder concessions, agreement, and sacrifice.

Trust and Insight

The design of this governance system taps into emerging trends from the rise of the cryptocurrency and decentralization movements.

All opinions expressed, decisions, votes, ratifications, identities, financial flows, impact measurement data, examples of success or failure in this new system will all be documented on a decentralized blockchain and accessible to anyone using the blockchain.

This degree of transparency designed into this new governance system goes over and above anything we have experienced at an organizational level before, helping create strong appeal and adoption for the new protocol.

Flexibility

The system will be developed in phases, across different physical and online environments and jurisdictions and with different volumes of scale to see if necessary assumptions and proof points can be achieved.

Only after a period of considerable testing and technological and methodological iterations, will there be plans to build a social and cultural movement to spread these tools and institutions to complement or replace existing governance institutions and decision-making protocols and processes.

There will be ample opportunities to change aspects of these institutions if real-world results demonstrate a misalignment between what they are producing versus what we had intended them to produce.

Protection against the Abuse of Power

The assumptions used to design this system are grounded in concepts of dynamic liquid democracy and as well as the wisdom of the crowds, and crowd intelligence, emphasizing the more diversity of participation and viewpoints expressed, the better the quality of end solutions created.

A liquid democracy design will allow for the rapid and dynamic distribution of power from one issue to another, helping create tighter feedback loops between empowering an intermediary and keeping them accountable to the decisions they claim to make on others' behalf. A liquid democracy inspired design also prevents concentration of power for a prolonged period of time. It is a system that is designed to reward merit and knowledge, not postures and positions, which is a fundamental break from our current representative democracy based governance institutions (which conversely work well at concentrating power, delaying feedback loops and creating opportunities for abuse of power).

We see collective intelligence as an antidote to concentrated power in the hands of like-minded people; an antidote to current existing systemic inconsistencies that create numerous abuse of power opportunities.

Accountability

However, we recognize crowds can be irrational and target minorities on grounds of race, ethnicity, ideology and other diverse factors. Participation in these new institutions will be governed by a rights-based philosophy. Any proposals aimed at marginalizing or negatively impacting certain groups, races, ethnicities on grounds of bias, will not be allowed to be expressed on the website, and we'll use AI to select keywords and derogatory content to help us intelligently and efficient moderate the platforms. Uncomfortable issues can be

discussed respectfully but no proposals marginalizing groups will be entertained; proposals must conform to rights-based doctrines respecting every individual's inalienable human rights.

Furthermore, to protect against potential hacking, the foundations of this new governance system are built off of decentralized blockchain technology based ID, which will exponentially limit the likelihood of hacking opportunities by those that hope to replace real individuals with fake bots to create the impression of mass participation in order to illegitimately increase the popularity of certain proposals and sway the crowd in one direction or another.

Finally, the piloting phase will be instrumental in understanding where there are inconsistencies in design - where the tools and fundamental values were not fully well designed.

Appendix C

THE WORLD AS IT IS, AND THE WORLD AS IT COULD BE

What kind of world do we want for the future? We want a world where war is abolished as an institution, and where the enormous resources now wasted on war are used constructively. We want a world where a stable population of moderate size lives in comfort and security, free from fear of hunger or unemployment. We want a world where peoples of all countries have equal access to resources, and an equal quality of life. We want a world with a new economic system where the prices of resources are not merely the prices of the burglar's tools needed to crack the safes of nature, a system which is not designed to produce unlimited growth, but which aims instead at meeting the real needs of the human community in equilibrium with the environment. We want a world of changed values, where extravagance and waste are regarded as morally wrong; where kindness, wisdom and beauty are admired; and where the survival of other species than our own is regarded as an end in itself, not just a means to our own ends. In our reverence for the intricate beauty and majesty of nature, and our respect for the dignity and rights of other humans, we can feel united with the great religious and philosophical traditions of mankind, and with the traditional wisdom of our ancestors.

Collectively, we can choose the future world that we want. We must join haands, and work together to create it. No one can achieve the urgently needed reforms alone, but together, we can do it!

THE WORLD AS IT IS
AND THE WORLD AS IT COULD BE

In the world as it is, 1.7 trillion US dollars are spent each year on armaments.

In the world as it could be, the enormous sums now wasted on war would be used to combat famine, poverty, illiteracy, and preventable disease.
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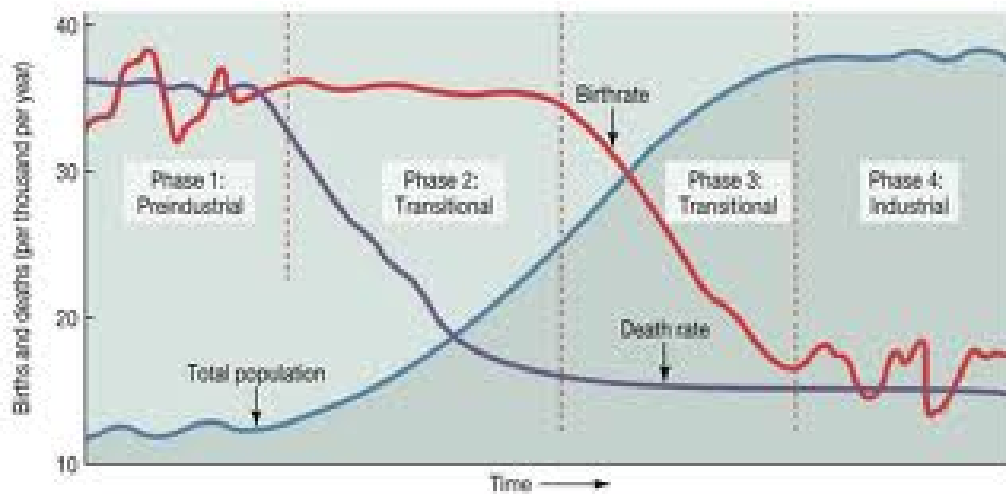
In the world as it is, population is increasing so fast that it doubles every thirty-nine years. Most of this increase is in the developing countries, and in many of these, the doubling time is less than twenty-five years. Famine is already present, and it threatens to become more severe and widespread in the future.

In the world as it could be, population would be stabilized at a level that could be sustained comfortably by the world's food and energy resources. Each country would be responsible for stabilizing its own population.

In the world as it is, the nuclear weapons now stockpiled are sufficient to kill everyone on earth several times over. Nuclear technology is spreading, and many politically unstable countries have recently acquired nuclear weapons or may acquire them soon. Even terrorist groups or organized criminals may acquire such weapons, and there is an increasing danger that they will be used.

In the world as it could be, both the manufacture and the possession of nuclear weapons would be prohibited. The same would hold for other weapons of mass destruction.

In the world as it is, 40% of all research funds are used for projects related to armaments.

In the world as it could be, research in science and engineering would be redirected towards solving the urgent problems now facing humanity, such as the development of better methods for treating tropical diseases, new energy sources, and new agricultural methods. An expanded UNESCO would replace national military establishments as the patron of science and engineering.

In the world as it is, gross violations of human rights are common. These include genocide, torture, summary execution, and imprisonment without trial.

In the world as it could be, the International Human Rights Commission would have far greater power to protect individuals against violations of human rights.

In the world as it is, armaments exported from the industrial countries to the Third World amount to a value of roughly 17 billion dollars per year. This trade in arms increases the seriousness and danger of conflicts in the less developed countries, and diverts scarce funds from their urgent needs.

In the world as it could be, international trade in arms would be strictly limited by enforcible laws.

In the world as it is, an estimated 10 million children die each year from starvation or from diseases related to malnutrition.

In the world as it could be, the international community would support programs for agricultural development and famine relief on a much larger scale than at present.

In the world as it is, diarrhoea spread by unsafe drinking water kills an estimated 6 million children every year.

In the world as it could be, the installation of safe and adequate water systems and proper sanitation in all parts of the world would have a high priority and would be supported by ample international funds.

In the world as it is, malaria, tuberculosis, AIDS, cholera, schistosomiasis, typhoid fever, typhus, trachoma, sleeping sickness and river blindness cause the illness and death of millions of people each year. For example, it is estimated that 200 million people now suffer from schistosomiasis and that 500 million suffer from trachoma, which often causes blindness. In Africa alone, malaria kills more than a million children every year.

In the world as it could be, these preventable diseases would be controlled by a concerted international effort. The World Health Organization would be given sufficient funds to carry out this project.

In the world as it is, the rate of illiteracy in the 25 least developed countries is 80%. The total number of illiterates in the world is estimated to be 800 million.

In the world as it could be, the international community would aim at giving all children at least an elementary education. Laws against child labour would prevent parents from regarding very young children as a source of income, thus removing one of the driving forces behind the population explosion. The money invested in education would pay economic dividends after a few years.

In the world as it is, there is no generally enforcible system of international law, although the International Criminal Court is a step in the right direction.

In the world as it could be, the General Assembly of the United Nations would have the power to make international laws. These laws would be binding for all citizens of the world community, and the United Nations would enforce its laws by arresting or fining individual violators, even if they were heads of states. However, the laws of the United Nations would be restricted to international matters, and each nation would run its own internal affairs according to its own laws.

*In the world as it is, each nation considers itself to be "sovereign".
In other words, every country considers that it can do whatever
it likes, without regard for the welfare of the world community.
This means that at the international level we have anarchy.*

**In the world as it could be, the concept of national sovereignty
would be limited by the needs of the world community. Each nation
would decide most issues within its own boundaries, but would
yield some of its sovereignty in international matters.**

In the world as it is, the system of giving "one nation one vote" in the United Nations General Assembly means that Monaco, Liechtenstein, Malta and Andorra have as much voting power as China, India, the United States and Russia combined. For this reason, UN resolutions are often ignored.

In the world as it could be, the voting system of the General Assembly would be reformed. One possible plan would be for final votes to be cast by regional blocks, each block having one vote. The blocks might be. 1) Latin America 2) Africa 3) Europe 4) North America 5) Russia and Central Asia 6) China 7) India and Southeast Asia 8) The Middle East and 9) Japan, Korea and Oceania.

In the world as it is, the United Nations has no reliable means of raising revenues.

In the world as it could be, the United Nations would have the power to tax international business transactions, such as exchange of currencies. Each member state would also pay a yearly contribution, and failure to pay would mean loss of voting rights.

In the world as it is, young men are forced to join national armies, where they are trained to kill their fellow humans. Often, if they refuse for reasons of conscience, they are thrown into prison.

In the world as it could be, national armies would be very much reduced in size. A larger force of volunteers would be maintained by the United Nations to enforce international laws. The United Nations would have a monopoly on heavy armaments, and the manufacture or possession of nuclear weapons would be prohibited.
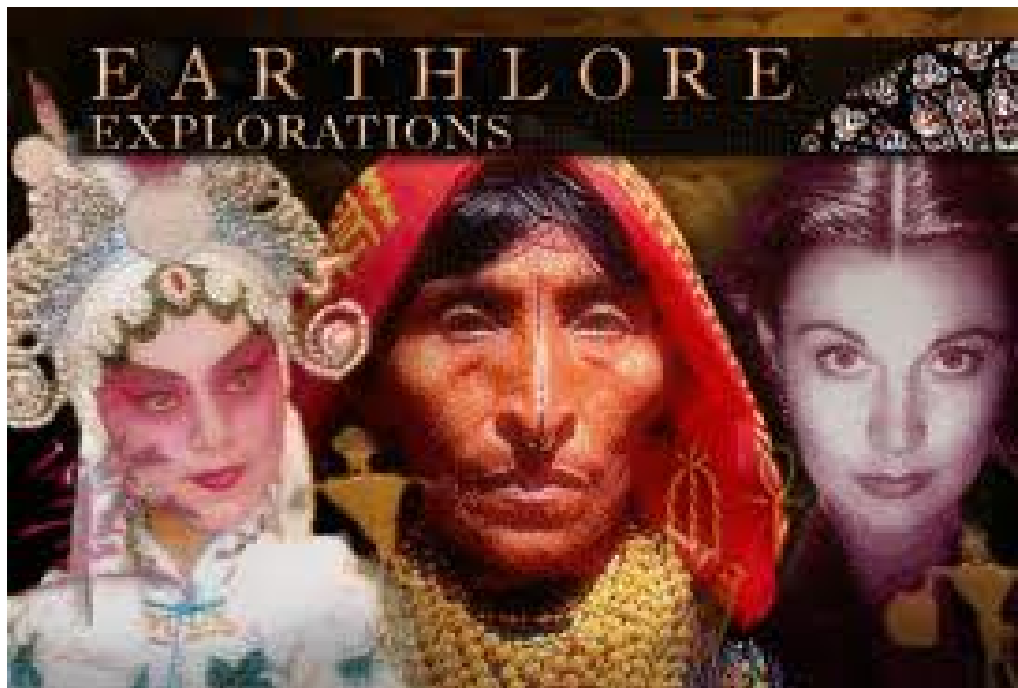
In the world as it is, young people are indoctrinated with nationalism. History is taught in such a way that one's own nation is seen as heroic and in the right, while other nations are seen as inferior or as enemies.

In the world as it could be, young people would be taught to feel loyalty to humanity as a whole. History would be taught in such a way as to emphasize the contributions that all nations and all races have made to the common cultural heritage of humanity.

In the world as it is, young people are often faced with the prospect of unemployment. This is true both in the developed countries, where automation and recession produce unemployment, and in the developing countries, where unemployment is produced by overpopulation and by lack of capital.

In the world as it could be, the idealism and energy of youth would be fully utilized by the world community to combat illiteracy and disease, and to develop agriculture and industry in the Third World. These projects would be financed by the UN using revenues derived from taxing international currency transactions.

WOMEN'S RIGHTS WORLDWIDE

In the world as it is, women form more than half of the population, but they are not proportionately represented in positions of political and economic power or in the arts and sciences. In many societies, women are confined to the traditional roles of childbearing and housekeeping.

In the world as it could be, women in all cultures would take their place beside men in positions of importance in government and industry, and in the arts and sciences. The reduced emphasis on childbearing would help to slow the population explosion.

In the world as it is, pollutants are dumped into our rivers, oceans and atmosphere. Some progress has been made in controlling pollution, but far from enough.

In the world as it could be, a stabilized and perhaps reduced population would put less pressure on the environment. Strict international laws would prohibit the dumping of pollutants into our common rivers, oceans and atmosphere. The production of greenhouse gasses would also be limited by international laws.

In the world as it is, there are no enforcible laws to prevent threatened species from being hunted to extinction. Many indigenous human cultures are also threatened.

In the world as it could be, an enforcible system of international laws would protect threatened species. Indigenous human cultures would also be protected.

In the world as it is, large areas of tropical rain forest are being destroyed by excessive timber cutting. The cleared land is generally unsuitable for farming.

In the world as it could be, it would be recognized that the conversion of carbon dioxide into oxygen by tropical forests is necessary for the earth's climatic stability. Tropical forests would also be highly valued because of their enormous diversity of plant and animal life, and large remaining areas of forest would be protected.

In the world as it is, opium poppies and other drug-producing plants are grown with little official hindrance in certain parts of Asia, the Middle East, and Latin America. Hard drugs refined from these plants are imported illegally into the developed countries, where they become a major source of high crime rates and human tragedy.

In the world as it could be, all nations would work together in a coordinated world-wide program to prevent the growing, refinement and distribution of harmful drugs,

In the world as it is, modern communications media, such as television, films and newspapers, have an enormous influence on public opinion. However, this influence is only rarely used to build up international understanding and mutual respect.

In the world as it could be, mass communications media would be more fully used to bridge human differences. Emphasis would be shifted from the sensational portrayal of conflicts to programs that widen our range of sympathy and understanding.

In the world as it is, international understanding is blocked by language barriers.

In the world as it could be, an international language would be selected, and every child would be taught it as a second language.

In the world as it is, power and material goods are valued more highly than they deserve to be. "Civilized" life often degenerates into a struggle of all against all for power and possessions. However, the industrial complex on which the production of goods depends cannot be made to run faster and faster, because we will soon encounter shortages of energy and raw materials.

In the world as it could be, nonmaterial human qualities, such as kindness, politeness, and knowledge, and musical, artistic or literary ability would be valued more highly, and people would derive a larger part of their pleasure from conversation, and from the appreciation of unspoiled nature.

In the world as it is, the institution of slavery existed for so many millennia that it seemed to be a permanent part of human society. Slavery has now been abolished in almost every part of the world. However war, an even greater evil than slavery, still exists as an established human institution.

In the world as it could be, we would take courage from the abolition of slavery, and we would turn with energy and resolution to the great task of abolishing war.

In the world as it is, people feel anxious about the future, but unable to influence it. They feel that as individuals they have no influence on the large-scale course of events.

In the world as it could be, ordinary citizens would realize that collectively they can shape the future. They would join hands and work together for a better world. They would give as much of themselves to peace as peace is worth.
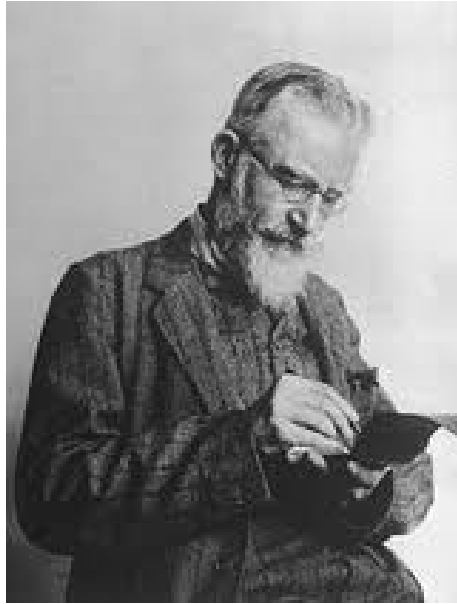
As George Bernard Shaw once said, "Most people look at the world as it is and ask 'Why?'. We should look at the world as it could be and ask, 'Why not?'"

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