WHO IS MY NEIGHBOR?

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$\mathbf{Preface}^{1}$

One often hears the question: "Is there a conflict between science and religion?" In my opinion, there are two aspects to religion - ethics and cosmology. Science has little to say about ethics, so here there is hardly any room for conflict.

By contrast, religious cosmologies are ancient legends, formed long before scientific research showed us the almost unimaginably immense scale of the observable universe, its 13.8 billion year history in time, and the 4.543 billion year history of the earth. We now know that humans evolved only an instant ago, on the cosmic time-scale. Can we still believe the entire universe was created by a quasi-human agency, especially for the enjoyment of humans?. Here, in the field of cosmology, science directly contradicts religion. Can we not accept religious ethics - the traditional wisdom of humanity - while at the same time rejecting religious cosmology?

Not only is there little or no conflict between religious ethics and science, there is also broad agreement on ethical principles between the major religions of the world. An interesting Wikipedia article on the Golden Rule points out that it exists in various forms in all the major religions of the world.

The Golden Rule, on which all major religions agree, tells us that we must treat others as we ourselves would wish to be treated. If everyone accepts this, how does it happen that human history contains a seemingly endless series of bloody wars, each more tragic, destructive and horrible than the last? Is there some fault in human nature that leads to tribalism and nationalism?

Chapter 4 of this book is devoted to a discussion of tribalism and nationalism from the standpoint of ethology, the science of inherited behavior in animals and humans. Human emotions were formed when our ancestors were hunter-gatherers, living in small, genetically homogeneous tribes. The tribes competed with each other for territory on the grasslands of Africa, and the tribe, as a whole, either survived or perished. Thus the tribe, rather than the individual, was the unit on which the Darwinian forces of natural selection acted. This evolutionary process has led to the fault in human nature that makes nationalism and war possible.

¹This book makes heavy use of my previously-published book chapters, but some new material has been added.

Fortunately, humans are not doomed to be the slaves of their instincts. These can be overwritten by ethics and by social structures, such as law and governance. Chapter 5 reviews the history of international law, while Chapter 6 discusses the steps needed to strengthen the United Nations so that it can become capable of fulfilling the role intended for it by its founders - eliminating the institution of war.

There is a particularly strong contrast between Christian ethics and the behavior of Christian nations, as is discussed in Chapter 8. Besides the Golden Rule, which is common to all major religions, Christian ethics contain two very important additions: The commandment that we must love and forgive our enemies, and the Parable of the Good Samaritan, which tells us that that our neighbor may belong to another nation or religion or ethnic group, but he or she is still our neighbor and deserves our care and protection. The chapter contrasts these important ethical principles with the atrocities inflicted by Christian Europe and Christian America on the remainder of the world.

Today modern transportation, instantaneous communication, and econonic interdependence have made it clear that nationalism is a dangerous anachronism. Modern war has become prohibitively dangerous. We are also threatened with a climate disaster which we must unite to avoid, and a pandemic which also requires global unity. Thus we urgently need a global ethic, in which narrow loyalties are suplemented or replaced by a higher loyalty to humanity as a whole.

On our small but beautiful earth, made small by technology, made beautiful by nature, there is room for one group only - the family of humankind.

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Chapter 1

ETHICS AND COSMOLOGY

1.1 Is there a conflict between science and religion?

Is there a conflict between science and religion? This is a frequently-asked question, and many different answers have been given. My own opinion is that there are two aspects to religion - ethics and cosmology. I think that when we talk about cosmology, there is often a conflict between science and religion. But with respect to ethics, there is very little room for conflict because science has almost nothing to say about ethics.

Why do I say "almost nothing" instead of "nothing"? It is often said that ethical principles cannot be derived from science, that they must come from somewhere else. Nevertheless, when nature is viewed through the eyes of modern science, we obtain some insights which seem almost ethical in character. Biology at the molecular level has shown us the complexity and beauty of even the most humble living organisms, and the interrelatedness of all life on earth. Looking through the eyes of contemporary biochemistry, we can see that even the single cell of an amoeba is a structure of miraculous complexity and precision, worthy of our respect and wonder.

Knowledge of the second law of thermodynamics, the statistical law favoring disorder over order, reminds us that life is always balanced like a tight-rope walker over an abyss of chaos and destruction. Living organisms distill their order and complexity from the flood of thermodynamic information which reaches the earth from the sun. In this way, they create local order; but life remains a fugitive from the second law of thermodynamics. Disorder, chaos, and destruction remain statistically favored over order, construction, and complexity.

It is easier to burn down a house than to build one, easier to kill a human

than to raise and educate one, easier to force a species into extinction than to replace it once it is gone, easier to burn the Great Library of Alexandria than to accumulate the knowledge that once filled it, and easier to destroy a civilization in a thermonuclear war than to rebuild it from the radioactive ashes. Knowing this, we can form an almost ethical insight: To be on the side of order, construction, and complexity, is to be on the side of life. To be on the side of destruction, disorder, chaos and war is to be against life, a traitor to life, an ally of death. Knowing the precariousness of life, knowing the statistical laws that favor disorder and chaos, we should resolve to be loyal to the principle of long continued construction upon which life depends.

War is based on destruction, destruction of living persons, destruction of homes, destruction of infrastructure, and destruction of the biosphere. If we are on the side of life, if we are not traitors to life and allies of death, we must oppose the institution of war. We must oppose the military-industrial complex. We must oppose the mass media when they whip up war-fever. We must oppose politicians who vote for obscenely enormous military budgets at a time of financial crisis. We must oppose these things by working with dedication, as though our lives depended on it. In fact, they do.

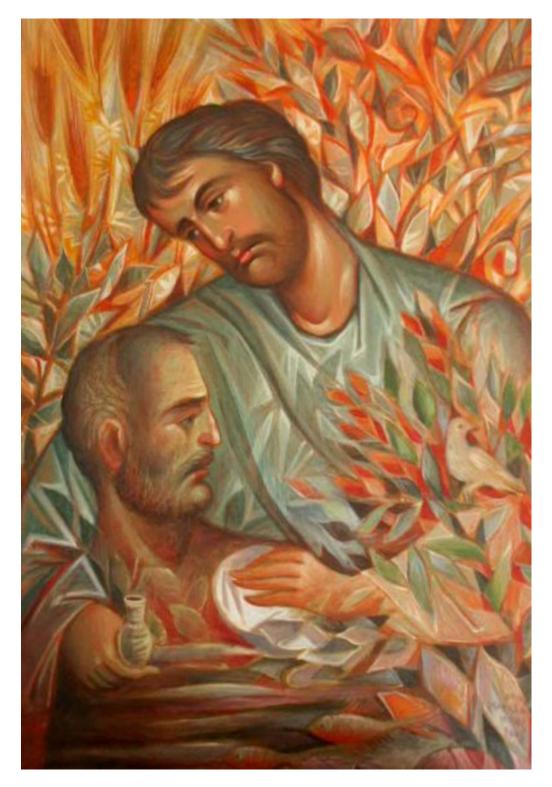
1.2 Religious ethics we can all accept

But let us turn to religious ethics. Not only do they not conflict with science, but there is also a general agreement on ethical principles between the major religions of the world.

The central ethical principles of Christianity can be found in the Sermon on the Mount and in the Parable of the Good Samaritan. In the Sermon on the Mount, we are told that we must not only love our neighbors as much as we love ourselves; we must also love and forgive our enemies. This seemingly impractical advice is in fact of great practicality, since escalatory cycles of revenge and counter-revenge can only be ended by unilateral acts of kindness.

In the Parable of the Good Samaritan, we are told that our neighbor, whom we must love, is not necessarily a member of our own ethnic group. Our neighbor may live on the other side of the world and belong to an entirely different race or culture; but he or she still deserves our love and care.

It is an interesting fact that the Golden Rule, "Do unto others as you would have them do unto you", appears in various forms in all of the world's major religions. The Wikipedia article on the Golden Rule gives an impressive and fascinating list of the forms in which the rule appears in many cultures and religions. For example, in ancient China, both Confucius and Laozi express the Golden Rule, but they do it slightly differently: Zi Gong asked, saying, "Is



 $Figure 1.1: \ {\bf A} \ {\bf painting \ illustrating \ the \ Parable \ of \ the \ Good \ Samaritan}$

there one word that may serve as a rule of practice for all one's life?" The Master said, "Is not reciprocity such a word?" (Confucius) and "The sage has no interest of his own, but takes the interests of the people as his own. He is kind to the kind; he is also kind to the unkind: for Virtue is kind. He is faithful to the faithful; he is also faithful to the unfaithful: for Virtue is faithful." (Laozi)

In the Jewish tradition, we have "The stranger who resides with you shall be to you as one of your citizens; you shall love him as yourself, for you were strangers in the land of Egypt" (Leviticus) In Islam: A Bedouin came to the prophet, grabbed the stirrup of his camel and said: O the messenger of God! Teach me something to go to heaven with it. The Prophet said: "As you would have people do to you, do to them; and what you dislike to be done to you, don't do to them. This maxim is enough for you; go and act in accordance with it!" (Kitab al-Kafi, vol. 2, p. 146)

The principle of reciprocity is an ancient one in human history, and it is thus embedded in our emotions. It is an important part of human nature. Reciprocity is the basis of non-market economies, and also the basis of social interactions between family members, friends and colleagues. In hunter-gatherer societies, it is customary to share food among all the members of the group. "Today I receive food from you, and tomorrow you will receive food from me." Similarly, among friends in modern society, no payment is made for hospitality, but it is expected that sooner or later the hospitality will be returned.

According to Wikipedia "Reciprocity in Social Psychology refers to responding to a positive action with another positive action, rewarding kind actions. As a social construct, reciprocity means that in response to friendly actions, people are frequently much nicer and much more cooperative than predicted by the self-interest model; conversely, in response to hostile actions they are frequently much more nasty and even brutal." As Wikipedia points out, reciprocity can also be negative, as in the case of escalatory cycles of revenge and counter-revenge.

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 vicious circles of revenge and counter revenge, such as those we see today in the Middle East and elsewhere. These vicious circles 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

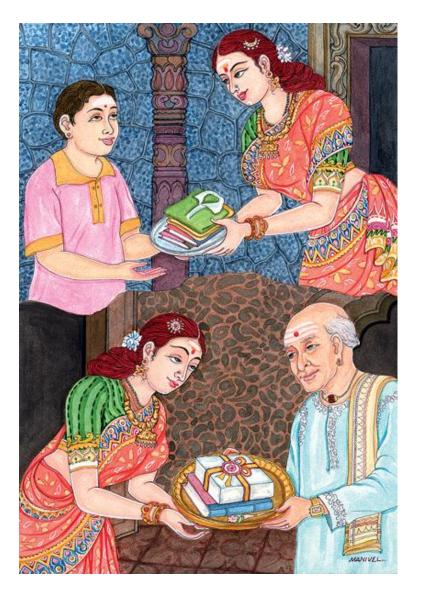


Figure 1.2: This painting illustrates the concept of karma. A lady gives books and clothing to a poor student. Later she receives a gift from a neighbor. There may sometimes be a direct causal connection between such events, but often they are connected only by the fact that each act of kindness makes the world a better place. (Himalayan Academy Publications, Kapaa, Kauai, Hawaii.)

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.

In Buddhist philosophy, the concept of Karma, action and reaction, also extends to our relationship with nature. 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 nonanthropocentric 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.

Today a few societies still follow a way of life similar to that of our huntergatherer ancestors. Anthropologists are able to obtain a vivid picture of the past by studying these societies. Often the religious ethics of the hunter- gatherers emphasizes the importance of harmony with nature. For example, respect for nature appears in the tribal traditions of Native Americans. 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



Figure 1.3: Chief Luther Standing Bear, author of "Land of the Spotted Eagle" and many other books.

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, and 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 preindustrial attitude is something from which the industrialized North could learn. In industrial societies, land "belongs" to some one 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. Preindustrial societies have a much less rapacious and much more custodial attitude towards the land and towards its non-human inhabitants.

We have received many gifts from modern technology, but if we are to build a happy, sustainable and war-free world we must combine our new scientific techniques with humanity's ancient wisdom.

1.3 The size of the universe

Modern astronomy has shown the Universe to be almost unimaginably large. Wikipedia states that: "The size of the Universe is unknown; it may be infinite. The region visible from Earth (the observable universe) is a sphere with a radius of about 46 billion light years, based on where the expansion of space has taken the most distant objects observed. For comparison, the diameter of a typical galaxy is 30,000 light-years, and the typical distance between two neighboring galaxies is 3 million light-years. As an example, the Milky Way Galaxy is roughly 100,000 light years in diameter, and the nearest sister galaxy to the Milky Way, the Andromeda Galaxy, is located roughly 2.5 million light years away. There are probably more than 100 billion (10^{11}) galaxies in the observable Universe.Typical galaxies range from dwarfs with as few as ten million (10^7) stars up to giants with one trillion (10^{12}) stars, all orbiting the galaxy's center of mass. A 2010 study by astronomers estimated that the

observable Universe contains 300 sextillion (3×10^{23}) stars."

Among this incredibly vast number of stars it is believed that there are innumerable stars that have planets similar to the Earth and hence able to support life. We also now know that given conditions that are favorable to life, it will almost certainly develop and evolve. The Earth seems to be only of extremely minor importance on the scale of the Universe. Given these facts, and given that the fundamental laws of nature are mathematical, I find it difficult to believe that the entire Universe and the laws that govern it were arranged for the benefit of humans, especially since humans have only existed for a brief instant on the time-scale of the Universe. If asked where the Universe came from and why, the scientist must answer with honesty, "I don't know".

1.4 Religious cosmologies are demonstrably false

Mesopotamia, 4000 BC

In the imagination of the early Mesopotamians (the Sumerians, Elamites, Babylonians and Assyrians), the earth was a flat disc, surrounded by a rim of mountains and floating on an ocean of sweet water. Resting on these mountains was the hemispherical vault of the sky, across which moved the stars, the planets, the sun and the moon. Under the earth was another hemisphere containing the spirits of the dead. The Mesopotamians visualized the whole spherical world-universe as being immersed like a bubble in a limitless ocean of salt water.

Ancient Egypt

The prosperity of ancient Egypt was based partly on its rich agriculture, nourished by the Nile, and partly on gold. Egypt possessed by far the richest gold deposits of the Middle East. They extended the whole length of the eastern desert, where more than a hundred ancient mines have been found; and in the south, Nubia was particularly rich in gold. The astonishing treasure found in the tomb of Tutankhamen, who was certainly not the most powerful of the pharaohs, gives us a pale idea of what the tombs of greater rulers must have been like before they were plundered.

In the religion of ancient Egypt, the distinction between the gods and the pharaohs was never very clear. Living pharaohs were considered to be gods, and they traced their ancestry back to the sun-god, Ra. Since all of the pharaohs were thought to be gods, and since, before the unification of Egypt, there were very many local gods, the Egyptian religion was excessively complicated. A list of gods found in the tomb of Thuthmosis III enumerates no

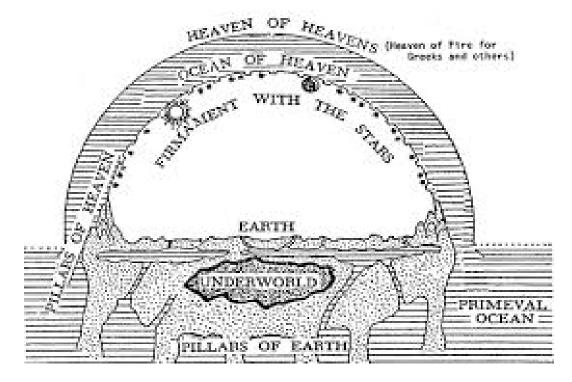


Figure 1.4: Mesopotamian cosmology

fewer than seven hundred and forty! The extreme conservatism of Egyptian art (which maintained a consistent style for several thousand years) derives from the religious function played by painting and sculpture.

The famous gods, Osiris, Isis, Horus and Set probably began their existence as real people, and their story, which we know both from hieroglyphic texts and from Pliny, depicts an actual historical event - the first unification of Egypt: Osiris, the good ruler of the lower Nile, was murdered and cut to pieces by his jealous brother Set; but the pieces of Osiris' body were collected by his faithful wife Isis, who performed the first mummification and thus made Osiris immortal. Then Horus, the son of Osiris and Isis, like an Egyptian Hamlet, avenged the murder of his father by tracking down his wicked uncle Set, who attempted to escape by turning into various animals. However, in the end Horus killed Set, and thus Horus became the ruler of all of Egypt, both the lower Nile and the upper Nile.

This first prehistoric unification of Egypt left such a strong impression on the national consciousness that when a later pharaoh named Menes reunified Egypt in 3,200 B.C., he did so in the name of Horus. Like the Mesopotamian story of the flood, and like the epics of Homer, the story of the unification of Egypt by Horus probably contains a core of historical fact, blended with imag-

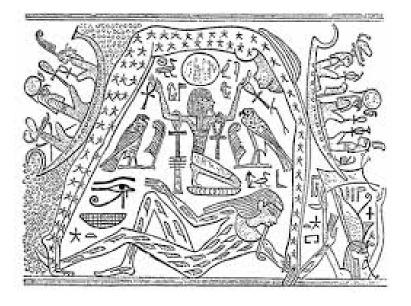


Figure 1.5: In the imagery of the ancient Egyptians, the goddess Nut represented the sky, while her husband, Geb, was the earth.

inative poetry. At certain points in the story, the characters seem to be real historical people - for example, when Osiris is described as being "handsome, dark-skinned and taller than other men". At other times, imagination seems to predominate. For example, the goddess Nut, who was the mother of Osiris, was thought to be the sky, while her husband Geb was the earth. The long curved body of Nut was imagined to be arched over the world so that only the tips of her toes and fingers touched the earth, while the stars and moon moved across her belly. Meanwhile her husband Geb lay prostrate, with all the vegetation of the earth growing out of his back.



Figure 1.6: The Nordic myth of the creation of the universe: "Thawing frost then became a cow called Audhumla. Four rivers of milk ran from her teats, and she fed Ymir. The cow licked salty ice blocks. After one day of licking, she freed a man's hair from the ice. After two days, his head appeared. On the third day the whole man was there. His name was Buri, and he was tall, strong, and handsome."



Figure 1.7: Ancient Nordic cosmology: "As all informed people know, the gods built a bridge from earth to heaven called Bifröst. Some call it the rainbow. It has three colors and is very strong, made with more skill and cunning than other structures. But strong as it is, it will break when the sons of Muspell ride out over it. The gods are not to blame that this structure will then break. Bifröst is a good bridge, but there is nothing in this world that can be relied on when the sons of Muspell are on the warpath. The chief sanctuary of the gods is by the ash tree Yggdrasil. There they hold their daily court. Yggdrasil is the best and greatest of all trees. Its branches spread out over the whole world and reach up over heaven."

The story of creation according to the Bible

- 1. In the beginning God created the heavens and the earth.
- 2. The earth was without form, and void; and darkness [was] on the face of the deep. And the Spirit of God was hovering over the face of the waters.
- 3. Then God said, "Let there be light"; and there was light.
- 4. And God saw the light, that [it was] good; and God divided the light from the darkness.
- 5. God called the light Day, and the darkness He called Night. So the evening and the morning were the first day.
- 6. Then God said, "Let there be a firmament in the midst of the waters, and let it divide the waters from the waters."
- 7. Thus God made the firmament, and divided the waters which [were] under the firmament from the waters which [were] above the firmament; and it was so.
- 8. And God called the firmament Heaven. So the evening and the morning were the second day.
- 9. Then God said, "Let the waters under the heavens be gathered together into one place, and let the dry [land] appear"; and it was so.
- 10. And God called the dry [land] Earth, and the gathering together of the waters He called Seas. And God saw that [it was] good.
- 11. Then God said, "Let the earth bring forth grass, the herb [that] yields seed, [and] the fruit tree [that] yields fruit according to its kind, whose seed [is] in itself, on the earth"; and it was so.
- 12. And the earth brought forth grass, the herb [that] yields seed according to its kind, and the tree [that] yields fruit, whose seed [is] in itself according to its kind. And God saw that [it was] good.
- 13. So the evening and the morning were the third day.
- 14. Then God said, "Let there be lights in the firmament of the heavens to divide the day from the night; and let them be for signs and seasons, and for days and years;
- 15. "and let them be for lights in the firmament of the heavens to give light on the earth"; and it was so.
- 16. Then God made two great lights: the greater light to rule the day, and the lesser light to rule the night. [He made] the stars also.
- 17. God set them in the firmament of the heavens to give light on the earth,
- 18. and to rule over the day and over the night, and to divide the light from the darkness. And God saw that [it was] good.
- 19. So the evening and the morning were the fourth day.

1.5. THE BLINDNESS OF SCIENCE

- 20. Then God said, "Let the waters abound with an abundance of living creatures, and let birds fly above the earth across the face of the firmament of the heavens."
- 21. So God created great sea creatures and every living thing that moves, with which the waters abounded, according to their kind, and every winged bird according to its kind. And God saw that [it was] good.
- 22. And God blessed them, saying, "Be fruitful and multiply, and fill the waters in the seas, and let birds multiply on the earth."
- 23. So the evening and the morning were the fifth day.
- 24. Then God said, "Let the earth bring forth the living creature according to its kind: cattle and creeping thing and beast of the earth, [each] according to its kind"; and it was so.
- 25. And God made the beast of the earth according to its kind, cattle according to its kind, and everything that creeps on the earth according to its kind. And God saw that [it was] good.
- 26. Then God said, "Let Us make man in Our image, according to Our likeness; let them have dominion over the fish of the sea, over the birds of the air, and over the cattle, over all the earth and over every creeping thing that creeps on the earth."
- 27. So God created man in His [own] image; in the image of God He created him; male and female He created them.
- 28. Then God blessed them, and God said to them, "Be fruitful and multiply; fill the earth and subdue it; have dominion over the fish of the sea, over the birds of the air, and over every living thing that moves on the earth."
- 29. And God said, "See, I have given you every herb [that] yields seed which [is] on the face of all the earth, and every tree whose fruit yields seed; to you it shall be for food.
- 30. "Also, to every beast of the earth, to every bird of the air, and to every thing that creeps on the earth, in which [there is] life, [I have given] every green herb for food"; and it was so.
- 31. Then God saw everything that He had made, and indeed [it was] very good. So the evening and the morning were the sixth day.

1.5 The blindness of science

Ethical considerations have traditionally been excluded from scientific discussions. This tradition perhaps has its roots in the desire of the scientific community to avoid the bitter religious controversies which divided Europe following the Reformation. Whatever the historical reason may be, it has certainly become customary to speak of scientific problems in a dehumanized language, as though science had nothing to do with ethics or politics. The great power of science is derived from an enormous concentration of attention and resources on the understanding of a tiny fragment of nature; but this concentration is at the same time a distortion of values. To be effective, a scientist must believe, at least temporarily, that the problem on which he or she is working is more important than anything else in the world, which is of course untrue. Thus a scientist, while seeing a fragment of reality better than anyone else, becomes blind to the larger whole. For example, when one looks into a microscope, one sees the tiny scene on the slide in tremendous detail, but that is all one sees. The remainder of the universe is blotted out by this concentration of attention.

The system of rewards and punishments in the training of scientists produces researchers who are highly competent when it comes to finding solutions to technical problems, but whose training has by no means encouraged them to think about the ethical or political consequences of their work.

Scientists may, in fact, be tempted to escape from the intractable moral and political difficulties of the world by immersing themselves in their work. Enrico Fermi, (whose research as much as that of any other person made nuclear weapons possible), spoke of science as "soma" - the escapist drug of Aldous Huxley's Brave New World. Fermi perhaps used his scientific preoccupations as an escape from the worrying political problems of the '30's and '40's.

The education of a scientist often produces a person with a strong feeling of loyalty to a particular research discipline, but perhaps without sufficient concern for the way in which progress in that discipline is related to the general welfare of humankind. To remedy this lack, it would be very desirable if the education of scientists could include some discussion of ethics, as well as a review of the history of modern science and its impact on society.

The explosive growth of science-driven technology during the last two centuries has changed the world completely; and our social and political institutions have adjusted much too slowly to the change. The great problem of our times is to keep society from being shaken to pieces by the headlong progress of science, the problem of harmonizing our social and political institutions with technological change. Because of the great importance of this problem, it is perhaps legitimate to ask whether anyone today can be considered to be educated without having studied the impact of science on society. Should we not include this topic in the education of both scientists and non-scientists?

Science has given us great power over the forces of nature. If wisely used, this power will contribute greatly to human happiness; if wrongly used, it will result in misery. In the words of the Spanish writer, Ortega y Gasset, "We live at a time when man, lord of all things, is not lord of himself"; or as Arthur Koestler has remarked, "We can control the movements of a spaceship orbiting about a distant planet, but we cannot control the situation in Northern



Figure 1.8: The blindness of science: Enormous concentration of attention on a small fragment of reality blinds the researcher to the larger whole.

Ireland."

To remedy this situation, educational reforms are needed. Science and engineering students ought to have some knowledge of the history and social impact of science. They could be given a course on the history of scientific ideas; but in connection with modern historical developments, such as the industrial revolution, the global population explosion, the development of nuclear weapons, genetic engineering, and information technology, some discussion of social impact could be introduced. One might hope to build up in science and engineering students an understanding of the way in which their work is related to the general welfare of humankind. These elements are needed in science education if rapid technological development is to be beneficial rather than harmful.

Chapter 2

THE ETHICS OF TOLSTOY, GANDHI AND KING

2.1 The ethics of Count Leo Tolstoy

Leo Tolstoy was born in 1828. While he was still a child, his parents died, and he became Count Tolstoy, with responsibility for the family estate at Yasnaya Polyana. As a young man, he was attracted to the gay and worldly social life of Moscow, but his diary during this period shows remorse over his pursuit of sensual pleasures. Disgusted with himself, he entered the army, and during idle periods he began his career as a writer. While still a soldier, he published a beautiful nostalgic work entitled "Childhood" as well as a number of skillful stories describing army life.

Schools and textbooks for peasants

At the age of 28, Tolstoy left the army and spent a brief period as a literary idol in St. Petersburg. He then became concerned about lack of education among Russian peasants, and he traveled widely in Europe, studying educational theory and methods. Returning to Yasnaya Polyana, he established schools for the peasants, published an educational magazine and compiled a number of textbooks whose simplicity and attractiveness anticipated modern teaching methods.

War and Peace

Tolstoy married in 1862 at the age of 34. His wife, Sonya Bers, shared his wide intellectual interests, and they had a happy family life with thirteen children1. During this period, Tolstoy managed his estate with much success,

and he produced his great literary masterpieces "War and Peace" and "Anna Karenina". He modeled the characters in "War and Peace" after members of his own family. For example, Tolstoy's famous heroine, Natassia, is modeled after his sister-in-law, Tanya Bers. Pierre in "War and Peace" and Levin in "Anna Karenina" reflect Tolstoy's own efforts to understand the meaning of life, his concern with the misery of the Russian peasants, and his ultimate conclusion that true happiness and peace of mind can only be found in a simple life devoted to the service of others.

Anna Karinina

Search for life's meaning

By the time Tolstoy had finished "Anna Karenina", he had become very dissatisfied with the life that he was leading. Despite having achieved in great measure all of the goals for which humans usually strive, he felt that his existence lacked meaning; and in 1879 he even contemplated suicide. He looked for life's purpose by systematically studying the writings of scientists and philosophers, but he could not find an answer there that satisfied him.

Finally Tolstoy found inspiration in the humble and devout lives of the peasants. He decided that the teachings of Jesus, as recorded in the New Testament, could provide the answer for which he was searching. Tolstoy published an account of his spiritual crisis in a book entitled "A Confession", in which he says:

"I searched for enlightenment everywhere in the hard-won accumulated knowledge of mankind. I searched passionately and long, not in a lazy way, but with my whole soul, day and night. I searched like a drowning man looking for safety - and found nothing. I searched all the sciences, and not only did I find nothing, but I also came to the conclusion that everyone who, like myself, had searched in the sciences for life's meaning had also found nothing."

"I then diligently studied the teachings of Buddhism and Islam in the holy books of those religions; but most of all I studied Christianity as I met it in the holy Scriptures and in the living Christians around me..."

Love for the poor

"I began to approach the believers among the poor, simple ignorant people: pilgrims, monks and peasants... The whole life of Christians of our own circle seemed to be a contradiction of their faith. By contrast, the whole life of Christians of the peasant class was an affirmation of the view of life which their religious faith gave to them. I looked more and more deeply into the

2.1. THE ETHICS OF COUNT LEO TOLSTOY

faith of these people, and the more deep my insight became, the more I became convinced that they had a genuine belief, that their faith was essential to them, and that it was their faith alone which gave their life a meaning and made it possible for them to live... I developed a love for these simple people."

Moved by the misery of the urban poor whom he encountered in the slums of Moscow, Tolstoy wrote: "Between us, the rich and the poor, there is a wall of false education, and before we can help the poor, we must first tear down that wall. I was forced to the conclusion that our own wealth is the true cause of the misery of the poor."

What Then Must We Do?

Tolstoy's book, "What Then Must We Do?", tells of his experiences in the slums and analyses the causes of poverty. Tolstoy felt that the professed Christian belief of the Czarist state was a thin cosmetic layer covering a structure that was fundamentally built on violence. Violence was used to maintain a huge gap between the rich and the poor, and violence was used in international relations. Tolstoy felt especially keenly the contradiction between Christianity and war. In a small book entitled "The Kingdom of God is Within Us" he wrote:

The contradiction between Christianity and war

"All other contradictions are insignificant compared with the contradiction which now faces humankind in international relations, and which cries out for a solution, since it brings the very existence of civilization into danger. This is the contradiction between the Christian conscience and war."

"All of the Christian peoples of the world, who all follow one and the same spiritual life, so that any good and fruitful thought which is put forward in any corner of the world is immediately communicated to all of Christiandom, where it arouses feelings of pride and happiness in us regardless of our nationality; we who simply love the thinkers, humanitarians, and poets of other countries; we who not only admire their achievements, but also feel delight in meeting them and greet them with friendly smiles; we will all be forced by the state to participate in a murderous war against these same people, a war which if it does not break out today will do so tomorrow."

"...The sharpest of all contradictions can be seen between the government's professed faith in the Christian law of the brotherhood of all humankind, and the military laws of the state, which force each young man to prepare himself for enmity and murder, so that each must be simultaneously a Christian and a gladiator."

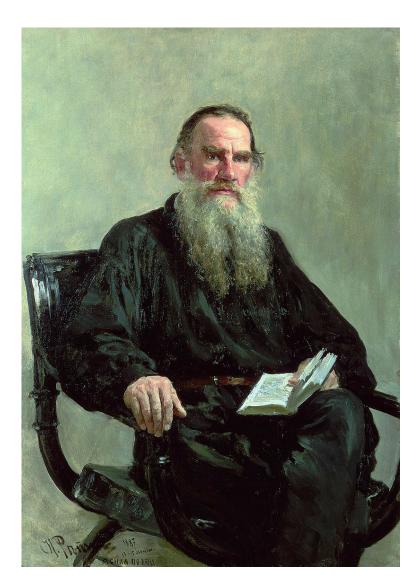


Figure 2.1: Portrait of Count Leo Tolstoy made in 1887 by Ilia Repin. Public domain, Wikimedia Commons

Banned and excommunicated

Tolstoy's writings on Christianity and on social questions were banned by the public censor, and he was excommunicated from the Russian Orthodox Church. However, his universally recognized stature as one of the world's greatest writers was undiminished, and his beliefs attracted many followers, both inside and outside of Russia.

Tolstoy and Gandhi

In 1894, the young Indian lawyer, Mohandas K. Gandhi, (who was then working for the civil rights of Indians in South Africa), read Tolstoy's books on Christianity and was greatly influenced by them. Gandhi wrote a review of "The Kingdom of God is Within Us", and in 1909 he sent Tolstoy an account of the activities of the civil rights movement in South Africa. He received a reply in which Tolstoy said:

"...The longer I live, and especially now, when I vividly feel the nearness of death, the more I want to tell others what I feel so particularly clearly and what to my mind is of great importance, namely that which is called passive resistance, but which is in reality nothing else but the teaching of love, uncorrupted by false interpretations. That love, i.e. the striving for the union of human souls and the activity derived from that striving, is the highest and only law of human life, and in the depth of his soul every human being knows this (as we most clearly see in children); he knows this until he is entangled in the false teachings of the world. This law was proclaimed by all, by the Indian as by the Chinese, Hebrew, Greek and Roman sages of the world. I think that this law was most clearly expressed by Christ, who plainly said that in this alone is all the law and the prophets..."

"...The peoples of the Christian world have solemnly accepted this law, while at the same time they have permitted violence and built their lives on violence; and that is why the whole life of the Christian peoples is a continuous contradiction between what 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 in different phases of life, such as the power of rulers, courts, and armies..."

Nonviolent resistance to governmental violence

Tolstoy believed that violence can never under any circumstances be justified, and that therefore an individual's resistance to governmental violence must be passive and non-violent. He also believed that each individual ought to reduce his needs to a minimum in order to avoid exploiting the labor of others.

WHO IS MY NEIGHBOR?

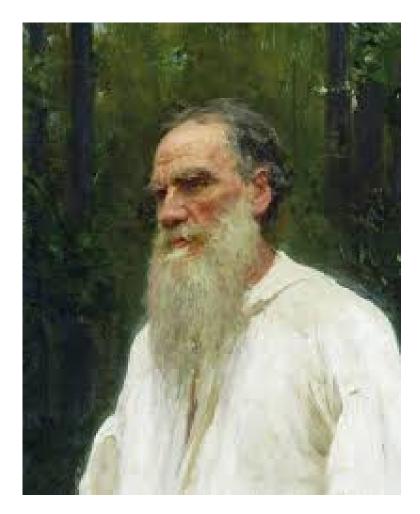


Figure 2.2: Count Leo Tolstoy

Tolstoy gave up meat, alcohol, tobacco, and hunting. He began to clean his own room, wore simple peasant clothes, worked in the fields, and made his own boots. He participated in famine relief, and he would have liked to give away all of his great wealth to feed the poor, but bowing to the protests of his family, he gave his wealth to them instead. Because he had been unable to convert his family to his beliefs, Tolstoy left home secretly on a November night in 1910, accompanied, like King Lear, by his youngest daughter. He died of pneumonia a few days later at a remote railway junction.

2.1. THE ETHICS OF COUNT LEO TOLSTOY



Figure 2.3: Mahatma Gandhi firmly rejected the pernicious doctrine that "the end justifies the mens". Gandhi said: "They say 'means are after all means'. I would say 'means are after all everything'. As the means so the end...... There is no wall of separation between means and end. Indeed the Creator has given us control (and that too very limited) over means, none over the end... The means may be likened to a seed, the end to a tree, and there is just the same inviolable connection between the means and the end as there is between the seed and the tree."

The Kingdom of God Is Within You

Wikipedia states that "the book was first published in Germany in 1894 after being banned in his home country of Russia. It is the culmination of 30 years of Tolstoy's thinking, and lays out a new organization for society based on an interpretation of Christianity focusing on universal love."

2.2 The ethics of Mahatma Gandhi

If humans are ever to achieve a stable global society in the future, they will have to become much more modest in their economic behavior and much more peaceful in their politics. For both modesty and peace, Gandhi is a useful source of ideas. The problems with which he struggled during his lifetime are extremely relevant to us in the 21st Century, when both nuclear and ecological catastrophes threaten the world.

Avoiding escalation of conflicts

Today we read almost every day of killings that are part of escalating cycles of revenge and counter-revenge, for example in the Middle East. Gandhi's experiences both in South Africa and in India convinced him that such cycles could only be ended by unilateral acts of kindness and understanding from one of the parties in a conflict. He said, "An eye for an eye makes the whole world blind".

To the insidious argument that "the end justifies the means", Gandhi answered firmly: "They say that 'means are after all means'. I would say that 'means are after all everything'. As the means, so the end. Indeed, the Creator has given us limited power 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."

Gandhi's advocacy of non-violence is closely connected to his attitude towards ends and means. He believed that violent methods for achieving a desired social result would inevitably result in an escalation of violence. The end achieved would always be contaminated by the methods used. He was influenced by Leo Tolstoy with whom he exchanged many letters, and he in turn influenced Martin Luther King and Nelson Mandela.

The power of truth

Gandhi was trained as a lawyer, and when he began to practice in South Africa, in his first case, he was able to solve a conflict by proposing a compromise that satisfied both parties. Of this result he said, "My joy was boundless. I had learnt the true practice of law. I had learnt to find out the better side of human nature and to enter men's hearts. I realized that the true function of a lawyer was to unite parties riven asunder." When Gandhi became involved with the struggle for civil rights of the Indian minority in South Africa, his background as a lawyer once more helped him. This time his jury was public opinion in England. When Gandhi lead the struggle for reform, he insisted that the means of protest used by his followers should be non-violent, even though violence was frequently used against them. In this way they won their case in the court of public opinion. Gandhi called this method of protest "satyagraha", a Sanskrit word meaning "the power of truth". In today's struggles for justice and peace, the moral force of truth and nonviolence can win victories in the court of world public opinion.

Harmony between religious groups

Gandhi believed that at their core, all religions are based on the concepts of truth, love, compassion, nonviolence and the Golden Rule. When asked whether he was a Hindu, Gandhi answered, "Yes I am. I am also a Christian, a Muslim, a Buddhist and a Jew." When praying at his ashram, Gandhi made a point of including prayers from many religions. One of the most serious problems that he had to face in his efforts to free India from British rule was disunity and distrust, even hate, between the Hindu and Muslim communities. Each community felt that with the British gone, they might face violence and repression from the other. Gandhi made every effort to bridge the differences and to create unity and harmony. His struggles with this problem are highly relevant to us today, when the world is split by religious and ethnic differences.

Solidarity with the poor

Today's world is characterized by intolerable economic inequalities, both between nations and within nations. 8 million children die each year from poverty-related causes. 1.3 billion people live on less than 1.25 dollars a day. Gandhi's concern for the poor can serve as an example to us today, as we work to achieve a more equal world. He said, "There is enough for every man's need, but not for every man's greed."

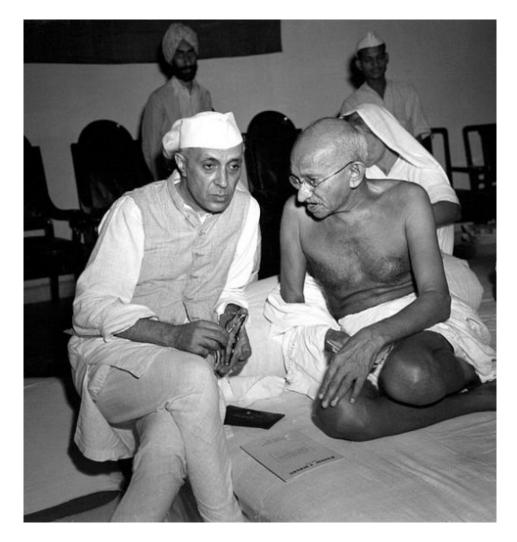


Figure 2.4: Gandhi and Nehru at a meeting of the Congress Party. After India gained its independence, it was Nehru's vision of an urbanized and industrialized India that prevailed. Ghandi's much more sustainable vision of "India of villages" was lost. (Wikimedia Commons)

Voluntary reduction of consumption

After Gandhi's death, someone took a photograph of all his worldly possessions. It was a tiny heap, consisting of his glasses, a pair of sandals, a homespun cloth (his only garment) and a watch. That was all. By reducing his own needs and possessions to an absolute minimum, Gandhi had tried to demonstrate that the commonly assumed connection between wealth and merit is false. This is relevant today, in a world where we face a crisis of diminishing resources. Not only fossil fuels, but also metals and arable land per capita will become scarce in the future. This will force a change in lifestyle, particularly in the industrialized countries, away from consumerism and towards simplicity. Gandhi's example can teach us that we must cease to use wealth and "conspicuous consumption" as a measure of merit.

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 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.

2.3 The ethics of Martin Luther King, Jr.

King applies nonviolent principles to the Civil Rights movement

The son of a southern Baptist minister, Martin Luther King, Jr received his Ph.D. in theology from Boston University in 1955. During his studies, he had admired Thoreau's essay "On the Duty of Civil Disobedience," and he had also been greatly moved by the life and teachings of Mahatma Gandhi.

Martin Luther King Jr. had been pastor of the Dexter Avenue Baptist Church in Montgomery Alabama for only a year when he was chosen to lead a boycott protesting segregation in the Montgomery buses. Suddenly thrust into this situation of intense conflict, he remembered both the Christian principle of loving one's enemies and Gandhi's methods of non-violent protest. In his first speech as President of the Montgomery Improvement Association (a speech which the rapid pace of events had forced him to prepare in only twenty minutes, five of which he spent in prayer), he said:

"Our method will be that of persuasion, not coercion. We will only say to people, 'Let your conscience be your guide'. Our actions must be guided by the deepest principles of our Christian faith. Love must be our regulating ideal. Once again we must hear the words of Jesus echoing across the centuries: 'Love your enemies, bless them that curse you, and pray for them that despitefully use you.' If we fail to do this, our protest will end up as a meaningless drama on the stage of history, and its memory will be shrouded by the ugly garments of shame. In spite of the mistreatment that we have confronted, we must not become bitter and end up by hating our white brothers. As Booker T. Washington said, 'Let no man pull you down so low as to make you hate him."

"If you will protest courageously, and yet with dignity and Christian love, when the history books are written in future generations, the historians will have to pause and say, 'There lived a great people, a black people, who injected new meaning and dignity into the veins of civilization.' This is our challenge and our overwhelming responsibility."

Victory in the court of public opinion

This speech, which Dr. King made in December 1955, set the tone of the black civil rights movement. Although the protesters against racism were often faced with brutality and violence; although many of them, including Dr. King were unjustly jailed; although the homes of the leaders were bombed; although they constantly received telephone calls threatening their lives; although many civil rights workers were severely beaten, and several of them killed, they never resorted to violence in their protests against racial discrimination. Because of this adherence to Christian ethics, public opinion shifted to the side of the civil rights movement, and the United States Supreme Court ruled bus segregation to be unconstitutional.

The March on Washington

According to Wikipedia,

"The March on Washington for Jobs and Freedom, also known as the March on Washington or The Great March on Washington, was held in Washington, D.C. on Wednesday, August 28, 1963. The purpose of the march was to advocate for the civil and economic rights of African Americans. At the march, Martin Luther King Jr., standing in front of the Lincoln Memorial, delivered his historic 'I Have a Dream' speech in which he called for an end to racism.

"The march was organized by A. Philip Randolph and Bayard Rustin, who built an alliance of civil rights, labor, and religious organizations that came together under the banner of 'jobs and freedom.' Estimates of the number of participants varied from 200,000 to 300,000, but the most widely cited estimate is 250,000 people. Observers estimated that 75-80% of the marchers were black. The march was one of the largest political rallies for human rights in United States history. Walter Reuther, president of the United Auto



Figure 2.5: Rosa Parks with 26-year-old Dr. Martin Luther King Jr. in the background..

Workers, was the most integral and significant white organizer of the march.

"The march is credited with helping to pass the Civil Rights Act of 1964 and preceded the Selma Voting Rights Movement which led to the passage of the Voting Rights Act of 1965...

"On June 22, the organizers met with President Kennedy, who warned against creating 'an atmosphere of intimidation' by bringing a large crowd to Washington. The civil rights activists insisted on holding the march. Wilkins pushed for the organizers to rule out civil disobedience and described this proposal as the 'perfect compromise'. King and Young agreed. Leaders from the Student Nonviolent Coordinating Committee (SNCC) and Congress of Racial Equality (CORE), who wanted to conduct direct actions against the Department of Justice, endorsed the protest before they were informed that civil disobedience would not be allowed. Finalized plans for the March were announced in a press conference on July 2. President Kennedy spoke favorably of the March on July 17, saying that organizers planned a peaceful assembly and had cooperated with the Washington, D.C., police."

Welcomed to India by Nehru

In 1959, while recovering from an almost-fatal stabbing, Martin Luther King Jr. visited India at the invitation of Prime Minister Jawaharlal Nehru. Dr. King and his wife Coretta were warmly welcomed by Nehru, who changed his schedule in order to meet them. They had an opportunity to visit a religious community or "ashram" that Gandhi had founded, and they discussed non-violence with many of Gandhi's disciples.

King is awarded the Nobel Peace Prize

In 1964, the change in public opinion produced by the non-violent black civil rights movement resulted in the passage of the civil rights act. In the same year, Dr. King was awarded the Nobel Peace Prize. He accepted it, not as an individual, but on behalf of all civil rights workers; and he immediately gave all the prize money to the movement.

Opposition to the Vietnam War

In 1967, a year before his assassination, Dr. King forcefully condemned the Viet Nam war in an address at a massive peace rally in New York City. He felt

2.3. THE ETHICS OF MARTIN LUTHER KING, JR.



Figure 2.6: The March on Washington.



Figure 2.7: The March on Washington, where Rev. Martin Luther King Jr. delivered his famous "I have a dream" speech, August 28, 1963.

that opposition to war followed naturally from his advocacy of non-violence. Speaking against the Viet Nam War, Dr. King said: "We have corrupted their women and children and killed their men. They move sadly and apathetically as we herd them off the land of their fathers into concentration camps where minimal social needs are rarely met. They know they must move on or be destroyed by our bombs ... primarily women and children and the aged watch as we poison their water, as we kill a million acres of their crops. They must weep as the bulldozers roar through their areas preparing to destroy the precious trees. They wander into the hospitals. So far we may have killed a million of them, [in Vietnam by 1967] mostly children. They wander into the towns and see thousands of the children, homeless, without clothes, running in packs on the streets like animals. They see the children degraded by our soldiers as they beg for food. They see the children selling their sisters to our soldiers, soliciting for their mothers."

An excerpt from Martin Luther King, Jr.'s Riverside Church speech

This I believe to be the privilege and the burden of all of us who deem ourselves bound by allegiances and loyalties which are broader and deeper than nationalism and which go beyond our nation's selfdefined goals and positions. We are called to speak for the weak, for the voiceless, for the victims of our nation and for those it calls "enemy," for no document from human hands can make these humans any less our brothers.

And as I ponder the madness of Vietnam and search within myself for ways to understand and respond in compassion, my mind goes constantly to the people of that peninsula. I speak now not of the soldiers of each side, not of the ideologies of the Liberation Front, not of the junta in Saigon, but simply of the people who have been living under the curse of war for almost three continuous decades now. I think of them, too, because it is clear to me that there will be no meaningful solution there until some attempt is made to know them and hear their broken cries.

They must see Americans as strange liberators. The Vietnamese people proclaimed their own independence in 1954 – in 1945 rather – after a combined French and Japanese occupation and before the communist revolution in China. They were led by Ho Chi Minh. Even though they quoted the American Declaration of Independence in their own document of freedom, we refused to recognize them. Instead, we decided to support France in its reconquest of her former colony. Our government felt then that the Vietnamese people were not ready for independence, and we again fell victim to the deadly Western arrogance that has poisoned the international atmosphere for so long. With that tragic decision we rejected a revolutionary government seeking self-determination and a government that had been established not by China – for whom the Vietnamese have no great love – but by clearly indigenous forces that included some communists. For the peasants this new government meant real land reform, one of the most important needs in their lives.

For nine years following 1945 we denied the people of Vietnam the right of independence. For nine years we vigorously supported the French in their abortive effort to recolonize Vietnam. Before the end of the war we were meeting eighty percent of the French war costs. Even before the French were defeated at Dien Bien Phu, they began to despair of their reckless action, but we did not. We encouraged them with our huge financial and military supplies to continue the war even after they had lost the will. Soon we would be paying almost the full costs of this tragic attempt at recolonization.

After the French were defeated, it looked as if independence and land reform would come again through the Geneva Agreement. But instead there came the United States, determined that Ho should not unify the temporarily divided nation, and the peasants watched again as we supported one of the most vicious modern dictators, our chosen man, Premier Diem. The peasants watched and cringed as Diem ruthlessly rooted out all opposition, supported their extortionist landlords, and refused even to discuss reunification with the North. The peasants watched as all this was presided over by United States' influence and then by increasing numbers of United States troops who came to help quell the insurgency that Diem's methods had aroused. When Diem was overthrown they may have been happy, but the long line of military dictators seemed to offer no real change, especially in terms of their need for land and peace.

The only change came from America, as we increased our troop commitments in support of governments which were singularly corrupt, inept, and without popular support. All the while the people read our leaflets and received the regular promises of peace and democracy and land reform. Now they languish under our bombs and consider us, not their fellow Vietnamese, the real enemy. They move sadly and apathetically as we herd them off the land of their fathers into concentration camps where minimal social needs are rarely met. They know they must move on or be destroyed by our bombs.

So they go, primarily women and children and the aged. They watch as we poison their water, as we kill a million acres of their crops. They must weep as the bulldozers roar through their areas preparing to destroy the precious trees. They wander into the hospitals with at least twenty casualties from American firepower for one Vietcong-inflicted injury. So far we may have killed a million of them, mostly children. They wander into the towns and see thousands of the children, homeless, without clothes, running in packs on the streets like animals. They see the children degraded by our soldiers as they beg for food. They see the children selling their sisters to our soldiers, soliciting for their mothers.

What do the peasants think as we ally ourselves with the landlords and as we refuse to put any action into our many words concerning land reform? What do they think as we test out our latest weapons on them, just as the Germans tested out new medicine and new tortures in the concentration camps of Europe? Where are the roots of the independent Vietnam we claim to be building? Is it among these voiceless ones?

We have destroyed their two most cherished institutions: the family and the village. We have destroyed their land and their crops. We have cooperated in the crushing – in the crushing of the nation's only non-Communist revolutionary political force, the unified Buddhist Church. We have supported the enemies of the peasants of Saigon. We have corrupted their women and children and killed their men.

Now there is little left to build on, save bitterness. Soon, the only solid – solid physical foundations remaining will be found at our military bases and in the concrete of the concentration camps we call "fortified hamlets." The peasants may well wonder if we plan to build our new Vietnam on such grounds as these. Could we blame them for such thoughts? We must speak for them and raise the questions they cannot raise. These, too, are our brothers.

Perhaps a more difficult but no less necessary task is to speak for those who have been designated as our enemies. What of the National Liberation Front, that strangely anonymous group we call "VC" or "communists"? What must they think of the United States of America when they realize that we permitted the repression and cruelty of Diem, which helped to bring them into being as a resistance group in the South? What do they think of our condoning the violence which led to their own taking up of arms? How can they believe in our integrity when now we speak of "aggression from the North" as if there were nothing more essential to the war? How can they trust us when now we charge them with violence after the murderous reign of Diem and charge them with violence while we pour every new weapon of death into their land? Surely we must understand their feelings, even if we do not condone their actions. Surely we must see that the men we supported pressed them to their violence. Surely we must see that our own computerized plans of destruction simply dwarf their greatest acts.

How do they judge us when our officials know that their membership is less than twenty-five percent communist, and yet insist on giving them the blanket name? What must they be thinking when they know that we are aware of their control of major sections of Vietnam, and yet we appear ready to allow national elections in which this highly organized political parallel government will not have a part? They ask how we can speak of free elections when the Saigon press is censored and controlled by the military junta. And they are surely right to wonder what kind of new government we plan to help form without them, the only party in real touch with the peasants. They question our political goals and they deny the reality of a peace settlement from which they will be excluded. Their questions are frighteningly relevant. Is our nation planning to build on political myth again, and then shore it up upon the power of new violence?

Here is the true meaning and value of compassion and nonviolence, when it helps us to see the enemy's point of view, to hear his questions, to know his assessment of ourselves. For from his view we may indeed see the basic weaknesses of our own condition, and if we are mature, we may learn and grow and profit from the wisdom of the brothers who are called the opposition.

So, too, with Hanoi. In the North, where our bombs now pummel the land, and our mines endanger the waterways, we are met by a deep but understandable mistrust. To speak for them is to explain this lack of confidence in Western words, and especially their distrust of American intentions now. In Hanoi are the men who led the nation to independence against the Japanese and the French, the men who sought membership in the French Commonwealth and were betrayed by the weakness of Paris and the willfulness of the colonial armies. It was they who led a second struggle against French domination at tremendous costs, and then were persuaded to give up the land they controlled between the thirteenth and seventeenth parallel as a temporary measure at Geneva. After 1954 they watched us conspire with Diem to prevent elections which could have surely brought Ho Chi Minh to power over a united Vietnam, and they realized they had been betrayed again. When we ask why they do not leap to negotiate, these things must be remembered.

Also, it must be clear that the leaders of Hanoi considered the presence of American troops in support of the Diem regime to have been the initial military breach of the Geneva Agreement concerning foreign troops. They remind us that they did not begin to send troops in large numbers and even supplies into the South until American forces had moved into the tens of thousands.

Hanoi remembers how our leaders refused to tell us the truth about the earlier North Vietnamese overtures for peace, how the president claimed that none existed when they had clearly been made. Ho Chi Minh has watched as America has spoken of peace and built up its forces, and now he has surely heard the increasing international rumors of American plans for an invasion of the North. He knows the bombing and shelling and mining we are doing are part of traditional pre-invasion strategy. Perhaps only his sense of humor and of irony can save him when he hears the most powerful nation of the world speaking of aggression as it drops thousands of bombs on a poor, weak nation more than eight hundred – rather, eight thousand miles away from its shores.

At this point I should make it clear that while I have tried in these last few minutes to give a voice to the voiceless in Vietnam and to understand the arguments of those who are called "enemy," I am as deeply concerned about our own troops there as anything else. For it occurs to me that what we are submitting them to in Vietnam is not simply the brutalizing process that goes on in any war where armies face each other and seek to destroy. We are adding cynicism to the process of death, for they must know after a short period there that none of the things we claim to be fighting for are really involved. Before long they must know that their government has sent them into a struggle among Vietnamese, and the more sophisticated surely realize that we are on the side of the wealthy, and the secure, while we create a hell for the poor.

Somehow this madness must cease. We must stop now. I speak as a child of God and brother to the suffering poor of Vietnam. I speak for those whose land is being laid waste, whose homes are being destroyed, whose culture is being subverted. I speak of the – for the poor of America who are paying the double price of smashed hopes at home, and death and corruption in Vietnam. I speak as a citizen of the world, for the world as it stands aghast at the path we have taken. I speak as one who loves America, to the leaders of our own nation: The great initiative in this war is ours; the initiative to stop it must be ours.

This is the message of the great Buddhist leaders of Vietnam. Recently one of them wrote these words, and I quote: "Each day the war goes on the hatred increases in the heart of the Vietnamese and in the hearts of those of humanitarian instinct. The Americans are forcing even their friends into becoming their enemies. It is curious that the Americans, who calculate so carefully on the possibilities of military victory, do not realize that in the process they are incurring deep psychological and political defeat. The image of America will never again be the image of revolution, freedom, and democracy, but the image of violence and militarism".

If we continue, there will be no doubt in my mind and in the mind of the world that we have no honorable intentions in Vietnam. If we do not stop our war against the people of Vietnam immediately, the world will be left with no other alternative than to see this as some horrible, clumsy, and deadly game we have decided to play. The world now demands a maturity of America that we may not be able to achieve. It demands that we admit that we have been wrong from the beginning of our adventure in Vietnam, that we have been detrimental to the life of the Vietnamese people. The situation is one in which we must be ready to turn sharply from our present ways. In order to atone for our sins and errors in Vietnam, we should take the initiative in bringing a halt to this tragic war.

I would like to suggest five concrete things that our government should do [immediately] to begin the long and difficult process of extricating ourselves from this nightmarish conflict:

Number one: End all bombing in North and South Vietnam.

Number two: Declare a unilateral cease-fire in the hope that such action will create the atmosphere for negotiation.

Three: Take immediate steps to prevent other battlegrounds in Southeast Asia by curtailing our military buildup in Thailand and our interference in Laos.

Four: Realistically accept the fact that the National Liberation Front has substantial support in South Vietnam and must thereby play a role in any meaningful negotiations and any future Vietnam government.

Five: Set a date that we will remove all foreign troops from

Vietnam in accordance with the 1954 Geneva Agreement...

In 1957, a sensitive American official overseas said that it seemed to him that our nation was on the wrong side of a world revolution. During the past ten years, we have seen emerge a pattern of suppression which has now justified the presence of U.S. military advisors in Venezuela. This need to maintain social stability for our investments accounts for the counterrevolutionary action of American forces in Guatemala. It tells why American helicopters are being used against guerrillas in Cambodia and why American napalm and Green Beret forces have already been active against rebels in Peru.

It is with such activity in mind that the words of the late John F. Kennedy come back to haunt us. Five years ago he said, "Those who make peaceful revolution impossible will make violent revolution inevitable." Increasingly, by choice or by accident, this is the role our nation has taken, the role of those who make peaceful revolution impossible by refusing to give up the privileges and the pleasures that come from the immense profits of overseas investments. I am convinced that if we are to get on the right side of the world revolution, we as a nation must undergo a radical revolution of values. We must rapidly begin...we must rapidly begin the shift from a thing-oriented society to a person-oriented society. When machines and computers, profit motives and property rights, are considered more important than people, the giant triplets of racism, extreme materialism, and militarism are incapable of being conquered.

A true revolution of values will soon cause us to question the fairness and justice of many of our past and present policies. On the one hand, we are called to play the Good Samaritan on life's roadside, but that will be only an initial act. One day we must come to see that the whole Jericho Road must be transformed so that men and women will not be constantly beaten and robbed as they make their journey on life's highway. True compassion is more than flinging a coin to a beggar. It comes to see that an edifice which produces beggars needs restructuring.

A true revolution of values will soon look uneasily on the glaring contrast of poverty and wealth. With righteous indignation, it will look across the seas and see individual capitalists of the West investing huge sums of money in Asia, Africa, and South America, only to take the profits out with no concern for the social betterment of the countries, and say, "This is not just." It will look at our alliance with the landed gentry of South America and say, "This is not just." The Western arrogance of feeling that it has everything to teach others and nothing to learn from them is not just.

A true revolution of values will lay hand on the world order and say of war, "This way of settling differences is not just." This business of burning human beings with napalm, of filling our nation's homes with orphans and widows, of injecting poisonous drugs of hate into the veins of peoples normally humane, of sending men home from dark and bloody battlefields physically handicapped and psychologically deranged, cannot be reconciled with wisdom, justice, and love. A nation that continues year after year to spend more money on military defense than on programs of social uplift is approaching spiritual death.

Opposition to nuclear weapons

In his book, "Strength to Love", Dr. King wrote, "Wisdom born of experience should tell us that war is obsolete. There may have been a time when war served a negative good by preventing the spread of an evil force, but the power of modern weapons eliminates even the possibility that war may serve as a negative good. If we assume that life is worth living, and that man has a right to survival, then we must find an alternative to war ... I am convinced that the Church cannot be silent while mankind faces the threat of nuclear annihilation. If the church is true to her mission, she must call for an end to the nuclear arms race."

Assassination

On April 4, 1968, Dr. King was shot and killed. A number of people, including members of his own family, believe that he was killed because of his opposition to the Viet Nam War. This conclusion is supported by the result of a 1999 trial initiated by members of the King family. Summing up the arguments to the jury, the family's lawyer said "We are dealing in conspiracy with agents of the City of Memphis and the governments of the State of Tennessee and the United States of America. We ask that you find that a conspiracy existed." After two and a half hour's deliberation, the jury found that Lloyd Jowers and "others, including governmental agencies, were parties to this conspiracy". The verdict of the jury remains judicially valid today, and it has never been overturned in a court of law, although massive efforts have been made to discredit it.

2.3. THE ETHICS OF MARTIN LUTHER KING, JR.



Figure 2.8: Martin Luther King Jr. speaking in Washington. Source: American Civil Liberties Union of Virginia, acluva.org

Redemptive love

Concerning the Christian principle of loving one's enemies, Dr. King wrote: "Why should we love our enemies? Returning hate for hate multiplies hate, adding deeper darkness to a night already devoid of stars. Darkness cannot drive out darkness; only light can do that. Hate cannot drive out hate. Only love can do that ... Love is the only force capable of transforming an enemy into a friend. We never get rid of an enemy by meeting hate with hate; we get rid of an enemy by getting rid of enmity... It is this attitude that made it possible for Lincoln to speak a kind word about the South during the Civil War, when feeling was most bitter. Asked by a shocked bystander how he could do this, Lincoln said, 'Madam, do I not destroy my enemies when I make them my friends?' This is the power of redemptive love."

To a large extent, the black civil rights movement of the '50's and '60's succeeded in ending legalized racial discrimination in America. If the methods used had been violent, the movement could easily have degenerated into a nightmare of interracial hatred; but by remembering the Christian message, "Love your enemy; do good to them that despitefully use you", Martin Luther King Jr. raised the ethical level of the civil rights movement; and the final result was harmony and understanding between the black and white communities. Later the nonviolent methods of Gandhi and King were successfully applied to the South African struggle against Apartheid by Nelson Mandela and his followers.

Here are a few more things that Martin Luther King said

I have decided to stick to love...Hate is too great a burden to bear

Faith is taking the first step even when you can't see the whole staircase.

Our lives begin to end the day we become silent about things that matter.

In the end, we will remember not the words of our enemies, but the silence of our friends.

If you can't fly then run, if you can't run then walk, if you can't walk then crawl, but whatever you do you have to keep moving forward. Only in the darkness can you see the stars.

There comes a time when a person must take a position that is neither safe, nor politic, nor popular, but he must take it because conscience tells him it is right.

Everybody can be great...because anybody can serve. You don't have to have a college degree to serve. You don't have to make your subject and verb agree to serve. You only need a heart full of grace. A soul generated by love.

Forgiveness is not an occasional act, it is a constant attitude.

We must accept finite disappointment, but never lose infinite hope.

There is some good in the worst of us and some evil in the best of us. When we discover this, we are less prone to hate our enemies.

We must live together as brothers or perish together as fools.

Intelligence plus character - that is the goal of true education.

True peace is not merely the absence of tension; it is the presence of justice.

Science investigates; religion interprets. Science gives man knowledge, which is power; religion gives man wisdom, which is control. Science deals mainly with facts; religion deals mainly with values. The two are not rivals.

The ultimate measure of a man is not where he stands in moments of comfort and convenience, but where he stands at times of challenge and controversy.

We know through painful experience that freedom is never voluntarily given by the oppressor, it must be demanded by the oppressed.

Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly, affects all indirectly. We have also come to this hallowed spot to remind America of the fierce urgency of Now. This is no time to engage in the luxury of cooling off or to take the tranquilizing drug of gradualism. Now is the time to make real the promises of democracy.

The time is always right to do what is right.

For when people get caught up with that which is right and they are willing to sacrifice for it, there is no stopping point short of victory.

All we say to America is, 'Be true to what you said on paper.' If I lived in... any totalitarian country, maybe I could understand the denial of certain basic First Amendment privileges, because they hadn't committed themselves to that over there. But somewhere I read of the freedom of assembly. Somewhere I read of the freedom of speech. Somewhere I read of the freedom of the press. Somewhere I read that the greatness of America is the right to protest for right.

We've got some difficult days ahead. But it really doesn't matter with me now because I've been to the mountaintop . . .I've looked over and I've seen the promised land. I may not get there with you. But I want you to know tonight that we as a people will get to the promised land.

Suggestions for further reading

- 1. Craraft, James. Two Shining Souls: Jane Addams, Leo Tolstoy, and the Quest for Global Peace (Lanham: Lexington, 2012). 179 pp.
- 2. Lednicki, Waclaw (April 1947). *Tolstoy through American eyes*. The Slavonic and East European Review. 25 (65).
- 3. *Trotsky's 1908 tribute to Leo Tolstoy* Published by the International Committee of the Fourth International (ICFI).
- 4. *The Life of Tolstoy: Later years* by Aylmer Maude, Dodd, Mead and Company, 1911 at Internet Archive
- 5. Why We Fail as Christians by Robert Hunter, The Macmillan Company, 1919 at Wikiquote
- 6. Why we fail as Christians by Robert Hunter, The Macmillan Company, 1919 at Google Books

Chapter 3

AGAINST THE INSTITUTION OF WAR

3.1 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 this year, 25 will commit 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 selfsacrifice:

"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 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.

3.2 Killing civilians

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

3.2. KILLING CIVILIANS



Figure 3.1: Contemporary Danish painting of the bombardment at night.

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.

WHO IS MY NEIGHBOR?

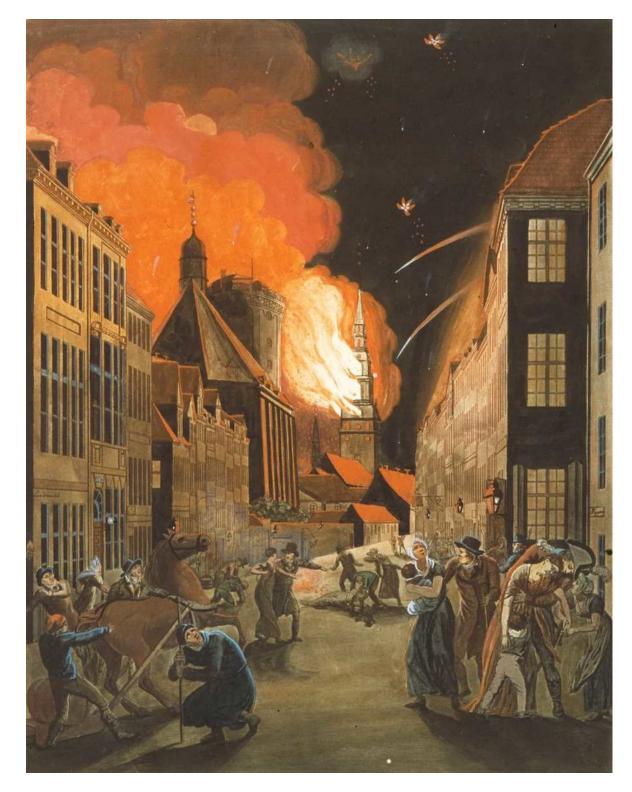


Figure 3.2: An illustration by Eckersberg of the Church of Our Lady being bombarded.



Figure 3.3: *The Most Terrible Night*. View of Kongens Nytorv in Copenhagen During the English Bombardment of Copenhagen at Night between 4 and 5 September 1807.

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.



Figure 3.4: Picasso's famous painting *Guernica* was a protest following the Nazi bombing of civilians in a Basque town,

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



Figure 3.5: The destruction of Dresdin. A statue representing *Peace* survived the bombardment.

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.

Hiroshima and Nagasaki

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 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 over 15,000

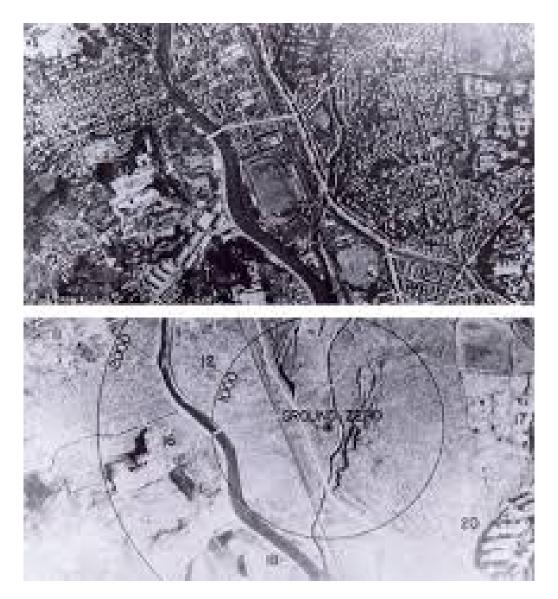


Figure 3.6: Nagasaki, before and after the bomb

nuclear weapons in the world, many of them hydrogen bombs, many on hairtrigger 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.

3.3 The direct and indirect costs of war

The costs of war, both direct and indirect, are so enormous that they are almost beyond comprehension. We face a direct threat because a thermonuclear war may destroy human civilization and much of the biosphere, and an indirect threat because the institution of war interferes seriously with the use of tax money for constructive and peaceful purposes.

Today, despite the end of the Cold War, the world spends roughly 1.7 trillion (i.e. 1.7 million million) US dollars each year on armaments. This colossal flood of money could have been used instead for education, famine relief, development of infrastructure, or on urgently needed public health measures.

The World Health Organization lacks funds to carry through an antimalarial program on as large a scale as would be desirable, but the entire program could be financed for less than our military establishments spend in a single day. Five hours of world arms spending is equivalent to the total cost of the 20-year WHO campaign that 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 per year, while the average spent on education is only \$380 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 drug-resistant form of tuberculosis has recently become widespread in Asia and in the former Soviet Union. In order to combat this new and highly dangerous form of tuberculosis and to prevent its spread, WHO needs \$500 million, an amount equivalent to 1.2 hours of world arms spending.

Today's world is one in which roughly ten million children die every year from starvation or 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 \$6.5 million on armaments.

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

3.4 Medical and psychological consequences; loss of life

While in earlier epochs it may have been possible to confine the effects of war mainly to combatants, in the 20th century the victims of war were increasingly civilians, and especially children. For example, according to Quincy Wright's statistics, the First and Second World Wars 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 UN, 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% and 90%, while in the Lebanese civil war some sources state that the proportion of civilian casualties was as high as 97%.

Civilian casualties often occur through malnutrition and through diseases that 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.¹

3.5 Effects of war on children

According to UNICEF figures, 90% of the casualties of recent wars have been civilians, and 50% children. The organization estimates that in recent years, violent conflicts have driven 20 million children from their homes. They have become refugees or internally displaced persons within their own countries.

During the last decade 2 million children have been killed and 6 million seriously injured or permanently disabled as the result of armed conflicts, while 1 million children have been orphaned or separated from their families. Of the ten countries with the highest rates of death of children under five years of age, seven are affected by armed conflicts. UNICEF estimates that 300,000 child soldiers are currently forced to fight in 30 armed conflicts throughout the world. Many of these have been forcibly recruited or abducted.

Even when they are not killed or wounded by conflicts, children often experience painful psychological traumas: the violent death of parents or close relatives, separation from their families, seeing family members tortured, displacement from home, disruption of ordinary life, exposure to shelling and other forms of combat, starvation and anxiety about the future.²

3.6 Refugees

Human Rights Watch estimates that in 2001 there were 15 million refugees in the world, forced from their countries by war, civil and political conflict, or by gross violations of human rights. In addition, there were an estimated 22 million internally displaced persons, violently forced from their homes but still within the borders of their countries.

In 2001, 78% of all refugees came from ten areas: Afghanistan, Angola, Burma, Burundi, Congo-Kinshasa, Eritrea, Iraq, the Palestinian territories, Somalia and Sudan. A quarter of all refugees are Palestinians, who make up the world's oldest and largest refugee population. 45% of the world's refugees have found sanctuaries in Asia, 30% in Africa, 19% in Europe and 5% in North America.

Refugees who have crossed an international border are in principle protected by Article 14 of the Universal Declaration of Human Rights, which

¹http://www.cadmusjournal.org/article/volume-2/issue-2-part-3/lessons-world-war-i http://www.truth-out.org/opinion/item/27201-the-leading-terrorist-state

²http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2080482/

affirms their right "to seek and to enjoy in other countries asylum from persecution". In 1950 the Office of the High Commissioner for Refugees was created to implement Article 14, and in 1951 the Convention Relating to the Status of Refugees was adopted by the UN. By 2002 this legally binding treaty had been signed by 140 nations. However the industrialized countries have recently adopted a very hostile and restrictive attitude towards refugees, subjecting them to arbitrary arrests, denial of social and economic rights, and even forcible return to countries in which they face persecution.

The status of internally displaced persons is even worse than that of refugees who have crossed international borders. In many cases the international community simply ignores their suffering, reluctant to interfere in the internal affairs of sovereign states. In fact, the United Nations Charter is self-contradictory in this respect, since on the one hand it calls for non-interference in the internal affairs of sovereign states, but on the other hand, people everywhere are guaranteed freedom from persecution by the Charter's Universal Declaration of Human Rights.³

3.7 Damage to infrastructure

Most insurance policies have clauses written in fine print exempting companies from payment of damage caused by war. The reason for this is simple. The damage caused by war is so enormous that insurance companies could never come near to paying for it without going bankrupt.

We mentioned above that the world spends 1.7 trillion dollars each year on preparations for war. A similarly colossal amount is needed to repair the damage to infrastructure caused by war. Sometimes this damage is unintended, but sometimes it is intentional.

During World War II, one of the main aims of air attacks by both sides was to destroy the industrial infrastructure of the opponent. This made some sense in a war expected to last several years, because the aim was to prevent the enemy from producing more munitions. However, during the Gulf War of 1990, the infrastructure of Iraq was attacked, even though the war was expected to be short. Electrical generating plants and water purification facilities were deliberately destroyed with the apparent aim of obtaining leverage over Iraq after the war.

In general, because war has such a catastrophic effect on infrastructure, it can be thought of as the opposite of development. War is the greatest generator of poverty.⁴

³https://www.hrw.org/topic/refugees

⁴https://www.wsws.org/en/articles/2002/11/iraq-n04.html

3.8 Ecological damage

Warfare during the 20th century has not only caused the loss of 175 million lives (primarily civilians) - it has also caused the greatest ecological catastrophes in human history. The damage takes place even in times of peace. Studies by Joni Seager, a geographer at the University of Vermont, conclude that "a military presence anywhere in the world is the single most reliable predictor of ecological damage".

Modern warfare destroys environments to such a degree that it has been described as an "environmental holocaust." For example, herbicides use in the Vietnam War killed an estimated 6.2 billion board-feet of hardwood trees in the forests north and west of Saigon, according to the American Association for the Advancement of Science. Herbicides such as Agent Orange also made enormous areas of previously fertile land unsuitable for agriculture for many years to come. In Vietnam and elsewhere in the world, valuable agricultural land has also been lost because land mines or the remains of cluster bombs make it too dangerous for farming.

During the Gulf War of 1990, the oil spills amounted to 150 million barrels, 650 times the amount released into the environment by the notorious Exxon Valdez disaster. During the Gulf War an enormous number of shells made of depleted uranium were fired. When the dust produced by exploded shells is inhaled it often produces cancer, and it will remain in the environment of Iraq for decades.

Radioactive fallout from nuclear tests pollutes the global environment and causes many thousands of cases of cancer, as well as birth abnormalities. Most nuclear tests have been carried out on lands belonging to indigenous peoples. Agent Orange also produced cancer, birth abnormalities and other serious forms of illness both in the Vietnamese population and among the foreign soldiers fighting in Vietnam⁵

3.9 Links between poverty and war

There are several relationships between intolerable economic inequality and war. Today 2.7 billion people live on less than 2 dollars a day - 1.1 billion on less than 1 dollar per day. 18 million of our fellow humans die each year from

http://www.globalresearch.ca/crimes-against-humanity-the-destruction-of-iraqs-electricity-infrastructure-the-social-economic-and-environmental-impacts/5355665

http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/00157630-EN-ERP-48.PDF

 $^{^{5}} http://www.dailymail.co.uk/news/article-2401378/Agent-Orange-Vietnamese-children-suffering-effects-herbicide-sprayed-US-Army-40-years-ago.html$

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.

Meanwhile, in 2011, world military budgets reached 1,700,000,000,000 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.

Military might is used by powerful industrialized nations to maintain economic hegemony over less developed countries. This is true today, even though the colonial era is supposed to be over (as has been amply documented by Professor Michael Klare in his books on "Resource Wars").

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 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.

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.

There is also another, less obvious, link between intolerable economic inequality war: Abolition of the institution of war will require the replacement of "might makes right" by the rule international law. It will require development of effective global governance. But reform and strengthening of the United Nations is blocked by wealthy countries because they are afraid of loosing their privileged positions. If global economic inequality were less enormous, the problem of unifying the world would be simplified.

Let us work to break the links between poverty and war! To do that, we must work for laws that will restrict the international sale of small arms; we must work for a fair relationship between developing countries and multinational corporations; and above all, we must question the need for colossal military budgets. 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.

3.10 The threat of nuclear war

As bad as conventional arms and conventional weapons may be, it is the possibility of a catastrophic nuclear war that poses the greatest threat to humanity. There are today roughly 16,000 nuclear warheads in the world. The total explosive power of the warheads that exist or that could be made on short notice is approximately equal to 500,000 Hiroshima bombs.

To multiply the tragedy of Hiroshima by a factor of half a million makes an enormous difference, not only quantitatively, but also qualitatively. Those who have studied the question believe that a nuclear catastrophe today would inflict irreversible damage on our civilization, genetic pool and environment.

Thermonuclear weapons consist of an inner core where the fission of uranium-235 or plutonium takes place. The fission reaction in the core is able to start a fusion reaction in the next layer, which contains isotopes of hydrogen. It is possible to add a casing of ordinary uranium outside the hydrogen layer, and under the extreme conditions produced by the fusion reaction, this ordinary uranium can undergo fission. In this way, a fission-fusion-fission bomb of almost limitless power can be produced. For a victim of severe radiation exposure, the symptoms during the first week are nausea, vomiting, fever, apathy, delirium, diarrhoea, oropharyngeal lesions and leukopenia. Death occurs during the first or second week.

We can perhaps be helped to imagine what a nuclear catastrophe means in human terms by reading the words of a young university professor, who was 2,500 meters from the hypocenter at the time of the bombing of Hiroshima: "Everything I saw made a deep impression: a park nearby covered with dead bodies... very badly injured people evacuated in my direction... Perhaps most impressive were girls, very young girls, not only with their clothes torn off, but their skin peeled off as well. ... My immediate thought was that this was like the hell I had always read about. ... I had never seen anything which resembled it before, but I thought that should there be a hell, this was it."

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.

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 1985, International Physicians for the Prevention of Nuclear War received the Nobel Peace Prize. IPPNW had been founded in 1980 by six physicians, three from the Soviet Union and three from the United States. Today, the organization has wide membership among the world's physicians. Professor Bernard Lowen of the Harvard School of Public Health, one of the founders of IPPNW, said in a recent speech:

"...No public health hazard ever faced by humankind equals the threat of nuclear war. Never before has man possessed the destructive resources to make this planet uninhabitable... Modern medicine has nothing to offer, not even a token benefit, in the event of nuclear war..."

"We are but transient passengers on this planet Earth. It does not belong to us. We are not free to doom generations yet unborn. We are not at liberty to erase humanity's past or dim its future. Social systems do not endure for eternity. Only life can lay claim to uninterrupted continuity. This continuity is sacred."

The danger of a catastrophic nuclear war casts a dark shadow over the future of our species. It also casts a very black shadow over the future of the global environment. The environmental consequences of a massive exchange of nuclear weapons have been treated in a number of studies by meteorologists and other experts from both East and West. They predict that a large-scale use of nuclear weapons would result in fire storms with very high winds and high temperatures, which would burn a large proportion of the wild land fuels in the affected nations. The resulting smoke and dust would block out sunlight for a period of many months, at first only in the northern hemisphere but later also in the southern hemisphere.

Temperatures in many places would fall far below freezing, and much of the earth's plant life would be killed. Animals and humans would then die of starvation. The nuclear winter effect was first discovered as a result of the Mariner 9 spacecraft exploration of Mars in 1971. The spacecraft arrived in the middle of an enormous dust-storm on Mars, and measured a large temperature drop at the surface of the planet, accompanied by a heating of the upper atmosphere. These measurements allowed scientists to check their theoretical models for predicting the effect of dust and other pollutants distributed in planetary atmospheres.

Using experience gained from the studies of Mars, R.P. Turco, O.B. Toon, T. Ackerman, J.B. Pollack and C. Sagan made a computer study of the climatic effects of the smoke and dust that would result from a large-scale nuclear war. This early research project is sometimes called the TTAPS Study, after the initials of the authors.

In April 1983, a special meeting was held in Cambridge, Massachusetts, where the results of the TTAPS Study and other independent studies of the nuclear winter effect were discussed by more than 100 experts. Their conclusions were presented at a forum in Washington, D.C., the following December, under the chairmanship of U.S. Senators Kennedy and Hatfield. The numerous independent studies of the nuclear winter effect all agreed of the following main predictions:

High-yield nuclear weapons exploded near the earth's surface would put large amounts of dust into the upper atmosphere. Nuclear weapons exploded over cities, forests, oilfields and refineries would produce fire storms of the type experienced in Dresden and Hamburg after incendiary bombings during the Second World War. The combination of high-altitude dust and lower altitude soot would prevent sunlight from reaching the earth's surface, and the degree of obscuration would be extremely high for a wide range of scenarios.

A baseline scenario used by the TTAPS study assumes a 5,000-megaton nuclear exchange, but the threshold for triggering the nuclear winter effect is believed to be much lower than that. After such an exchange, the screening effect of pollutants in the atmosphere might be so great that, in the northern and middle latitudes, the sunlight reaching the earth would be only 1% of ordinary sunlight on a clear day, and this effect would persist for many months. As a result, the upper layers in the atmosphere might rise in temperature by as much as 100 $^{\circ}$ C, while the surface temperatures would fall, perhaps by as much a 50 $^{\circ}$ C.

The temperature inversion produced in this way would lead to superstability, a condition in which the normal mixing of atmospheric layers is suppressed. The hydrological cycle (which normally takes moist air from the oceans to a higher and cooler level, where the moisture condenses as rain) would be strongly suppressed. Severe droughts would thus take place over continental land masses. The normal cleansing action of rain would be absent in the atmosphere, an effect which would prolong the nuclear winter.

In the northern hemisphere, forests would die because of lack of sunlight, extreme cold, and drought. Although the temperature drop in the southern hemisphere would be less severe, it might still be sufficient to kill a large portion of the tropical forests, which normally help to renew the earth's oxygen.

The oxygen content of the atmosphere would then fall dangerously, while the concentration of carbon dioxide and oxides of nitrogen produced by firestorms would remain high. The oxides of nitrogen would ultimately diffuse to the upper atmosphere, where they would destroy the ozone layer.

Thus, even when the sunlight returned after an absence of many months, it would be sunlight containing a large proportion of the ultraviolet frequencies which are normally absorbed by the ozone in the stratosphere, and therefore a type of light dangerous to life. Finally, after being so severely disturbed, there is no guarantee that the global climate would return to its normal equilibrium.

Even a nuclear war below the threshold of nuclear winter might have climatic effects very damaging to human life. Professor Paul Ehrlich, of Stanford University, has expressed this in the following words:

"...A smaller war, which set off fewer fires and put less dust into the atmosphere, could easily depress temperatures enough to essentially cancel grain production in the northern hemisphere. That in itself would be the greatest catastrophe ever delivered upon Homo Sapiens, just that one thing, not worrying about prompt effects. Thus even below the threshold, one cannot think of survival of a nuclear war as just being able to stand up after the bomb has gone off."⁶

 $^{6} http://www.voanews.com/content/pope-francis-calls-for-nuclear-weapons-ban/2909357.html$

http://www.cadmusjournal.org/article/issue-4/flaws-concept-nuclear-deterrance

http://www.countercurrents.org/avery300713.htm

https://www.wagingpeace.org/author/john-avery/

http://www.commondreams.org/news/2015/08/06/70-years-after-bombing-hiroshima-calls-abolish-nuclear-weapons

http://www.informationclearinghouse.info/article42488.htm



Figure 3.7: U.N. Secretary General Antonio Guterres addressed the Human Rights Council at the United Nations in Geneva, Switzerland February 26, 2018.

http://www.cadmusjournal.org/article/issue-4/flaws-concept-nuclear-deterrance

- http://eruditio.worldacademy.org/issue-6/article/remember-your-humanity
- http://www.informationclearinghouse.info/article42568.htm

- http://www.informationclearinghouse.info/article 42577.htm
- http://www.informationclearinghouse.info/article42580.htm
- http://human-wrongs-watch.net/2015/08/06/us-unleashing-of-atomic-weapons-against-civilian-populations-was-a-criminal-act-of-the-first-order/

http://www.informationclearinghouse.info/article42492.htm

http://www.commondreams.org/views/2015/08/06/hiroshima-and-nagasaki-remembering-power

http://human-wrongs-watch.net/2015/07/22/israel-iran-and-the-nuclear-non-proliferation-treaty/

http://human-wrongs-watch.net/2015/06/25/militarisms-hostages/

http://human-wrongs-watch.net/2015/05/24/the-path-to-zero-dialogues-on-nuclear-dangers-by-richard-falk-and-david-krieger/

http://human-wrongs-watch.net/2015/03/30/europe-must-not-be-forced-into-a-nuclear-war-with-russia/

http://www.truth-out.org/opinion/item/32073-the-us-should-eliminate-its-nuclear-arsenal-not-modernize-it

http://www.cadmusjournal.org/article/issue-6/arms-trade-treaty-opens-new-possibilities-u

https://firstlook.org/theintercept/2014/09/23/nobel-peace-prize-fact-day-syria-7th-country-bombed-obama/

http://human-wrongs-watch.net/2015/08/06/hiroshima-and-nagasaki-remembering-the-power-of-peace/

http://human-wrongs-watch.net/2015/08/04/atomic-bombing-hear-the-story-setsuko-thurlow/

http://human-wrongs-watch.net/2015/08/04/atomic-bombing-hear-the-story-yasuaki-bombing-hear

Speaking to the Conference on Disarmament at the U.N. complex in Geneva, Guterres said many states still wrongly thought that nuclear weapons made the world safer.

"There is great and justified anxiety around the world about the threat of nuclear war," he said.

"Countries persist in clinging to the fallacious idea that nuclear arms make the world safer ... At the global level, we must work towards forging a new momentum on eliminating nuclear weapons."

Two World War I poems by Wilfred Owen

Wilfred Owen and his mentor, Siegfried Sassoon were two poets who eloquently described the horrors of World War I. They met in a military hospital, after both had been wounded in the war. Owen had been writing poetry since the age of 11, but not about war. When he became friends with Sassoon during their hospital stay, Owen was inspired by Sassoon's example and realized that the horrors of trenches and gas warfare deserved to be described realistically in poetry. Against the strong advice of Sassoon, Owen insisted on returning to active duty in France, where he wrote the eloquent and bitter war poems for which he is remembered.

Owen was killed in action exactly one week before the end of the war. His mother received the telegram informing her of his death on Armistice Day, as the church bells were ringing out in celebration. Here are two of Owen's poems:

Dulce et decorum Est

Bent double, like old beggars under sacks, Knock-kneed, coughing like hags, we cursed through sludge, Till on the haunting flares we turned out backs, And towards our distant rest began to trudge. Men marched asleep. Many had lost their boots, But limped on, blood-shod. All went lame, all blind; Drunk with fatigue; deaf even to the hoots Of gas-shells dropping softly behind.

Gas! GAS! Quick, boys! - An ecstasy of fumbling Fitting the clumsy helmets just in time, But someone still was yelling out and stumbling

yamashita/ http://human-wrongs-watch.net/2015/08/03/why-nuclear-weapons/

3.10. THE THREAT OF NUCLEAR WAR

And flound'ring like a man in fire or lime. Dim through the misty panes and thick green light, As under a green sea, I saw him drowning. In all my dreams before my helpless sight He plunges at me, guttering, choking, drowning.

If in some smothering dreams, you too could pace Behind the wagon that we flung him in, And watch the white eyes writhing in his face, His hanging face, like a devil's sick of sin, If you could hear, at every jolt, the blood Come gargling from the froth-corrupted lungs Obscene as cancer, bitter as the cud Of vile, incurable sores on innocent tongues, My friend, you would not tell with such high zest To children ardent for some desperate glory, The old Lie: Dulce et decorum est Pro patria mori.

The parable of the old man and the young

So Abram rose, and clave the wood, and went, And took the fire with him, and a knife. And as they sojourned both of them together, Isaac the first-born spake and said, My Father, Behold the preparations, fire and iron, But where the lamb for this burnt-offering? Then Abram bound the youth with belts and straps, and builded parapets and trenches there, And stretchèd forth the knife to slay his son. When lo! an angel called him out of heaven, Saying, Lay not thy hand upon the lad, Neither do anything to him. Behold, A ram, caught in a thicket by its horns; Offer the Ram of Pride instead of him.

But the old man would not so, but slew his son, And half the seed of Europe, one by one.

We condemn human sacrifice in primitive cultures, but does not our modern industrial society also practice this abominable custom? We sacrifice countless young men and women in endless and unnecessary wars.

World War II: a continuation of World War I

In the Second World War, the number of soldiers killed was roughly the same as in World War I, but the numbers of civilian deaths was much larger. In the USSR alone, about 20 million people are thought to have been killed, directly or indirectly, by World War II, and of these only 7.5 million were battle deaths. Many of the USSR's civilian deaths were caused by starvation, disease or exposure. Civilian populations also suffered greatly in the devastating bombings of cities such as London, Coventry, Rotterdam, Warsaw, Dresden, Cologne, Berlin, Tokyo, Hiroshima and Nagasaki. In World War II, the total number of deaths, civilian and military, is estimated to have been between 62 and 78 million.

Do Benjamin Netanyahu and Ehud Barak, who are contemplating starting what might develop into World War III, have any imaginative concept of what it would be like? Netanyahu has told the Israeli people that only 500 of their citizens would be killed, and that the conflict would be over in a month. One is reminded of the Austrian leaders in 1914, who started a what they thought would be a small action to punish the Serbian nationalists for their Pan-Slavic ambitions. When the result was a world-destroying war, they said "That is not what we intended." Of course it is not what they intended, but nobody can control the escalation of conflicts. The astonishing unrealism of the Netanyahu-Barak statements also reminds one of Kaiser Wilhelm's monumentally unrealistic words to his departing troops: "You will be home before the leaves are off the trees."

The planned attack on Iran would not only violate international law, but would also violate common sense and the wishes of the people of Israel. The probable result would be a massive Iranian missile attack on Tel Aviv, and Iran would probably also close the Straits of Hormuz. If the United States responded by bombing Iranian targets, Iran would probably use missiles to sink one or more of the US ships in the Persian Gulf. One can easily imagine other steps in the escalation of the conflict: a revolution in Pakistan; the entry of nuclear-armed Pakistan into the war on the side of Iran; a preemptive nuclear strike by Israel against Pakistan's nuclear weapons; and Chinese-Russian support of Iran. In the tense atmosphere of such a war, the danger of a major nuclear exchange, due to accident or miscalculation, would be very great.

Today, because the technology of killing has continued to develop, the danger of a catastrophic war with hydrogen bombs hangs like a dark cloud over the future of human civilization. The total explosive power of today's 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 are more than 15,000 nuclear weapons in the world today, about 4,000 of them on hair-trigger alert. The phrase "hair trigger alert" means that the person in charge has only 15 minutes to decide whether the warning from the radar system was true of false, and to decide whether or not to launch a counterattack. The danger of accidental nuclear war continues to be high. Technical failures and human failures have many times brought the world close to a catastrophic nuclear war. Those who know the system of "deterrence" best describe it as "an accident waiting to happen".

No one can win a nuclear war, just as no one can win a natural catastrophe like an earthquake or a tsunami. The effects of a nuclear war would be global, and all the nations of the world would suffer - also neutral nations.

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, blocking the hydrological cycle and destroying the ozone layer. Because of the devastating effect on global agriculture, darkness from even a small nuclear war could result in an estimated billion deaths from famine. This number corresponds to the fact that today, a billion people are chronically undernourished. If global agriculture were sufficiently damaged by a nuclear war, these vulnerable people might not survive. A large-scale nuclear war would be an even greater global catastrophe, completely destroying all agriculture for a period of ten years.

The tragedies of Chernobyl and Fukushima remind us that a nuclear war would make large areas of the world permanently uninhabitable because of long-lasting radioactive contamination.

The First World War was a colossal mistake. Today, the world stands on the threshold of an equally enormous disaster. Must we again be lead into a world-destroying war by a few blind individuals who do not have the slightest idea of what such a war would be like?

WHO IS MY NEIGHBOR?



3.11 Atoms for peace?

"Atoms for Peace", the title of U.S. President Dwight D. Eisenhower's 1953 speech to the U.N. General Assembly, may be regarded by future generations as being tragically self-contradictory. Nuclear power generation has led not only to dangerous proliferation of nuclear weapons, but also to disasters which have made large areas of the world permanently uninhabitable because of long-lived radioactive contamination.

According to Wikipedia, "...Under Atoms for Peace related programs, the US exported 25 tons of highly enriched uranium to 30 countries, mostly to fuel research reactors....The Soviet Union also exported 11 tons of HEU under a similar program." This enormous quantity of loose weapons-usable highly enriched uranium, is now regarded as very worrying because of proliferation and terrorism risks.

A recent article in "The Examiner" (http://www.examiner.com/article/nuclearsecurity-u-s-fails-to-protect-its-nuclear-materials-overseas) pointed out that "...NRC and DOE could not account for the current location and disposition of U.S. HEW overseas in response to a 1992 congressional mandate. U.S. agencies, in a 1993 report produced in response to the mandate, were able to verify the location of only 1.160 kilograms out of 17,500 kilograms of U.S. HEW estimated to have been exported."

The dangers of nuclear power generation are exemplified by the Chernobyl disaster: On the 26th of April, 1986, during the small hours of the morning, the staff of the Chernobyl nuclear reactor in Ukraine turned off several safety systems in order to perform a test. The result was a core meltdown in Reactor 4, causing a chemical explosion that blew off the reactor's 1,000-ton steel and concrete lid. 190 tons of highly radioactive uranium and graphite were hurled into the atmosphere.

The resulting radioactive fallout was 200 times greater than that caused by the nuclear bombs that destroyed Hiroshima and Nagasaki. The radioactive cloud spread over Belarus, Ukraine, Russia, Finland, Sweden and Eastern Europe, exposing the populations of these regions to levels of radiation 100 times the normal background. Ultimately, the radioactive cloud reached as far as Greenland and parts of Asia.

The exact number of casualties resulting from the Chernobyl meltdown is a matter of controversy, but according to a United Nations report, as many as 9 million people have been adversely affected by the disaster. Since 1986, the rate of thyroid cancer in affected areas has increased ten-fold. An area of 155,000 square kilometers (almost half the size of Italy) in Belarus, Ukraine and Russia is still severely contaminated. Even as far away as Wales, hundreds of farms are still under restrictions because of sheep eating radioactive grass.

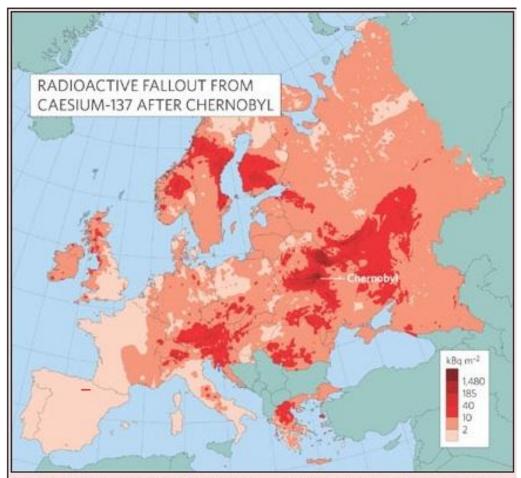


The more recent disaster of 11 March, 2011, may prove to be very much worse than Chernobyl. According to an article by Harvey Wasserman (http://www.commondreams.org/view/2014/02/03-3),

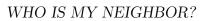
the ongoing fallout from the Fukushima catastrophe is already far in excess of that from Chernobyl. Ecosystems of the entire Pacific ocean are being contaminated by the 300 tons of radioactive water from Fukushima.that continue to pour into the Pacific every day.

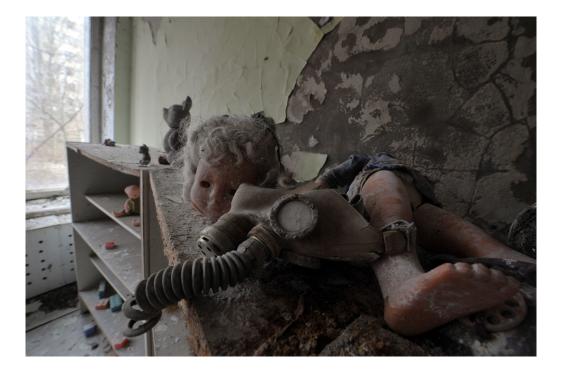
Meanwhile, the increasingly militaristic government of Japan's Prime Minister Shinzo Abe has passed a State Secrets Act that makes it an offense punishable by 5 year's imprisonment for journalists to report on the situation. Under this cloak of secrecy, attempts are being made to remove highly radioactive used fuel rods balanced precariously in a partially destroyed container hanging in the air above the stricken Unit Four. If an accident should occur, the released radioactivity could dwarf previous disasters.

Public opinion turned against nuclear power generation as a result of the Chernobyl and Fukushima catastrophes. Nevertheless, many governments insist on pushing forward their plans for opening new nuclear power plants, despite popular opposition. Nuclear power could never compete in price with solar energy or wind energy if it were not heavily subsidized by governments. Furthermore, if a careful accounting is made of the CO2 released in the construction of nuclear power plants, the mining, refining and transportation of uranium ore, and the final decommissioning of the plants, the amount of CO2 released is seen to be similar to that of coal-fired plants.



J. SMITH & N. A. BERESFORD CHERNOBYL: CATASTROPHE AND CONSEQUENCES (PRAXIS, CHICHESTER, 2005)









There are three basic reasons why nuclear power generation is is one of the worst ideas ever conceived: First is the danger of proliferation of nuclear weapons, which will be discussed in detail below. Secondly, there is the danger of catastrophic accidents, such as the ones that occurred at Chernobyl and Fukushima. Finally, the problem of how to safely dispose of or store used fuel rods has not been solved.

In thinking about the dangers posed by radioactive waste, we should remember that many of the dangerous radioisotopes involved have half-lives of hundreds of thousands of years. Thus, it is not sufficient to seal them in containers that will last for a century, or even a millennium. We must find containers that will last for a hundred thousand years or more, longer than any human structure has ever lasted.

Of the two bombs that destroyed Hiroshima and Nagasaki, one made use of the rare isotope of uranium, U-235, while the other used plutonium. Both of these materials can be made by a nation with a nuclear power generation program.

Uranium has atomic number 92, i.e., a neutral uranium atom has a nucleus containing 92 positively-charged protons, around which 92 negatively-charged electrons circle. All of the isotopes of uranium have the same number of protons and electrons, and hence the same chemical properties, but they differ in the number of neutrons in their nuclei. For example, the nucleus of U-235 has

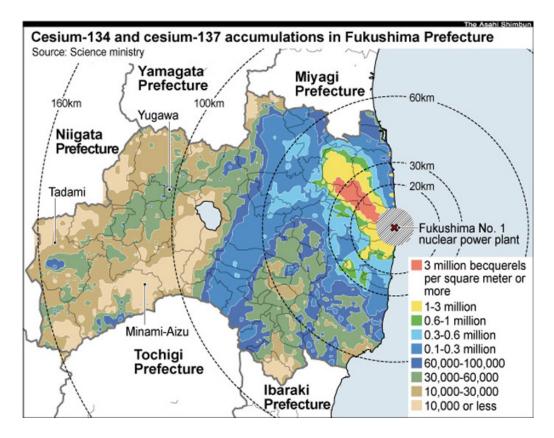


Figure 3.8: People evacuated from the region near to Fukushima wonder when they will be able to return to their homes. The honest answer is "never".

143 neutrons, while that of U-238 has 146. Notice that 92+143=235, while 92+146=238. The number written after the name of an element to specify a particular isotope is the number of neutrons plus the number of protons. This is called the "nucleon number", and the weight of an isotope is roughly proportional to it. This means that U-238 is slightly heavier than U-235. If the two isotopes are to be separated, difficult physical methods dependent on mass must be used, since their chemical properties are identical. In natural uranium, the amount of the rare isotope U-235 is only 0.7 percent.

A paper published in 1939 by Niels Bohr and John A. Wheeler indicated that it was the rare isotope of uranium, U-235, that undergoes fission. A bomb could be constructed, they pointed out, if enough highly enriched U-235 could be isolated from the more common isotope, U-238 Calculations later performed in England by Otto Frisch and Rudolf Peierls showed that the "critical mass" of highly enriched uranium needed is quite small: only a few kilograms.

The Bohr-Wheeler theory also predicted that an isotope of plutonium, Pu-239, should be just as fissionable as U-235. Both U-235 and Pu-239 have odd nucleon numbers. When U-235 absorbs a neutron, it becomes U-236, while when Pu-239 absorbs a neutron it becomes Pu-240. In other words, absorption of a neutron converts both these species to nuclei with even nucleon numbers.

According to the Bohr-Wheeler theory, nuclei with even nucleon numbers are especially tightly-bound. Thus absorption of a neutron converts U-235 to a highly-excited state of U-236, while Pu-239 is similarly converted to a highly excited state of Pu-240. The excitation energy distorts the nuclei to such an extent that fission becomes possible. Instead of trying to separate the rare isotope, U-235, from the common isotope, U-238, physicists could just operate a nuclear reactor until a sufficient amount of Pu-239 accumulated, and then separate it out by ordinary chemical means.

Thus in 1942, when Enrico Fermi and his coworkers at the University of Chicago produced the world's first controlled chain reaction within a pile of cans containing ordinary (nonenriched) uranium powder, separated by blocks of very pure graphite, the chain-reacting pile had a double significance: It represented a new source of energy, but it also had a sinister meaning. It represented an easy path to nuclear weapons, since one of the by-products of the reaction was a fissionable isotope of plutonium, Pu-239. The bomb dropped on Hiroshima in 1945 used U-235, while the Nagasaki bomb used Pu-239.

By reprocessing spent nuclear fuel rods, using ordinary chemical means, a nation with a power reactor can obtain weapons-usable Pu-239. Even when such reprocessing is performed under international control, the uncertainty as to the amount of Pu-239 obtained is large enough so that the operation might superficially seem to conform to regulations while still supplying enough Pu-239 to make many bombs.

The enrichment of uranium, i.e. production of uranium with a higher percentage of U-235 than is found in natural uranium is also linked to reactor use. Many reactors of modern design make use of low enriched uranium (LEU) as a fuel. Nations operating such a reactor may claim that they need a program for uranium enrichment in order to produce LEU for fuel rods. However, by operating their ultracentrifuges a little longer, they can easily produce highly enriched uranium (HEU), i.e. uranium containing a high percentage of the rare isotope U-235, and therefore usable in weapons.

Nuclear power generation is not a solution to the problem of obtaining energy without producing dangerous climate change: Known reserves of uranium are only sufficient for the generation of about 25 terawatt-years of electrical energy (Craig, J.R., Vaugn, D.J. and Skinner, B.J., "Resources of the Earth: Origin, Use and Environmental Impact, Third Edition", page 210). This can be compared with the world's current rate of energy use of over 14 terrawatts. Thus, if all of our energy were obtained from nuclear power, existing reserves of uranium would only be sufficient for about 2 years.

It is sometimes argued that a larger amount of electricity could be obtained from the same amount of uranium through the use of fast breeder reactors, but this would involve totally unacceptable proliferation risks. In fast breeder reactors, the fuel rods consist of highly enriched uranium. Around the core, is an envelope of natural uranium. The flux of fast neutrons from the core is sufficient to convert a part of the U-238 in the envelope into Pu-239, a fissionable isotope of plutonium.

Fast breeder reactors are prohibitively dangerous from the standpoint of nuclear proliferation because both the highly enriched uranium from the fuel rods and the Pu-239 from the envelope are directly weapons-usable. It would be impossible, from the standpoint of equity, to maintain that some nations have the right to use fast breeder reactors, while others do not. If all nations used fast breeder reactors, the number of nuclear weapons states would increase drastically.

It is interesting to review the way in which Israel, South Africa, Pakistan, India and North Korea obtained their nuclear weapons, since in all these cases the weapons were constructed under the guise of "atoms for peace", a phrase that future generations may someday regard as being tragically selfcontradictory.

Israel began producing nuclear weapons in the late 1960's (with the help of a "peaceful" nuclear reactor provided by France, and with the tacit approval of the United States) and the country is now believed to possess 100-150 of them, including neutron bombs. Israel's policy is one of visibly possessing nuclear

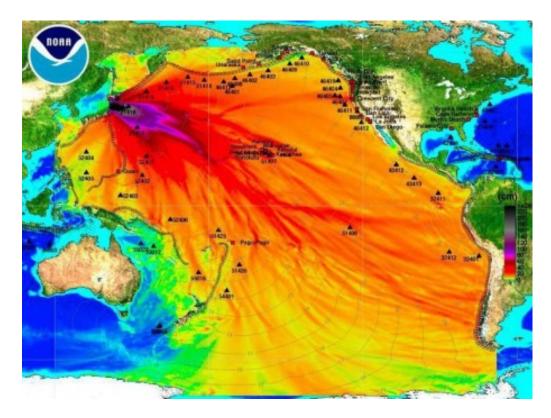


Figure 3.9: Radioactive contamination from the Fukushima disaster is spreading through the food chain of marine life throughout the Pacific region.



Figure 3.10: The Israeli nuclear technician and whistleblower Mordechai Vanunu called public attention to Israel's nuclear weapons while on a trip to England. He was lured to Italy by a Mossad "honey trap", where he was drugged, kidnapped and transported to Israel by Mossad.



Figure 3.11: Vanunu was imprisoned for 18 years, during 11 of which he was held in solitary confinement and subjected to psychological torture, such as not being allowed to sleep for long periods.

weapons while denying their existence.

South Africa, with the help of Israel and France, also weaponized its civil nuclear program, and it tested nuclear weapons in the Indian Ocean in 1979. In 1991 however, South Africa destroyed its nuclear weapons and signed the Nuclear Non-Proliferation Treaty.

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". 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 ultracentrifuges 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 weapons 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 February, 2004) 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..." 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 Libya, Iran and North Korea, and that he had contacts with Al Qaeda. However, observers considered that it was unlikely that Khan would be tried, since a trial might implicate Pakistan's army as well as two of its former prime ministers.

There is a danger that Pakistan's unpopular government may be overthrown, and that the revolutionists might give Pakistan's nuclear weapons to a subnational organization. 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 criminals or terrorists.

There is also a possibility that poorly-guarded fissionable material could fall into the hands of subnational groups, who would then succeed in constructing their own nuclear weapons. Given a critical mass of highly-enriched uranium, a terrorist group, or an organized criminal (Mafia) group, could easily construct a crude gun-type nuclear explosive device. Pu-239 is more difficult to use since it is highly radioactive, but the physicist Frank Barnaby believes that a subnational group could nevertheless construct a crude nuclear bomb (of the Nagasaki type) from this material.

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, or by organized criminals for the purpose of extortion. 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 criminals or 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.

Finally we must remember that if the number of nations possessing nuclear weapons becomes very large, there will be a greatly increased chance that these weapons will be used in conflicts between nations, either by accident or through irresponsible political decisions.

The slogan "Atoms for Peace" has proved to be such a misnomer that it would be laughable if it were not so tragic. Nuclear power generation has been a terrible mistake. We must stop before we turn our beautiful earth into a radioactive wasteland.

3.12 Cancer threat from radioactive leaks at Hanford

On August 9, 1945, a nuclear bomb was dropped on the Japanese city of Nagasaki. Within a radius of one mile, destruction was total. People were

vaporized so that the only shadows on concrete pavements were left to show where they had been. Many people outside the radius of total destruction were trapped in their collapsed houses, and were burned alive by the fire that followed. By the end of 1945, an estimated 80,000 men, women, young children, babies and old people had died as a result of the bombing. As the years passed more people continued to die from radiation sickness.

Plutonium for the bomb that destroyed Nagasaki had been made at an enormous nuclear reactor station located at Hanford in the state of Washington. During the Cold War, the reactors at Hanford produced enough weaponsusable plutonium for 60,000 nuclear weapons. The continued existence of plutonium and highly-enriched uranium-235 in the stockpiles of nuclear weapons states hangs like a dark cloud over the future of humanity. A full scale thermonuclear war would be the ultimate ecological catastrophe, threatening to make the world permanently uninhabitable.

Besides playing a large role in the tragedy of Nagasaki, the reactor complex at Hanford has damaged the health of many thousands of Americans. The prospects for the future are even worse. Many millions of gallons of radioactive waste are held in Hanford's aging storage tanks, the majority of which have exceeded their planned lifetimes. The following quotations are taken from a Wikipedia article on Hanford, especially the section devoted to ecological concerns:

"A huge volume of water from the Columbia River was required to dissipate the heat produced by Hanford's nuclear reactors. From 1944 to 1971, pump systems drew cooling water from the river and, after treating this water for use by the reactors, returned it to the river. Before being released back into the river, the used water was held in large tanks known as retention basins for up to six hours. Longer-lived isotopes were not affected by this retention, and several tetrabecquerels entered the river every day. These releases were kept secret by the federal government. Radiation was later measured downstream as far west as the Washington and Oregon coasts."

"The plutonium separation process also resulted in the release of radioactive isotopes into the air, which were carried by the wind throughout southeastern Washington and into parts of Idaho, Montana, Oregon and British Colombia. Downwinders were exposed to radionuclide's, particularly Iodine 131... These radionuclide's filtered into the food chain via contaminated fields where dairy cows grazed; hazardous fallout was ingested by communities who consumed the radioactive food and drank the milk. Most of these airborne releases were a part of Hanford's routine operations, while a few of the larger releases occurred in isolated incidents."

"In response to an article in the Spokane Spokesman Review in September 1985, the Department of Energy announced its intent to declassify environ-

3.12. CANCER THREAT FROM RADIOACTIVE LEAKS AT HANFORD97

mental records and in February, 1986 released to the public 19,000 pages of previously unavailable historical documents about Hanford's operations. The Washington State Department of Health collaborated with the citizen-led Hanford Health Information Network (HHIN) to publicize data about the health effects of Hanford's operations. HHIN reports concluded that residents who lived downwind from Hanford or who used the Columbia River downstream were exposed to elevated doses of radiation that placed them at increased risk for various cancers and other diseases."

"The most significant challenge at Hanford is stabilizing the 53 million U.S. Gallons (204,000 m3) of high-level radioactive waste stored in 177 underground tanks. About a third of these tanks have leaked waste into the soil and groundwater. As of 2008, most of the liquid waste has been transferred to more secure double-shelled tanks; however, 2.8 million U.S. Gallons (10,600 m3) of liquid waste, together with 27 million U.S. gallons (100,000 m3) of salt cake and sludge, remains in the single-shelled tanks. That waste was originally scheduled to be removed by 2018. The revised deadline is 2040. Nearby aquifers contain an estimated 270 billion U.S. Gallons (1 billion m3) of contaminated groundwater as a result of the leaks. As of 2008, 1 million U.S. Gallons (4,000 m3) of highly radioactive waste is traveling through the groundwater toward the Columbia River."

The documents made public in 1986 revealed that radiation was intentionally and secretly released by the plant and that people living near to it acted as unknowing guinea pigs in experiments testing radiation dangers. Thousands of people who live in the vicinity of the Hanford Site have suffered an array of health problems including thyroid cancers, autoimmune diseases and reproductive disorders that they feel are the direct result of these releases and experiments.

In thinking about the dangers posed by leakage of radioactive waste, we should remember that many of the dangerous radioisotopes involved have halflives of hundreds of thousands of years. Thus, it is not sufficient to seal them into containers that will last for a century or even a millennium. We must find containers that will last for a hundred thousand years or more, longer than any human structure has ever lasted. This logic has lead Finland to deposit its radioactive waste in a complex of underground tunnels carved out of solid rock. But looking ahead for a hundred thousand years involves other problems: If humans survive for that long, what language will they speak? Certainly not the languages of today. How can we warn them that the complex of tunnels containing radioactive waste is a death trap? The reader is urged to see a film exploring these problems, "Into Eternity", by the young Danish film-maker Michael Madsen. Here is the link: http://dotsub.com/view/8e40ebda-5966-4212-9b96-6abbce3c6577. We have already gone a long way towards turning our beautiful planet earth into a nuclear wasteland. In the future, let us be more careful, as guardians of a precious heritage, the natural world and the lives of all future generations.

3.13 An accident waiting to happen

In Stanley Kubrick's film, "Dr. Strangelove", a paranoid ultra-nationalist brigadier general, Jack D. Ripper, orders a nuclear attack on the Soviet Union because he believes that the Soviets are using water fluoridation as a means to rob Americans of their "precious bodily fluids". Efforts are made to recall the US bombers, but this proves to be impossible, and the attack triggers the Soviet "Doomsday Machine". The world is destroyed.

Kubrick's film is a black comedy, and we all laugh at it, especially because of the brilliant performance of Peter Sellers in multiple roles. Unfortunately, however, the film comes uncomfortably close to reality. An all-destroying nuclear war could very easily be started by an insane or incompetent person whose hand happens to be on the red button.

This possibility (or probability) has recently come to public attention through newspaper articles revealing that 11 of the officers responsible for launching US nuclear missiles have been fired because of drug addiction. Furthermore, a larger number of missile launch officers were found to be cheating on competence examinations. Three dozen officers were involved in the cheating ring, and some reports state that an equal number of others may have known about it., and remained silent. Finally, it was shown that safety rules were being deliberately ignored. The men involved, were said to be "burned out".

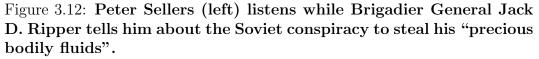
According to an article in The Guardian (Wednesday, 15 January, 2014), "Revelations of misconduct and incompetence in the nuclear missile program go back at least to 2007, when six nuclear-tipped cruise missiles were accidentally loaded onto a B-52 bomber in Minot, North Dakota, and flown to a base in Louisiana."

"Last March, military inspectors gave officers at the ICBM base in Minot the equivalent of a 'D' grade for launch mastery. Â A month later, 17 officers were stripped of their authority to launch the missiles."

"In October, a senior air force officer in charge of 450 ICBM's, major general Michael Carey, was fired after accusations of drunken misconduct during a summer trip to Moscow. An internal investigation found that Carey drank heavily, cavorted with two foreign women and visited a nightclub called La Cantina, where Maj. Gen. Carey had alcohol and kept trying to get the band to let him play with them."

The possibility that a catastrophic nuclear war could be triggered by a





madman gains force from the recent statements of Benjamin Netanyahu, who has said repeatedly that, with or without US help, Israel intends to attack Iran. Such an attack, besides being a war crime, would be literally insane.

If Netanyahu believes that a war with Iran would be short or limited, he is ignoring several very obvious dangers. Such a war would most probably escalate into a widespread general war in the Middle East. It could cause a revolution in Pakistan, and the new revolutionary government of Pakistan would be likely to enter the war on the side of Iran, bringing with it Pakistan's nuclear weapons. Russia and China, both staunch allies of Iran, might be drawn into the conflict. There is a danger that the conflict could escalate into a Third World War, where nuclear weapons might easily be used, either by accident or intentionally.

China could do grave economic damage to the United States through its large dollar holdings. Much of the world's supply of petroleum passes through the Straits of Hormuz, and a war in the region could greatly raise the price of oil, triggering a depression that might rival or surpass the Great Depression of the 1920's and 1930's. \hat{A}

The probability of a catastrophic nuclear war occurring by accident is made greater by the fact that several thousand nuclear weapons are kept on "hairtrigger alert" with a quasi-automatic reaction time measured in minutes. There is a constant danger that a nuclear war will be triggered by an error in evalu-



Figure 3.13: Peter Sellers as Dr. Strangelove. He has to restrain his black-gloved crippled hand, which keeps trying to give a Nazi salute.



Figure 3.14: General Buck Turgidson (George C. Scott) struggles with the Russian Ambassador. Peter Sellers (right) playing the US President, rebukes them for fighting in the War Room.



Figure 3.15: Major T. "King" Kong rides a nuclear bomb on its way down, where it will trigger the Soviet Doomsday Machine and ultimately destroy the world.

ating a signal on a radar screen.



Figure 3.16: Benjamin Netanyahu has stated repeatedly that, with or without US support, Israel will attack Iran, an action that could escalate uncontrollably into World War III.



3.14 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.⁷ 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. Grey⁸ expressed this concern as follows: "The problem, indeed the enduring problem,

⁷Of 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.

⁸Chairman, National Institute for Public Policy

is that we are resting our future upon a nuclear deterrence system concerning which we cannot tolerate even a single malfunction." General Curtis E. LeMay⁹ 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. Blair¹⁰ 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 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.

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

⁹Founder and former Commander in Chief of the United States Strategic Air Command ¹⁰Brookings Institute

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, 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

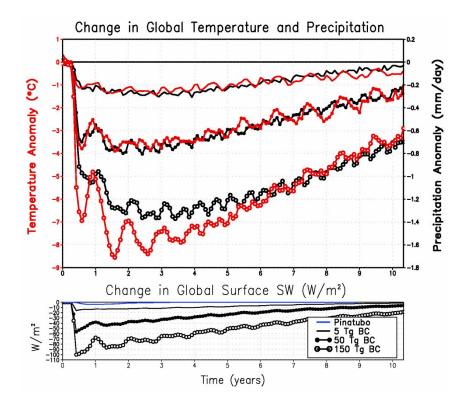


Figure 3.17: Recent studies by atmospheric scientists have shown that the smoke from burning cities produced by even a limited nuclear war would have a devastating effect on global agriculture. The studies show that the smoke would rise to the stratosphere, where it would spread globally and remain for 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)

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.

3.15 Nuclear weapons are criminal! Every war is a crime!

War was always madness, always immoral, always the cause of unspeakable suffering, economic waste and widespread destruction, and always a source of poverty, hate, barbarism and endless cycles of revenge and counter-revenge. It has always been a crime for soldiers to kill people, just as it is a crime for murderers in civil society to kill people. No flag has ever been wide enough to cover up atrocities.

3.15. NUCLEAR WEAPONS ARE CRIMINAL! EVERY WAR IS A CRIME!111

But today, the development of all-destroying modern weapons has put war completely beyond the bounds of sanity and elementary humanity.

Today, war is not only insane, but also a violation of international law. Both the United Nations Charter and the Nuremberg Principles make it a crime to launch an aggressive war. According to the Nuremberg Principles, every soldier is responsible for the crimes that he or she commits, even while acting under the orders of a superior officer.

Nuclear weapons are not only insane, immoral and potentially omnicidal, but also criminal under international law. In response to questions put to it by WHO and the UN General Assembly, the International Court of Justice ruled in 1996 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 selfdefense, 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 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 and effective international control."

Can we not rid ourselves of both nuclear weapons and the institution of war itself? We must act quickly and resolutely before our beautiful world and everything that we love are reduced to radioactive ashes.

Suggestions for further reading

- A. Robock, L. Oman, G. L. Stenchikov, O. B. Toon, C. Bardeen, and R. Turco, *Climatic consequences of regional nuclear conflicts*, Atmospheric Chemistry and Physics, Vol. 7, p. 2003-2012, (2007).
- M. Mills, O. Toon, R. Turco, D. Kinnison, R. Garcia, Massive global ozone loss predicted following regional nuclear conflict, Proceedings of the National Academy of Sciences (USA), vol. 105(14), pp. 5307-12, Apr 8, (2008).
- 3. O. Toon, A. Robock, and R. Turco, *The Environmental Consequences* of Nuclear War, Physics Today, vol. 61, No. 12, p. 37-42, (2008).
- R. Turco, O. Toon, T. Ackermann, J. Pollack, and C. Sagan, Nuclear Winter: Global consequences of multiple nuclear explosions, Science, Vol. 222, No. 4630, pp. 1283-1292, December (1983).
- 5. A. Robock, L. Oman, G. Stenchikov, Nuclear winter revisited with a modern climate model and current nuclear arsenals: Still catastrophic

consequences, Journal of Geophysical Research - Atmospheres, Vol. 112, No. D13, p. 4 of 14, (2007).

- I. Helfand, An Assessment of the Extent of Projected Global Famine Resulting From Limited, Regional Nuclear War, International Physicians for the Prevention of Nuclear War, Physicians for Social Responsibility, Leeds, MA, (2007).
- George P. Schultz, William J. Perry, Henry A. Kissinger and Sam Nunn, *A World Free of Nuclear Weapons*, The Wall Street Journal, January 4, 2007, page A15 and January 15, (2008), page A15.
- 8. Mikhail Gorbachev, *The Nuclear Threat*, The Wall Street Journal, January 30, (2007), page A15.
- Massimo D'Alema, Gianfranco Fini, Giorgio La Malfa, Arturo Parisi and Francesco Calogero, For a World Free of Nuclear Weapons, Corriere Della Sera, July 24, (2008).
- 10. Hoover Institution, Reykjavik Revisited; Steps Towards a World Free of Nuclear Weapons, October, (2007).
- 11. Douglas Hurd, Malcolm Rifkind, David Owen and George Robertson, *Start Worrying and Learn to Ditch the Bomb*, The Times, June 30, (2008).
- 12. Des Brown, Secretary of State for Defense, UK, Laying the Foundations for Multilateral Disarmament, Geneva Conference on Disarmament, February 5, (2008).
- Government of Norway, International Conference on Achieving the Vision of a World Free of Nuclear Weapons, Oslo, Norway, February 26-27, (2008).
- 14. Jonas Gahr Støre, Foreign Minister, Norway, Statement at the Conference on Disarmament, Geneva, March 4, (2008).
- 15. Anne-Grete Strøm-Erichsen, Defense Minister, Norway, *Emerging Opportunities for Nuclear Disarmament*, Pugwash Conference, Canada, July 11, (2008).
- Kevin Rudd, Prime Minister, Australia, International Commission on Nuclear Non-Proliferation and Disarmament, Media Release, July 9, (2008).
- 17. Helmut Schmidt, Richard von Weizäcker, Egon Bahr and Hans-Dietrich Genscher, *Towards a Nuclear-Free World: a German View*, International Herald Tribune, January 9, (2009).
- Hans M. Kristensen and Elliot Negin, Support Growing for Removal of U.S. Nuclear Weapons from Europe, Common Dreams Newscenter, first posted May 6, (2005).
- 19. David Krieger, *President-elect Obama and a World Free of Nuclear Weapons*, Nuclear Age Peace Foundation Website, (2008).

- 20. J.L. Henderson, *Hiroshima*, Longmans (1974).
- A. Osada, Children of the A-Bomb, The Testament of Boys and Girls of Hiroshima, Putnam, New York (1963).
- 22. M. Hachiya, M.D., *Hiroshima Diary*, The University of North Carolina Press, Chapel Hill, N.C. (1955).
- 23. M. Yass, *Hiroshima*, G.P. Putnam's Sons, New York (1972).
- 24. R. Jungk, *Children of the Ashes*, Harcourt, Brace and World (1961).
- B. Hirschfield, A Cloud Over Hiroshima, Baily Brothers and Swinfin Ltd. (1974).
- 26. J. Hersey, *Hiroshima*, Penguin Books Ltd. (1975).
- 27. R. Rhodes, *Dark Sun: The Making of the Hydrogen Bomb*, Simon and Schuster, New York, (1995)
- R. Rhodes, *The Making of the Atomic Bomb*, Simon and Schuster, New York, (1988).
- 29. D.V. Babst et al., Accidental Nuclear War: The Growing Peril, Peace Research Institute, Dundas, Ontario, (1984).
- 30. S. Britten, The Invisible Event: An Assessment of the Risk of Accidental or Unauthorized Detonation of Nuclear Weapons and of War by Miscalculation, Menard Press, London, (1983).
- M. Dando and P. Rogers, *The Death of Deterrence*, CND Publications, London, (1984).
- N.F. Dixon, On the Psychology of Military Incompetence, Futura, London, (1976).
- D. Frei and C. Catrina, *Risks of Unintentional Nuclear War*, United Nations, Geneva, (1982).
- 34. H. L'Etang, *Fit to Lead?*, Heinemann Medical, London, (1980).
- 35. SPANW, Nuclear War by Mistake Inevitable or Preventable?, Swedish Physicians Against Nuclear War, Lulea, (1985).
- 36. J. Goldblat, Nuclear Non-proliferation: The Why and the Wherefore, (SIPRI Publications), Taylor and Francis, (1985).
- J. Schear, ed., Nuclear Weapons Proliferation and Nuclear Risk, Gower, London, (1984).
- D.P. Barash and J.E. Lipton, Stop Nuclear War! A Handbook, Grove Press, New York, (1982).
- 39. C.F. Barnaby and G.P. Thomas, eds., *The Nuclear Arms Race: Control* or *Catastrophe*, Francis Pinter, London, (1982).
- 40. L.R. Beres, *Apocalypse: Nuclear Catastrophe in World Politics*, Chicago University press, Chicago, IL, (1980).
- 41. F. Blackaby et al., eds., *No-first-use*, Taylor and Francis, London, (1984).
- 42. NS, ed., New Statesman Papers on Destruction and Disarmament (NS Report No. 3), New Statesman, London, (1981).

- 43. H. Caldicot, *Missile Envy: The Arms Race and Nuclear War*, William Morrow, New York, (1984).
- 44. R. Ehrlich, Waging the Peace: The Technology and Politics of Nuclear Weapons, State University of New York Press, Albany, NY, (1985).
- 45. W. Epstein, *The Prevention of Nuclear War: A United Nations Perspective*, Gunn and Hain, Cambridge, MA, (1984).
- 46. W. Epstein and T. Toyoda, eds., A New Design for Nuclear Disarmament, Spokesman, Nottingham, (1975).
- 47. G.F. Kennan, The Nuclear Delusion, Pantheon, New York, (1983).
- 48. R.J. Lifton and R. Falk, *Indefensible Weapons: The Political and Psy*chological Case Against Nuclearism, Basic Books, New York, (1982).
- 49. J.R. Macy, *Despair and Personal Power in the Nuclear Age*, New Society Publishers, Philadelphia, PA, (1983).
- A.S. Miller et al., eds., Nuclear Weapons and Law, Greenwood Press, Westport, CT, (1984).
- 51. MIT Coalition on Disarmament, eds., *The Nuclear Almanac: Confronting the Atom in War and Peace*, Addison-Wesley, Reading, MA, (1984).
- 52. UN, Nuclear Weapons: Report of the Secretary-General of the United Nations, United Nations, New York, (1980).
- 53. IC, Proceedings of the Conference on Understanding Nuclear War, Imperial College, London, (1980).
- B. Russell, Common Sense and Nuclear Warfare, Allen and Unwin, London, (1959).
- 55. F. Barnaby, The Nuclear Age, Almqvist and Wiksell, Stockholm, (1974).
- D. Albright, F. Berkhout and W. Walker, *Plutonium and Highly En*riched Uranium 1996: World Inventories, Capabilities and Policies, Oxford University Press, Oxford, (1997).
- 57. G.T. Allison et al., Avoiding Nuclear Anarchy: Containing the Threat of Loose Russian Nuclear Weapons and Fissile Material, MIT Press, Cambridge MA, (1996).
- 58. B. Bailin, The Making of the Indian Atomic Bomb: Science, Secrecy, and the Postcolonial State, Zed Books, London, (1998).
- 59. P. Bidawi and A. Vanaik, South Asia on a Short Fuse: Nuclear Politics and the Future of Global Disarmament, Oxford University Press, Oxford, (2001).
- 60. F.A. Boyle, The Criminality of Nuclear Deterrence: Could the U.S. War on Terrorism Go Nuclear?, Clarity Press, Atlanta GA, (2002).
- 61. G. Burns, The Atomic Papers: A Citizen's Guide to Selected Books and Articles on the Bomb, the Arms Race, Nuclear Power, the Peace Movement, and Related Issues, Scarecrow Press, Metuchen NJ, (1984).

- L. Butler, A Voice of Reason, The Bulletin of Atomic Scientists, 54, 58-61, (1998).
- 63. R. Butler, Fatal Choice: Nuclear Weapons and the Illusion of Missile Defense, Westview Press, Boulder CO, (2001).
- 64. R.P. Carlisle (Ed.), *Encyclopedia of the Atomic Age*, Facts on File, New York, (2001).
- 65. G.A. Cheney, Nuclear Proliferation: The Problems and Possibilities, Franklin Watts, New York, (1999).
- A. Cohen, Israel and the Bomb, Colombia University Press, New York, (1998).
- S.J. Diehl and J.C. Moltz, Nuclear Weapons and Nonproliferation: A Reference Handbook, ABC-Clio Information Services, Santa Barbara CA, (2002).
- 68. H.A. Feiveson (Ed.), The Nuclear Turning Point: A Blueprint for Deep Cuts and De-Alerting of Nuclear Weapons, Brookings Institution Press, Washington D.C., (1999).
- 69. R. Hilsman, From Nuclear Military Strategy to a World Without War: A History and a Proposal, Praeger Publishers, Westport, (1999).
- 70. International Physicians for the Prevention of Nuclear War and The Institute for Energy and Environmental Research *Plutonium: Deadly Gold of the Nuclear Age*, International Physicians Press, Cambridge MA, (1992).
- R.W. Jones and M.G. McDonough, *Tracking Nuclear Proliferation: A Guide in Maps and Charts, 1998*, The Carnegie Endowment for International Peace, Washington D.C., (1998).
- 72. R.J. Lifton and R. Falk, *Indefensible Weapons: The Political and Psy*chological Case Against Nuclearism, Basic Books, New York, (1982).
- 73. R.E. Powaski, March to Armageddon: The United States and the Nuclear Arms Race, 1939 to the Present, Oxford University Press, (1987).
- J. Rotblat, J. Steinberger and B. Udgaonkar (Eds.), A Nuclear-Weapon-Free World: Desirable? Feasible?, Westview Press, (1993).
- 75. The United Methodist Council of Bishops, In Defense of Creation: The Nuclear Crisis and a Just Peace, Graded Press, Nashville, (1986).
- U.S. Congress Office of Technology Assessment (Ed.), Dismantling the Bomb and Managing the Nuclear Materials, U.S. Government Printing Office, Washington D.C., (1993).
- 77. S.R. Weart, Nuclear Fear: A History of Images, Harvard University Press, (1988).
- 78. P. Boyer, By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age, University of North Carolina Press, (1985).

- C. Perrow, Normal Accidents: Living With High-Risk Technologies, Basic Books, (1984).
- 80. P. Rogers, *The Risk of Nuclear Terrorism in Britain*, Oxford Research Group, Oxford, (2006).
- 81. MIT, The Future of Nuclear Power: An Interdisciplinary MIT Study, http://web.mit.edu/nuclearpower, (2003).
- Z. Mian and A. Glaser, *Life in a Nuclear Powered Crowd*, INES Newsletter No. 52, 9-13, April, (2006).
- 83. K. Bergeron, *Nuclear Weapons: The Death of No Dual-use*, Bulletin of the Atomic Scientists, 15-17, January, (2004).
- 84. E. Chivian, and others (eds.), Last Aid: The Medical Dimensions of Nuclear War, W.H. Freeman, San Fransisco, (1982).
- 85. Medical Association's Board of Science and Education, *The Medical Effects of Nuclear War*, Wiley, (1983).
- Kevin Rudd, Prime Minister, Australia, "International Commission on Nuclear Non-Proliferation and Disarmament", Media Release, July 9, 2008.
- 87. Global Zero, www.globalzero.org/paris-conference
- 88. Helmut Schmidt, Richard von Weizäcker, Egon Bahr and Hans-Dietrich Genscher, "Towards a Nuclear-Free World: a German View", International Herald Tribune, January 9, 2009.
- Hans M. Kristensen and Elliot Negin, "Support Growing for Removal of U.S. Nuclear Weapons from Europe", Common Dreams Newscenter, first posted May 6, 2005.
- 90. David Krieger, "President-elect Obama and a World Free of Nuclear Weapons", Nuclear Age Peace Foundation Website, 2008.
- 91. J.L. Henderson, *Hiroshima*, Longmans (1974).
- 92. A. Osada, Children of the A-Bomb, The Testament of Boys and Girls of Hiroshima, Putnam, New York (1963).
- 93. M. Hachiya, M.D., *Hiroshima Diary*, The University of North Carolina Press, Chapel Hill, N.C. (1955).
- 94. M. Yass, *Hiroshima*, G.P. Putnam's Sons, New York (1972).
- 95. R. Jungk, Children of the Ashes, Harcourt, Brace and World (1961).
- B. Hirschfield, A Cloud Over Hiroshima, Baily Brothers and Swinfin Ltd. (1974).
- 97. J. Hersey, *Hiroshima*, Penguin Books Ltd. (1975).
- 98. R. Rhodes, *Dark Sun: The Making of the Hydrogen Bomb*, Simon and Schuster, New York, (1995)
- 99. R. Rhodes, *The Making of the Atomic Bomb*, Simon and Schuster, New York, (1988).

- 100. D.V. Babst et al., Accidental Nuclear War: The Growing Peril, Peace Research Institute, Dundas, Ontario, (1984).
- 101. S. Britten, The Invisible Event: An Assessment of the Risk of Accidental or Unauthorized Detonation of Nuclear Weapons and of War by Miscalculation, Menard Press, London, (1983).
- M. Dando and P. Rogers, *The Death of Deterrence*, CND Publications, London, (1984).
- N.F. Dixon, On the Psychology of Military Incompetence, Futura, London, (1976).
- 104. D. Frei and C. Catrina, Risks of Unintentional Nuclear War, United Nations, Geneva, (1982).
- 105. H. L'Etang, Fit to Lead?, Heinemann Medical, London, (1980).
- 106. SPANW, Nuclear War by Mistake Inevitable or Preventable?, Swedish Physicians Against Nuclear War, Lulea, (1985).
- 107. J. Goldblat, Nuclear Non-proliferation: The Why and the Wherefore, (SIPRI Publications), Taylor and Francis, (1985).
- 108. IAEA, International Safeguards and the Non-proliferation of Nuclear Weapons, International Atomic Energy Agency, Vienna, (1985).
- J. Schear, ed., Nuclear Weapons Proliferation and Nuclear Risk, Gower, London, (1984).
- 110. D.P. Barash and J.E. Lipton, *Stop Nuclear War! A Handbook*, Grove Press, New York, (1982).
- 111. C.F. Barnaby and G.P. Thomas, eds., *The Nuclear Arms Race: Control* or *Catastrophe*, Francis Pinter, London, (1982).
- 112. L.R. Beres, *Apocalypse: Nuclear Catastrophe in World Politics*, Chicago University press, Chicago, IL, (1980).
- 113. F. Blackaby et al., eds., *No-first-use*, Taylor and Francis, London, (1984).
- 114. NS, ed., New Statesman Papers on Destruction and Disarmament (NS Report No. 3), New Statesman, London, (1981).
- H. Caldicot, Missile Envy: The Arms Race and Nuclear War, William Morrow, New York, (1984).
- 116. R. Ehrlich, Waging the Peace: The Technology and Politics of Nuclear Weapons, State University of New York Press, Albany, NY, (1985).
- 117. W. Epstein, *The Prevention of Nuclear War: A United Nations Perspective*, Gunn and Hain, Cambridge, MA, (1984).
- W. Epstein and T. Toyoda, eds., A New Design for Nuclear Disarmament, Spokesman, Nottingham, (1975).
- 119. G.F. Kennan, *The Nuclear Delusion*, Pantheon, New York, (1983).
- 120. R.J. Lifton and R. Falk, Indefensible Weapons: The Political and Psychological Case Against Nuclearism, Basic Books, New York, (1982).

- J.R. Macy, Despair and Personal Power in the Nuclear Age, New Society Publishers, Philadelphia, PA, (1983).
- 122. A.S. Miller et al., eds., Nuclear Weapons and Law, Greenwood Press, Westport, CT, (1984).
- 123. MIT Coalition on Disarmament, eds., The Nuclear Almanac: Confronting the Atom in War and Peace, Addison-Wesley, Reading, MA, (1984).
- 124. UN, Nuclear Weapons: Report of the Secretary-General of the United Nations, United Nations, New York, (1980).
- IC, Proceedings of the Conference on Understanding Nuclear War, Imperial College, London, (1980).
- B. Russell, Common Sense and Nuclear Warfare, Allen and Unwin, London, (1959).
- 127. F. Barnaby, The Nuclear Age, Almqvist and Wiksell, Stockholm, (1974).
- 128. D. Albright, F. Berkhout and W. Walker, *Plutonium and Highly En*riched Uranium 1996: World Inventories, Capabilities and Policies, Oxford University Press, Oxford, (1997).
- 129. G.T. Allison et al., Avoiding Nuclear Anarchy: Containing the Threat of Loose Russian Nuclear Weapons and Fissile Material, MIT Press, Cambridge MA, (1996).
- 130. B. Bailin, The Making of the Indian Atomic Bomb: Science, Secrecy, and the Post-colonial State, Zed Books, London, (1998).
- 131. G.K. Bertsch and S.R. Grillot, (Eds.), Arms on the Market: Reducing the Risks of Proliferation in the Former Soviet Union, Routledge, New York, (1998).
- 132. P. Bidawi and A. Vanaik, South Asia on a Short Fuse: Nuclear Politics and the Future of Global Disarmament, Oxford University Press, Oxford, (2001).
- 133. F.A. Boyle, The Criminality of Nuclear Deterrence: Could the U.S. War on Terrorism Go Nuclear?, Clarity Press, Atlanta GA, (2002).
- 134. G. Burns, The Atomic Papers: A Citizen's Guide to Selected Books and Articles on the Bomb, the Arms Race, Nuclear Power, the Peace Movement, and Related Issues, Scarecrow Press, Metuchen NJ, (1984).
- 135. L. Butler, A Voice of Reason, The Bulletin of Atomic Scientists, 54, 58-61, (1998).
- 136. R. Butler, Fatal Choice: Nuclear Weapons and the Illusion of Missile Defense, Westview Press, Boulder CO, (2001).
- 137. R.P. Carlisle (Ed.), *Encyclopedia of the Atomic Age*, Facts on File, New York, (2001).
- 138. G.A. Cheney, Nuclear Proliferation: The Problems and Possibilities, Franklin Watts, New York, (1999).

- A. Cohen, Israel and the Bomb, Colombia University Press, New York, (1998).
- 140. S.J. Diehl and J.C. Moltz, Nuclear Weapons and Nonproliferation: A Reference Handbook, ABC-Clio Information Services, Santa Barbara CA, (2002).
- 141. H.A. Feiveson (Ed.), The Nuclear Turning Point: A Blueprint for Deep Cuts and De-Alerting of Nuclear Weapons, Brookings Institution Press, Washington D.C., (1999).
- 142. R. Hilsman, From Nuclear Military Strategy to a World Without War: A History and a Proposal, Praeger Publishers, Westport, (1999).
- 143. International Physicians for the Prevention of Nuclear War and The Institute for Energy and Environmental Research *Plutonium: Deadly Gold of the Nuclear Age*, International Physicians Press, Cambridge MA, (1992).
- 144. R.W. Jones and M.G. McDonough, Tracking Nuclear Proliferation: A Guide in Maps and Charts, 1998, The Carnegie Endowment for International Peace, Washington D.C., (1998).
- 145. R.J. Lifton and R. Falk, *Indefensible Weapons: The Political and Psy*chological Case Against Nuclearism, Basic Books, New York, (1982).
- 146. J. Rotblat, J. Steinberger and B. Udgaonkar (Eds.), A Nuclear-Weapon-Free World: Desirable? Feasible?, Westview Press, (1993).
- 147. The United Methodist Council of Bishops, In Defense of Creation: The Nuclear Crisis and a Just Peace, Graded Press, Nashville, (1986).
- 148. U.S. Congress Office of Technology Assessment (Ed.), Dismantling the Bomb and Managing the Nuclear Materials, U.S. Government Printing Office, Washington D.C., (1993).
- 149. S.R. Weart, Nuclear Fear: A History of Images, Harvard University Press, (1988).
- 150. P. Boyer, By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age, University of North Carolina Press, (1985).
- 151. A. Makhijani and S. Saleska, The Nuclear Power Deception: Nuclear Mythology From Electricity 'Too Cheap to Meter' to 'Inherently Safe' Reactors, Apex Press, (1999).
- 152. C. Perrow, Normal Accidents: Living With High-Risk Technologies, Basic Books, (1984).
- 153. P. Rogers, *The Risk of Nuclear Terrorism in Britain*, Oxford Research Group, Oxford, (2006).
- 154. MIT, The Future of Nuclear Power: An Interdisciplinary MIT Study, http://web.mit.edu/nuclearpower, (2003).

- 155. Z. Mian and A. Glaser, *Life in a Nuclear Powered Crowd*, INES Newsletter No. 52, 9-13, April, (2006).
- 156. E. Chivian, and others (eds.), Last Aid: The Medical Dimensions of Nuclear War, W.H. Freeman, San Fransisco, (1982).
- 157. G. Kolko, "Another Century of War", New Press, (2002).
- 158. G. Kolko, "Confronting the Third World: United States Foreign Policy, 1945-1980", Pantheon Books, (1988).
- 159. John A. Hobson, "Imperialism; A Study", (1902).
- 160. M.T. Klare, "Resource Wars: The New Landscape of Global Conflict", Owl Books reprint edition, New York, (2002).

Chapter 4

TRIBALISM AND NATIONALISM

4.1 Ethology

In the long run, because of the terrible weapons that have already been produced through the misuse of science, and because of the even more terrible weapons that are likely to be invented in the future, the only way in which we can ensure the survival of civilization is to abolish the institution of war. But is this possible? Or are the emotions that make war possible so much a part of human nature that we cannot stop humans from fighting any more than we can stop cats and dogs from fighting? Can biological science throw any light on the problem of why our supposedly rational species seems intent on choosing war, pain and death instead of peace, happiness and life? To answer this question, we need to turn to the science of ethology - the study of inherited emotional tendencies and behavior patterns in animals and humans.

In *The Origin of Species*, Charles Darwin devoted a chapter to the evolution of instincts, and he later published a separate book on *The Expression of the Emotions in Man and Animals*. Because of these pioneering studies, Darwin is considered to be the founder of ethology.

Behind Darwin's work in this field is the observation that instinctive behavior patterns are just as reliably inherited as morphological characteristics. Darwin was also impressed by the fact that within a given species, behavior patterns have some degree of uniformity, and the fact that the different species within a family are related by similarities of instinctive behavior, just as they are related by similarities of bodily form. For example, certain elements of cat-like behavior can be found among all members of the cat family; and certain elements of dog-like or wolf-like behavior can be found among all members of the dog family. On the other hand, there are small variations in instinct among the members of a given species. For example, not all domestic dogs behave in the same way.

"Let us look at the familiar case of breeds of dogs", Darwin wrote in *The Origin of Species*, "It cannot be doubted that young pointers will sometimes point and even back other dogs the very first time they are taken out; retrieving is certainly in some degree inherited by retrievers; and a tendency to run round, instead of at, a flock of sheep by shepherd dogs. I cannot see that these actions, performed without experience by the young, and in nearly the same manner by each individual, and without the end being known - for the young pointer can no more know that he points to aid his master than the white butterfly knows why she lays her eggs on the leaf of the cabbage - I cannot see that these actions differ essentially from true instincts..."

"How strongly these domestic instincts habits and dispositions are inherited, and how curiously they become mingled, is well shown when different breeds of dogs are crossed. Thus it is known that a cross with a bulldog has affected for many generations the courage and obstinacy of greyhounds; and a cross with a greyhound has given to a whole family of shepherd dogs a tendency to hunt hares..."

Darwin believed that in nature, desirable variations of instinct are propagated by natural selection, just as in the domestication of animals, favorable variations of instinct are selected and propagated by kennelmen and stock breeders. In this way, according to Darwin, complex and highly developed instincts, such as the comb-making instinct of honey-bees, have evolved by natural selection from simpler instincts, such as the instinct by which bumble bees use their old cocoons to hold honey and sometimes add a short wax tube.

In the introduction of his book, *The Expression of the Emotions in Man* and Animals, Darwin says "I thought it very important to ascertain whether the same expressions and gestures prevail, as has often been asserted without much evidence, with all the races of mankind, especially with those who have associated but little with Europeans. Whenever the same movements of the features or body express the same emotions in several distinct races of man, we may infer with much probability, that such expressions are true ones, - that is, are innate or instinctive."

To gather evidence on this point, Darwin sent a printed questionnaire on the expression of human emotions and sent it to missionaries and colonial administrators in many parts of the world. There were 16 questions to be answered:

1. Is astonishment expressed by the eyes and mouth being opened wide, and by the eyebrows being raised?

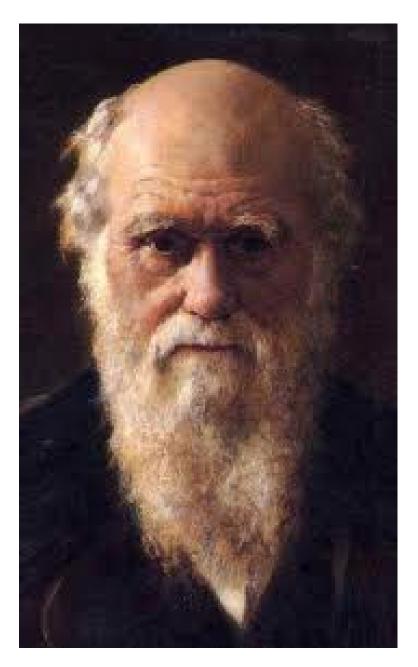


Figure 4.1: Because of Charles Darwin's book "The Expression of Emotions in Man and Animals", he is considered to be the founder of the field of Ethology, the study of inherited behavior patterns.

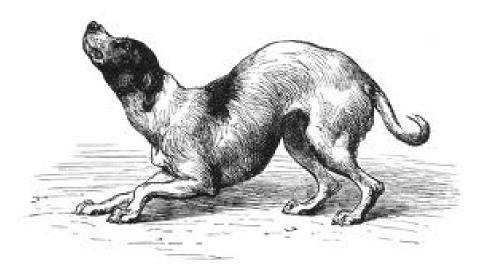


Figure 4.2: A dog expressing affection towards its master.

- 2. Does shame excite a blush when the colour of the skin allows it to be visible? and especially how low down on the body does the blush extend?
- 3. When a man is indignant or defiant does he frown, hold his body and head erect, square his shoulders and clench his fists?
- 4. When considering deeply on any subject, or trying to understand any puzzle, does he frown, or wrinkle the skin beneath the lower eyelids?

and so on.

Darwin received 36 replies to his questionnaire, many coming from people who were in contact with extremely distinct and isolated groups of humans. The results convinced him that our emotions and the means by which they are expressed are to a very large extent innate, rather than culturally determined, since the answers to his questionnaire were so uniform and so independent of both culture and race. In preparation for his book, he also closely observed the emotions and their expression in very young babies and children, hoping to see inherited characteristics in subjects too young to have been greatly influenced by culture. Darwin's observations convinced him that in humans, just as in other mammals, the emotions and their expression are to a very large extent inherited universal characteristics of the species.

The study of inherited behavior patterns in animals (and humans) was continued in the 20th century by such researchers as Karl von Frisch (1886-1982), Nikolaas Tinbergen (1907-1988), and Konrad Lorenz (1903-1989), three scientists who shared a Nobel Prize in Medicine and Physiology in 1973.

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Karl von Frisch, the first of the three ethologists who shared the 1973 prize, is famous for his studies of the waggle-dance of honeybees. Bees guide each other to sources of food by a genetically programmed signaling method - the famous waggle dance, deciphered in 1945 by von Frisch. When a worker bee has found a promising food source, she returns to the hive and performs a complex dance, the pattern of which indicates both the direction and distance of the food. The dancer moves repeatedly in a pattern resembling the Greek letter Θ . If the food-discoverer is able to perform her dance on a horizontal flat surface in view of the sun, the line in the center of the pattern points in the direction of the food. However, if the dance is performed in the interior of the hive on a vertical surface, gravity takes the place of the sun, and the angle between the central line and the vertical represents the angle between the food source and the sun.

The central part of the dance is, in a way, a re-enactment of the excited forager's flight to the food. As she traverses the central portion of the pattern, she buzzes her wings and waggles her abdomen rapidly, the number of waggles indicating the approximate distance to the food ¹. After this central portion of the dance, she turns alternately to the left or to the right, following one or the other of the semicircles, and repeats the performance. Studies of the accuracy with which her hive-mates follow these instructions show that the waggle dance is able to convey approximately 7 bits of information - 3 bits concerning distance and 4 bits concerning direction. After making his initial discovery of the meaning of the dance, von Frisch studied the waggle dance in many species of bees. He was able to distinguish species-specific dialects, and to establish a plausible explanation for the evolution of the dance.

Among the achievements for which Tinbergen is famous are his classic studies of instinct in herring gulls. He noticed that the newly-hatched chick of a herring gull pecks at the beak of its parent, and this signal causes the parent gull to regurgitate food into the gaping beak of the chick. Tinbergen wondered what signal causes the chick to initiate this response by pecking at the beak of the parent gull. Therefore he constructed a series of models of the parent in which certain features of the adult gull were realistically represented while other features were crudely represented or left out entirely. He found by trial and error that the essential signal to which the chick responds is the red spot on the tip of its parent's beak. Models which lacked the red spot produced almost no response from the young chick, although in other respects they were realistic models; and the red spot on an otherwise crude model would make the chick peck with great regularity.

In other experiments, Tinbergen explored the response of newly-hatched

¹The number of waggles is largest when the source of food is near, and for extremely nearby food, the bees use another dance, the "round dance".



Figure 4.3: The red spot on the beak of the parent gull proved to be the crucial signal needed to activate the instinctive response of the chick.



Figure 4.4: Nikolaas Tinbergen (1907-1988) on the left, with Konrad Lorenz (1903-1989). Together with Karl von Frisch (1886-1982) they shared the 1973 Nobel Prize in Physiology and Medicine for their pioneering work in Ethology.

chicks of the common domestic hen to models representing a hawk. Since the chicks were able to recognize a hawk immediately after hatching, he knew that the response must be genetically programmed. Just as he had done in his experiments with herring gulls, Tinbergen experimented with various models, trying to determine the crucial characteristic that was recognized by the chicks, causing them to run for cover. He discovered that a crude model in the shape of the letter T invariable caused the response if pulled across the sky with the wings first and tail last. (Pulled backwards, the T shape caused no response.)

In the case of a newly-hatched herring gull chick pecking at the red spot on the beak of its parent, the program in the chick's brain must be entirely genetically determined, without any environmental component at all. Learning cannot play a part in this behavioral pattern, since the pattern is present in the young chick from the very moment when it breaks out of the egg. On the other hand (Tinbergen pointed out) many behavioral patterns in animals and in man have both an hereditary component and an environmental component. Learning is often very important, but learning seems to be built on a foundation of genetic predisposition.

To illustrate this point, Tinbergen called attention to the case of sheepdogs, whose remote ancestors were wolves. These dogs, Tinbergen tells us, can easily be trained to drive a flock of sheep towards the shepherd. However, it is difficult to train them to drive the sheep away from their master. Tinbergen

WHO IS MY NEIGHBOR?



Figure 4.5: Konrad Lorenz with geese who consider him to be their mother.

explained this by saying that the sheep-dogs regard the shepherd as their "pack leader"; and since driving the prey towards the pack leader is part of the hunting instinct of wolves, it is easy to teach the dogs this maneuver. However, driving the prey away from the pack leader would not make sense for wolves hunting in a pack; it is not part of the instinctive makeup of wolves, nor is it a natural pattern of behavior for their remote descendants, the sheep-dogs.

As a further example of the fact that learning is usually built on a foundation of genetic predisposition, Tinbergen mentions the ease with which human babies learn languages. The language learned is determined by the baby's environment; but the astonishing ease with which a human baby learns to speak and understand implies a large degree of genetic predisposition.

The third of the 1973 prizewinners, Konrad Lorenz, is more controversial, but at the same time very interesting in the context of studies of the causes of war and discussions of how war may be avoided. As a young boy, he was very fond of animals, and his tolerant parents allowed him to build up a large menagerie in their house in Altenberg, Austria. Even as a child, he became an expert on waterfowl behavior, and he discovered the phenomenon of im-

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printing. He was given a one day old duckling, and found, to his intense joy, that it transferred its following response to his person. As Lorenz discovered, young waterfowl have a short period immediately after being hatched, when they identify as their "mother" whomever they see first. In later life, Lorenz continued his studies of imprinting, and there exists a touching photograph of him, with his white beard, standing waist-deep in a pond, surrounded by an adoring group of goslings who believe him to be their mother. Lorenz also studied bonding behavior in waterfowl.

It is, however, for his controversial book *On Aggression* that Konrad Lorenz is best known. In this book, Lorenz makes a distinction between intergroup aggression and intragroup aggression. Among animals, he points out, rankdetermining fights are seldom fatal. Thus, for example, the fights that determine leadership within a wolf pack end when the loser makes a gesture of submission. By contrast, fights between groups of animals are often fights to the death, examples being wars between ant colonies, or of bees against intruders, or the defense of a rat pack against strange rats.

Many animals, humans included, seem willing to kill or be killed in defense of the communities to which they belong. Lorenz calls this behavioral tendency a "communal defense response". He points out that the "holy shiver" - the tingling of the spine that humans experience when performing a heroic act in defense of their communities - is related to the prehuman reflex for raising the hair on the back of an animal as it confronts an enemy - a reflex that makes the animal seem larger than it really is.

Konrad Lorenz and his followers have been criticized for introducing a cathartic model of instincts. According to Lorenz, if an instinct is not used, a pressure for its use builds up over a period of time. In the case of human aggression, according to Lorenz, the nervous energy has to be dissipated in some way, either harmlessly through some substitute for aggression, or else through actual fighting. Thus, for example, Lorenz believed that violent team sports help to reduce the actual level of violence in a society. This conclusion has been challenged by by the distinguished ethologist Prof. R.A. Hinde and by many others in his field who believe that there is no experimental evidence for the cathartic model of aggression.²

²In a 1985 letter to the author, Professor Hinde wrote; "Dear Dr. Avery, I found your pamphlet 'The World as it is and the World as it could be' a very inspiring document, and I hope that it will be widely circulated. But just one comment - amongst the suggestions for further reading you include Konrad Lorenz's 'On Aggression'. The message that comes from this book is that human aggressiveness is inevitably part of our human nature, and we must seek harmless outlets for it. This rests on a cathartic model of human behavior that is outdated. A more appropriate message is that we must find ways of rearing our children so that their propensity to show aggression is reduced, and provide individuals with environments in which any aggressive propensities are not called forth. I'm sure you

Professor Hinde points out that unused instincts tend to atrophy; and he concludes that violent team sports or violence shown on television tend to raise rather than lower the level of harmful violence in a society. Although the cathartic model of aggression is now widely considered to be incorrect (and on this point I certainly agree with Professor Hinde) it seems probable that the communal defense response discussed by Lorenz will prove to be a correct and useful concept. The communal defense mechanism can be thought of as the aspect of human emotions which makes it natural for soldiers to kill or be killed in defense of their countries. In the era before nuclear weapons made war prohibitively dangerous, such behavior was considered to be the greatest of virtues.

Generations of schoolboys have learned the Latin motto: "Dulce et decorum est pro patria mori" - it is both sweet and noble to die for one's country. Even in today's world, death in battle in defense of country and religion is still praised by nationalists. However, because of the development of weapons of mass destruction, both nationalism and narrow patriotism have become dangerous anachronisms.

In thinking of violence and war, we must be extremely careful not to confuse the behavioral patterns that lead to wife-beating or bar-room brawls with those that lead to episodes like the trench warfare of the First World War, or to the nuclear bombing of Hiroshima and Nagasaki. The first type of aggression is similar to the rank-determining fights of animals, while the second is more akin to the team-spirit exhibited by a football side. Heroic behavior in defense of one's community has been praised throughout the ages, but the tendency to such behavior has now become a threat to the survival of civilization, since tribalism makes war possible, and war with thermonuclear weapons threatens civilization with catastrophe.

In an essay entitled *The Urge to Self-Destruction*³, Arthur Koestler says:

"Even a cursory glance at history should convince one that individual crimes, committed for selfish motives, play a quite insignificant role in the human tragedy compared with the numbers massacred in unselfish love of one's tribe, nation, dynasty, church or ideology... Wars are not fought for personal gain, but out of loyalty and devotion to king, country or cause..."

"We have seen on the screen the radiant love of the Führer on the faces of the Hitler Youth... They are transfixed with love, like monks in ecstasy on religious paintings. The sound of the nation's anthem, the sight of its proud

would agree with this. I hope that you will forgive this slight reservation about what seems to me to be a totally admirable and important statement. With best wishes, Yours sincerely, Robert A. Hinde.

³in *The Place of Value in a World of Facts*, A. Tiselius and S. Nielsson editors, Wiley, New York, (1970)

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flag, makes you feel part of a wonderfully loving community. The fanatic is prepared to lay down his life for the object of his worship, as the lover is prepared to die for his idol. He is, alas, also prepared to kill anybody who represents a supposed threat to the idol." The emotion described here by Koestler is the same as the communal defense mechanism ("militant enthusiasm") described in biological terms by Lorenz.

In his book *On Aggression*, Konrad Lorenz gives the following description of the emotions of a hero preparing to risk his life for the sake of the group:

"In reality, militant enthusiasm is a specialized form of communal aggression, clearly distinct from and yet functionally related to the more primitive forms of individual aggression. Every man of normally strong emotions knows, from his own experience, the subjective phenomena that go hand in hand with the response of militant enthusiasm. A shiver runs down the back and, as more exact observation shows, along the outside of both arms. One soars elated, above all the ties of everyday life, one is ready to abandon all for the call of what, in the moment of this specific emotion, seems to be a sacred duty. All obstacles in its path become unimportant; the instinctive inhibitions against hurting or killing one's fellows lose, unfortunately, much of their power. Rational considerations, criticisms, and all reasonable arguments against the behavior dictated by militant enthusiasm are silenced by an amazing reversal of all values, making them appear not only untenable, but base and dishonorable.

Men may enjoy the feeling of absolute righteousness even while they commit atrocities. Conceptual thought and moral responsibility are at their lowest ebb. As the Ukrainian proverb says: 'When the banner is unfurled, all reason is in the trumpet'."

"The subjective experiences just described are correlated with the following objectively demonstrable phenomena. The tone of the striated musculature is raised, the carriage is stiffened, the arms are raised from the sides and slightly rotated inward, so that the elbows point outward. The head is proudly raised, the chin stuck out, and the facial muscles mime the 'hero face' familiar from the films. On the back and along the outer surface of the arms, the hair stands on end. This is the objectively observed aspect of the shiver!"

"Anybody who has ever seen the corresponding behavior of the male chimpanzee defending his band or family with self-sacrificing courage will doubt the purely spiritual character of human enthusiasm. The chimp, too, sticks out his chin, stiffens his body, and raises his elbows; his hair stands on end, producing a terrifying magnification of his body contours as seen from the front. The inward rotation of the arms obviously has the purpose of turning the longest-haired side outward to enhance the effect. The whole combination of body attitude and hair-raising constitutes a bluff. This is also seen when a cat humps its back, and is calculated to make the animal appear bigger and more dangerous than it really is. Our shiver, which in German poetry is called a 'heiliger Schauer', a 'holy' shiver, turns out to be the vestige of a prehuman vegetative response for making a fur bristle which we no longer have. To the humble seeker for biological truth, there cannot be the slightest doubt that human militant enthusiasm evolved out of a communal defense response of our prehuman ancestor."

Lorenz goes on to say, "An impartial visitor from another planet, looking at man as he is today - in his hand the atom bomb, the product of his intelligence in his heart the aggression drive, inherited from his anthropoid ancestors, which the same intelligence cannot control - such a visitor would not give mankind much chance of survival."

There are some semantic difficulties connected with discussions of the parts of human nature that make war possible. In one of the passages quoted above, Konrad Lorenz speaks of "militant enthusiasm", which he says is both a form of communal aggression and also a communal defense response. In their inspiring recent book *War No More*, Professor Robert Hinde and Sir Joseph Rotblat use the word "duty" in discussing the same human emotional tendencies. I will instead use the word "tribalism".

I prefer the word "tribalism" because from an evolutionary point of view the human emotions involved in war grew out of the territorial competition between small tribes during the formative period when our ancestors were hunter-gatherers on the grasslands of Africa. Members of tribe-like groups are bound together by strong bonds of altruism and loyalty. Echos of these bonds can be seen in present-day family groups, in team sports, in the fellowship of religious congregations, and in the bonds that link soldiers to their army comrades and to their nation.

Warfare involves not only a high degree of aggression, but also an extremely high degree of altruism. Soldiers kill, but they also sacrifice their own lives. Thus patriotism and duty are as essential to war as the willingness to kill. As Arthur Koestler points out, "Wars are not fought for personal gain, but out of loyalty and devotion to king, country or cause..."

Tribalism involves passionate attachment to one's own group, self-sacrifice for the sake of the group, willingness both to die and to kill if necessary to defend the group from its enemies, and belief that in case of a conflict, one's own group is always in the right.

4.2 **Population genetics**

If we examine altruism and aggression in humans, we notice that members of our species exhibit great altruism towards their own children. Kindness towards close relatives is also characteristic of human behavior, and the closer the biological relationship is between two humans, the greater is the altruism they tend to show towards each other. This profile of altruism is easy to explain on the basis of Darwinian natural selection since two closely related individuals share many genes and, if they cooperate, the genes will be more effectively propagated.

To explain from an evolutionary point of view the communal defense mechanism discussed by Lorenz - the willingness of humans to kill and be killed in defense of their communities - we have only to imagine that our ancestors lived in small tribes and that marriage was likely to take place within a tribe rather than across tribal boundaries. Under these circumstances, each tribe would tend to consist of genetically similar individuals. The tribe itself, rather than the individual, would be the unit on which the evolutionary forces of natural selection would act. The idea of group selection in evolution was proposed in the 1930's by J.B.S. Haldane and R.A. Fischer, and more recently it has been discussed by W.D. Hamilton and E.O. Wilson.

According to the group selection model, a tribe whose members showed altruism towards each other would be more likely to survive than a tribe whose members cooperated less effectively. Since several tribes might be in competition for the same territory, intertribal aggression might, under some circumstances, increase the chances for survival of one's own tribe. Thus, on the basis of the group selection model, one would expect humans to be kind and cooperative towards members of their own group, but at the same time to sometimes exhibit aggression towards members of other groups, especially in conflicts over territory. One would also expect intergroup conflicts to be most severe in cases where the boundaries between groups are sharpest - where marriage is forbidden across the boundaries.



Figure 4.6: Sir Ronald Aylmer Fischer (1890-1962). Together with J.B.S Haldane he pioneered the theory of population genetics. Recent contributions to this theory have been made by W.D. Hamilton and E.O. Wilson.

4.3 Formation of group identity

Although humans originally lived in small, genetically homogeneous tribes, the social and political groups of the modern world are much larger, and are often multiracial and multiethnic.

There are a number of large countries that are remarkable for their diversity, for example Brazil, Argentina and the United States. Nevertheless it has been possible to establish social cohesion and group identity within each of these enormous nations. India and China too, are mosaics of diverse peoples, but nevertheless, they function as coherent societies. Thus we see that group identity is a social construction, in which artificial "tribal markings" define the boundaries of the group. These tribal markings will be discussed in more detail below.

One gains hope for the future by observing how it has been possible to produce both internal peace and social cohesion over very large areas of the globe - areas that contain extremely diverse populations. The difference between making large, ethnically diverse countries function as coherent sociopolitical units and making the entire world function as a unit is not very great.

Since group identity is a social construction, it is not an impossible goal to think of enlarging the already-large groups of the modern world to include all of humanity.

4.4 Religion and ethnic identity

For the hominids that formed a bridge between present-day humans and the common ancestor of ourselves and the anthropoid apes, culture included not only rudimentary language, but also skills such as methods of tool-making and weapon making.

An acceleration of human cultural development seems to have begun approximately 70,000 years ago. The first art objects date from that period, as do migrations that ultimately took modern man across the Bering Strait to the western hemisphere. A land bridge extending from Siberia to Alaska is thought to have been formed approximately 70,000 years ago, disappearing again roughly 10,000 years before the present. Cultural and genetic studies indicate that migrations from Asia to North America took place during this period. Shamanism,⁴ which is found both in Asia and the new world, as well as among the Sami (Lapps) of northern Scandinavia, is an example of the

⁴A shaman is a special member of a hunting society who, while in a trance, is thought to be able pass between the upper world, the present world, and the lower world, to cure illnesses, and to insure the success of a hunt.

cultural links between the hunting societies of these regions.

Before the acceleration of human cultural development just mentioned, genetic change and cultural change went hand in hand, but during the last 70,000 years, the constantly accelerating rate of information-accumulation and cultural evolution has increasingly outdistanced the rate of genetic change in humans. Genetically we are almost identical with our hunter-gatherer ancestors of 70,000 years ago, but cultural evolution has changed our way of life beyond recognition.

Humans are capable of cultural evolution because it is so easy to overwrite and modify our instinctive behavior patterns with learned behavior. Within the animal kingdom, humans are undoubtedly the champions in this respect. No other species is so good at learning as we are. During the early stages of cultural evolution, the tendency of humans to be religious may have facilitated the overwriting of instinctive behavior with the culture of the tribe. Since religions, like languages, are closely associated with particular cultures, they serve as marks of ethnic identity.

4.5 Tribal markings; ethnicity; pseudospeciation

In biology, a species is defined to be a group of mutually fertile organisms. Thus all humans form a single species, since mixed marriages between all known races will produce children, and subsequent generations in mixed marriages are also fertile. However, although there is never a biological barrier to marriages across ethnic and racial boundaries, there are often very severe cultural barriers.

Irenäus Eibl-Ebesfeldt, a student of Konrad Lorenz, introduced the word *pseudospeciation* to denote cases where cultural barriers between two groups of humans are so strongly marked that marriages across the boundary are difficult and infrequent. In such cases, he pointed out, the two groups function as though they were separate species, although from a biological standpoint this is nonsense. When two such groups are competing for the same land, the same water, the same resources, and the same jobs, the conflicts between them can become very bitter indeed. Each group regards the other as being "not truly human".

In his book *The Biology of War and Peace*, Eibl-Eibesfeldt discusses the "tribal markings" used by groups of humans to underline their own identity and to clearly mark the boundary between themselves and other groups. One of the illustrations in the book shows the marks left by ritual scarification on the faces of the members of certain African tribes. These scars would be



Figure 4.7: Scars help to establish tribal identity

hard to counterfeit, and they help to establish and strengthen tribal identity. Seeing a photograph of the marks left by ritual scarification on the faces of African tribesmen, it is impossible not to be reminded of the dueling scars that Prussian army officers once used to distinguish their caste from outsiders.

Surveying the human scene, one can find endless examples of signs that mark the bearer as a member of a particular group - signs that can be thought of as "tribal markings": tattoos; piercing; bones through the nose or ears; elongated necks or ears; filed teeth; Chinese binding of feet; circumcision, both male and female; unique hair styles; decorations of the tongue, nose, or naval; peculiarities of dress, fashions, veils, chadors, and headdresses; caste markings in India; use or nonuse of perfumes; codes of honor and value systems; traditions of hospitality and manners; peculiarities of diet (certain foods forbidden, others preferred); giving traditional names to children; knowledge of dances and songs; knowledge of recipes; knowledge of common stories, literature, myths, poetry or common history; festivals, ceremonies, and rituals; burial customs, treatment of the dead and ancestor worship; methods of building and decorating homes; games and sports peculiar to a culture; relationship to animals, knowledge of horses and ability to ride; nonrational systems of belief. Even a baseball hat worn backwards or the professed ability to enjoy atonal music can mark a person as a member of a special "tribe". Undoubtedly there many people in New York who would never think of marrying someone who could not appreciate the paintings of Jasper Johns, and many in London who would

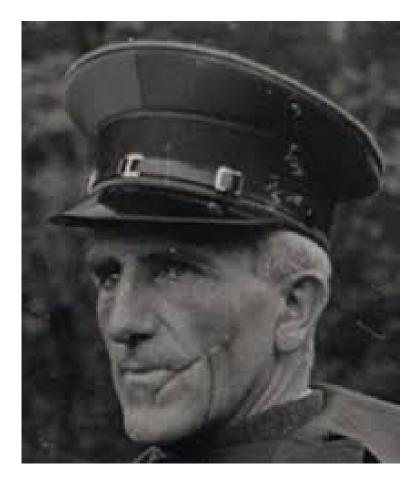


Figure 4.8: An example of the dueling scars that Prussian army officers once used to distinguish their caste from outsiders.

consider anyone had not read all the books of Virginia Wolfe to be entirely outside the bounds of civilization.

By far the most important mark of ethnic identity is language, and within a particular language, dialect and accent. If the only purpose of language were communication, it would be logical for the people of a small country like Denmark to stop speaking Danish and go over to a more universallyunderstood international language such as English. However, language has another function in addition to communication: It is also a mark of identity. It establishes the boundary of the group.

Within a particular language, dialects and accents mark the boundaries of subgroups. For example, in England, great social significance is attached to accents and diction, a tendency that George Bernard Shaw satirized in his play, *Pygmalion*, which later gained greater fame as the musical comedy, My *Fair Lady*. This being the case, we can ask why all citizens of England do not follow the example of Eliza Doolittle in Shaw's play, and improve their social positions by acquiring Oxford accents. However, to do so would be to run the risk of being laughed at by one's peers and regarded as a traitor to one's own local community and friends. School children everywhere can be very cruel to any child who does not fit into the local pattern. At Eton, an Oxford accent is compulsory; but in a Yorkshire school, a child with an Oxford accent would suffer for it.

Next after language, the most important "tribal marking" is religion. As mentioned above, it seems probable that in the early history of our huntergatherer ancestors, religion evolved as a mechanism for perpetuating tribal traditions and culture. Like language, and like the innate facial expressions studied by Darwin, religion is a universal characteristic of all human societies. All known races and cultures practice some sort of religion. Thus a tendency to be religious seems to be built into human nature, or at any rate, the needs that religion satisfies seem to be a part of our inherited makeup. Otherwise, religion would not be so universal as it is.

Religion is often strongly associated with ethnicity and nationalism, that is to say, it is associated with the demarcation of a particular group of people by its culture or race. For example, the Jewish religion is associated with Zionism and with Jewish nationalism. Similarly Islam is strongly associated with Arab nationalism. Christianity too has played an important role in in many aggressive wars, for example in the Crusades, in the European conquest of the New World, in European colonial conquests in Africa and Asia, and in the wars between Catholics and Protestants within Europe. We shall see in a later chapter how the originators of the German nationalist movement (the precursors of the Nazis), used quasi-religious psychological methods.

Human history seems to be saturated with blood. It would be impossible

to enumerate the conflicts with which the story of humankind is stained. Many of the atrocities of history have involved what Irenäus Eibl-Eibesfeldt called "pseudospeciation", that is to say, they were committed in conflicts involving groups between which sharply marked cultural barriers have made intermarriage difficult and infrequent. Examples include the present conflict between Israelis and Palestinians; "racial cleansing" in Kosovo; the devastating wars between Catholics and Protestants in Europe; the Lebanese civil war; genocide committed against Jews and Gypsies during World War II; recent genocide in Rwanda; current intertribal massacres in the Ituri Provence of Congo; use of poison gas against Kurdish civilians by Saddam Hussein's regime in Iraq; the massacre of Armenians by Turks; massacres of Hindus by Muslims and of Muslims by Hindus in post-independence India; massacres of Native Americans by white conquerors and settlers in all parts of the New World; and massacres committed during the Crusades. The list seems almost endless.

Religion often contributes to conflicts by sharpening the boundaries between ethnic groups and by making marriage across those boundaries difficult and infrequent. However, this negative role is balanced by a positive one, whenever religion is the source of ethical principles, especially the principle of universal human brotherhood.

The religious leaders of today's 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.

4.6 The mystery of self-sacrifice in war

Warfare involves not only a high degree of aggression, but also an extremely high degree of altruism. Soldiers kill, but they also sacrifice their own lives. Thus patriotism and duty are as essential to war as the willingness to kill.

Tribalism involves passionate attachment to one's own group, self-sacrifice for the sake of the group, willingness both to die and to kill if necessary to defend the group from its enemies, and belief that in case of a conflict, one's own group is always in the right. Unfortunately these emotions make war possible; and today a Third World War might lead to the destruction of civilization.

At first sight, the willingness of humans to die defending their social groups seems hard to explain from the standpoint of Darwinian natural selection. After the heroic death of such a human, he or she will be unable to produce more children, or to care for those already born. Therefore one might at first suppose that natural selection would work strongly to eliminate the trait of self-sacrifice from human nature. However, the theory of population genetics and group selection can explain both the willingness of humans to sacrifice themselves for their own group, and also the terrible aggression that they sometimes exhibit towards competing groups. It can explain both intra-group altruism and inter-group aggression.

4.7 Fischer, Haldane, Hamilton and Wilson

The idea of group selection in evolution was proposed in the 1930's by J.B.S. Haldane and R.A. Fischer, and more recently it has been discussed by W.D. Hamilton and E.O. Wilson.

If we examine altruism and aggression in humans, we notice that members of our species exhibit great altruism towards their own children. Kindness towards close relatives is also characteristic of human behavior, and the closer the biological relationship is between two humans, the greater is the altruism they tend to show towards each other. This profile of altruism is easy to explain on the basis of Darwinian natural selection since two closely related individuals share many genes and, if they cooperate, the genes will be more effectively propagated.

To explain from an evolutionary point of view the communal defense mechanism - the willingness of humans to kill and be killed in defense of their communities - we have only to imagine that our ancestors lived in small tribes and that marriage was likely to take place within a tribe rather than across tribal boundaries. Under these circumstances, each tribe would tend to consist of genetically similar individuals. The tribe itself, rather than the individual, would be the unit on which the evolutionary forces of natural selection would act.

According to the group selection model, a tribe whose members showed altruism towards each other would be more likely to survive than a tribe whose members cooperated less effectively. Since several tribes might be in competition for the same territory, successful aggression against a neighboring group could increase the chances for survival of one's own tribe. Thus, on the basis of the group selection model, one would expect humans to be kind and cooperative towards members of their own group, but at the same time to sometimes exhibit aggression towards members of other groups, especially in conflicts over territory. One would also expect intergroup conflicts to be most severe in cases where the boundaries between groups are sharpest - where marriage is forbidden across the boundaries.

4.8 Cooperation in groups of animals and human groups

The social behavior of groups of animals, flocks of birds and communities of social insects involves cooperation as well as rudimentary forms of language. Various forms of language, including chemical signals, postures and vocal signals, are important tools for orchestrating cooperative behavior.

The highly developed language of humans made possible an entirely new form of evolution. In cultural evolution (as opposed to genetic evolution), information is passed between generations not in the form of a genetic code, but in the form of linguistic symbols. With the invention of writing, and later the invention of printing, the speed of human cultural evolution greatly increased. Cooperation is central to this new form of evolution. Cultural advances can be shared by all humans.

4.9 Trading in primitive societies

Although primitive societies engaged in frequent wars, they also cooperated through trade. Peter Watson, an English historian of ideas, believes that longdistance trade took place as early as 150,000 before the present. There is evidence that extensive trade in obsidian and flint took place during the stone age. Evidence for wide ranging prehistoric obsidian and flint trading networks has been found in North America. Ancient burial sites in Southeast Asia show that there too, prehistoric trading took place across very large distances. Analysis of jade jewelry from the Philippines, Thailand, Malaysia and Vietnam shows that the jade originated in Taiwan.

The invention of writing was prompted by the necessities of trade. In prehistoric Mesopotamia, clay tokens marked with simple symbols were used for accounting as early as 8,000 BC. Often these tokens were kept in clay jars, and symbols on the outside of the jars indicated the contents. About 3,500 BC, the use of such tokens and markings led to the development of pictographic writing in Mesopotamia, and this was soon followed by the cuneiform script, still using soft clay as a medium. The clay tablets were later dried and baked to ensure permanency. The invention of writing led to a great acceleration of human cultural evolution. Since ideas could now be exchanged and preserved with great ease through writing, new advances in technique could be shared by an ever larger cooperating community of humans. Our species became more and more successful as its genius for cooperation developed.

Early religions tended to be centered on particular tribes, and the ethics associated with them were usually tribal in nature. However, the more cosmopolitan societies that began to form after the Neolithic agricultural revolution required a more universal code of ethics. It is interesting to notice that many of the great ethical teachers of human history, for example Moses, Socrates, Plato, Aristotle, Lao-Tzu, Confucius, Buddha, and Jesus, lived at the time when the change to larger social units was taking place. Tribalism was no longer appropriate. A wider ethic was needed.

Today the size of the social unit is again being enlarged, this time enlarged to include the entire world. Narrow loyalties have become inappropriate and there is an urgent need for a new ethic - a global ethic. Loyalty to one's nation needs to be supplemented by a higher loyalty to humanity as a whole.

4.10 Interdependence in modern human society

The enormous success of humans as a species is due to their genius for cooperation. The success of humans is a success of cultural evolution, a new form of evolution in which information is passed between generations, not in the form of DNA sequences but in the form of speech, writing, printing and finally electronic signals. Cultural evolution is built on cooperation, and has reached great heights of success as the cooperating community has become larger and larger, ultimately including the entire world.

Without large-scale cooperation, modern science would never have evolved. It developed as a consequence of the invention of printing, which allowed painfully gained detailed knowledge to be widely shared. Science derives its great power from concentration. Attention and resources are brought to bear on a limited problem until all aspects of it are understood. It would make no sense to proceed in this way if knowledge were not permanent, and if the results of scientific research were not widely shared. But today the printed word and the electronic word spread the results of research freely to the entire world. The whole human community is the repository of shared knowledge.

The achievements of modern society are achievements of cooperation. We can fly, but no one builds an airplane alone. We can cure diseases, but only through the cooperative efforts of researchers, doctors and medicinal firms. We can photograph and understand distant galaxies, but the ability to do so is built on the efforts of many cooperating individuals. The comfort and wellbeing that we experience depends on far-away friendly hands and minds, since trade is global, and the exchange of ideas is also global.

4.11 Two sides of human nature

Looking at human nature, both from the standpoint of evolution and from that of everyday experience, we see the two faces of Janus; one face shines radiantly; the other is dark and menacing. Two souls occupy the human breast, one warm and friendly, the other murderous. Humans have developed a genius for cooperation, the basis for culture and civilization; but they are also capable of genocide; they were capable of massacres during the Crusades, capable of genocidal wars against the Amerinds, capable of the Holocaust, of Hiroshima, of the killing-fields of Cambodia, of Rwanda, and of Darfur

As an example of the two sides of human nature, we can think of Scandinavia. The Vikings were once feared throughout Europe. The Book of Common Prayer in England contains the phrase "Protect us from the fury of the Northmen!". Today the same people are so peaceful and law-abiding that they can be taken as an example for how we would like a future world to look. Human nature has the possibility for both kinds of behavior depending on the circumstances. This being so, there are strong reasons to enlist the help of education and religion to make the bright side of human nature win over the dark side. Today, the mass media are an important component of education, and thus the mass media have a great responsibility for encouraging the cooperative and constructive side of human nature rather than the dark and destructive side.

4.12 Tribalism and agreed-upon lies

Members of tribelike groups throughout history have marked their identity by adhering to irrational systems of belief. Like the ritual scarification which is sometimes used by primitive tribes as a mark of identity, irrational systems of belief are also a mark of tribal identity. We parade these beliefs to demonstrate that we belong to a special group and that we are proud of it. The more irrational the belief is, the better it serves this purpose. When you and I tell each other that we believe the same nonsense, a bond is forged between us. The worse the nonsense is, the stronger the bond.

Sometimes motives of advantage are mixed in. As the Nobel Laureate biochemist Albert Szent-Györgyi observed, evolution designed the human mind, not for finding truth, but for finding advantage. Within the Orwellian framework of many modern nations, it is extremely disadvantageous to hold the wrong opinions. The wiretappers know what you are thinking.

Also, people often believe what will make them happy. How else can we explain the denial of climate change in the face of massive evidence to the contrary?

But truth has the great virtue that it allows us to accurately predict the future. If we ignore truth because it is unfashionable, or painful, or heretical, the future will catch us unprepared.

4.13 From tribalism to nationalism

70,000 years ago, our hunter-gatherer ancestors lived in tribes. Loyalty to the tribe was natural for our ancestors, as was collective work on tribal projects. Today, at the start of the 21st century, we live in nation-states to which we feel emotions of loyalty very similar to the tribal emotions of our ancestors.

The enlargement of the fundamental political and social unit has been made necessary and possible by improved transportation and communication, and by changes in the techniques of warfare. In Europe, for example, the introduction of canons in warfare made it possible to destroy castles, and thus the power of central monarchs was increased at the expense of feudal barons. At the same time, improved roads made merchants wish to trade freely over larger areas. Printing allowed larger groups of people to read the same books and newspapers, and thus to experience the same emotions. Therefore the size of the geographical unit over which it was possible to establish social and political cohesion became enlarged.

The tragedy of our present situation is that the same forces that made the nation-state replace the tribe as the fundamental political and social unit have continued to operate with constantly-increasing intensity. For this reason, the totally sovereign nation-state has become a dangerous anachronism. Although the world now functions as a single unit because of modern technology, its political structure is based on fragments, on absolutely-sovereign nation states - large compared to tribes, but too small for present-day technology, since they do not include all of mankind. Gross injustices mar today's global economic interdependence, and because of the development of thermonuclear weapons, the continued existence of civilization is threatened by the anarchy that exists today at the international level.

In this chapter, we will discuss nationalism in Europe, and especially the conflicts between absolutely sovereign nation-states that led to the two World Wars. However, it is important to remember that parallel to this story, run others, equally tragic - conflicts in the Middle East, the Vietnam War, the Cuban Missile Crisis, conflicts between India and Pakistan, the Korean War, the two Gulf Wars, and so on. In all of these tragedies, the root the trouble is that international interdependence exists in practice because of modern technology, but our political institutions, emotions and outlook are at the stunted level of the absolutely sovereign nation-state. Although we focus here

on German nationalism as an example, and although historically it had terrible consequences, it is not a danger today. Germany is now one of the world's most peaceful and responsible countries, and the threats to world peace now come from nationalism outside Europe.

4.14 Nationalism in Europe

There is no doubt that the founders of nationalism in Europe were idealists; but the movement that they created has already killed more than sixty million people in two world wars, and today it contributes to the threat of a catastrophic third world war.

Nationalism in Europe is an outgrowth of the Enlightenment, the French Revolution, and the Romantic Movement. According to the philosophy of the Enlightenment and the ideas of the French Revolution, no government is legitimate unless it derives its power from the will of the people. Speaking to the Convention of 1792, Danton proclaimed that "by sending us here as deputies, the French Nation has brought into being a grand committee for the general insurrection of peoples."

Since all political power was now believed to be vested in the "nation", the question of national identity suddenly became acutely important. France itself was a conglomeration of peoples - Normans, Bretons, Provencaux, Burgundians, Flemings, Germans, Basques, and Catalans - but these peoples had been united under a strong central government since the middle ages, and by the time of the French Revolution it was easy for them to think of themselves as a "nation". However, what we now call Germany did not exist. There was only a collection of small feudal principalities, in some of which the most common language was German.

The early political unity of France enabled French culture to dominate Europe during the 17th and 18th centuries. Frederick the Great of Prussia and his court spoke and wrote in French. Frederick himself regarded German as a language of ignorant peasants, and on the rare occasions when he tried to speak or write in German, the result was almost incomprehensible. The same was true in the courts of Brandenburg, Saxony, Pomerania, etc. Each of them was a small-scale Versailles. Below the French-speaking aristocracy was a German-speaking middle class and a German or Slavic-speaking peasantry.

The creators of the nationalist movement in Germany were young middleclass German-speaking students and theologians who felt frustrated and stifled by the narrow *kleinstädtisch* provincial atmosphere of the small principalities in which they lived. They also felt frustrated because their talents were completely ignored by the French-speaking aristocracy. This was the situation when the armies of Napoleon marched across Europe, easily defeating and humiliating both Prussia and Austria. The young German-speaking students asked themselves what it was that the French had that they did not have.

The answer was not hard to find. What the French had was a sense of national identity. In fact, the French Revolution had unleashed long-dormant tribal instincts in the common people of France. It was the fanatical support of the Marseillaise-singing masses that made the French armies invincible. The founders of the German nationalist movement concluded that if they were ever to have a chance of defeating France, they would have to inspire the same fanaticism in their own peoples. They would have to touch the same almostforgotten cord of human nature that the French Revolution had touched.

The common soldiers who fought in the wars of Europe in the first part of the 18th century were not emotionally involved. They were recruited from the lowest ranks of society, and they joined the army of a king or prince for the sake of money. All this was changed by the French Revolution. In June, 1792, the French Legislative Assembly decreed that a Fatherland Alter be erected in each commune with the inscription, "The citizen is born, lives and dies for *la patrie*." The idea of a "Fatherland Alter" clearly demonstrates the quasi-religious nature of French nationalism.

The soldiers in Napoleon's army were not fighting for the sake of money, but for an ideal that they felt to be larger and more important than themselves - Republicanism and the glory of France. The masses, who for so long had been outside of the politics of a larger world, and who had been emotionally involved only in the affairs of their own village, were now fully aroused to largescale political action. The surge of nationalist feeling in France was tribalism on an enormous scale - tribalism amplified and orchestrated by new means of mass communication.

This was the phenomenon with which the German nationalists felt they had to contend. One of the founders of the German nationalist movement was Johan Gottlieb Fichte (1762-1814), a follower of the philosopher Immanuel Kant (1724-1804). Besides rejecting objective criteria for morality, Fichte denied the value of the individual. According to him, the individual is nothing and the state is everything. Denying the value of the individual, Fichte compared the state to an organism of which the individual is a part:

"In a product of nature", Fichte wrote, "no part is what it is but through its relation to the whole, and it would absolutely not be what it is apart from this relation; more, if it had no organic relation at all, it would be absolutely nothing, since without reciprocity in action between organic forces maintaining one another in equilibrium, no form would subsist... Similarly, man obtains a determinate position in the scheme of things and a fixity in nature only through his civil association... Between the isolated man and the citizen there is the



Figure 4.9: A portrait of Napoleon (as he liked to see himself).



Figure 4.10: A romantic figure representing Germany

same relation as between raw and organized matter... In an organized body, each part continuously maintains the whole, and in maintaining it, maintains itself also. Similarly the citizen with regard to the State."

Another post-Kantian, Adam Müller (1779-1829) wrote that "the state is the intimate association of all physical and spiritual needs of the whole nation into one great, energetic, infinitely active and living whole... the totality of human affairs... If we exclude for ever from this association even the most unimportant part of a human being, if we separate private life from public life even at one point, then we no longer perceive the State as a phenomenon of life and as an idea."

The doctrine that Adam Müller sets forth in this passage is what we now call Totalitarianism, i.e. the belief that the state ought to encompass "the totality of human affairs". This doctrine is the opposite of the Liberal belief that the individual is all-important and that the role of the state ought to be as small as possible.

Fichte maintains that "a State which constantly seeks to increase its internal strength is forced to desire the gradual abolition of all favoritisms, and the establishment of equal rights for all citizens, in order that it, the State itself, may enter upon its own true right - to apply the whole surplus power of all its citizens without exception to the furtherance of its own purposes... Internal peace, and the condition of affairs in which everyone may by diligence earn his daily bread... is only a means, a condition and framework for what love of Fatherland really wants to bring about, namely that the Eternal and the Divine may blossom in the world and never cease to become more pure, perfect and excellent."

Fichte proposed a new system of education which would abolish the individual will and teach individuals to become subservient to the will of the state. "The new education must consist essentially in this", Fichte wrote, "that it completely destroys the will in the soil that it undertakes to cultivate... If you want to influence a man at all, you must do more than merely talk to him; you must fashion him, and fashion him, and fashion him in such a way that he simply cannot will otherwise than you wish him to will."

Fichte and Herder (1744-1803) developed the idea that language is the key to national identity. They believed that the German language is superior to French because it is an "original" language, not derived from Latin. In a poem that is obviously a protest against the French culture of Frederick's court in Prussia, Herder wrote:

> "Look at other nationalities! Do they wander about So that nowhere in the world they are strangers Except to themselves? They regard foreign countries with proud disdain. And you, German, alone, returning from abroad, Wouldst greet your mother in French? Oh spew it out before your door! Spew out the ugly slime of the Seine! Speak German, O you German!

Another poem, "The German Fatherland", by Ernst Moritz Arndt (1769-1860), expresses a similar sentiment:

"What is the Fatherland of the German? Name me the great country! Where the German tongue sounds And sings *Lieder* in God's praise, That's what it ought to be Call that thine, valiant German! That is the Fatherland of the German, Where anger roots out foreign nonsense, Where every Frenchman is called enemy, Where every German is called friend, That's what it ought to be! It ought to be the whole of Germany!"

It must be remembered that when these poems were written, the German nation did not exist except in the minds of the nationalists. Groups of people speaking various dialects of German were scattered throughout central and eastern Europe. In many places, the German-speaking population was a minority. To bring together these scattered German-speaking groups would require, in many cases, the conquest and subjugation of Slavic majorities; but the quasi-religious fervor of the nationalists was such that aggression took on the appearance of a "holy war". Fichte believed that war between states introduces "a living and progressive principle into history". By war he did not mean a decorous limited war of the type fought in the 18th century, but "...a true and proper war - a war of subjugation!"

The German nationalist movement was not only quasi-religious in its tone; it also borrowed psychological techniques from religion. It aroused the emotions of the masses to large-scale political activity by the use of semi-religious political liturgy, involving myth, symbolism, and festivals. In his book "German Society" (1814), Arndt advocated the celebration of "holy festivals". For example, he thought that the celebration of the pagan festival of the summer solstice could be combined with a celebration of the victory over Napoleon at the Battle of Leipzig.

Arndt believed that special attention should be given to commemoration of the "noble dead" of Germany's wars for, as he said, "…here history enters life, and life becomes part of history". Arndt advocated a combination of Christian and pagan symbolism. The festivals should begin with prayers and a church service; but in addition, the Oak leaves and the sacred flame of ancient pagan tradition were to play a part.

In 1815, many of Arndt's suggestions were followed in the celebration of the anniversary of the Battle of Leipzig. This festival clearly exhibited a mixing of secular and Christian elements to form a national cult. Men and women



Figure 4.11: Celebration of the "German May" at Hambrach Castle

decorated with oak leaves made pilgrimages to the tops of mountains, where they were addressed by priests speaking in front of alters on which burned "the sacred flame of Germany's salvation". This borrowing of psychological techniques from religion was deliberate, and it was retained by the Nazi Party when the latter adopted the methods of the early German nationalists. The Nazi mass rallies retained the order and form of Protestant liturgy, including hymns, confessions of faith, and responses between the leader and the congregation.⁵

In 1832, the first mass meeting in German history took place, when 32,000 men and women gathered to celebrate the "German May". Singing songs, wearing black, red, and gold emblems, and carrying flags, they marched to Hambrach Castle, where they were addressed by their leaders.

By the 1860's the festivals celebrating the cult of nationalism had acquired a definite form. Processions through a town, involving elaborate national symbolism, were followed by unison singing by men's choirs, patriotic plays, displays by gymnasts and sharp-shooters, and sporting events. The male choirs, gymnasts and sharp-shooters were required to wear uniforms; and the others attending the festivals wore oak leaves in their caps. The cohesion of the crowd was achieved not only by uniformity of dress, but also by the space in which the crowd was contained. Arndt advocated the use of a "sacred space" for mass

⁵ The Nazi sacred symbols and the concept of the swastika or "gamma cross", the eagle, the red/black/white color scheme, the ancient Nordic runes (one of which became the symbol of the SS), were all adopted from esoteric traditions going back centuries, shared by Brahmins, Scottish Masons, Rosicrutians, the Knights Templars and other esoteric societies.

meetings. The idea of the "sacred space" was taken from Stonehenge, which was seen by the nationalists as a typical ancient Germanic meeting place. The Nazi art historian Hubert Schrade wrote: "The space which urges us to join the community of the *Volk* is of greater importance than the figure which is meant to represent the Fatherland."

Dramas were also used to promote a feeling of cohesion and national identity. An example of this type of propagandist drama is Kleist's play, "Hermann's Battle", (1808). The play deals with a Germanic chieftain who, in order to rally the tribes against the Romans, sends his own men, disguised as Roman soldiers, to commit atrocities in the neighboring German villages. At one point in the play, Hermann is told of a Roman soldier who risked his own life to save a German child in a burning house. Hearing this report, Hermann exclaims, "May he be cursed if he has done this! He has for a moment made my heart disloyal; he has made me for a moment betray the august cause of Germany!... I was counting, by all the gods of revenge, on fire, loot, violence, murder, and all the horrors of unbridled war! What need have I of Latins who use me well?"

At another point in the play, Hermann's wife, Thusnelda, tempts a Roman Legate into a romantic meeting in a garden. Instead of finding Thusnelda, the Legate finds himself locked in the garden with a starved and savage she-bear. Standing outside the gate, Thusnelda urges the Legate to make love to the she-bear, and, as the bear tears him to pieces, she faints with pleasure.

Richard Wagner's dramas were also part of the nationalist movement. They were designed to create "an unending dream of sacred *völkisch* revelation". No applause was permitted, since this would disturb the reverential atmosphere of the cult. A new type of choral theater was developed which "...no longer represented the fate of the individual to the audience, but that which concerns the community, the *Volk*... Thus, in contrast to the bourgeois theater, private persons are no longer represented, but only types."

We have primarily been discussing the growth of German nationalism, but very similar movements developed in other countries throughout Europe and throughout the world. Characteristic for all these movements was the growth of state power, and the development of a reverential, quasi-religious, attitude towards the state. Patriotism became "a sacred duty." According to Georg Wilhelm Fredrich Hegel, "The existence of the State is the movement of God in the world. It is the ultimate power on earth; it is its own end and object. It is an ultimate end that has absolute rights against the individual."

Nationalism in England (as in Germany) was to a large extent a defensive response against French nationalism. At the end of the 18th century, the liberal ideas of the Enlightenment were widespread in England. There was much sympathy in England with the aims of the French Revolution, and a

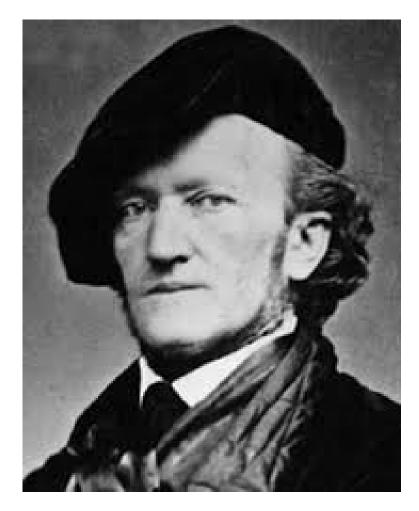


Figure 4.12: Wagner's dramas were part of the quasi-religious cult of German nationalism-



Figure 4.13: A painting from Francisco de Goya's series on the *Disasters of War*.

WHO IS MY NEIGHBOR?



Figure 4.14: Y no hay remedio (And it cannot be helped). Prisoners executed by firing squads, reminiscent of The Third of May 1808, from Goya's series on the *Disasters of War*.

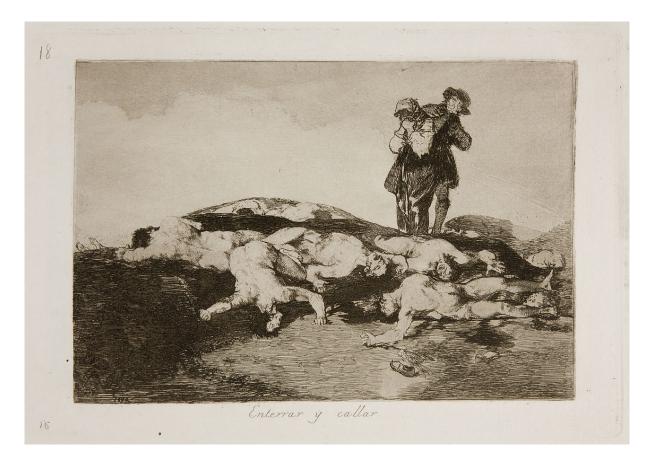


Figure 4.15: Goya's Enterrar y callar (Bury them and keep quiet). Atrocities, starvation and human degradation.



Figure 4.16: One of a series of prints which the German artist Käthe Kollwitz (1867-1945) made as a protest against the atrocities of World War I.



Figure 4.17: Another anti-war print by Käthe Kollwitz.

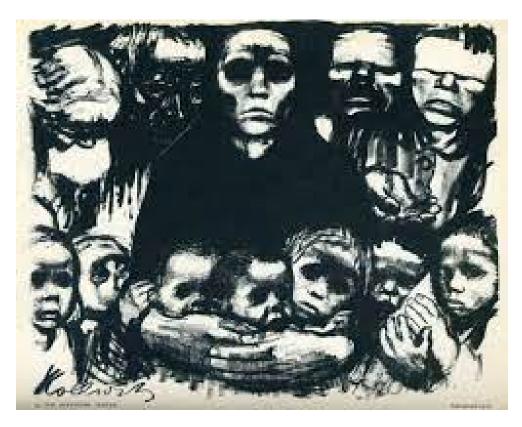


Figure 4.18: Never Again War by Käthe Kollwitz.



Figure 4.19: Never Again War (poster) by Käthe Kollwitz.



Figure 4.20: About Mothers and Children by Käthe Kollwitz.

similar revolution almost took place in England. However, when Napoleon landed an army in Ireland and threatened to invade England, there was a strong reaction towards national self-defense. The war against France gave impetus to nationalism in England, and military heros like Wellington and Nelson became objects of quasi-religious worship. British nationalism later found an outlet in colonialism.

Italy, like Germany, had been a collection of small principalities, but as a reaction to the other nationalist movements sweeping across Europe, a movement for a united Italy developed. The conflicts between the various nationalist movements of Europe produced the frightful world wars of the 20th century. Indeed, the shot that signaled the outbreak of World War I was fired by a Serbian nationalist.

War did not seem especially evil to the 18th and 19th century nationalists because technology had not yet given humanity the terrible weapons of the 20th century. In the 19th century, the fatal combination of space-age science and stone-age politics still lay in the future. However, even in 1834, the German writer Heinrich Heine was perceptive enough to see the threat:

"There will be", Heine wrote, "Kantians forthcoming who, in the world to come, will know nothing of reverence for aught, and who will ravage without mercy, and riot with sword and axe through the soil of all European life to dig out the last root of the past. There will be well-weaponed Fichtians upon the ground, who in the fanaticism of the Will are not restrained by fear or self-advantage, for they live in the Spirit."

Suggestions for further reading

- 1. C. Darwin, *The Expression of Emotions in Man and Animals*, The University of Chicago Press (1965).
- 2. P. Kropotkin, *Mutual Aid, A Factor in Evolution*, Walter Heinemann, London, (1902).
- R.A. Fischer, *The Genetical Theory of Natural Selection*, Clarendon, Oxford, (1930).
- 4. J.B.S. Haldane, *Population genetics*, New Biology 18, 34-51, (1955).
- 5. L. Margulis, Symbiosis as a Source of Evolutionary Innovation: Speciation and Morphogenesis, The MIT Press, (1991).
- L. Margulis, Symbiosis in Cell Evolution: Microbial Communities in the Archean and Proterozoic Eons, W.H. Freeman, (1992).
- 7. N. Tinbergen, The Study of Instinct, Oxford University Press, (1951).
- 8. I. Eibl-Eibesfeldt, *The Biology of Peace and War*, Thames and Hudson, New York (1979).
- 9. E.O. Wilson, On Human Nature, Bantham Books, New York, (1979).

- R.A. Hinde, Biological Bases of Human Social Behavior, McGraw-Hill, New York (1977).
- 11. R.A. Hinde, *Individuals, Relationships and Culture: Links Between Ethology and the Social Sciences*, Cambridge University Press, (1987).
- W.M. Senner, editor, *The Origins of Writing*, University of Nebraska Press, Lincoln and London, (1989).
- P.J. Bowler, *Evolution: The History of an Idea*, University of California Press, (1989).
- D.J. Futuyma, *Evolutionary Biology*, Sinauer Associates, Sunderland Mass., (1986).
- B. Glass, O. Temkin, and W.L. Strauss, eds., Forerunners of Darwin: 1745-1859, Johns Hopkins Press, Baltimore, (1959).
- 16. R. Milner, *The Encyclopedia of Evolution*, an Owl Book, Henry Holt and Company, New York, (1990).
- 17. T.A. Appel, *The Cuvier-Geoffroy Debate: French Biology in the Decades before Darwin*, Oxford University Press, (1987).
- P.J. Bowler, Fossils and Progress: Paleontology and the Idea of Progressive Evolution in the Nineteenth Century, Science History Publications, New York, (1976).
- P. Corsi, The Age of Lamarck: Evolutionary Theories in France, 1790-1834, University of California Press, Berkeley, (1988).
- 20. M. McNeil, Under the Banner of Science: Erasmus Darwin and his Age, Manchester University Press, Manchester, (1987).
- L.G. Wilson, Sir Charles Lyell's Scientific Journals on the Species Question, Yale University Press, New Haven, (1970).
- 22. A.B. Adams, *Eternal Quest: The Story of the Great Naturalists*, G.P. Putnam's Sons, New York, (1969).
- 23. A.S. Packard, *Lamarck, the Founder of Evolution: His Life and Work*, Longmans, Green, and Co., New York, (1901).
- 24. C. Darwin, An historical sketch of the progress of opinion on the Origin of Species, previously to the publication of this work, Appended to third and later editions of On the Origin of Species, (1861).
- 25. L. Eiseley, *Darwin's Century: Evolution and the Men who Discovered It*, Dobleday, New York, (1958).
- 26. H.F. Osborne, From the Greeks to Darwin: The Development of the Evolution Idea Through Twenty-Four Centuries, Charles Scribner and Sons, New York, (1929).
- 27. Sir Julian Huxley and H.B.D. Kettlewell, *Charles Darwin and his World*, Thames and Hudson, London (1965).
- 28. Allan Moorehead, Darwin and the Beagle, Penguin Books Ltd. (1971).

- 29. Francis Darwin (editor), The Autobiography of Charles Darwin and Selected Letters, Dover, New York (1958).
- 30. Charles Darwin, *The Voyage of the Beagle*, J.M. Dent and Sons Ltd., London (1975).
- 31. Charles Darwin, The Origin of Species, Collier MacMillan, London (1974).
- 32. Charles Darwin, *The Expression of Emotions in Man and Animals*, The University of Chicago Press (1965).
- 33. Ruth Moore, *Evolution*, Time-Life Books (1962).
- L. Barber, *The Heyday of Natural History: 1820-1870*, Doubleday and Co., Garden City, New York, (1980).
- 35. A. Desmond, *Huxley*, Addison Wesley, Reading, Mass., (1994).
- 36. R. Owen, (P.R. Sloan editor), *The Hunterian Lectures in Comparative Anatomy, May-June, 1837*, University of Chicago Press, (1992).
- 37. C. Nichols, *Darwinism and the social sciences*, Phil. Soc. Scient. 4, 255-277 (1974).
- 38. M. Ruse, *The Darwinian Revolution*, University of Chicago Press, (1979).
- 39. A. Desmond and J. Moore, *Darwin*, Penguin Books, (1992).
- 40. R. Dawkins, *The Extended Phenotype*, Oxford University Press, (1982).
- 41. R. Dawkins, *The Blind Watchmaker*, W.W. Norton, (1987).
- 42. R. Dawkins, *River out of Eden: A Darwinian View of Life*, Harper Collins, (1995).
- 43. R. Dawkins, *Climbing Mount Improbable*, W.W. Norton, (1996).
- 44. S.J. Gould, Ever Since Darwin, W.W. Norton, (1977).
- 45. R.G.B. Reid, *Evolutionary Theory: The Unfinished Synthesis*, Croom Helm, (1985).
- 46. M. Ho and P.T. Saunders, editors, *Beyond Neo-Darwinism: An Introduc*tion to a New Evolutionary Paradigm, Academic Press, London, (1984).
- 47. J.Maynard Smith, Did Darwin Get it Right? Essays on Games, Sex and Evolution, Chapman and Hall, (1989).
- 48. E. Sober, *The Nature of Selection: Evolutionary Theory in Philosophical Focus*, University of Chicago Press, (1984).
- 49. B.K. Hall, *Evolutionary Developmental Biology*, Chapman and Hall, London, (1992).
- 50. J. Thompson, Interaction and Coevolution, Wiley and Sons, (1982).
- 51. R.A. Fischer, *The Genetical Theory of Natural Selection*, Clarendon, Oxford, (1930).
- 52. J.B.S. Haldane, *Population genetics*, New Biology 18, 34-51, (1955).
- 53. N. Tinbergen, The Study of Instinct, Oxford University Press, (1951).
- 54. N. Tinbergen, The Herring Gull's World, Collins, London, (1953).
- 55. N. Tinbergen, Social Behavior in Animals, Methuen, London, (1953).
- 56. N. Tinbergen, Curious Naturalists, Country Life, London, (1958).

- 57. N. Tinbergen, *The Animal in its World: Explorations of an Ethologist*, Allan and Unwin, London, (1973).
- 58. K. Lorenz, On the evolution of behavior, Scientific American, December, (1958).
- 59. K. Lorenz, *Evolution and Modification of Behavior* Harvard University Press, Cambridge, MA, (1961).
- K. Lorenz, Studies in Animal and Human Behavior. I and II., Harvard University Press, (1970) and (1971).
- 61. P.H. Klopfer and J.P. Hailman, An Introduction to Animal Behavior: Ethology's First Century, Prentice-Hall, New Jersey, (1969).
- J. Jaynes, The historical origins of "Ethology" and "Comparative Psychology", Anim. Berhav. 17, 601-606 (1969).
- 63. W.H. Thorpe, The Origin and Rise of Ethology: The Science of the Natural Behavior of Animals, Heinemann, London, (1979).
- 64. R.A. Hinde, Animal Behavior: A Synthesis of Ethological and Comparative Psychology, McGraw-Hill, New York, (1970).
- 65. J.H. Crook, editor, *Social Behavior in Birds and Mammals*, Academic Press, London, (1970).
- P. Ekman, editor, *Darwin and Facial Expression*, Academic Press, New York, (1973).
- 67. P. Ekman, W.V. Friesen and P. Ekworth, *Emotions in the Human Face*, Pergamon, New York, (1972).
- N. Blurton Jones, editor, *Ethological Studies of Child Behavior*, Cambridge University Press, (1975).
- 69. M. von Cranach, editor, *Methods of Inference from Animals to Human Behavior*, Chicago/Mouton, Haag, (1976); Aldine, Paris, (1976).
- 70. K. Lorenz, On Aggression, Bantem Books, (1977).
- I. Eibl-Eibesfeldt, *Ethology, The Biology of Behavior*, Holt, Rinehart and Winston, New York, (1975).
- I. Eibl-Eibesfeldt and F.K. Salter, editors, *Indoctrinability, Ideology, and Warfare: Evolutionary Perspectives*, Berghahn Books, (1998).
- 73. I. Eibl-Eibesfeldt, Human Ethology, Walter De Gruyter Inc., (1989).
- 74. I. Eibl-Eibesfeldt, Love and Hate, Walter De Gruyter Inc., (1996).
- J. Bowlby, By ethology out of psychoanalysis: An experiment in interbreeding, Animal Behavior, 28, 649-656 (1980).
- B.B. Beck, Animal Tool Behavior, Garland STPM Press, New York, (1980).
- 77. R. Axelrod, *The Evolution of Cooperation*, Basic Books, New York, (1984).
- J.D. Carthy and F.L. Ebling, *The Natural History of Aggression*, Academic Press, New York, (1964)

- 79. D.L. Cheney and R.M. Seyfarth, *How Monkeys See the World: Inside the Mind of Another Species*, University of Chicago Press, (1990).
- 80. F. De Waal, *Chimpanzee Politics*, Cape, London, (1982).
- 81. M. Edmunds, *Defense in Animals*, Longman, London, (1974).
- R.D. Estes, *The Behavior Guide to African Mammals*, University of California Press, Los Angeles, (1991).
- 83. R.F. Ewer, *Ethology of Mammals*, Logos Press, London, (1968).
- 84. E. Morgan, The Scars of Evolution, Oxford University Press, (1990).
- W.D. Hamilton, The genetical theory of social behavior. I and II, J. Theor. Biol. 7, 1-52 (1964).
- 86. R. Dawkins, *The Selfish Gene*, Oxford University Press, (1989).
- 87. R.W. Sussman, *The Biological Basis of Human Behavior*, Prentice Hall, Englewood Cliffs, (1997).
- 88. Irenäus Eibl-Eibesfeldt, *The Biology of Peace and War*, Thames and Hudson, New York (1979).
- R.A. Hinde, Biological Bases of Human Social Behavior, McGraw-Hill, New York (1977).
- R.A. Hinde, Towards Understanding Relationships, Academic Press, London (1979).
- 91. Albert Szent-Györgyi, *The Crazy Ape*, Philosophical Library, New York (1970).
- 92. E.O. Wilson, *Sociobiology*, Harvard University Press (1975).
- 93. C. Zhan-Waxler, Altruism and Aggression: Biological and Social Origins, Cambridge University Press (1986).
- 94. D.R. Griffin, Animal Mind Human Mind, Dahlem Conferenzen 1982, Springer, Berlin, (1982).
- 95. R. Dart, *The predatory transition from ape to man*, International Anthropological and Linguistic Review, **1**, (1953).
- 96. S. Savage-Rumbaugh, R. Lewin, et al., *Kanzi: The Ape at the Brink of the Human Mind*, John Wiley and Sons, New York, (1996).
- 97. R. Dunbar, *Grooming, Gossip, and the Evolution of Language*, Harvard University Press, (1998).
- 98. M.E. Bitterman, *The evolution of intelligence*, Scientific American, January, (1965).
- R. Fox, In the beginning: Aspects of hominid behavioral evolution, Man, NS 2, 415-433 (1967).
- M.S. Gazzaniga, The split brain in man, Scientific American, 217, 24-29 (1967).
- D. Kimura, The asymmetry of the human brain, Scientific American, 228, 70-78 (1973).

- 102. R.G. Klein, Anatomy, behavior, and modern human origins, Journal of World Prehistory, 9 (2), 167-198 (1995).
- 103. N.G. Jablonski and L.C. Aiello, editors, *The Origin and Diversification of Language*, Wattis Symposium Series in Anthropology. Memoirs of the California Academy of Sciences, No. 24, The California Academy of Sciences, San Francisco, (1998).
- 104. S. Pinker, *The Language Instinct: How the Mind Creates Language*, Harper-Collins Publishers, New York, (1995).
- 105. J.H. Barkow, L. Cosmides and J. Tooby, editors, *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*, Oxford University Press, (1995).
- 106. D.R. Begun, C.V. Ward and M.D. Rose, Function, Phylogeny and Fossils: Miocene Hominid Evolution and Adaptations, Plenum Press, New York, (1997).
- 107. R.W. Byrne and A.W. Whitten, Machiavellian Intelligence: Social Expertise and the Evolution of Intellect in Monkeys, Apes and Humans, Cambridge University Press, (1988),
- 108. V.P. Clark, P.A. Escholz and A.F. Rosa, editors, *Language: Readings in Language and Culture*, St Martin's Press, New York, (1997).
- 109. T.W. Deacon, *The Symbolic Species: The Co-evolution of Language and the Brain*, W.W. Norton and Company, New York, (1997).
- 110. C. Gamble, *Timewalkers: The Prehistory of Global Colonization*, Harvard University Press, (1994).
- 111. K.R. Gibson and T. Inglod, editors, Tools, Language and Cognition in Human Evolution, Cambridge University Press, (1993).
- 112. P. Mellers, *The Emergence of Modern Humans: An Archaeological Perspective*, Edinburgh University Press, (1990).
- 113. P. Mellers, *The Neanderthal Legacy: An Archaeological Perspective of Western Europe*, Princeton University Press, (1996).
- 114. S. Mithen, *The Prehistory of the Mind*, Thames and Hudson, London, (1996).
- 115. D. Haraway, Signs of dominance: from a physiology to a cybernetics of primate biology, C.R. Carpenter, 1939-1970, Studies in History of Biology, 6, 129-219 (1983).
- D. Johanson and M. Edey, *Lucy: The Beginnings of Humankind*, Simon and Schuster, New York, (1981).
- B. Kurtén, Our Earliest Ancestors, Colombia University Press, New York, (1992).
- R.E. Leakey and R. Lewin, Origins Reconsidered, Doubleday, New York, (1992).

- 119. P. Lieberman, *The Biology and Evolution of Language*, Harvard University Press, (1984).
- 120. J.D. Wall and M. Przeworski, When did the human population size start increasing?, Genetics, 155, 1865-1874 (2000).
- 121. L. Aiello and C. Dean, An Introduction to Human Evolutionary Anatomy, Academic Press, London, (1990).
- 122. F. Ikawa-Smith, ed., Early Paleolithic in South and East Asia, Mouton, The Hague, (1978).
- 123. R.R. Baker, *Migration: Paths Through Space and Time*, Hodder and Stoughton, London, (1982).
- 124. P. Bellwood, *Prehistory of the Indo-Malaysian Archipelago*, Academic Press, Sidney, (1985).
- 125. P.J. Bowler, Theories of Human Evolution: A Century of Debate, 1884-1944, Basil Blackwell, Oxford, (1986).
- 126. G. Isaac and M. McCown, eds., *Human Origins: Louis Leaky and the East African Evidence*, Benjamin, Menlo Park, (1976).
- 127. F.J. Brown, R. Leaky, and A. Walker, Early Homo erectus skeleton from west Lake Turkana, Kenya, Nature, 316, 788-92, (1985).
- K.W. Butzer, Archeology as Human Ecology, Cambridge University Press, (1982).
- 129. A.T. Chamberlain and B.A. Wood, *Early hominid phylogeny*, Journal of Human Evolution, 16, 119-33, (1987).
- 130. P. Mellars and C. Stringer, eds., The Human Revolution: Behavioural and Biological Perspectives in the Origins of Modern Humans, Edinburgh University Press, (1989).
- 131. G.C. Conroy, *Primate Evolution*, W.W. Norton, New York, (1990).
- 132. R.I.M. Dunbar, *Primate Social Systems*, Croom Helm, London, (1988).
- 133. B. Fagan, *The Great Journey: The Peopling of Ancient America*, Thames and Hudson, London, (1987).
- 134. R.A. Foley, ed., *Hominid Evolution and Community Ecology*, Academic Press, New York, (1984).
- S.R. Binford and L.R. Binford, Stone tools and human behavior, Scientific American, 220, 70-84, (1969).
- G. Klein, The Human Career, Human Biological and Cultural Origins, University of Chicago Press, (1989).
- 137. B.F. Skinner and N. Chomsky, Verbal behavior, Language, 35 26-58 (1959).
- 138. D. Bickerton, *The Roots of Language*, Karoma, Ann Arbor, Mich., (1981).
- 139. E. Lenneberg in *The Structure of Language: Readings in the Philosophy of Language*, J.A. Fodor and J.A. Katz editors, Prentice-Hall, Englewood Cliffs N.J., (1964).

- 140. S. Pinker, Talk of genetics and visa versa, Nature, **413**, 465-466, (2001).
- 141. S. Pinker, Words and rules in the human brain, Nature, 387, 547-548, (1997).
- 142. M. Ruhelen, The Origin of Language, Wiley, New York, (1994).
- 143. C.B. Stringer and R. McKie, *African Exodus: The Origins of Modern Humanity*, Johnathan Cape, London (1996).
- 144. R.W. Sussman, *The Biological Basis of Human Behavior*, Prentice Hall, Englewood Cliffs, (1997).
- 145. D.P. Barash Sociobiology and Behavior, Elsevier, New York, (1977).
- 146. J.D. Carthy and F.J. Eblin, eds., *The Natural History of Aggression*, Academic Press, New York, (1964).
- 147. N.A. Chagnon and W. Irons, eds., Evolutionary Biology and Human Social Behavior, an Anthropological Perspective, Duxbury Press, N. Scituate, MA, (1979).
- 148. E. Danielson, Vold, en Ond Arv?, Gyldendal, Copenhagen, (1929).
- 149. M.R. Davie, *The Evolution of War*, Yale University Press, New Haven, CT, (1929).
- 150. T. Dobzhanski, *Mankind Evolving*, Yale University Press, New Haven, CT, (1962).
- 151. I. Eibl-Eibesfeldt, Der Vorprogramiert Mensch, Molden, Vienna, (1973).
- 152. I. Eibl-Eibesfeldt, *Ethology, the Biology of Behavior*, Holt, Rinehart and Winston, New York, (1975).
- 153. I. Eibl-Eibesfeldt, *Liebe und Hass*, Molden, Vienna, (1973).
- 154. R.L. Holloway, *Primate Aggression: Territoriality and Xenophobia*, Academic Press, New York, (1974).
- 155. P. Kitcher, Vaulting Ambition: Sociobiology and the Quest for Human Nature, MIT Press, Cambridge, MA, (1985).
- 156. S.L.W. Mellen, *The Evolution of Love*, Freeman, Oxford, (1981).
- 157. A. Roe and G.G. Simpson, *Behavior and Evolution*, Yale University Press, New Haven, CT, (1958).
- 158. N.J. Smelser, *The Theory of Collective Behavior*, Free Press, New York, (1963).
- 159. R. Trivers, Social Evolution, Benjamin/Cummings, Menlo Park, CA, (1985).
- 160. W. Weiser, Konrad Lorenz und seine Kritiker, Piper, Munich, (1976).
- 161. W. Wickler, *Biologie der 10 Gebote*, Piper, Munich, (1971).
- J.H. Bodley, Cultural Anthropology: Tribes, States, and the Global System, 3rd ed., Mayfield, Mountain View, CA, (2000).
- 163. K. Raaflaub and N. Rosenstein, eds., War and Society in the Ancient and Medieval Worlds, Harvard University Press and Center for Hellenic Studies, (1999).

- 164. Elie Kedourie, *Nationalism*, Hutchison University Library, Third Edition, (1966).
- 165. Eugene Kamenka, editor, Nationalism, Edward Arnold Ltd., London, (1976).
- 166. Elie Kedourie, editor, *Nationalism in Asia and Africa*, New American Library, (1970).
- 167. G. Allport, *The Nature of Prejudice*, Doubleday Anchor Books, New York, (1958).
- 168. I.A. Berg and B.M. Bass, eds., Conformity and Deviation, Harper and Row, New York, (1961).
- W. Buchanan and H. Cantril, *How Nations See Each Other*, University of Illinois Press, Urbana, IL, (1953).
- 170. H.C.J. Duijker and N.H. Frijda, *National Character and National Stereotypes*, North-Holland Publishing Co., Amsterdam, (1960).
- S. Freud, Warum Krieg? Das Bild vom Feind, Arbeitsgem. Friedenspädegogik, (1983).
- 172. S. Freud, Why War?, in The Basic Writings of Sigmund Freud, A.A. Brill, ed., Modern Library, (1995).
- 173. S. Freud, Civilization, War and Death. Psycho-analytical Epitomes No. 4, Hogarth Press, London, (1953).
- 174. S. Keen, Faces of the Enemy: Reflections of the Hostile Imagination, Harper and Row, San Francisco, (1986).
- 175. W.E. Lampert, *Children's Views of Foreign Peoples*, Appleton-Century-Crofts, New York, (1967).
- 176. R.A. Levine and D.T. Campbell, *Ethnocentricism: Theories of Theories of Conflict, Ethnic Attitudes and Group Behavior*, Wiley, New York, (1972).
- 177. V.D. Volken, Cyprus: War and Adaption: A Psychoanalytical History of Two Ethnic Groups in Conflict, University Press of Virginia, Charlottsville, VA, (1979).
- 178. L. Durrell, *Bitter Lemons* (nationalism in the Cyprus conflicts), Faber and Faber, London, (1957).
- 179. N. Choucri and R. North, Nations in Conflict: National Growth and International Violence, W.H. Freeman, San Francisco, (1975).
- 180. R. Cohen, Warfare and State Formation, in Warfare, Culture and the Environment, B. Ferguson, ed., Academic Press, Orlando, (1984).
- 181. A. Giddens, The Nation-State and Violence: Volume Two of a Contemporary Critique of Historical Materialism, University of California, Berkeley, CA, (1985).
- 182. M. Haas, Social Change and National Aggressiveness, 1900-1960, in Quantitative International Politics, J.D. Singer, ed., Free Press, New York, (1968).

- 183. W. Schwartzwaller, *The Unknown Hitler*, Berkeley Books, (1990).
- 184. Francis King, Satan and the Swastika, Mayflower, St. Albans, (1976).
- 185. J.M. Angebert, The Occult and the Third Reich, New York, (1974).
- 186. J.H. Brennan, Occult Reich, New York, (1974).
- N. Goodrick-Clarke, *The Occult Roots of Nazism*, Aquarium Press, Wellingborough, (1985).
- 188. T. Ravenscroft, *The Spear of Destiny*, Putnam's, New York, (1974).
- 189. D. Sklar, The Nazis and the Occult, Dorset Press, New York, (1977).
- 190. W. Schirer, *The Rise and Fall of the Third Reich*, Crest Books, New York, (1962).
- 191. E.J. Hobsbawn, The Age of Empire, 1875-1914, Vintage Books, (1989).
- 192. L. James, The Rise and Fall of the British Empire, St Martin's Press, (1997).
- 193. N. Ferguson, Empire: The Rise and Demise of the British World Order and the Lessons for Global Power, Basic Books, (2003).
- 194. S. Schama, The Fate of Empire, 1776-2000, Miramax, (2002).
- 195. A.P. Thorton, *The Imperial Idea and Its Enemies: A Study in British Power*, Palgrave Macmillan, (1985).
- H. Mejcher, Imperial Quest for Oil: Iraq, 1910-1928, Ithaca Books, London, (1976).
- 197. P. Sluglett, Britain in Iraq, 1914-1932, Ithaca Press, London, (1976).
- D.E. Omissi, British Air Power and Colonial Control in Iraq, 1920-1925, Manchester University Press, Manchester, (1990).
- V.G. Kiernan, Colonial Empires and Armies, 1815-1960, Sutton, Stroud, (1998).
- 200. R. Solh, Britain's 2 Wars With Iraq, Ithaca Press, Reading, (1996).
- D. Hiro, The Longest War: The Iran-Iraq Military Conflict, Routledge, New York, (1991).
- 202. T.E. Lawrence, A Report on Mesopotamia by T.E. Lawrence, Sunday Times, August 22, (1920).
- 203. D. Fromkin, A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East, Owl Books, (2001).
- 204. T. Rajamoorthy, Deceit and Duplicity: Some Reflections on Western Intervention in Iraq, Third World Resurgence, March-April, (2003).
- 205. P. Knightley and C. Simpson, The Secret Lives of Lawrence of Arabia, Nelson, London, (1969).
- 206. G. Lenczowski, The Middle East in World Affairs, Cornell University Press, (1962).
- 207. John A. Hobson, Imperialism; A Study, (1902).
- 208. P. Cain and T. Hopkins, British Imperialism, 1688-200, Longman, (2000).

- 209. N. Ferguson, Empire: The Rise and Demise of the British World Order and the Lessons for Global Power, Basic Books, (2003).
- 210. G. Kolko, Another Century of War, New Press, (2002).
- 211. G. Kolko, Confronting the Third World: United States Foreign Policy, 1945-1980, Pantheon Books, (1988).
- 212. M.T. Klare, *Resource Wars: The New Landscape of Global Conflict*, Owl Books reprint edition, New York, (2002).
- 213. Y. Nakash, The Shi'is of Iraq, Princeton University Press, (1994).
- 214. D. Fromkin, A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East, Owl Books, (2001).
- 215. S.K. Aburish, Saddam Hussein: The Politics of Revenge, Bloomsbury, London, (2001).
- 216. M. Muffti, Sovereign Creations: Pan-Arabism and Political Order in Syria and Iraq, Cornell University Press, (1996).
- 217. C. Clover, Lessons of the 1920 Revolt Lost on Bremer, Financial Times, November 17, (2003).
- 218. J. Kifner, Britain Tried First. Iraq Was No Picnic Then, New York Times, July 20, (2003).
- 219. J. Feffer, B. Egrenreich and M.T. Klare, *Power Trip: US Unilateralism* and Global Strategy After September 11, Seven Stories Press, (2003).
- 220. J.D. Rockefeller, *Random Reminiscences of Men and Events*, Doubleday, New York, (1909).
- 221. M.B. Stoff, Oil, War and American Security: The Search for a National Policy on Oil, 1941-1947, Yale University Press, New Haven, (1980).
- 222. W.D. Muscable, George F. Kennan and the Making of American Foreign Policy, Princeton University Press, Princeton, (1992).
- 223. J. Stork, *Middle East Oil and the Energy Crisis*, Monthly Review, New York, (1976).
- 224. F. Benn, Oil Diplomacy in the Twentieth Century, St. Martin's Press, New York, (1986).
- 225. R. Sale, *Saddam Key in Early CIA Plot*, United Press International, April 10, (2003).
- 226. K. Roosevelt, *Countercoup: The Struggle for the Control of Iran*, McGraw-Hill, New York, (1979).
- 227. J. Fitchett and D. Ignatius, *Lengthy Elf Inquiry Nears Explosive Finish*, International Herald Tribune, February 1, (2002).
- 228. M.T. Klare, *Resource Wars: The New Landscape of Global Conflict*, Owl Books reprint edition, New York, (2002).
- 229. M. Klare, Bush-Cheney Energy Strategy: Procuring the Rest of the World's Oil, Foreign Policy in Focus, (Interhemispheric Resource Center/Institute for Policy Studies/SEEN), Washington DC and Silver City NM, January, (2004).

- 230. M. Klare, *Endless Military Superiority*, The Nation magazine, July 15, (2002).
- 231. M.T. Klare, *Geopolitics Reborn: The Global Struggle Over Oil and Gas Pipelines*, Current History, December issue, 428-33, (2004).
- 232. P. Grose, Allen Dulles: The Life of a Gentleman Spy, Houghton Mifflin, Boston, (1994).
- 233. S. Warren, Exxon's Profit Surged in 4th Quarter, Wall Street Journal, February 12, (2004).
- 234. R. Suskind, The Price of Loyalty: George W. Bush, the White House and the Education of Paul O'Neill, Simon and Schuster, New York, (2004).
- 235. D. Morgan and D.B. Ottaway, In Iraqi War Scenario, Oil is Key Issue as U.S. Drillers Eye Huge petroleum Pool, Washington Post, September 15, (2002).
- 236. D. Rose, Bush and Blair Made Secret Pact for Iraqi War, The Observer, April 4, (2004).
- 237. E. Vulliamy, P. Webster and N.P. Walsh, Scramble to Carve Up Iraqi Oil Reserves Lies Behind US Diplomacy, The Observer, October 6, (2002).
- 238. Y. Ibrahim, Bush's Iraq Adventure is Bound to Backfire, International Herald Tribune, November 1, (2002).
- 239. P. Beaumont and F. Islam, Carve-Up of Oil Riches Begins, The Observer, November 3, (2002).
- 240. M. Dobbs, US Had Key Role in Iraq Buildup, Washington Post, December 30, (2002).
- 241. R. Sale, *Saddam Key in Early CIA Plot*, United Press International, April 10, (2003).
- 242. R. Morris, A Tyrant Forty Years in the Making, New York Times, March 14, (2003).
- 243. H. Batatu, The Old Social Classes and the Revolutionary Movements of Iraq, Princeton University Press, (1978).
- 244. D.W. Riegel, Jr., and A.M. D'Amato, US Chemical and Biological Warfare-Related Dual Use Exports to Iraq and their Possible Impact on the Health Consequences of the Persian Gulf War, Report to US Senate ("The Riegel Report"), May 25, (1994).
- 245. P.E. Tyler, Officers Say US Aided Iraq in War Despite Use of Gas, New York Times, August 18, (2002).
- 246. D. Priest, Rumsfeld Visited Baghdad in 1984 to Reassure Iraqis, Documents Show, Washington Post, December 19, (2003).
- 247. S. Zunes, Saddam's Arrest Raises Troubling Questions, Foreign Policy in Focus, http://www.globalpolicy.org/, December (2003).
- 248. D. Leigh and J. Hooper, *Britain's Dirty Secret*, Guardi an, March 6, (2003).

- 249. J. Battle, (Ed.), Shaking Hands With Saddam Hussein: The US Tilts Towards Iraq, 1980-1984, National Security Archive Electronic Briefing Book No. 82, February 25, (2003).
- 250. J.R. Hiltermann, America Didn't Seem to Mind Poison Gas, International Herald Tribune, January 17, (2003).
- 251. D. Hiro, Iraq and Poison Gas, Nation, August 28, (2002).
- 252. T. Weiner, Iraq Uses Techniques in Spying Against its Former Tutor, the US, Philadelphia Inquirer, February 5, (1991).
- 253. S. Hussein and A. Glaspie, Excerpts From Iraqi Document on Meeting with US Envoy, The New York Times, International, September 23, (1990).
- 254. D. Omissi, Baghdad and British Bombers, Guardian, January 19, (1991).
- 255. D. Vernet, *Postmodern Imperialism*, Le Monde, April 24, (2003).
- 256. J. Buchan, Miss Bell's Lines in the Sand, Guardian, March 12, (2003).
- 257. C. Tripp, *Iraq: The Imperial Precedent*, Le Monde Diplomatique, January, (2003).
- 258. G.H.W. Bush and B. Scowcroft, *Why We Didn't Remove Saddam*, Time, 2 March, (1998).
- 259. J.A. Baker III, The Politics of Diplomacy: Revolution, War and Peace, 1989-1992, G.P. Putnam's Sons, New York, (1995).
- 260. H. Thomas, *Preventive War Sets Serious Precedent*, Seattle Post Intelligencer, March 20, (2003).
- 261. R.J. Barnet, Intervention and Revolution: The United States in the Third World, World Publishing, (1968).
- 262. T. Bodenheimer and R. Gould, *Rollback: Right-wing Power in U.S. For*eign Policy, South End Press, (1989).
- 263. G. Guma, Uneasy Empire: Repression, Globalization, and What We Can Do, Toward Freedom, (2003).
- 264. W. Blum, A Brief History of U.S. Interventions: 1945 to the Present, Z magazine, June, (1999).
- 265. W. Blum, Killing Hope: U.S. Military and CIA Intervention Since World War II
- 266. J.M. Cypher, *The Iron Triangle: The New Military Buildup*, Dollars and Sense magazine, January/February, (2002).
- 267. L. Meyer, *The Power of One*, (World Press Review), Reforma, Mexico City, August 5, (1999).
- 268. W. Hartung, F. Berrigan and M. Ciarrocca, Operation Endless Deployment: The War With Iraq Is Part of a Larger Plan for Global Military Dominance, The Nation magazine, October 21, (2002).
- 269. I. Ramonet, *Servile States*, Le Monde diplomatique, Fromkin Paris, October (2002), World Press Review, December, (2002).

- 270. J.K. Galbraith, *The Unbearable Costs of Empire*, American Prospect magazine, November, (2002).
- 271. G. Monbiot, *The Logic of Empire*, The Guardian, August 6, (2002), World Press Review, October, (2002).
- 272. W.R. Pitt, The Greatest Sedition is Silence, Pluto Press, (2003).
- 273. J. Wilson, Republic or Empire?, The Nation magazine, March 3, (2003).
- 274. W.B. Gallie, Understanding War: Points of Conflict, Routledge, London, (1991).
- 275. R. Falk and S.S. Kim, eds., The War System: An Interdisciplinary Approach, Westview, Boulder, CO, (1980).
- 276. J.D. Clarkson and T.C. Cochran, eds., War as a Social Institution, Colombia University Press, New York, (1941).
- 277. S. Melman, *The Permanent War Economy*, Simon and Schuster, (1974). Morgan
- H. Mejcher, Imperial Quest for Oil: Iraq, 1910-1928, Ithaca Books, London, (1976).
- 279. D. Hiro, The Longest War: The Iran-Iraq Military Conflict, Routledge, New York, (1991).
- 280. M. Klare, Bush-Cheney Energy Strategy: Procuring the Rest of the World's Oil, Foreign Policy in Focus, (Interhemispheric Resource Center/Institute for Policy Studies/SEEN), Washington DC and Silver City NM, January, (2004).
- 281. J. Fitchett and D. Ignatius, *Lengthy Elf Inquiry Nears Explosive Finish*, International Herald Tribune, February 1, (2002).
- 282. T. Rajamoorthy, Deceit and Duplicity: Some Reflections on Western Intervention in Iraq, Third World Resurgence, March-April, (2003).
- 283. P. Knightley and C. Simpson, The Secret Lives of Lawrence of Arabia, Nelson, London, (1969).
- 284. G. Lenczowski, *The Middle East in World Affairs*, Cornell University Press, (1962).
- 285. D. Rose, Bush and Blair Made Secret Pact for Iraq War, Observer, April 4, (2004).
- 286. B. Gellman, Allied Air War Struck Broadly in Iraq; Officials Acknowledge Strategy Went Beyond Purely Military Targets, Washington Post, June 23, (1991).
- 287. M. Fletcher and M. Theodoulou, Baker Says Sanctions Must Stay as Long as Saddam Holds Power, Times, May 23, (1991).
- 288. J. Pienaar and L. Doyle, UK Maintains Tough Line on Sanctions Against Iraq, Independent, May 11, (1991).
- 289. B. Blum (translator), Ex-National Security Chief Brzezinski Admits: Afghan Islamism Was Made in Washington, Nouvel Observateur, January 15, (1998).

WHO IS MY NEIGHBOR?

- 290. G. Vidal, Dreaming War: Blood for Oil and the Bush-Cheney Junta, Thunder's Mouth Press, (2002).
- 291. H. Thomas, *Preventive War Sets Serious Precedent*, Seattle Post-Intelligencer, March 20, (2003).
- 292. C. Johnson, The Sorrows of Empire: Militarism, Secrecy, and the End of the Republic, Henry Hold and Company, New York, (2004).
- 293. C. Johnson, *Blowback: The Costs and Consequences of American Empire*, Henry Hold and Company, New York, (2000).
- 294. M. Parenti, Against Empire: The Brutal Realities of U.S. Global Domination, City Lights Books, 261 Columbus Avenue, San Francisco, CA94133, (1995).
- 295. E. Ahmad, *Confronting Empire*, South End Press, (2000).
- 296. W. Greider, Fortress America, Public Affairs Press, (1998).
- 297. J. Pilger, *Hidden Agendas*, The New Press, (1998).
- 298. S.R. Shalom, *Imperial Alibis*, South End Press, (1993).
- 299. C. Boggs (editor), Masters of War: Militarism and Blowback in the Era of American Empire, Routledge, (2003).
- 300. J. Pilger, The New Rulers of the World, Verso, (2992).
- 301. G. Vidal, Perpetual War for Perpetual Peace: How We Got To Be So Hated, Thunder's Mouth Press, (2002).
- 302. W. Blum, Rogue State: A Guide to the World's Only Superpower, Common Courage Press, (2000).
- 303. M. Parenti, The Sword and the Dollar, St. Martin's Press, 175 Fifth Avenue, New York, NY 10010, (1989).
- 304. T. Bodenheimer and R. Gould, *Rollback: Right-wing Power in U.S. For*eign Policy, South End Press, (1989).
- 305. G. Guma, Uneasy Empire: Repression, Globalization, and What We Can Do, Toward Freedom, (2003).
- 306. W. Blum, A Brief History of U.S. Interventions: 1945 to the Present, Z magazine, June, (1999).
- 307. W. Blum, Killing Hope: U.S. Military and CIA Intervention Since World War II
- 308. J.M. Cypher, *The Iron Triangle: The New Military Buildup*, Dollars and Sense magazine, January/February, (2002).
- 309. L. Meyer, *The Power of One*, (World Press Review), Reforma, Mexico City, August 5, (1999).
- 310. C. Johnson, *Time to Bring the Troops Home*, The Nation magazine, May 14, (2001).
- 311. W. Hartung, F. Berrigan and M. Ciarrocca, Operation Endless Deployment: The War With Iraq Is Part of a Larger Plan for Global Military Dominance, The Nation magazine, October 21, (2002).

- 312. C. Johnson, *The Sorrows of Empire: Militarism, Secrecy, and the End of the Republic*, Henry Hold and Company, New York, (2004).
- 313. C. Johnson, *Blowback: The Costs and Consequences of American Empire*, Henry Hold and Company, New York, (2000).
- 314. I. Ramonet, Servile States, Le Monde diplomatique, Paris, October (2002), World Press Review, December, (2002).
- 315. J.K. Galbraith, *The Unbearable Costs of Empire*, American Prospect magazine, November, (2002).
- 316. G. Monbiot, *The Logic of Empire*, The Guardian, August 6, (2002), World Press Review, October, (2002).
- 317. W.R. Pitt and S. Ritter, War on Iraq, Context Books
- 318. W.R. Pitt, The Greatest Sedition is Silence, Pluto Press, (2003).
- 319. J. Wilson, *Republic or Empire?*, The Nation magazine, March 3, (2003).
- 320. R. Dreyfuss, Just the Beginning: Is Iraq the Opening Salvo in a War to Remake the World?, The American Prospect magazine, April, (2003).
- 321. D. Moberg, The Road From Baghdad: The Bush Team Has Big Plans For the 21st Century. Can the Rest of the World Stop Them?, These Times magazine, May, (2003).
- 322. J.M. Blair, The Control of Oil, Random House, New York, (1976).
- 323. R.S. Foot, S.N. MacFarlane and M. Mastanduno, US Hegemony and International Organizations: The United States and Multilateral Institutions, Oxford University Press, (2003).
- 324. P. Bennis and N. Chomsky, *Before and After: US Foreign Policy and the September 11th Crisis*, Olive Branch Press, (2002).
- 325. J. Garrison, America as Empire: Global Leader or Rouge Power?, Berrett-Koehler Publishers, (2004).
- 326. A.J. Bacevich, American Empire: The Realities and Consequences of US Diplomacy, Harvard University Press, (2002).
- 327. D.R. Francis, *Hidden Defense Costs Add Up to Double Trouble*, Christian Science Monator, February 23, (2004).
- 328. A. Sampson, The Seven Sisters: The Great Oil Companies of the World and How They Were Made, Hodder and Staughton, London, (1988).
- 329. D. Yergin, *The Prize*, Simon and Schuster, New York, (1991).
- 330. E. Abrahamian, *Iran Between Two Revolutions*, Princeton University Press, Princeton, (1982).

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Chapter 5

THE NEED FOR INTERNATIONAL LAW

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

5.1 Why we need laws

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.

5.2 What is law?

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



Figure 5.1: A portion of Hammurabi's Code, c. 1754 BC

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 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.



Figure 5.2: King John is forced to sign the Magna Carta

5.3 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".

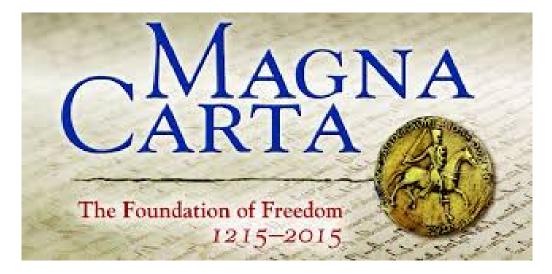


Figure 5.3: Lord Denning described the Magna Carta as "the greatest constitutional document of all times: the foundation of the freedom of the individual against the arbitrary authority of the despot".

5.4 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).

5.5 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.

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

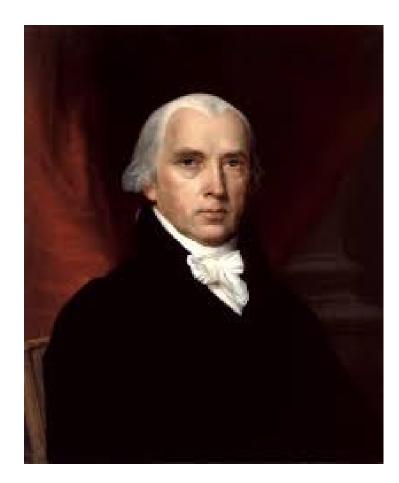


Figure 5.4: James Madison, wrote that the more he reflected on the use of force, the more he doubted "the practicality, the justice and the efficacy of it when applied to people collectively, and not individually." He later introduced the Constitutional amendments that became the U.S. Bill of Rights.

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.

5.6 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.

5.7 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.

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5.7. UNITED NATIONS CHARTER, 1945

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 international 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.

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

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



Figure 5.5: Clearly, the United Nations Charter aims at abolishing the institution of war once and for all.

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, 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.

5.7. UNITED NATIONS CHARTER, 1945

With increased budgets the UN agencies could sponsor research and other actions aimed at solving the world's most pressing problems: AIDS, drugresistant 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.

subsection*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."

subsection*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



Figure 5.6: 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.

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.

5.8 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 ad-

equate 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 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,

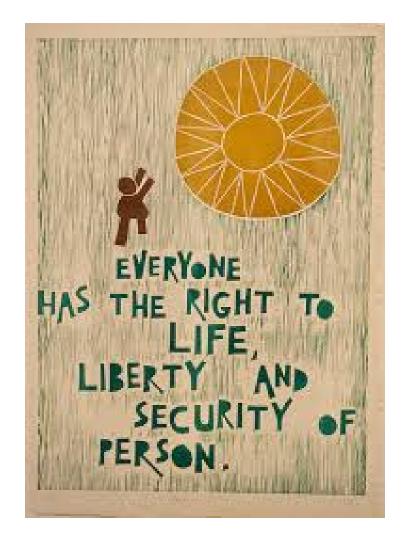


Figure 5.7: The Universal Declaration of Human Rights has great value in defining the norms towards which the world ought to be striving.

5.8. THE UNIVERSAL DECLARATION OF HUMAN RIGHTS, 1948 195

without any regard for guilt or innocence.

5.9 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.

5.10 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.

5.11 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.

5.12 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 Chemical 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.

5.13 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.

5.14 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.

5.15 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.

5.16 Tteaty on the Prohibition of Nuclear Weapons

Wikipadia states that

"The Treaty on the Prohibition of Nuclear Weapons (TPNW), or the Nuclear Weapon Ban Treaty, is the first legally binding international agreement to comprehensively prohibit nuclear weapons with the ultimate goal being their total elimination. It was adopted on 7 July 2017, opened for signature on 20 September 2017, and entered into force on 22 January 2021. "For those nations that are party to it, the treaty prohibits the 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.

"A mandate adopted by the United Nations General Assembly on 23 December 2016 scheduled two sessions for negotiations: 27 to 31 March and from 15 June to 7 July, 2017. The treaty passed on schedule on 7 July with 122 in favour, 1 against (Netherlands), and 1 official abstention (Singapore). 69 nations did not vote, among them all of the nuclear weapon states and all NATO members except the Netherlands."

The Nobel Peace Prize was awarded to ICAN very largely because of ICAN's successful campaign for adoption of the Treaty on the Prohibition of Nuclear Weapons.

The nuclear weapons states, as well as NATO nenbebr states, have refused to ratify the treaty. However, world public opinion may ultimately force them to do so, and to comply with the provisions of the treaty. 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."

5.17 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.

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

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

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



Figure 5.8: 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.

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/

subsection*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.

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Chapter 6

A WORLD FEDERATION

"To coerce the states is one of the maddest projects that was ever devised... 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." Alexander Hamilton, 1787

6.1 A personal note

I have been a World Federalist ever since 1954. almost seventy 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 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

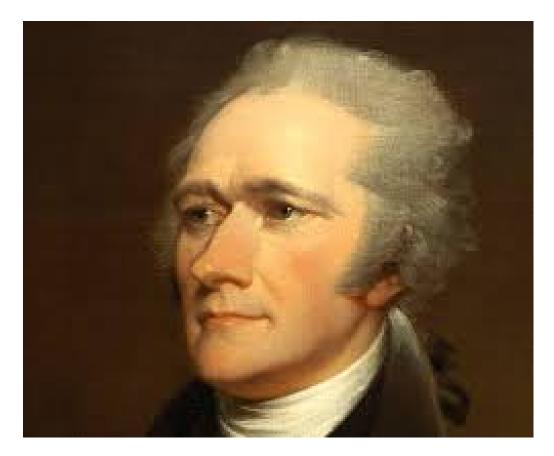


Figure 6.1: Alexander Hamilton believed that "To coerce the states is one of the maddest projects that was ever devised."

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 for the World Association of World Federalists.

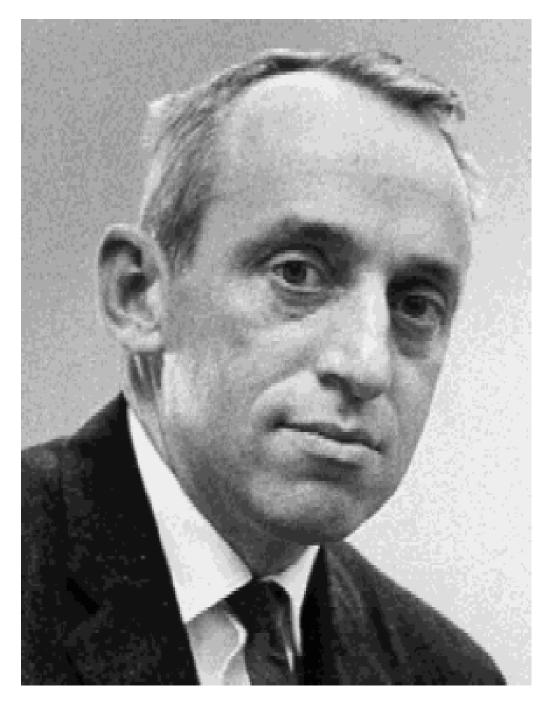


Figure 6.2: James Tobin. When asked what should be done with the proceeds of the tax, Tobin said, almost as an afterthought, "Let the United Nations have it."

6.2 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 paralyzed 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 coming 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 nationstate 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 CO2 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 sufficient 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

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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.

6.3 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 semiindependent 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.

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 British colonies 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 Corawa 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.

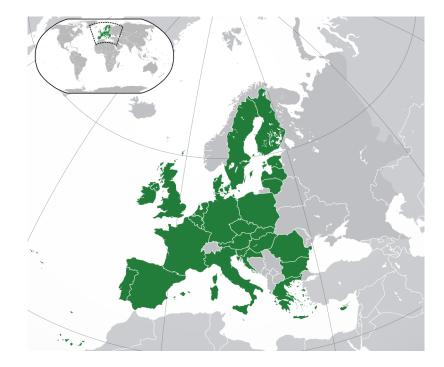


Figure 6.3: A map of the European Union. Existing federations like the EU can give us insights as we work to develop the United Nations into a federation.

Another frequently heard complaint about the EU is that it takes decisionmaking 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 selfgovernment, 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.

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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.

6.4 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

 $^{^1\}mathrm{The}$ interested reader can find the "Hague Invasion Act" described on the Internet

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

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.

²It 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 enormous 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.

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.

6.5 Governments of large nations

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.

Suggestions for further reading

- 1. Francesco Stipo, World Federalist Manifesto. Guide to Political Globalization, (April 10, 2007), pages 1, 3, 21 and 136.
- 2. Francesco Stipo, United Nations Reorganization. The Unification of the UN System, (April 21, 2007).
- 3. International Commission on Peace and Food, Uncommon Opportunities: An Agenda for Peace and Equitable Development, 2nd Edition, pages 43-46, (2004).

6.5. GOVERNMENTS OF LARGE NATIONS

- 4. Alexander Hamilton, James Madison and John Jay, *The Federalist Papers*, (1787-1788), Project Gutenberg.
- Edith Wynner, World Federal Government in Maximum Terms: Proposals for United Nations Charter Revision, Fedonat Press, Afton N.Y., (1954).
- Grenville Clark and Louis B. Sohn, World Peace Through World Law, Harvard University Press, (1958).
- 7. Bertrand Russell, Has Man A Future?, Penguin, Hammondsworth, (1961).
- 8. Michael Klare, *Resource Wars: The New Landscape of Global Conflict* Owl Books, New York, (reprint edition 2002).
- 9. Michael Klare, *Rising Powers, Shrinking Planet: The New Geopolitics* of Energy, Henry Holt & Company, (2008).
- 10. Michael Klare, The Race for What's Left: The Global Scramble for the World's Last Resources, Metropolitan Books, (2012).
- 11. United Nations General Assembly, Principles of International Law Recognized in the Charter of the Nürnberg Tribunal and in the Judgment of the Tribunal, (1950).
- 12. Bengt Broms, *United Nations*, Suomalainen Tiedeakatemia, Helsinki, (1990).
- 13. S. Rosenne, *The Law and Practice at the International Court*, Dordrecht, (1985).
- 14. S. Rosenne, *The World Court What It Is and How It Works*, Dordrecht, (1995).
- J. D'Arcy and D. Harris, The Procedural Aspects of International Law (Book Series), Volume 25, Transnational Publishers, Ardsley, New York, (2001).
- H. Cullen, The Collective Complaints Mechanism Under the European Social Charter, European Law Review, Human Rights Survey, p. 18-30, (2000).
- 17. S.D. Bailey, The Procedure of the Security Council, Oxford, (1988).
- R.A. Akindale, The Organization and Promotion of World Peace: A Study of Universal-Regional Relationships, Univ. Toronto Press, Toronto, Ont., (1976).
- 19. J.S. Applegate, *The UN Peace Imperative*, Vantage Press, New York, (1992).
- S.E. Atkins, Arms Control, Disarmament, International Security and Peace: An Annotated Guide to Sources, 1980-1987, Clio Press, Santa Barbara, CA, (1988).
- N. Ball and T. Halevy, Making Peace Work: The Role of the International Development Community, Overseas Development Council, Washington DC, (1996).

- 22. F. Barnaby, Ed., The Gaia Peace Atlas: Survival into the Third Millennium, Doubleday, New York, (1988)
- 23. J.H. Barton, *The Politics of Peace: An Evaluation of Arms Control*, Stanford Univ. Press, Stanford, CA, (1981).
- 24. W. Bello, *Visions of a Warless World*, Friends Committee on National Education Fund, Washington DC, (1986).
- 25. A. Boserup and A. Mack, *Abolishing War: Cultures and Institutions; Dialogue with Peace Scholars Elise Boulding and Randall Forsberg*, Boston Research Center for the Twenty-first Century, Cambridge, MA, (1998).
- 26. E. Boulding et al., *Bibliography on World Conflict and Peace*, Westview Press, Boulder, CO, (1979).
- 27. E. Boulding et al., Eds., *Peace, Culture and Society: Transnational Research Dialogue*, Westview Press, Boulder, CO, (1991).

Chapter 7

CHILDREN SINGING

7.1 Children's choirs around the world

Childhood should be a time of joy

In his famous novel, *Childhood*, Leo Tolstoy, then 23, wrote: "Will the freshness, lightheartedness, the need for love, and strength of faith which you have in childhood ever return? What better time than when the two best virtues - innocent joy and the boundless desire for love - were the only motives in life?"

When we experience childhood, time seems to run slowly. Childhood is an eternity. Later, when we are adults, our subjective experience of the passage of time accelerates, and the time between one year and the next seems to be only an instant.

Childhood should be a time of joy, but for many children in war-torn or impoverished areas of the world, it is a time of insecurity and suffering. We must work to change this.

The songs of children

It is always moving and beautiful for us to hear children singing. The songs that they sing may be handed down from child to child, or they may be handed down between generations in the countries to which the children belong. The photos below show childrens' choirs in many countries. In Sweden (an also in Denmark) Lucia Day is celebrated on the 13th of December, one of the darkest days of the year, and the ceremony with lighted candles, celebrates the return of the light. May light return to our troubled world!





www.shutterstock.com 1224006635

Figure 7.1: Celebrating Lucia Day in Sweden

7.1. CHILDREN'S CHOIRS AROUND THE WORLD







Figure 7.2: The King's College Choir in England



Figure 7.3: Children singing in Bhutan



Figure 7.4: Children singing in Africa

7.1. CHILDREN'S CHOIRS AROUND THE WORLD



Figure 7.5: An African choir

WHO IS MY NEIGHBOR?



Figure 7.6: Children singing in Japan

7.1. CHILDREN'S CHOIRS AROUND THE WORLD



Figure 7.7: A Japanese choir



Figure 7.8: Chinese children singing



Figure 7.9: A Chinese choir touring the world



Figure 7.10: Children in India sing on television

7.1. CHILDREN'S CHOIRS AROUND THE WORLD



Figure 7.11: A children's choir in India: Music Basti



Figure 7.12: A children's choir in Pakistan



Figure 7.13: Pakistan street talent: Amazing voice



Figure 7.14: Gruen sind alle meine Kleider. Children singing in Germany

7.2. MORE PHOTOS OF CHILDREN SINGING



Figure 7.15: Jingle Bells, with lyrics translated into German

7.2 More photos of children singing

Songs of peace and joy

The children shown singing in these photos belong to many nations; and those nations sometimes regard each other as enemies. But the children do not. Their songs express joy and peace. The children of Russia and the children of the United States are not enemies of each other. For adults to involve them in wars and power struggles is criminal, especially to threaten them with nuclear annihilation. As Eglantine Jebb said, "Every war is a war against children". Even if there were no other reason for ending the terrible waste and suffering of war, the involvement of innocent children would be a more than sufficient reason.

Nor are children racists. And music unites us. In the photos we can see children of different ethnic groups celebrating peace, unity and joy. May peace, unity and joy return to our troubled world!



Figure 7.16: A children's choir in Russia



Figure 7.17: A Russian children's orphanage choir

7.2. MORE PHOTOS OF CHILDREN SINGING



Figure 7.18: Children singing in Bolivia



Figure 7.19: Bolivian children



Figure 7.20: Children singing in the United States



Figure 7.21: Bel Air singing lessons, California

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Figure 7.22: Indigenous children singing in Australia



Figure 7.23: Australia: Stop obsessing over talent. Everyone can sing

Chapter 8

CHRISTIAN ETHICS

8.1 The Parable of the Good Samaritan

All of the major religions of humanity contain some form of the Golden Rule. Christianity offers an especially clear statement of this central ethical principle: According to the Gospel of Luke, after being told that he must love his neighbor as much as he loves himself, a man asks Jesus, "Who is my neighbor?". Jesus then replies with the Parable of the Good Samaritan, in which we are told that our neighbor need not be a member of our own tribe, but can live far away and can belong to a completely different nation or ethnic group. Nevertheless, that person is still our neighbor, and deserves our love and care.

An account of this parable can be found in Luke 10:25-37

On one occasion an expert in the law stood up to test Jesus. "Teacher," he asked, "what must I do to inherit eternal life?"

"What is written in the Law?" he replied. "How do you read it?"

He answered, "Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind'; and, 'Love your neighbor as yourself."

"You have answered correctly," Jesus replied. "Do this and you will live."

But he wanted to justify himself, so he asked Jesus, "And who is my neighbor?"

In reply Jesus said: "A man was going down from Jerusalem to Jericho, when he was attacked by robbers. They stripped him of his clothes, beat him and went away, leaving him half dead. A priest happened to be going down the same road, and when he saw the man, he passed by on the other side. So too, a Levite, when he came to the place and saw him, passed by on the other side. 33 But a Samaritan, as he traveled, came where the man was; and when he saw him, he took pity on him. 34 He went to him and bandaged his wounds, pouring on oil and wine. Then he put the man on his own donkey, brought him to an inn and took care of him. The next day he took out two denarii and gave them to the innkeeper. 'Look after him,' he said, 'and when I return, I will reimburse you for any extra expense you may have.'

"Which of these three do you think was a neighbor to the man who fell into the hands of robbers?"

The expert in the law replied, "The one who had mercy on him." Jesus told him, "Go and do likewise."

The Jewish community of that time, and the Samaritan community, regarded each other as enemies.

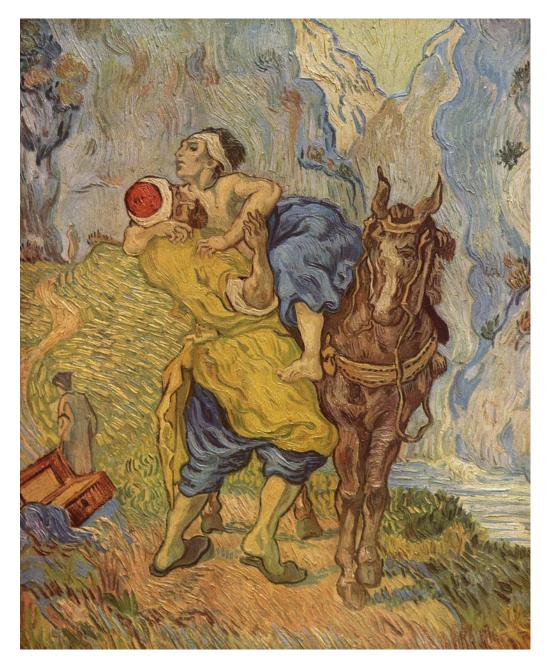


Figure 8.1: The Good Samaritan, after Delacroix by Van Gogh, 1890

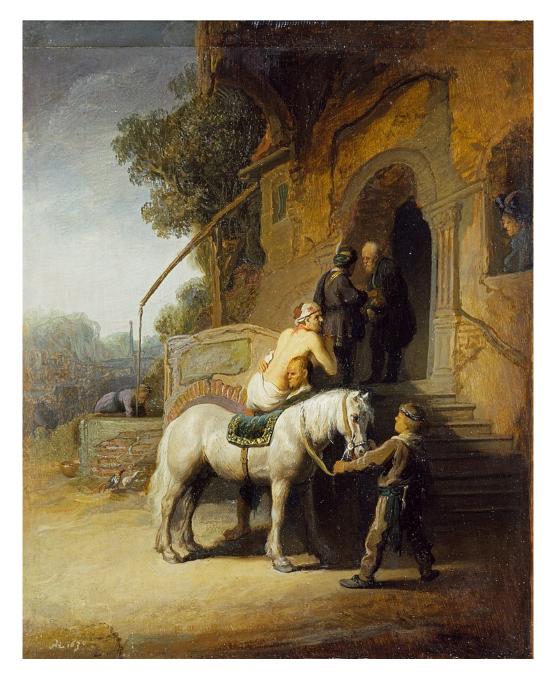


Figure 8.2: The Good Samaritan by Rembrandt (1630) shows the Good Samaritan making arrangements with the innkeeper.

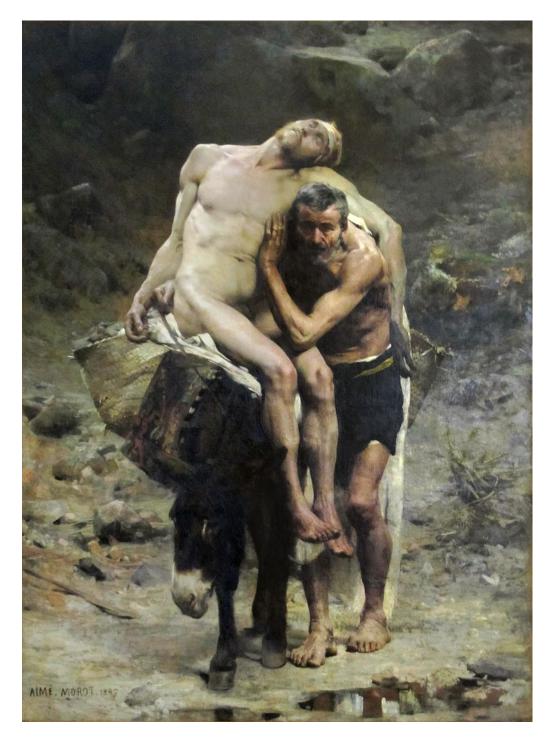


Figure 8.3: The Good Samaritan by Aimé Morot (1880) shows the Good Samaritan taking the injured man to the inn.



Figure 8.4: Parable of the Good Samaritan by Balthasar van Cortbemde (1647) shows the Good Samaritan tending the injured man while the Levite and priest are also shown in the distance.

8.2 The Sermon on the Mount

The three Abrahamic religions, Judaism, Christianity and Islam, have a total of 4 billion followers today, of which 2.4 billion are Christian. At its start, the Christian religion can be seen as a reform of Jewish traditions, a protest against the overly legalistic teachings of the Pharisees and a revelation of a new. more powerful and more universal system of ethics. Later, Saint Paul saw it as his mission to bring Christianity to the Gentiles (i.e. non-Jews).

If Christian ethics were really followed, war would be impossible, but wars have nevertheless persisted, and many of the most brutal wars have been fought in the name of Christianity. In the words the American poet, Edna St. Vincent Millay,¹

Up goes the man of God before the crowd. With voice of honey and with eyes of steel He drones your humble Gospel to the proud. Nobody listens, less than the wind that blows Are all your words to us you died to save. Oh Prince of Peace! O Sharon's dewy Rose! How mute you lie within your vaulted grave! The stone the angel rolled away with tears Is back upon your mouth these thousand years.

The Seven Deadly Sins

Here is a list of important human failings as recognized by Christianity. They are rooted in emotions which we share with our animal ancestors. Today these emotions are inappropriate for civilized human society, and they must be overwritten by ethical principles.

- 1. LUST Regarding lust, Schopenhauer wrote: Lust is the ultimate goal of almost all human endeavor, exerts an adverse influence on the most important affairs, interrupts the most serious business, sometimes for a while confuses even the greatest minds, does not hesitate with its trumpery to disrupt the negotiations of statesmen and the research of scholars, has the knack of slipping its love-letters and ringlets even into ministerial portfolios and philosophical manuscripts.
- 2. **GLUTTONY** Saint Thomas Aquinas argued that gluttony could include, besides eating too much, an obsessive anticipation of meals, and

¹from her poem. To Jesus, on His Birthday

the constant eating of delicacies and excessively costly foods. He even proposed five categories of Gluttony: 1. Laute: eating too expensively. 2. Studiose: eating too daintily. 3. Nimis: eating too much. 4. Praepropere: eating too soon. 5. Ardenter: eating too eagerly.

- 3. GREED As defined outside Christian writings, greed is an inordinate desire to acquire or possess more than one needs, especially with respect to material wealth. Like pride, it can lead to not just some, but all evil. Saint Thomas Aquinas wrote: Greed is a sin against God, just as all mortal sins, in as much as man condemns things eternal for the sake of temporal things. In the New Testament, we can find many passages condemning greed, for example: For the love of money is the root of all evil: which while some coveted after, they have erred from the faith, and pierced themselves through with many sorrows. Timothy 6:10, and Lay not up for yourselves treasures upon earth, where moth and rust doth corrupt, and where thieves break through and steal. Mathew 6:19
- 4. **SLOTH** Unlike the other deadly sins, Sloth is characterized by sins of omission. In his play Per Gynt, Henrik Ibsen portrays his protagonist as hearing voices which tell him: We are the tears you should have shed. That cutting ice, which all hearts dread, we could have melted, but now its dart is frozen into a stubborn heart. Our power is lost. We are the deeds you should have done, strangled by doubt, spoiled e're begun. At the judgement day, we will be there to tell our tale. How will you fare? Per Gynt answers: You can't condemn a man for what he has not done!, but Ibsen's message is: Yes, you can condemn a person for sins of omission. They too are deadly sins.
- 5. WRATH According to the Catholic Church, Hatred is the sin of desiring that someone else may suffer misfortune or evil, and is a mortal sin when one desires grave harm. The Catholic Church also states that If anger reaches the point of a deliberate desire to kill or seriously wound a neighbor, it is gravely against charity; it is a mortal sin. We can also remember the words of Gautama Buddha, Hatred does not cease by hatred at any time; hatred ceases by love.
- ENVY Envy can be directly related to the Ten Commandments, specifically, Neither shall you covet... anything that belongs to your neighbor. If we are free from envy, our happiness is greatly increased, since we can derive pleasure from the success and happiness of others.
- 7. **PRIDE** C.S. Lewis wrote that Unchastity, anger, greed, drunkenness, and all that, are mere fleabites in comparison: it was through Pride that

8.2. THE SERMON ON THE MOUNT

the devil became the devil: Pride leads to every other vice: it is the complete anti-God state of mind. In ancient Greece, both philosophers and dramatists considered excessive pride, which they called *hubris*, to be a sin against the gods, which always led to punishment. According to Wikipedia, Hubris means extreme pride or arrogance. Hubris often indicates a loss of contact with reality, and an overestimation of one's own competence or capabilities, especially when the person exhibiting it is in a position of power.... The word is also used to describe actions of those who challenged the gods or their laws, especially in Greek tragedy, resulting in the protagonist's fall. We can think, for example of the Titanic. The invention and use of nuclear weapons can also be thought of as an example of hubris.

Excerpts from The Sermon on the Mount

Many of the important ethical principles of Christianity are contained in the Sermon on the Mount. Here is the first part of the sermon, as given by the Gospel According to Mathew, Chapter 6:

And seeing the multitudes, he went up into a mountain: and when he was set, his disciples came unto him: And he opened his mouth, and taught them, saying,

Blessed are the poor in spirit: for theirs is the kingdom of heaven.

Blessed are they that mourn: for they shall be comforted.

Blessed are the meek: for they shall inherit the earth.

Blessed are they which do hunger and thirst after righteousness: for they shall be filled.

Blessed are the merciful: for they shall obtain mercy.

Blessed are the pure in heart: for they shall see God.

Blessed are the peacemakers: for they shall be called the children of God.

Blessed are they which are persecuted for righteousness' sake: for theirs is the kingdom of heaven. Blessed are ye, when men shall revile you, and persecute you, and shall say all manner of evil against you falsely, for my sake.

Rejoice, and be exceeding glad: for great is your reward in heaven: for so persecuted they the prophets which were before you.

Ye are the salt of the earth: but if the salt have lost his savour, wherewith shall it be salted? it is thenceforth good for nothing, but to be cast out, and to be trodden under foot of men.

Ye are the light of the world. A city that is set on an hill cannot be hid.

Neither do men light a candle, and put it under a bushel, but on a candlestick; and it giveth light unto all that are in the house.

Let your light so shine before men, that they may see your good works, and glorify your Father which is in heaven.

Think not that I am come to destroy the law, or the prophets: I am not come to destroy, but to fulfil.

For verily I say unto you, Till heaven and earth pass, one jot or one tittle shall in no wise pass from the law, till all be fulfilled.

Whosoever therefore shall break one of these least commandments, and shall teach men so, he shall be called the least in the kingdom of heaven: but whosoever shall do and teach them, the same shall be called great in the kingdom of heaven.

For I say unto you, That except your righteousness shall exceed the righteousness of the scribes and Pharisees, ye shall in no case enter into the kingdom of heaven.

Ye have heard that it was said by them of old time, Thou shalt not kill; and whosoever shall kill shall be in danger of the judgment:

But I say unto you, That whosoever is angry with his brother without a cause shall be in danger of the judgment: and whosoever shall say to his brother, Raca, shall be in danger of the council: but whosoever shall say, Thou fool, shall be in danger of hell fire.

Therefore if thou bring thy gift to the altar, and there rememberest that thy brother hath ought against thee;

Leave there thy gift before the altar, and go thy way; first be reconciled to thy brother, and then come and offer thy gift.

Agree with thine adversary quickly, whiles thou art in the way with him; lest at any time the adversary deliver thee to the judge, and the judge deliver thee to the officer, and thou be cast into prison.

Verily I say unto thee, Thou shalt by no means come out thence, till thou hast paid the uttermost farthing. Ye have heard that it was said by them of old time, Thou shalt not commit adultery:

But I say unto you, That whosoever looketh on a woman to lust after her hath committed adultery with her already in his heart.

And if thy right eye offend thee, pluck it out, and cast it from thee: for it is profitable for thee that one of thy members should perish, and not that thy whole body should be cast into hell.

And if thy right hand offend thee, cut if off, and cast it from thee: for it is profitable for thee that one of thy members should perish, and not that thy whole body should be cast into hell.

It hath been said, Whosoever shall put away his wife, let him give her a writing of divorcement: But I say unto you, That whosoever shall put away his wife, saving for the cause of fornication, causeth her to commit adultery: and whosoever shall marry her that is divorced committeth adultery.

Again, ye have heard that it hath been said by them of old time, Thou shalt not forswear thyself, but shalt perform unto the Lord thine oaths:

But I say unto you, Swear not at all; neither by heaven; for it is God's throne:

Nor by the earth; for it is his footstool: neither by Jerusalem;

for it is the city of the great King. Neither shalt thou swear by thy head, because thou canst not make one hair white or black. But let your communication be, Yea, yea; Nay, nay: for whatsoever is more than these cometh of evil. Ye have heard that it hath been said, An eye for an eye, and a tooth for a tooth:

But I say unto you, That ye resist not evil: but whosoever shall smite thee on thy right cheek, turn to him the other also.

And if any man will sue thee at the law, and take away thy coat, let him have thy cloke also.

And whosoever shall compel thee to go a mile, go with him twain.

Give to him that asketh thee, and from him that would borrow of thee turn not thou away.

Ye have heard that it hath been said, Thou shalt love thy neighbour, and hate thine 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 which despitefully use you, and persecute you;

That ye may be the children of your Father which is in heaven: for he maketh his sun to rise on the evil and on the good, and sendeth rain on the just and on the unjust.

For if ye love them which love you, what reward have ye? do not even the publicans the same?

And if ye salute your brethren only, what do ye more than others? do not even the publicans so?

Be ye therefore perfect, even as your Father which is in heaven is perfect.

Notice particularly that Christians are required to love their enemies and to do good to those who have wronged them. This seemingly impractical advice is in fact very practical. Endless escalating cycles of revenge and counter-revenge can only be prevented by unilateral acts of kindness. But do the governments of supposedly Christian countries follow this commandment? Absolutely not! As Edna St. Vincent Millay says, "Nobody listens. Less than the winds that blow are all your words to us you died to save."

Contrast the duty to love and do good to one's enemies with the doctrine of massive retaliation which is built into the concept of nuclear deterrence. In a nuclear war, the hundreds of millions, or even billions, of victims in every country of the world, also neutral countries, would include people of every kind: women, men, old people, children and infants, completely irrespective of any degree of guilt that they might have. This type of killing has to be classified as genocide.

If Christians were true to their beliefs, not only nuclear war, but every kind of war would be forbidden to them.

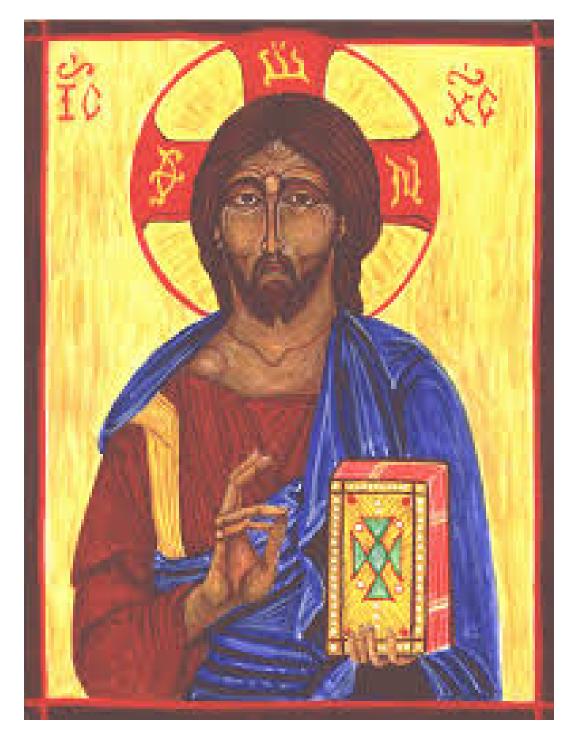


Figure 8.5: An ikon depicting Jesus

8.3 Saint Paul's letter to the Corinthians

If I speak in the tongues of men or of angels, but do not have love, I am only a resounding gong or a clanging cymbal. If I have the gift of prophecy and can fathom all mysteries and all knowledge, and if I have a faith that can move mountains, but do not have love, I am nothing. If I give all I possess to the poor and give over my body to hardship that I may boast, but do not have love, I gain nothing.

Love is patient, love is kind. It does not envy, it does not boast, it is not proud. It does not dishonor others, it is not self-seeking, it is not easily angered, it keeps no record of wrongs. Love does not delight in evil but rejoices with the truth. It always protects, always trusts, always hopes, always perseveres. Love never fails. But where there are prophecies, they will cease; where there are tongues, they will be stilled; where there is knowledge, it will pass away. For we know in part and we prophesy in part, but when completeness comes, what is in part disappears. When I was a child, I talked like a child, I thought like a child, I reasoned like a child. When I became a man, I put the ways of childhood behind me. For now we see only a reflection as in a mirror; then we shall see face to face. Now I know in part; then I shall know fully, even as I am fully known.

And now these three remain: faith, hope and love. But the greatest of these is love.

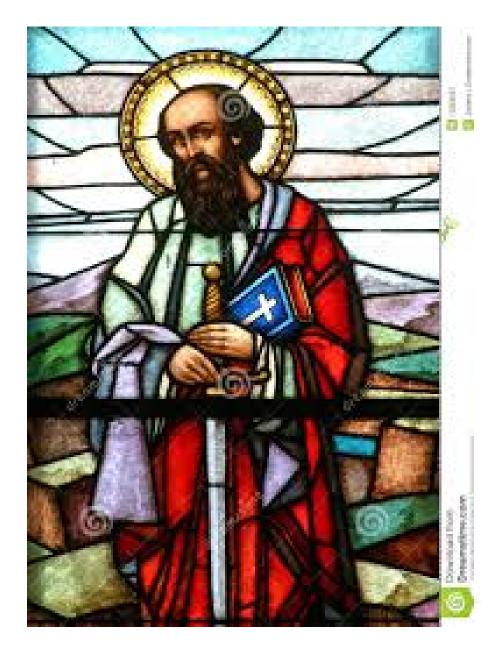


Figure 8.6: A church window showing Saint Paul.

8.4 Saint Francis of Assisi

The life of Saint Francis

Saint Francis of Assisi was born in 1181 in the Italian hilltop town of Assisi. His father, Pietro di Bernardone, was a prosperous silk merchant, and his mother Pica de Bourlemont, was a noblewoman from Provence. Saint Francis was originally called Giovanni, but his father later renamed him Francesco because of his successful business dealings in France and his admiration for all things French.

After leading the ordinary (somewhat dissolute) life of a wealthy young man of that period, Saint Francis underwent a religious conversion, following which he renounced his inheritance and embraced a life of poverty. Although not ordained as a priest, he began teaching what he believed to be the true Christian message. He soon acquired a small group of followers, and he traveled with them to Rome to ask Pope Innocent III for permission to found a new religious order. During his life, Saint Francis founded three religious orders.

Saint Francis continued to preach, and is even said to have preached to birds and animals, whom he regarded as his sisters and brothers. His attitude towards nature can be seen in his "Canticle of the Sun":

Canticle of the Sun

Most High, all powerful, good Lord, Yours are the praises, the glory, the honor, and all blessing.

To You alone, Most High, do they belong, and no man is worthy to mention Your name.

Be praised, my Lord, through all your creatures, especially through my lord Brother Sun, who brings the day; and you give light through him. And he is beautiful and radiant in all his splendor! Of you, Most High, he bears the likeness.

Praise be You, my Lord, through Sister Moon and the stars, in heaven you formed them clear and precious and beautiful.

Praised be You, my Lord, through Brother Wind,



Figure 8.7: Saint Francis preaching to the birds in a painting by Giotto (public domain).

8.4. SAINT FRANCIS OF ASSISI

and through the air, cloudy and serene, and every kind of weather through which You give sustenance to Your creatures.

Praised be You, my Lord, through Sister Water, which is very useful and humble and precious and chaste.

Praised be You, my Lord, through Brother Fire, through whom you light the night and he is beautiful and playful and robust and strong.

Praised be You, my Lord, through Sister Mother Earth, who sustains us and governs us and who produces varied fruits with colored flowers and herbs.

Praised be You, my Lord, through those who give pardon for Your love, and bear infirmity and tribulation.

Blessed are those who endure in peace for by You, Most High, they shall be crowned.

Praised be You, my Lord, through our Sister Bodily Death, from whom no living man can escape.

Woe to those who die in mortal sin. Blessed are those whom death will find in Your most holy will, for the second death shall do them no harm.

Praise and bless my Lord, and give Him thanks and serve Him with great humility.

Canonization

Pope Gregory IX canonized Francis on 16 July 1228. Along with Saint Catherine of Sienna, he was designated Patron Saint of Italy. He later became associated with patronage of animals and the natural environment, and it became customary for Catholic and Anglican churches to hold ceremonies blessing animals on his feast day of 4 October.

A prayer of Saint Francis

Blessed is he who loves and does not therefore desire to be loved; Blessed is he who fears and does not therefore desire to be feared; Blessed is he who serves and does not therefore desire to be served; Blessed is he who behaves well toward others and does not desire that others behave well toward him;

8.5 Christian ethics, and the crimes of Christian nations

Although Europe and the United States contain people of many cultures and religions, they are both predominantly Christian. It would therefore be reasonable to expect them to follow Christian ethics, the most important parts of which are the commandment to love and forgive our enemies, and the Parable of the Good Samaritan. These important ethical principles ought to make wars of aggression impossible for Christians. In reality, Europeans have participated in an a seemingly endless string of bloody wars, starting with the Crusades, continuing through religious wars between Catholics and Protestants, and including gruesome wars in which Europeans established colonies throughout the remainder of the world.

The aggressive wars initiated by the United States are more recent, but no less horrible. We must also remember that the United States constructed the first nuclear weapons, and used them against an already-defeated Japan. A recent poll showed that a majority of people throughout the world consider the United States to be the greatest threat to peace.

Those of us who can see something good and positive in Christian ethics, ardently wish that Christian nations would follow the fundamental commandments of their professed religion.

8.6 European racism, colonialism and exceptionalism

As Europe became industrialized, European armaments allowed colonial expansion, until ultimately as much as 85% of the world's land surface fell un-

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der the colonial domination of the industrialized nations. Colonialism can be thought of as an early example military-industrial complexes. At this early stage of industrialism, we can already see wars conducted for the sake of resources. We can already see a circular flow of money from the profits of arms manufacturers to politicians and their newspaper supporters, and back to the arms manufacturers. We can already see the Devil's Dynamo at work.

Genocides in the Americas

Instances of genocide stain much of human history. 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 potentially be of enormous value to humanity, and great efforts should be made to protect them.

In North America, we can recall that military commanders, such as Lord Jeffrey Amherst, deliberately inoculated the Indians with smallpox by giving them blankets from smallpox hospitals. Amherst wrote to his associate, Colonel Henry Bouquet "You will do well to try to inoculate the Indians, by means of blankets, as well as to try every other method that can serve to extirpate this execrable race." This is clearly an instance of genocide, as well as being an example of the use of biological weapons.

The website of the Holocaust Museum Houston states that "Civil war existed in Guatemala since the early 1960s due to inequalities existing in the economic and political life. In the 1970s, the Maya began participating in protests against the repressive government, demanding greater equality and inclusion of the Mayan language and culture. In 1980, the Guatemalan army instituted "Operation Sophia," which aimed at ending insurgent guerrilla warfare by destroying the civilian base in which they hid. This program specifically targeted the Mayan population, who were believed to be supporting the guerilla movement. Over the next three years, the army destroyed 626 villages, killed or 'disappeared' more than 200,000 people and displaced an additional 1.5 million, while more than 150,000 were driven to seek refuge in Mexico. Forced disappearance policies included secretly arresting or abducting people, who were often killed and buried in unmarked graves."



Figure 8.8: The atrocities they committed by the "conquistadors" over the course of three centuries are far too many to be listed here, but there are some that stand out. In the Caribbean, most of the native populations were completely wiped out due to Spanish rapine and diseases. In Mexico, Hernan Cortes and Pedro de Alvarado ordered the Cholula Massacre and the Temple Massacre respectively, killing thousands of unarmed men, women and children. In Peru, Francisco Pizarro captured Emperor Atahualpa in the midst of an unprovoked bloodbath at Cajamarca. Wherever the conquistadors went, death and misery for the natives followed.

Modern weapons and colonialism

In the 18th and 19th centuries, the continually accelerating development of science and science-based industry began to affect the whole world. As the factories of Europe poured out cheap manufactured goods, a change took place in the patterns of world trade: Before the Industrial Revolution, trade routes to Asia had brought Asian spices, textiles and luxury goods to Europe. For example, cotton cloth and fine textiles, woven in India, were imported to England. With the invention of spinning and weaving machines, the trade was reversed. Cheap cotton cloth, manufactured in England, began to be sold in India, and the Indian textile industry withered, just as the hand-loom industry in England itself had done a century before.

The rapid development of technology in the west also opened an enormous gap in military strength between the industrialized nations and the rest of the world. Taking advantage of their superior weaponry, the advanced industrial nations rapidly carved the remainder of the world into colonies, which acted as sources of raw materials and food, and as markets for manufactured goods.

Throughout the American continent, the native Indian population had proved vulnerable to European diseases, such as smallpox, and large numbers of them had died. The remaining Indians were driven westward by streams of immigrants arriving from Europe.

Often the industrialized nations made their will felt by means of naval bombardments: In 1854, Commodore Perry forced Japan to accept foreign traders by threatening to bombard Tokyo. In 1856, British warships bombarded Canton in China to punish acts of violence against Europeans living in the city. In 1864, a force of European and American warships bombarded Choshu in Japan, causing a revolution. In 1882, Alexandria was bombarded, and in 1896, Zanzibar.

Much that was beautiful and valuable was lost, as mature traditional cultures collapsed, overcome by the power and temptations of modern industrial civilization. For the Europeans and Americans of the late 19th century and early 20th century, progress was a religion, and imperialism was its crusade.

Between 1800 and 1875, the percentage of the earth's surface under European rule increased from 35 percent to 67 percent. In the period between 1875 and 1914, there was a new wave of colonial expansion, and the fraction of the earth's surface under the domination of colonial powers (Europe, the United States and Japan) increased to 85 percent, if former colonies are included. The unequal (and unfair) contest between the industrialized countries, armed with modern weapons, and the traditional cultures with their much more primitive arms, was summarized by the English poet Hilaire Belloc in a sardonic couplet:



 $\mathbf{2}$

Whatever happens, we have got The Maxim gun, and they have not.

During the period between 1880 and 1914, British industrial and colonial dominance began to be challenged. Industrialism had spread from Britain to Belgium, Germany and the United States, and, to a lesser extent, to France, Italy, Russia and Japan. By 1914, Germany was producing twice as much steel as Britain, and the United States was producing four times as much.

New techniques in weaponry were introduced, and a naval armaments race began among the major industrial powers. The English found that their old navy was obsolete, and they had to rebuild. Thus, the period of colonial expansion between 1880 and 1914 was filled with tensions, as the industrial powers raced to arm themselves in competition with each other, and raced to seize as much as possible of the rest of the world. Industrial and colonial rivalry contributed to the outbreak of the First World War, to which the Second World War can be seen as a sequel.

With the founding of the United Nations at the end of the Second World War, a system of international law was set up to replace the rule of military force. Law is a mechanism for equality. Under law, the weak and the powerful

²The Maxim gun was one of the world's first automatic machine guns. It was invented in the United States in 1884 by Hiram S. Maxim. The explorer and colonialist Henry Morton Stanley (1841-1904) was extremely enthusiastic about Maxim's machine gun, and during a visit to the inventor he tried firing it, demonstrating that it really could fire 600 rounds per minute. Stanley commented that the machine gun would be "a valuable tool in helping civilization to overcome barbarism".

are in principle equal. One of the basic purposes of the United Nations is to make war illegal, and if war is illegal, the powerful and weak are on equal footing, much to the chagrin of the powerful. How can one can one construct or maintain an empire if war is not allowed? It is only natural that powerful nations should be opposed to international law, since it is a curb on their power. However, despite opposition, the United Nations has been largely successful in ending the era of colonialism, perhaps because of the balance of power between East and West during the Cold War. One by one, former colonies have regained their independence.

Persistent effects of colonialism

Part of the extreme economic inequality that exists in today's world is due to colonial and neocolonial wars.

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.

Racism, colonialism and exceptionalism

It seems to be possible for nations, and the majority of their citizens, to commit the worst imaginable atrocities, including torture, murder and genocide, while feeling that what they are doing is both noble and good. Some understanding of how this is possible can be gained by watching the 3-part BBC documentary, "The History of Racism".³

The series was broadcast by BBC Four in March 2007, and videos of the broadcasts are available on the Internet. Watching this eye-opening documentary can give us much insight into the link between racism and colonialism. We can also begin to see how both racism and colonialism are linked to US exceptionalism and neocolonialism.

Leopold II and Atrocities in Belgian Congo

Looking at the BBC documentary we can see how often in human history economic greed and colonial exploitation have been justified by racist theories. The documentary describes almost unbelievable cruelties committed against the peoples of the Americas and Africa by Europeans. For example, in the Congo, a vast region which King Leopold II of Belgium claimed as his private property, the women of villages were held as hostages while the men were forced to gather rubber in the forests. Since neither the men nor the women could produce food under these circumstances, starvation was the result.

Leopold's private army of 90,000 men were issued ammunition, and to make sure that they used it in the proper way, the army was ordered to cut off the hands of their victims and send them back as proof that the bullets had not been wasted. Human hands became a kind of currency, and hands were cut off from men, women and children when rubber quotas were not fulfilled. Sometimes more than a thousand human hands were gathered in a single day. During the rule of Leopold, roughly 10,000,000 Congolese were killed, which was approximately half the population of the region.

According to the racist theories that supported these atrocities, it was the duty of philanthropic Europeans like Leopold to bring civilization and the Christian religion to Africa. Similar theories were used to justify the genocides committed by Europeans against the native inhabitants of the Americas.

Racist theories were also used to justify enormous cruelties committed by the British colonial government in India. For example, during the great famine of 1876-1878, in which ten million people died, the Viceroy, Lord Lytton, oversaw the export to England of a record 6.4 million hundredweight of wheat.

Meanwhile, in Europe, almost everyone was proud of the role which they were playing in the world. All that they read in newspapers and in books or heard from the pulpits of their churches supported the idea that they were serving the non-Europeans by bringing them the benefits of civilization and

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³https://www.youtube.com/watch?v=efI6T8lovqY https://www.youtube.com/watch?v=IdBDRbjx9jo https://www.youtube.com/watch?v=oCJHJWaNL-g

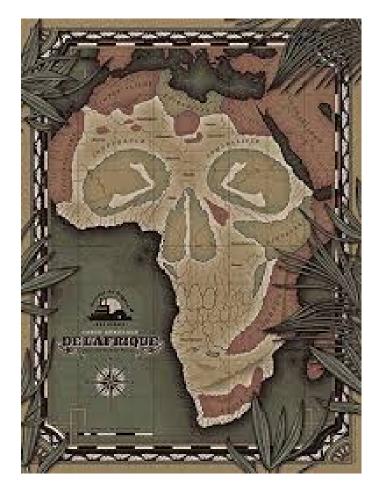


Figure 8.9: Half of the population of Belgian Congo died during the rule of Leopold II.

Christianity. On the whole, the mood of Europe during this orgy of external cruelty and exploitation, was self-congratulatory.

Can we not see a parallel with the self-congratulatory mood of the American people and their allies, who export violence, murder, torture and neocolonialism to the whole world, and who justify it by thinking of themselves as "exceptional"?

The Kaiser's genocide

A book entitled *The Kaiser's Holocaust: Germany's Forgotten Genocide and the Colonial Roots of Nazism*, by David Olusoga and Caspar W. Erichsen describes Germany's involvement in an African genocide. Here is Amazon's synopsis of the book: "On 12 May 1883, the German flag was raised on the

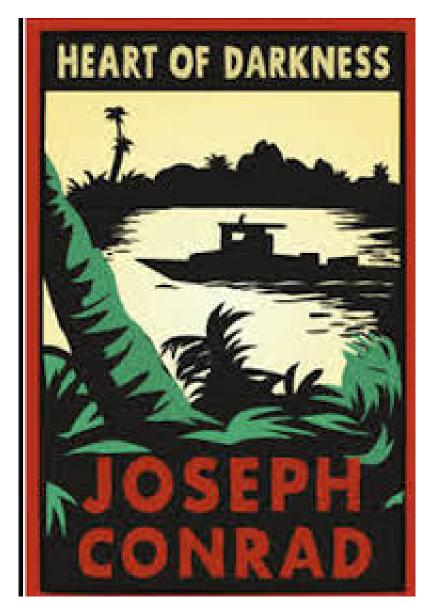


Figure 8.10: Joseph Conrad's famous book was written against the background of Leopold's atrocities.

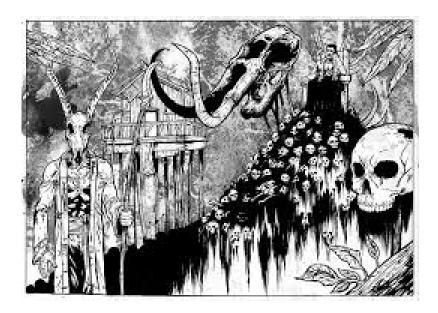


Figure 8.11: Heart of Darkness: An illustration for Joseph Conrad's book.



Figure 8.12: Heart of Darkness: Another illustration for Conrad's book.

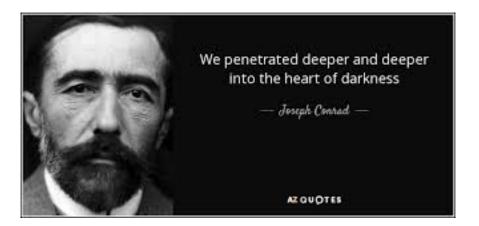


Figure 8.13: Heart of Darkness: Joseph Conrad.



Figure 8.14: Heart of Darkness: King Leopold II of Belgium and some of his victims.

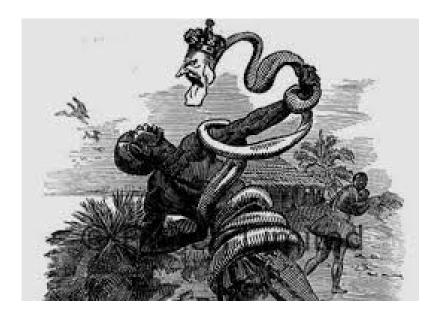


Figure 8.15: Heart of Darkness: A drawing used in the campaign to end Leopold's personal ownership of the Congo.



Figure 8.16: Heart of Darkness: In Leopold's Congo, human hands became a currency.

WHO IS MY NEIGHBOR?



Figure 8.17: Heart of Darkness: Part of a palace built by Leopold II to glorify his "humanitarian" activities in the Congo.



Figure 8.18: Heart of Darkness. A statue of Leopold II.



Figure 8.19: Bones left by the German Kaiser's African genocide.

coast of South-West Africa, modern Namibia - the beginnings of Germany's African Empire. As colonial forces moved in , their ruthless punitive raids became an open war of extermination. Thousands of the indigenous people were killed or driven out into the desert to die. By 1905, the survivors were interned in concentration camps, and systematically starved and worked to death. Years later, the people and ideas that drove the ethnic cleansing of German South West Africa would influence the formation of the Nazi Party. The Kaiser's Holocaust uncovers extraordinary links between the two regimes: their ideologies, personnel, even symbols and uniform. The Herero and Nama genocide was deliberately concealed for almost a century. Today, as the graves of the victims are uncovered, its re-emergence challenges the belief that Nazism was an aberration in European history. The Kaiser's Holocaust passionately narrates this harrowing story and explores one of the defining episodes of the twentieth century from a new angle. Moving, powerful and unforgettable, it is a story that needs to be told."

The racism of Cecil Rhodes

Cecil Rhodes, who was born in Bishop's Stortford in Hertfordshire, came to South Africa in the late 1800s and made his fortune in the country's diamond mines before moving into politics. He served as prime minister of the Cape Colony and later founded the southern African territory of Rhodesia, which would later become independent Zimbabwe. He was the architect of South Africa's notorious apartheid system, and a rabid advocate of British imperialism. Social Darwinism and the eugenics movement may have contributed to the racism and imperialism of Cecil Rhodes.

In a December 2015 article in *The Telegraph*, Dalia Gebrial wrote: "Cecil Rhodes was a man responsible for untold, unending devastation and violence. An architect of South African apartheid, he explicitly believed in the existence of an Anglo-Saxon master race - an ideology that drove him to not only steal approximately one [square] million miles of South African land, but to facilitate the deaths of hundreds of thousands of black South Africans.

"His establishment of a paramilitary private army, the British South Africa Company's Police (BSACP) resulted in the systematic murder of approximately 60,000 people; his amendment of the Masters and Servants Act (1890) reintroduced conditions of torture for black labourers; his infamous racist 'land grabs' set up a system in which the unlawful and illegitimate acquisition of land through armed force was routine.

" In 1887 he told the House of Assembly in Cape Town: 'The native is to be treated as a child and denied the franchise. We must adopt a system of despotism in our relations with the barbarians of South Africa.' His 1892 Franchise and Ballot Act effectively eliminated African voting rights. He repeatedly reminded his colleagues of the 'extreme caution' they must exercise when it comes to 'granting the franchise to coloured people.

Rhodes wanted to create an international movement to extend British influence. He once said: "Why should we not form a secret society with but one object, the furtherance of the British Empire and the bringing of the whole world under British rule, for the recovery of the United States, for making the Anglo-Saxon race but one Empire?"

Rhodes did, in fact, establish this secret society, and it remains very influential today. According to G. Edward Griffin⁴, "Financed by Nathan Rothschild and the Bank of England, he [Rhodes] established a monopoly over the diamond output of South Africa and most of the gold as well. He formed a secret society which included many of the top leaders of British government. Their elitist goal was nothing less than world domination and the establishment of a modern feudalist society controlled by themselves through the world's central banks. In America, the Council on Foreign Relations (CFR) was an outgrowth of that group."



Figure 8.20: Native Americans protesting against the Dakota Access Pipeline.

Our older brothers can help us today

The distinguished English author Anne Baring describes the indigenous peoples of the world as our "older brothers". They are anxious to give their "younger brothers" (us) advice about how to preserve the earth, rather than destroying it. But we do not listen. Instead, we murder them because of greed, because we want to take their land.

Pipeline protests by Native Americans

As a recent example of the way in which we respond to our "older brothers" when they urge us to behave in an environmentally responsible manner, we can consider the pipeline protests at Standing Rock. Wikipedia describe these protests as follows:

"On September 3, 2016, during Labor Day weekend, the Dakota Access Pipeline brought in a private security firm when the company used bulldozers to dig up part of the pipeline route that contained possible Native graves and burial artifacts; it was subject to a pending injunction motion. The bulldozers arrived within a day after the tribe filed legal action. Energy Transfer bulldozers cut a two-mile (3200 m) long, 150-foot (45 m) wide path through the contested area.

"When unarmed protesters crossed the perimeter fence to stop the bulldozers, the guards used pepper spray and guard dogs to attack. At least six

⁴in his book, The Creature from Jeckyll Island

protesters were treated for dog bites, and an estimated 30 were pepper-sprayed before the guards and their dogs left the scene in trucks. A woman that had taken part in the incident stated, 'The cops watched the whole thing from up on the hills. It felt like they were trying to provoke us into being violent when we're peaceful.' The incident was filmed by Amy Goodman and a crew from Democracy Now! Footage shows several people with dog bites and a dog with blood on its muzzle.

"Some protesters who were arrested for misdemeanors and taken to the Morton County jail reported what they considered harsh and unusual treatment. Sara Jumping Eagle, a physician on the Standing Rock Sioux Reservation, was required to remove all of her clothing and 'squat and cough' when she was arrested for disorderly conduct. In another such case, LaDonna Brave Bull Allard, who founded Sacred Stone Camp, said that when her daughter was arrested and taken into custody she was 'strip-searched in front of multiple male officers, then left for hours in her cell, naked and freezing.' Cody Hall from Cheyenne River Reservation in South Dakota also reported being stripsearched. He was held for four days without bail or bond and then charged with two misdemeanors."

because of public indignation, construction of the pipeline was halted in December, 2016. However, on February 7, 2017, newly-elected Donald Trump authorized the Army Corps of Engineers to proceed, ending its environmental impact assessment and the associated public comment period. The director of the Indigenous Environmental Network released a statement saying: "The granting of an easement, without any environmental review or tribal consultation, is not the end of this fight - it is the new beginning. Expect mass resistance far beyond what Trump has seen so far."

8.7 US wars, interventions and coups

Harold Pinter's Nobel Lecture

Harold Pinter (1930-2008) was a British author who received the 2005 Nobel Prize in Literature. Here is the final section of his Nobel Lecture:

Political language, as used by politicians, does not venture into any of this territory since the majority of politicians, on the evidence available to us, are interested not in truth but in power and in the maintenance of that power. To maintain that power it is essential that people remain in ignorance, that they live in ignorance of the truth, even the truth of their own lives. What surrounds us therefore is a vast tapestry of lies, upon which we feed. As every single person here knows, the justification for the invasion of Iraq was that Saddam Hussein possessed a highly dangerous body of weapons of mass destruction, some of which could be fired in 45 minutes, bringing about appalling devastation. We were assured that was true. It was not true. We were told that Iraq had a relationship with al-Qaeda and shared responsibility for the atrocity in New York of September 11th 2001. We were assured that this was true. It was not true. We were told that Iraq threatened the security of the world. We were assured it was true. It was not true.

The truth is something entirely different. The truth is to do with how the United States understands its role in the world and how it chooses to embody it.

But before I come back to the present I would like to look at the recent past, by which I mean United States foreign policy since the end of the Second World War. I believe it is obligatory upon us to subject this period to at least some kind of even limited scrutiny, which is all that time will allow here.

Everyone knows what happened in the Soviet Union and throughout Eastern Europe during the post-war period: the systematic brutality, the widespread atrocities, the ruthless suppression of independent thought. All this has been fully documented and verified.

But my contention here is that the US crimes in the same period have only been superficially recorded, let alone documented, let alone acknowledged, let alone recognized as crimes at all. I believe this must be addressed and that the truth has considerable bearing on where the world stands now. Although constrained, to a certain extent, by the existence of the Soviet Union, the United States' actions throughout the world made it clear that it had concluded it had carte blanch to do what it liked.

Direct invasion of a sovereign state has never in fact been America's favoured method. In the main, it has preferred what it has described as 'low intensity conflict'. Low intensity conflict means that thousands of people die but slower than if you dropped a bomb on them in one fell swoop. It means that you infect the heart of the country, that you establish a malignant growth and watch the gangrene bloom. When the populace has been subdued - or beaten to death - the same thing - and your own friends, the military and the great corporations, sit comfortably in power, you go before the camera and say that democracy has prevailed. This was a commonplace in US foreign policy in the years to which I refer.

The tragedy of Nicaragua was a highly significant case. I choose

to offer it here as a potent example of America's view of its role in the world, both then and now.

I was present at a meeting at the US embassy in London in the late 1980s.

The United States Congress was about to decide whether to give more money to the Contras in their campaign against the state of Nicaragua. I was a member of a delegation speaking on behalf of Nicaragua but the most important member of this delegation was a Father John Metcalf. The leader of the US body was Raymond Seitz (then number two to the ambassador, later ambassador himself). Father Metcalf said: 'Sir, I am in charge of a parish in the north of Nicaragua. My parishioners built a school, a health centre, a cultural centre. We have lived in peace. A few months ago a Contra force attacked the parish. They destroyed everything: the school, the health centre, the cultural centre. They raped nurses and teachers, slaughtered doctors, in the most brutal manner. They behaved like savages. Please demand that the US government withdraw its support from this shocking terrorist activity.'

Raymond Seitz had a very good reputation as a rational, responsible and highly sophisticated man. He was greatly respected in diplomatic circles. He listened, paused and then spoke with some gravity. 'Father,' he said, 'let me tell you something. In war, innocent people always suffer.' There was a frozen silence. We stared at him. He did not flinch.

Innocent people, indeed, always suffer.

Finally somebody said: 'But in this case "innocent people" were the victims of a gruesome atrocity subsidized by your government, one among many. If Congress allows the Contras more money further atrocities of this kind will take place. Is this not the case? Is your government not therefore guilty of supporting acts of murder and destruction upon the citizens of a sovereign state?'

Seitz was imperturbable. 'I don't agree that the facts as presented support your assertions,' he said.

As we were leaving the Embassy a US aide told me that he enjoyed my plays. I did not reply.

I should remind you that at the time President Reagan made the following statement: 'The Contras are the moral equivalent of our Founding Fathers.'

The United States supported the brutal Somoza dictatorship in Nicaragua for over 40 years. The Nicaraguan people, led by the Sandinistas, overthrew this regime in 1979, a breathtaking popular

revolution.

The Sandinistas weren't perfect. They possessed their fair share of arrogance and their political philosophy contained a number of contradictory elements. But they were intelligent, rational and civilized. They set out to establish a stable, decent, pluralistic society. The death penalty was abolished. Hundreds of thousands of povertystricken peasants were brought back from the dead. Over 100,000 families were given title to land. Two thousand schools were built. A quite remarkable literacy campaign reduced illiteracy in the country to less than one seventh. Free education was established and a free health service. Infant mortality was reduced by a third. Polio was eradicated.

The United States denounced these achievements as Marxist/Leninist subversion. In the view of the US government, a dangerous example was being set. If Nicaragua was allowed to establish basic norms of social and economic justice, if it was allowed to raise the standards of health care and education and achieve social unity and national self respect, neighboring countries would ask the same questions and do the same things. There was of course at the time fierce resistance to the status quo in El Salvador.

I spoke earlier about 'a tapestry of lies' which surrounds us. President Reagan commonly described Nicaragua as a 'totalitarian dungeon'. This was taken generally by the media, and certainly by the British government, as accurate and fair comment. But there was in fact no record of death squads under the Sandinista government. There was no record of torture. There was no record of systematic or official military brutality. No priests were ever murdered in Nicaragua. There were in fact three priests in the government, two Jesuits and a Maryknoll missionary. The totalitarian dungeons were actually next door, in El Salvador and Guatemala. The United States had brought down the democratically elected government of Guatemala in 1954 and it is estimated that over 200,000 people had been victims of successive military dictatorships.

Six of the most distinguished Jesuits in the world were viciously murdered at the Central American University in San Salvador in 1989 by a battalion of the Alcatl regiment trained at Fort Benning, Georgia, USA. That extremely brave man Archbishop Romero was assassinated while saying mass. It is estimated that 75,000 people died. Why were they killed? They were killed because they believed a better life was possible and should be achieved. That belief immediately qualified them as communists. They died because they dared to question the status quo, the endless plateau of poverty, disease, degradation and oppression, which had been their birthright.

The United States finally brought down the Sandinista government. It took some years and considerable resistance but relentless economic persecution and 30,000 dead finally undermined the spirit of the Nicaraguan people. They were exhausted and poverty stricken once again. The casinos moved back into the country. Free health and free education were over. Big business returned with a vengeance. 'Democracy' had prevailed.

But this 'policy' was by no means restricted to Central America. It was conducted throughout the world. It was never-ending. And it is as if it never happened.

The United States supported and in many cases engendered every right wing military dictatorship in the world after the end of the Second World War. I refer to Indonesia, Greece, Uruguay, Brazil, Paraguay, Haiti, Turkey, the Philippines, Guatemala, El Salvador, and, of course, Chile. The horror the United States inflicted upon Chile in 1973 can never be purged and can never be forgiven.

Hundreds of thousands of deaths took place throughout these countries. Did they take place? And are they in all cases attributable to US foreign policy? The answer is yes they did take place and they are attributable to American foreign policy. But you wouldn't know it.

It never happened. Nothing ever happened. Even while it was happening it wasn't happening. It didn't matter. It was of no interest. The crimes of the United States have been systematic, constant, vicious, remorseless, but very few people have actually talked about them. You have to hand it to America. It has exercised a quite clinical manipulation of power worldwide while masquerading as a force for universal good. It's a brilliant, even witty, highly successful act of hypnosis.

I put to you that the United States is without doubt the greatest show on the road. Brutal, indifferent, scornful and ruthless it may be but it is also very clever. As a salesman it is out on its own and its most saleable commodity is self love. It's a winner. Listen to all American presidents on television say the words, 'the American people', as in the sentence, 'I say to the American people it is time to pray and to defend the rights of the American people and I ask the American people to trust their president in the action he is about to take on behalf of the American people.'

It's a scintillating stratagem. Language is actually employed to

keep thought at bay. The words 'the American people' provide a truly voluptuous cushion of reassurance. You don't need to think. Just lie back on the cushion. The cushion may be suffocating your intelligence and your critical faculties but it's very comfortable. This does not apply of course to the 40 million people living below the poverty line and the 2 million men and women imprisoned in the vast gulag of prisons, which extends across the US.

The United States no longer bothers about low intensity conflict. It no longer sees any point in being reticent or even devious. It puts its cards on the table without fear or favour. It quite simply doesn't give a damn about the United Nations, international law or critical dissent, which it regards as impotent and irrelevant. It also has its own bleating little lamb tagging behind it on a lead, the pathetic and supine Great Britain.

What has happened to our moral sensibility? Did we ever have any? What do these words mean? Do they refer to a term very rarely employed these days - conscience? A conscience to do not only with our own acts but to do with our shared responsibility in the acts of others? Is all this dead? Look at Guantanamo Bay. Hundreds of people detained without charge for over three years, with no legal representation or due process, technically detained forever. This totally illegitimate structure is maintained in defiance of the Geneva Convention. It is not only tolerated but hardly thought about by what's called the 'international community'. This criminal outrage is being committed by a country, which declares itself to be 'the leader of the free world'. Do we think about the inhabitants of Guantanamo Bay? What does the media say about them? They pop up occasionally - a small item on page six. They have been consigned to a no man's land from which indeed they may never return. At present many are on hunger strike, being force-fed, including British residents. No niceties in these force-feeding procedures. No sedative or anaesthetic. Just a tube stuck up your nose and into your throat. You vomit blood. This is torture. What has the British Foreign Secretary said about this? Nothing. What has the British Prime Minister said about this? Nothing. Why not? Because the United States has said: to criticize our conduct in Guantanamo Bay constitutes an unfriendly act. You're either with us or against us. So Blair shuts up.

The invasion of Iraq was a bandit act, an act of blatant state terrorism, demonstrating absolute contempt for the concept of international law. The invasion was an arbitrary military action inspired by a series of lies upon lies and gross manipulation of the media and therefore of the public; an act intended to consolidate American military and economic control of the Middle East masquerading - as a last resort - all other justifications having failed to justify themselves - as liberation. A formidable assertion of military force responsible for the death and mutilation of thousands and thousands of innocent people.

We have brought torture, cluster bombs, depleted uranium, innumerable acts of random murder, misery, degradation and death to the Iraqi people and call it 'bringing freedom and democracy to the Middle East'.

How many people do you have to kill before you qualify to be described as a mass murderer and a war criminal? One hundred thousand? More than enough, I would have thought. Therefore it is just that Bush and Blair be arraigned before the International Criminal Court of Justice. But Bush has been clever. He has not ratified the International Criminal Court of Justice. Therefore if any American soldier or for that matter politician finds himself in the dock Bush has warned that he will send in the marines. But Tony Blair has ratified the Court and is therefore available for prosecution. We can let the Court have his address if they're interested. It is Number 10, Downing Street, London.

Death in this context is irrelevant. Both Bush and Blair place death well away on the back burner. At least 100,000 Iraqis were killed by American bombs and missiles before the Iraq insurgency began. These people are of no moment. Their deaths don't exist. They are blank. They are not even recorded as being dead. 'We don't do body counts,' said the American general Tommy Franks.

Early in the invasion there was a photograph published on the front page of British newspapers of Tony Blair kissing the cheek of a little Iraqi boy. 'A grateful child,' said the caption. A few days later there was a story and photograph, on an inside page, of another four-year-old boy with no arms. His family had been blown up by a missile. He was the only survivor. 'When do I get my arms back?' he asked. The story was dropped. Well, Tony Blair wasn't holding him in his arms, nor the body of any other mutilated child, nor the body of any bloody corpse. Blood is dirty. It dirties your shirt and tie when you're making a sincere speech on television.

The 2,000 American dead are an embarrassment. They are transported to their graves in the dark. Funerals are unobtrusive, out of harm's way. The mutilated rot in their beds, some for the rest of their lives. So the dead and the mutilated both rot, in different kinds of graves.

Here is an extract from a poem by Pablo Neruda, 'I'm Explaining a Few Things':

And one morning all that was burning, one morning the bonfires leapt out of the earth devouring human beings and from then on fire, gunpowder from then on, and from then on blood. Bandits with planes and Moors, bandits with finger-rings and duchesses, bandits with black friars spattering blessings came through the sky to kill children and the blood of children ran through the streets without fuss, like children's blood.

Jackals that the jackals would despise stones that the dry thistle would bite on and spit out, vipers that the vipers would abominate.

Face to face with you I have seen the blood of Spain tower like a tide to drown you in one wave of pride and knives.

Treacherous generals: see my dead house, look at broken Spain: from every house burning metal flows instead of flowers from every socket of Spain Spain emerges and from every dead child a rifle with eyes and from every crime bullets are born which will one day find the bull's eye of your hearts. And you will ask: why doesn't his poetry speak of dreams and leaves and the great volcanoes of his native land.

Come and see the blood in the streets. Come and see the blood in the streets. Come and see the blood in the streets!

Let me make it quite clear that in quoting from Neruda's poem I am in no way comparing Republican Spain to Saddam Hussein's Iraq. I quote Neruda because nowhere in contemporary poetry have I read such a powerful visceral description of the bombing of civilians.

I have said earlier that the United States is now totally frank about putting its cards on the table. That is the case. Its official declared policy is now defined as 'full spectrum dominance'. That is not my term, it is theirs. 'Full spectrum dominance' means control of land, sea, air and space and all attendant resources.

The United States now occupies 702 military installations throughout the world in 132 countries, with the honourable exception of Sweden, of course. We don't quite know how they got there but they are there all right.

The United States possesses 8,000 active and operational nuclear warheads. Two thousand are on hair trigger alert, ready to be launched with 15 minutes warning. It is developing new systems of nuclear force, known as bunker busters. The British, ever cooperative, are intending to replace their own nuclear missile, Trident. Who, I wonder, are they aiming at? Osama bin Laden? You? Me? Joe Dokes? China? Paris? Who knows? What we do know is that this infantile insanity - the possession and threatened use of nuclear weapons - is at the heart of present American political philosophy. We must remind ourselves that the United States is on a permanent military footing and shows no sign of relaxing it.

Many thousands, if not millions, of people in the United States itself are demonstrably sickened, shamed and angered by their government's actions, but as things stand they are not a coherent political force - yet. But the anxiety, uncertainty and fear which we can see growing daily in the United States is unlikely to diminish.

I know that President Bush has many extremely competent speech

writers but I would like to volunteer for the job myself. I propose the following short address which he can make on television to the nation. I see him grave, hair carefully combed, serious, winning, sincere, often beguiling, sometimes employing a wry smile, curiously attractive, a man's man.

'God is good. God is great. God is good. My God is good. Bin Laden's God is bad. His is a bad God. Saddam's God was bad, except he didn't have one. He was a barbarian. We are not barbarians. We don't chop people's heads off. We believe in freedom. So does God. I am not a barbarian. I am the democratically elected leader of a freedom-loving democracy. We are a compassionate society. We give compassionate electrocution and compassionate lethal injection. We are a great nation. I am not a dictator. He is. I am not a barbarian. He is. And he is. They all are. I possess moral authority. You see this fist? This is my moral authority. And don't you forget it.'

A writer's life is a highly vulnerable, almost naked activity. We don't have to weep about that. The writer makes his choice and is stuck with it. But it is true to say that you are open to all the winds, some of them icy indeed. You are out on your own, out on a limb. You find no shelter, no protection - unless you lie - in which case of course you have constructed your own protection and, it could be argued, become a politician.

I have referred to death quite a few times this evening. I shall now quote a poem of my own called 'Death'.

Where was the dead body found? Who found the dead body? Was the dead body dead when found? How was the dead body found?

Who was the dead body?

Who was the father or daughter or brother Or uncle or sister or mother or son Of the dead and abandoned body?

Was the body dead when abandoned? Was the body abandoned? By whom had it been abandoned? Was the dead body naked or dressed for a journey?

What made you declare the dead body dead? Did you declare the dead body dead? How well did you know the dead body? How did you know the dead body was dead?

Did you close both its eyes Did you bury the body Did you leave it abandoned Did you kiss the dead body

When we look into a mirror we think the image that confronts us is accurate. But move a millimeter and the image changes. We are actually looking at a never-ending range of reflections. But sometimes a writer has to smash the mirror - for it is on the other side of that mirror that the truth stares at us.

I believe that despite the enormous odds which exist, unflinching, unswerving, fierce intellectual determination, as citizens, to define the real truth of our lives and our societies is a crucial obligation which devolves upon us all. It is in fact mandatory.

If such a determination is not embodied in our political vision we have no hope of restoring what is so nearly lost to us - the dignity of man.



Figure 8.21: Harold Pinter (1930-2008)

A letter from Prof. Anthony James Hall

Here is a quotation from a letter that I received from Prof. Anthony James Hall of the University of Lethbridge, Alberta Canada:

The global fiasco that has unfolded since the 9/11 debacle presents almost a text book case of public policy gone awry because of rushed decisions made without due diligence, made without the careful application of evidence-based science. The result has been an onslaught of murder and mayhem pressed against innocent people who have been disproportionately Muslim. The number of those killed, crippled, and displaced as a consequence can now be counted in the many millions.

Moreover our civil liberties and protections, including the human right to be treated as innocent until proven guilty, have basically become museum artifacts. In the name of the ongoing Global War on Terror citizens have been transformed en masse into suspects to be spied upon, incarcerated, tortured and killed, all in the name of specious applications of so-called "national security."

We are fast losing any semblance of protection and enforcement of our right to free speech. Of special significance for this group, be-

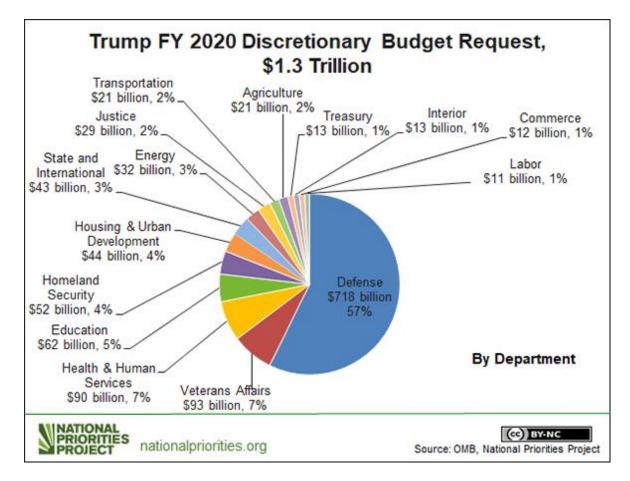


Figure 8.22: Veteran's Affairs should be viewed as part of the "Defense" budget. Thus the total for military purposes is \$0.811 trillion, or 64% of the total budget. The Trump administration plans to slash all social services because "the money for them is not available". cause of the abuses flowing from the specious interpretation of 9/11 we are ironically losing our academic freedom to pursue evidencebased research and debate on a variety of topics including 9/11.

There is no doubt that nuclear weapons and other WMDs have been and continue to be very much a factor in all the machinations undertaken in the name of the Global War on Terror. Its origins lie in a demonstrably false account of what transpired on 9/11. Indeed, the misrepresentation of the events of 9/11 followed by misrepresentations concerning the existence of supposed WMDs in Iraq gave rise to a US-led invasion whose appalling consequences continue yet.

List of US wars, interventions and coups

David Swanson's list

Here are some quotations from the website of the distinguished peace activist David Swanson:⁵

Since World War II, during a supposed golden age of peace, the United States military has killed or helped kill some 20 million people, overthrown at least 36 governments, interfered in at least 84 foreign elections, attempted to assassinate over 50 foreign leaders, and dropped bombs on people in over 30 countries. The United States is responsible for the deaths of 5 million people in Vietnam, Laos, and Cambodia, and over 1 million just since 2003 in Iraq.

Since 2001, the United States has been systematically destroying a region of the globe, bombing Afghanistan, Iraq, Pakistan, Libya, Somalia, Yemen, and Syria, not to mention the Philippines. The United States has "special forces" operating in two-thirds of the world's countries and non-special forces in three-quarters of them.

The U.S. government as of 2017 provided military aid to 73% of the world's dictatorships.

U.S. weapons are used on both sides of many wars.

The supreme international crime according to 2017 U.S. media reporting is interfering nonviolently in a democratic election - at least if Russia does it. William Blum, in his book Rogue State, lists over 30 times that the United States has done that. Another study, however, says 81 elections in 47 countries. France 2017 makes that

⁵http://davidswanson.org/warlist/

total at least 82. Honduras 2017 makes it 83. Russia 2018 makes it 84.

In a reality-based assessment of U.S. crimes, the serious offenses begin beyond that threshold. Here's Blum's list of over 50 foreign leaders whom the United States has attempted to assassinate:

- 1949 Kim Koo, Korean opposition leader
- 1950s CIA/Neo-Nazi hit list of more than 200 political figures in West Germany to be "put out of the way" in the event of a Soviet invasion
- 1950s Chou En-lai, Prime minister of China, several attempts on his life
- 1950s, 1962 Sukarno, President of Indonesia
- 1951 Kim Il Sung, Premier of North Korea
- 1953 Mohammed Mossadegh, Prime Minister of Iran
- 1950s (mid) Claro M. Recto, Philippines opposition leader
- 1955 Jawaharlal Nehru, Prime Minister of India
- 1957 Gamal Abdul Nasser, President of Egypt
- 1959, 1963, 1969 Norodom Sihanouk, leader of Cambodia
- 1960 Brig. Gen. Abdul Karim Kassem, leader of Iraq
- 1950s-70s José Figueres, President of Costa Rica, two attempts on his life
- 1961 Francois "Papa Doc" Duvalier, leader of Haiti
- 1961 Patrice Lumumba, Prime Minister of the Congo (Zaire)
- 1961 Gen. Rafael Trujillo, leader of Dominican Republic
- 1963 Ngo Dinh Diem, President of South Vietnam
- 1960s-70s Fidel Castro, President of Cuba, many attempts on his life
- 1960s Raúl Castro, high official in government of Cuba
- 1965 Francisco Caamano, Dominican Republic opposition leader
- 1965-6 Charles de Gaulle, President of France
- 1967 Che Guevara, Cuban leader
- 1970 Salvador Allende, President of Chile
- 1970 Gen. Rene Schneider, Commander-in-Chief of Army, Chile
- 1970s, 1981 General Omar Torrijos, leader of Panama
- 1972 General Manuel Noriega, Chief of Panama Intelligence
- 1975 Mobutu Sese Seko, President of Zaire
- 1976 Michael Manley, Prime Minister of Jamaica
- 1980-1986 Muammar Qaddafi, leader of Libya, several plots and attempts upon his life

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- 1982 Ayatollah Khomeini, leader of Iran
- 1983 Gen. Ahmed Dlimi, Moroccan Army commander
- 1983 Miguel d'Escoto, Foreign Minister of Nicaragua
- 1984 The nine comandantes of the Sandinista National Directorate
- 1985 Sheikh Mohammed Hussein Fadlallah, Lebanese Shiite leader (80 people killed in the attempt)
- 1991 Saddam Hussein, leader of Iraq
- 1993 Mohamed Farah Aideed, prominent clan leader of Somalia
- 1998, 2001-2 Osama bin Laden, leading Islamic militant
- 1999 Slobodan Milosevic, President of Yugoslavia
- 2002 Gulbuddin Hekmatyar, Afghan Islamic leader and warlord
- 2003 Saddam Hussein and his two sons
- 2011 Muammar Qaddafi, leader of Libya

Here is Blum's list of U.S. attempts to overthrow governments (* indicates success): CIA

- China 1949 to early 1960s
- Albania 1949-53
- East Germany 1950s
- Iran 1953 *
- Guatemala 1954 *
- Costa Rica mid-1950s
- Syria 1956-7
- Egypt 1957
- Indonesia 1957-8
- British Guiana 1953-64 *
- Iraq 1963 *
- North Vietnam 1945-73
- Cambodia 1955-70 *
- Laos 1958 *, 1959 *, 1960 *
- Ecuador 1960-63 *
- Congo 1960 *
- France 1965
- Brazil 1962-64 *
- Dominican Republic 1963 * Cuba 1959 to present
- Bolivia 1964 *
- Indonesia 1965 *
- Ghana 1966 *

- Chile 1964-73 *
- Greece 1967 *
- Costa Rica 1970-71
- Bolivia 1971 *
- Australia 1973-75 *
- Angola 1975, 1980s
- Zaire 1975
- Portugal 1974-76 *
- Jamaica 1976-80 *
- Seychelles 1979-81
- Chad 1981-82 *
- Grenada 1983 *
- South Yemen 1982-84
- Suriname 1982-84
- Fiji 1987 *
- Libya 1980s
- Nicaragua 1981-90 *
- Panama 1989 *
- Bulgaria 1990 *
- Albania 1991 *
- Iraq 1991
- Afghanistan 1980s *
- Somalia 1993
- Yugoslavia 1999-2000 *
- Ecuador 2000 *
- Afghanistan 2001 *
- Venezuela 2002 * I
- raq 2003 *
- Haiti 2004 *
- Somalia 2007 to present
- Honduras 2009
- Libya 2011 *
- Syria 2012
- Ukraine 2014 *

The above list does not include numerous coups by U.S.-trained fighters, such as (other than Honduras) those discussed here: "from Isaac Zida of Burkina Faso, Haiti's Philippe Biamby, and Yahya Jammeh of The Gambia to Egypt's Abdel-Fattah el-Sisi, Mohammad Zia-ul-Haq of Pakistan, and the IMET-educated leaders of the 2009 coup in Honduras, not to mention Mali's Amadou Sanogo." These

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are just in very recent years, by no means a complete list, though the Haiti coup referenced here was earlier than the one included in the list above.

We might want to add Venezuela 2018. We should certainly add Bolivia 2019.

Here is Blum's list of nations bombed by the United States:

- Korea and China 1950-53 (Korean War)
- Guatemala 1954
- Indonesia 1958
- Cuba 1959-1961
- Guatemala 1960
- Congo 1964
- Laos 1964-73
- Vietnam 1961-73
- Cambodia 1969-70
- Guatemala 1967-69
- Grenada 1983
- Lebanon 1983, 1984 (both Lebanese and Syrian targets)
- Libya 1986
- El Salvador 1980s
- Nicaragua 1980s
- Iran 1987
- Panama 1989
- Iraq 1991 (Persian Gulf War)
- Kuwait 1991
- Somalia 1993
- Bosnia 1994, 1995
- Sudan 1998
- Afghanistan 1998
- Yugoslavia 1999
- Yemen 2002
- Iraq 1991-2003 (US/UK on regular basis)
- Iraq 2003-2015
- Afghanistan 2001-2015
- Pakistan 2007-2015
- Somalia 2007-8, 2011
- Yemen 2009, 2011
- Libya 2011, 2015
- Syria 2014-2016

WHO IS MY NEIGHBOR?



Figure 8.23: U.S. soldiers take aim while searching people in Panama City, Panama on Dec. 26, 1989. Ezequiel Becerra / AP.

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.

The climate emergency

The threat to human civilization and to the biosphere from catastrophic climate change makes it essential that the extraction and use of fossil fuels must stop within the next few years. Nevertheless, it useful to look at the size and placement of fossil fuel reserves in order to understand the motivation for wars in the Middle East which took place several decades ago, before the climate emergency gained its present place on the global agenda.

From Table 4.3, 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.⁶ 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 4.3 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

⁶Notice 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 4.3 is the same as the total at the bottom of the "Reserves and resources" column in Table 9.1

Table 8.1: 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

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

Table 8.2: Main users of petroleum. (US Energy Information Agency, 2001.)

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 4.2. 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 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

Table 8.3: 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

8.7. US WARS, INTERVENTIONS AND COUPS

will be hit still harder by famine in the future.

Comparing Tables 4.1 and 4.2, 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 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 Curzon⁷ 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".

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.

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.⁸ 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

 $^{^7\}mathrm{a}$ member of the British War Cabinet who became Foreign Minister immediately after the war

 $^{^8{\}rm This}$ 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.

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 Reigel 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 Reigel 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 eco-



Figure 8.24: Donald Rumsfield and Sadam Hussein, the best of friends.

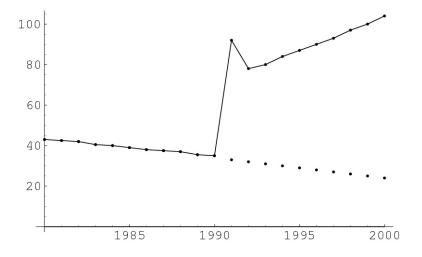


Figure 8.25: Deaths of children under five years of age in Iraq, measured in thousands. This graph is based on a study by UNICEF, and it shows the effect of sanctions on child mortality. From UNICEF's figures it can be seen that the sanctions imposed on Iraq caused the deaths of more than half a million children.

nomic sanctions against Iraq with the aim of forcing Iraq to withdraw from Kuwait. Meanwhile, US Secretary of State James A. Baker III used armtwisting 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.

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."

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-Qaeda. 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 sect⁹. He wished to expel the US from the Middle East, and especially to expel US troops 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

⁹The Wahhabi sect of Islam was founded by Abdul Wahhab (1703-1792). It is known for extremely strict observance of the Koran, and it flourishes mainly in Saudi Arabia.

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-Qaeda 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 law¹⁰. 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

 $^{^{10}\}mathrm{He}$ had previously abrogated a number of important treaties.



Figure 8.26: The attack on Iraq.

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.

Empire?

The empires of the ancient world were made possible by the technology of the periods during which they flourished. For example, the Roman Empire was made possible by Roman achievements in road-building and bridge-building which allowed imperial legions to move quickly and to crush rebellions wherever they might occur within the boundaries of the Empire. Similarly, the worldwide British Empire, larger than any previous empire, was made possible by the technology of its era. Machine guns gave those who possessed them military superiority over forces armed with more primitive weapons, steam ships carried troops rapidly to trouble spots so that rebellions could be crushed, and naval power was used to bombard recalcitrant cities.

Technology played an additional role in motivating and supporting the empires of the 19th and 20th centuries: As the Industrial Revolution developed momentum, local sources were no longer sufficient for supplying raw materials to the factories of developed countries, nor were local markets sufficient as outlets for their manufactured goods. Colonies were needed not only to supply the industrialized countries with minerals, timber, rubber, hemp, etc., but also to buy cloth, shoes, tools, toys, clocks, chemicals, and other factorymade products¹¹. This division of labor was usually far more advantageous to the industrialized countries than to their colonies. Today, the same unfair economic relationships persist between the highly industrialized countries and the less developed parts of the world, and they contribute to today's painful contrasts between extremes of wealth and poverty.

After serving in the British police force in Burma, George Orwell concluded that Empire is a system in which the soldier holds down the poor Asian, while the merchant goes through his pockets. He resigned his post and wrote a book about his colonial experiences - *Burmese Days*. It is still relevant and worth reading. The same can be said of Orwell's prophetic book 1984.

For a long time, Britain held its position as the leading industrial and colonial power, but from 1890 onwards its dominance was challenged by Germany, the United States, Belgium, France, Italy, Russia and Japan. Rivalry between these industrial powers, competing with each other for colonies, natural resources, markets, and military power, contributed to the start of World War I. At the end of "the Great War", the League of Nations assigned "protectorates" to the victors. These "protectorates" were, in fact, colonies with a new name, although in principle protectorates were supposed to be temporary.

The Second World War was terrible enough to make world leaders resolve

¹¹During the 18th and early 19th centuries, the mercantile system prohibited colonies from either manufacturing industrial goods or trading for them in countries other than the mother country.

to end the institution of war once and for all, and the United Nations was set up for this purpose. Despite the flaws and weaknesses of the UN Charter, the organization was successful in formally ending the era of colonialism. One must say "formally ending" rather than "ending", because colonialism persisted in a new guise: During the classical era of colonialism, there was direct political power, with Viceroys and Governors General acting as formal rulers of colonies. During the decades following the Second World War, almost all colonies were granted formal independence, but nevertheless the influence of the industrialized nations was strongly felt in the developing world. Direct political power was replaced by indirect methods.

The United States emerged from the two global wars as the world's dominant industrial power, taking over the position that Britain had held during the 19th century. The economies of its rivals had been destroyed by the two wars, but no fighting had taken place on American soil. Because of its unique position as the only large country whose economy was completely intact in 1945, the United States found itself suddenly thrust, almost unwillingly, into the center of the world's political stage.

The new role as "leader of the free world" was accepted by the United States with a certain amount of nervousness. America's previous attitude had been isolationism - a wish to be "free from the wars and quarrels of Europe". After the Second World War, however, this was replaced by a much more active international role. Perhaps the new US interest in the rest of the world reflected the country's powerful and rapidly growing industrial economy and its need for raw materials and markets (the classical motive for empires). Publicly, however, it was the threat of Communism that was presented to American voters as the justification for interference in the internal affairs of other countries. (Today, after the end of the Cold War, it has become necessary to find another respectable motivation that can be used to justify foreign intervention, and the "Crusade Against Communism" has now been replaced by the "War on Terror".)

During the period from 1945 to the present the US interfered, militarily or covertly, in the internal affairs of a large number of nations: China, 1945-49; Italy, 1947-48; Greece, 1947-49; Philippines, 1946-53; South Korea, 1945-53; Albania, 1949-53; Germany, 1950s; Iran, 1953; Guatemala, 1953-1990s; Middle East, 1956-58; Indonesia, 1957-58; British Guiana/Guyana, 1953-64; Vietnam, 1950-73; Cambodia, 1955-73; The Congo/Zaire, 1960-65; Brazil, 1961-64; Dominican Republic, 1963-66; Cuba, 1959-present; Indonesia, 1965; Chile, 1964-73; Greece, 1964-74; East Timor, 1975-present; Nicaragua, 1978-89; Grenada, 1979-84; Libya, 1981-89; Panama, 1989; Iraq, 1990-present; Afghanistan 1979-92; El Salvador, 1980-92; Haiti, 1987-94; Yugoslavia, 1999; and Afghanistan, 2001-present. Most of these interventions were explained to the American peo-



ple as being necessary to combat communism (or more recently, terrorism), but an underlying motive was undoubtedly the desire to put in place governments and laws that would be favorable to the economic interests of the US and its allies ¹².

For the sake of balance, we should remember that during the Cold War period, the Soviet Union and China also intervened in the internal affairs of many countries, for example in Korea in 1950-53, Hungary in 1956, Czechoslovakia in 1968, and so on. These Cold War interventions were also unjustifiable, like those mentioned above. Neither a fervently-held conviction that capitalism is wicked and communism good nor an equally fervently-held conviction that the opposite is true can justify military or covert interference by superpowers in

¹²The recent US-led invasion of Iraq, illegal in itself, has been followed by an illegal revision of Iraq's fundamental laws to favor the economic interests of large US and UK corporations. The revision of an occupied country's laws violates the Hague Regulations of 1907 and the Geneva Conventions of 1949 (both signed by the US), as well as the US Army's own Code of War. Article 43 of the Hague Regulations requires an occupying power to "re-establish and insure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country". Resolution 1483 of the UN Security Council (March 26, 2003) specifically instructs the powers occupying Iraq to respect the Hague Regulations and the Geneva Conventions. Britain's Attorney General, Lord Goldsmith, also warned Tony Blair that "the imposition of major structural economic reforms would not be authorized by international law". Naomi Klein has expressed the same principle more simply: "Bombing something does not give you the right to sell it", she wrote. Nevertheless, despite the illegality of their actions, the occupying powers in Iraq are making wholesale changes in the constitution and laws of the country and are awarding its public assets to private corporations such as BearingPoint, Bechtel and Haliburton.

the internal affairs of smaller countries, since people have a right to live under governments of their own choosing even if those governments are not optimal.

Today United States is the only nation in the world that maintains large numbers of its troops on the soil of other countries. Only 46 nations lack a US military presence.

Many, but by no means all, of the current US military bases on foreign soil are listed in the Defense Department's 2003 *Base Structure Report*. According to this report, the United States owns or rents 702 bases in 130 countries. In the US itself and its territories, there are an additional 6000 bases. The overseas bases are staffed by 253,288 men and women in uniform who have an approximately equal number of dependents. The number of foreign bases listed in the Pentagon's *Base Structure Report* is far less than the true number for 2004, since the report omits several hundred recently-established bases in Kosovo, Afghanistan, Iraq, Israel, Kuwait, Kyrgyzistan, Qatar and Uzbekistan¹³. The Pentagon estimates that it would cost \$591 billion to replace all its bases. One of the important companies that construct bases is Kellogg, Brown & Root, a subsidiary of the Haliburton Corporation of Houston Texas.

In February, 2004, President George W. Bush asked the US Congress for \$401.7 billion for the Department of Defense for the fiscal year 2005¹⁴. This figure, colossal as it is, underestimates the true burden that the military establishment places on the US economy. Economic historian Robert Higgs believes as a rule of thumb, one should double the figures given for military budgets to find the true cost. This is primarily because of the increased interest on the national debt incurred by military spending, but hidden expenses, such as clean-up costs, and care of veterans etc. also play a role.

The Pentagon's Joint Vision for 2020 states that "The US military today is a force of superbly trained men and women who are ready to deliver victory for our Nation. In support of the objectives of our National Security Strategy, it is routinely employed to shape the international security environment and stands ready to respond across the full range of military potential... The global interests and responsibilities of the United States will endure, and there is no indication that threats to those interests and responsibilities or to our allies will disappear¹⁵... The overarching vision is full spectrum dominance."

The result of the enormous (and enormously costly) growth of the US military establishment has been the militarization of American foreign policy.

 $^{^{13}\}mathrm{It}$ is fair to note that the number of US bases is substantially reduced from the number at the end of the Cold War.

¹⁴According to the US Congressional Budget Office, the yearly US expenditure for military purposes is likely to grow to \$600 billion in 2013.

 $^{^{15}}$ One is reminded of the vision of endless war in George Orwell's 1984.

Two symptoms of this militarization of foreign policy are the concept of an endless "war on terror", and George W. Bush's West Point speech calling for preemptive wars. In a campaign speech in 1999, Bush had previously embraced the concept of permanent militarism: "Our forces in the next century must be agile, lethal, readily deployable and require a minimum of logistical support", Bush had said in this speech. "We must be able to project our power over long distances, in days or weeks rather than months. Our military must be able to identify targets by a variety of means [and] ... to destroy those targets almost instantly with an array of weapons¹⁶."

Right-wing journalist Charles Krauthammer, one of the advocates of a militarized US foreign policy recently wrote that "America is no mere international citizen. It is the dominant power in the world, more dominant than any since Rome. Accordingly, America is in a position to reshape norms - How? By unapologetic and implacable demonstrations of will."

The Project for a New American Century (a group including Dick Cheney, Donald Rumsfeld, and Paul Wolfowitz) has this to say about the US military presence in Iraq: "The United States has for decades sought to play a more permanent role in Gulf security. While the unresolved conflict in the Gulf provides the immediate justification, the need for a substantial American force presence in the Gulf transcends the issue of the regime of Saddam Hussein."

Another (more critical) comment come from Michael Stohl, writing in in Current Perspectives on International Terrorism: "We must recognize that by convention - and it must be emphasized only by convention - great power use of the threat of force is normally described as coercive diplomacy and not as a form of terrorism [though it involves] the threat and often the use of violence for what would be described as terroristic purposes if it were not great powers who were pursuing the very same tactic."

Richard Falk, Professor of International Relations, Princeton, comments: "From Machiavelli to Niebuhr, Morgenthau and Kissinger, there has been inculcated in public consciousness an ethos of violence that is regulated, if at all, only by perceptions of effectiveness. ... A weapon or tactic is acceptable, and generally beyond scrutiny, if it works in the sense of bringing the goals of the state more closely toward realization. ... Considerations of innocence, of human suffering, or on limits of state policy are treated as irrelevant, [and to be] scorned."

The rise of militarism in the United States has been accompanied by attacks on civil liberties. Since the 1970's a massive electronic surveillance system codenamed ECHELON has been operated by the US in collaboration with Britain, Australia, New Zealand and Canada. Each of the partners in

 $^{^{16}\}mathrm{As}$ Mark Twain once remarked, "When the only instrument in the toolbox is a hammer, all problems begin to look like nails."

this system frequently breaks its own laws against arbitrary and unlimited eavesdropping, as well as the laws of other countries and international laws, but since the operations of ECHELON are secret, no one is able to stop them.

ECHELON intercepts telephone conversations, e-mail messages etc. and feeds the enormous quantities of information thus gathered into arrays of supercomputers that search for key words. Selected conversations or messages are then listened to by humans to determine whether anything useful to "security" can be gleaned. Targets of ECHELON have included (for example) organizations like Amnesty International and Christian Aid. Since the terrorist attacks of September 11, 2001, US spying on its own citizens has been greatly increased under the provisions of the Patriot Act, passed by Congress on October 25, 2001. One danger of the massive spying on their own citizens by governments is that ruling elites may use the information thus gathered to maintain themselves in power.

The British author Niall Ferguson has written several books comparing the American Empire with the British and Roman Empires. He feels that empires are not necessarily a bad thing, and that if any country deserves to have an empire today, it is the United States. According to Niall Ferguson, the benevolent global hegemony of the United States is good for the world, and we live today under a "Pax Americana" analogous to the Pax Romana imposed by the Roman Empire.

What is wrong with this? What is wrong with the idea of a "Pax Americana"? If the Americans want to act as a world government, why not let them? In the first place, any world government based exclusively on military power rather than on globally democratic principles deserves to be called a tyranny. Furthermore, can any single country be truly objective in its evaluation of international issues? Certainly the Islamic world does not feel that American Middle East policy is even-handed. In fact, anger and frustration over what is perceived to be massive US bias in favour of Israel was the main reason for the September 11 attacks. Finally, "Pax Americana" is a misnomer, since US foreign policy has become increasingly based on war.

The United States maintains that it is a democracy, and that its aim is to spread democratic principles throughout the world, but there is something intrinsically undemocratic about the idea of global US hegemony. Why should the inhabitants of a single chosen country have more political power than other citizens of the world? Is it democratic for enormous wealth to be gained at the expense of third world poverty through the military enforcement of unfair economic relationships? Why are the three thousand innocent lives lost in the New York terrorist attacks so much more tragic than the million innocent Iraqi lives lost through the effects of sanctions, or for that matter the ten million lives of third world children who die each year from malnutrition and preventable disease?

Those of us who love the United States - and there are many reasons for loving the great idealism, generosity and energy of the American people, as well as the enlightened principles of the US Constitution - those of us who love the United States are sad to see militarism growing like a cancer within the country - the same militarism against which President Dwight D. Eisenhower warned in his farewell address.

An empire of bases

Here are some quotations from an article entitled *America's Empire of Bases* by Chalmers Johnson, published in TomDispatch in January, 2004¹⁷:

As distinct from other peoples, most Americans do not recognize – or do not want to recognize – that the United States dominates the world through its military power. Due to government secrecy, our citizens are often ignorant of the fact that our garrisons encircle the planet. This vast network of American bases on every continent except Antarctica actually constitutes a new form of empire – an empire of bases with its own geography not likely to be taught in any high school geography class. Without grasping the dimensions of this globe-girdling Baseworld, one can't begin to understand the size and nature of our imperial aspirations or the degree to which a new kind of militarism is undermining our constitutional order.

Our military deploys well over half a million soldiers, spies, technicians, teachers, dependents, and civilian contractors in other nations. To dominate the oceans and seas of the world, we are creating some thirteen naval task forces built around aircraft carriers whose names sum up our martial heritage – Kitty Hawk, Constellation, Enterprise, John F. Kennedy, Nimitz, Dwight D. Eisenhower, Carl Vinson, Theodore Roosevelt, Abraham Lincoln, George Washington, John C. Stennis, Harry S. Truman, and Ronald Reagan. We operate numerous secret bases outside our territory to monitor what the people of the world, including our own citizens, are saying, faxing, or e-mailing to one another.

Our installations abroad bring profits to civilian industries, which design and manufacture weapons for the armed forces or, like the now well-publicized Kellogg, Brown & Root company, a subsidiary of the Halliburton Corporation of Houston, undertake contract services to build and maintain our far-flung outposts. One task of such

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¹⁷https://www.globalpolicy.org/component/content/article/153/26119.html

contractors is to keep uniformed members of the imperium housed in comfortable quarters, well fed, amused, and supplied with enjoyable, affordable vacation facilities. Whole sectors of the American economy have come to rely on the military for sales. On the eve of our second war on Iraq, for example, while the Defense Department was ordering up an extra ration of cruise missiles and depleted-uranium armor-piercing tank shells, it also acquired 273,000 bottles of Native Tan sunblock, almost triple its 1999 order and undoubtedly a boon to the supplier, Control Supply Company of Tulsa, Oklahoma, and its subcontractor, Sun Fun Products of Daytona Beach, Florida.

It's not easy to assess the size or exact value of our empire of bases. Official records on these subjects are misleading, although instructive. According to the Defense Department's annual "Base Structure Report" for fiscal year 2003, which itemizes foreign and domestic U.S. military real estate, the Pentagon currently owns or rents 702 overseas bases in about 130 countries and HAS another 6,000 bases in the United States and its territories. Pentagon bureaucrats calculate that it would require at least \$113.2 billion to replace just the foreign bases – surely far too low a figure but still larger than the gross domestic product of most countries – and an estimated \$591,519.8 million to replace all of them. The military high command deploys to our overseas bases some 253,288 uniformed personnel, plus an equal number of dependents and Department of Defense civilian officials, and employs an additional 44,446 locally hired foreigners. The Pentagon claims that these bases contain 44,870 barracks, hangars, hospitals, and other buildings, which it owns, and that it leases 4,844 more.

These numbers, although staggeringly large, do not begin to cover all the actual bases we occupy globally. The 2003 Base Status Report fails to mention, for instance, any garrisons in Kosovo – even though it is the site of the huge Camp Bondsteel, built in 1999 and maintained ever since by Kellogg, Brown & Root. The Report similarly omits bases in Afghanistan, Iraq, Israel, Kuwait, Kyrgyzstan, Qatar, and Uzbekistan, although the U.S. military has established colossal base structures throughout the so-called arc of instability in the two-and-a-half years since 9/11.

For Okinawa, the southernmost island of Japan, which has been an American military colony for the past 58 years, the report deceptively lists only one Marine base, Camp Butler, when in fact Okinawa "hosts" ten Marine Corps bases, including Marine Corps Air Station Futenma occupying 1,186 acres in the center of that modest-

WHO IS MY NEIGHBOR?

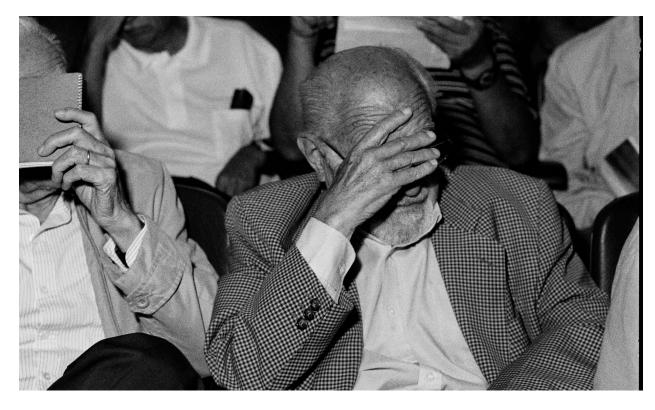


Figure 8.27: Former military men hide their faces during a session of their trial, after being accused of crimes against humanity committed during Condor.

sized island's second largest city. (Manhattan's Central Park, by contrast, is only 843 acres.) The Pentagon similarly fails to note all of the \$5-billion-worth of military and espionage installations in Britain, which have long been conveniently disguised as Royal Air Force bases. If there were an honest count, the actual size of our military empire would probably top 1,000 different bases in other people's countries, but no one – possibly not even the Pentagon – knows the exact number for sure, although it has been distinctly on the rise in recent years...

Operation Condor

Wikipedia states that "Operation Condor was a United States-backed campaign of political repression and state terror involving intelligence operations and assassination of opponents, officially and formally implemented in November 1975 by the right-wing dictatorships of the Southern Cone of South Amer-



Figure 8.28: Mirta Clara, a former Argentine political prisoner. In custody she was tortured while pregnant with her second son, who was born in prison; her husband was executed. She was released after eight years in 1983, and today she works as a human rights advocate and psychologist in Buenos Aires.



Figure 8.29: Families of disappeared people, near the mass graves where 26 political prisoners have been buried by the Chilean military. After the 1973 military coup organized by Augusto Pinochet, the military formed a special taskforce known as Caravan of Death. It swept the north of Chile, picking up political prisoners to interrogate and torture, executing most of them and burying them in remote locations.

ica.

"The program, nominally intended to eradicate communist or Soviet influence and ideas, was created to suppress active or potential opposition movements against the participating governments' neoliberal economic policies, which sought to reverse the economic policies of the previous era.

"Due to its clandestine nature, the precise number of deaths directly attributable to Operation Condor is highly disputed. Some estimates are that at least 60,000 deaths can be attributed to Condor, roughly 30,000 of these in Argentina, and the so-called "Archives of Terror" list 50,000 killed, 30,000 disappeared and 400,000 imprisoned. American political scientist J. Patrice McSherry gives a figure of at least 402 killed in operations which crossed national borders in a 2002 source, and mentions in a 2009 source that of those who "had gone into exile" and were 'kidnapped, tortured and killed in allied countries or illegally transferred to their home countries to be executed... hundreds, or thousands, of such persons-the number still has not been finally determined-were abducted, tortured, and murdered in Condor operations. Victims included dissidents and leftists, union and peasant leaders, priests and nuns, students and teachers, intellectuals and suspected guerrillas. Although it was described by the CIA as "a cooperative effort by the intelligence/security services of several South American countries to combat terrorism and subversion," guerrillas were used as an excuse, as they were never substantial enough to control territory, gain material support by any foreign power, or otherwise threaten national security. Condor's key members were the governments in Argentina, Chile, Uruguay, Paraguay, Bolivia and Brazil. Ecuador and Peru later joined the operation in more peripheral roles.

Suggestions for further reading

- 1. W.B. Gallie, Understanding War: Points of Conflict, Routledge, London, (1991).
- 2. R. Falk and S.S. Kim, eds., *The War System: An Interdisciplinary Approach*, Westview, Boulder, CO, (1980).
- 3. J.D. Clarkson and T.C. Cochran, eds., *War as a Social Institution*, Colombia University Press, New York, (1941).
- 4. S. Melman, *The Permanent War Economy*, Simon and Schuster, (1974).
- 5. D. Yergin, *The Prize*, Simon and Schuster, New York, (1991).
- 6. A. Sampson, *The Seven Sisters: The Great Oil Companies of the World* and *How They Were Made*, Hodder and Staughton, London, (1988).
- J.D. Rockefeller, Random Remaniscences of Men and Events, Doubleday, New York, (1909).

- M.B. Stoff, Oil, War and American Security: The Search for a National Policy on Oil, 1941-1947, Yale University Press, New Haven, (1980).
- 9. W.D. Muscable, George F. Kennan and the Making of American Foreign Policy, Princeton University Press, Princeton, (1992).
- J. Stork, Middle East Oil and the Energy Crisis, Monthly Review, New York, (1976).
- F. Benn, Oil Diplomacy in the Twentieth Century, St. Martin's Press, New York, (1986).
- 12. R. Sale, *Saddam Key in Early CIA Plot*, United Press International, April 10, (2003).
- K. Roosevelt, Countercoup: The Struggle for the Control of Iran, McGraw-Hill, New York, (1979).
- 14. E. Abrahamian, *Iran Between Two Revolutions*, Princeton University Press, Princeton, (1982).
- 15. J. Fitchett and D. Ignatius, *Lengthy Elf Inquiry Nears Explosive Finish*, International Herald Tribune, February 1, (2002).
- 16. J.M. Blair, The Control of Oil, Random House, New York, (1976).
- 17. M.T. Klare, *Resource Wars: The New Landscape of Global Conflict*, Owl Books reprint edition, New York, (2002).
- 18. P. Grose, Allen Dulles: The Life of a Gentleman Spy, Houghton Mifflin, Boston, (1994).
- H. Mejcher, Imperial-Quest for Oil: Iraq, 1910-1928, Ithaca Books, London, (1976).
- 20. P. Sluglett, Britain in Iraq, 1914-1932, Ithaca Press, London, (1976).
- D.E. Omissi, British Air Power and Colonial Control in Iraq, 1920-1925, Manchester University Press, Manchester, (1990).
- V.G. Kiernan, Colonial Empires and Armies, 1815-1960, Sutton, Stroud, (1998).
- 23. R. Solh, Britain's 2 Wars With Iraq, Ithaca Press, Reading, (1996).
- 24. D. Hiro, *The Longest War: The Iran-Iraq Military Conflict*, Routledge, New York, (1991).
- 25. S. Warren, *Exxon's Profit Surged in 4th Quarter*, Wall Street Journal, February 12, (2004).
- 26. R. Suskind, The Price of Loyalty: George W. Bush, the White House and the Education of Paul O'Neill, Simon and Schuster, New York, (2004).
- 27. D. Morgan and D.B. Ottaway, In Iraqi War Scenario, Oil is Key Issue as U.S. Drillers Eye Huge Petrolium Pool, Washington Post, September 15, (2002).
- 28. D. Rose, Bush and Blair Made Secret Pact for Iraqi War, The Observer, April 4, (2004).

- 29. E. Vulliamy, P. Webster and N.P. Walsh, *Scramble to Carve Up Iraqi Oil Reserves Lies Behind US Diplomacy*, The Observer, October 6, (2002).
- 30. Y. Ibrahim, Bush's Iraq Adventure is Bound to Backfire, International Herald Tribune, November 1, (2002).
- 31. P. Beaumont and F. Islam, *Carve-Up of Oil Riches Begins*, The Observer, November 3, (2002).
- C.J. Cleveland, Physical and Economic Aspects of Natural Resource Scarcity: The Cost of Oil Supply in the Lower 48 United States 1936-1987, Resources and Energy 13, 163-188, (1991).
- C.J. Cleveland, Yield Per Effort for Additions to Crude Oil Reserves in the Lower 48 States, 1946-1989, American Association of Petroleum Geologists Bulletin, 76, 948-958, (1992).
- M.K. Hubbert, Technique of Prediction as Applied to the Production of Oil and Gas, in NBS Special Publication 631, US Department of Commerce, National Bureau of Standards, (1982).
- L.F. Ivanhoe, Oil Discovery Indices and Projected Discoveries, Oil and Gas Journal, 11, 19, (1984).
- L.F. Ivanhoe, Future Crude Oil Supplies and Prices, Oil and Gas Journal, July 25, 111-112, (1988).
- Energy Information Administration, International Energy Outlook, 2001, US Department of Energy, (2001).
- 38. Energy Information Administration, *Caspian Sea Region*, US Department of Energy, (2001).
- 39. National Energy Policy Development Group, National Energy Policy, The White House, (2004). (http://www.whitehouse.gov/energy/)
- M. Klare, Bush-Cheney Energy Strategy: Procuring the Rest of the World's Oil, Foreign Policy in Focus, (Interhemispheric Resource Center/Institute for Policy Studies/SEEN), Washington DC and Silver City NM, January, (2004).
- 41. M. Dobbs, US Had Key Role in Iraq Buildup, Washington Post, December 30, (2002).
- 42. R. Sale, *Saddam Key in Early CIA Plot*, United Press International, April 10, (2003).
- 43. R. Morris, A Tyrant Forty Years in the Making, New York Times, March 14, (2003).
- 44. H. Batatu, The Old Social Classes and the Revolutionary Movements of Iraq, Princeton University Press, (1978).
- 45. D.W. Riegel, Jr., and A.M. D'Amato, US Chemical and Biological Warfare-Related Dual Use Exports to Iraq and their Possible Impact on the Health Consequences of the Persian Gulf War, Report to US Senate ("The Riegel Report"), May 25, (1994).

- 46. P.E. Tyler, Officers Say US Aided Iraq in War Despite Use of Gas, New York Times, August 18, (2002).
- D. Priest, Rumsfeld Visited Baghdad in 1984 to Reassure Iraqis, Documents Show, Washington Post, December 19, (2003).
- S. Zunes, Saddam's Arrest Raises Troubling Questions, Foreign Policy in Focus, (http://www.globalpolicy.org/), December (2003).
- 49. D. Leigh and J. Hooper, *Britain's Dirty Secret*, Guardian, March 6, (2003).
- J. Battle, (Ed.), Shaking Hands With Saddam Hussein: The US Tilts Towards Iraq, 1980-1984, National Security Archive Electronic Briefing Book No. 82, February 25, (2003).
- 51. J.R. Hiltermann, America Didn't Seem to Mind Poison Gas, International Herald Tribune, January 17, (2003).
- 52. D. Hiro, Iraq and Poison Gas, Nation, August 28, (2002).
- 53. T. Weiner, Iraq Uses Techniques in Spying Against its Former Tutor, the US, Philadelphia Inquirer, February 5, (1991).
- 54. S. Hussein and A. Glaspie, *Excerpts From Iraqi Document on Meeting with US Envoy*, The New York Times, International, September 23, (1990).
- 55. T.E. Lawrence, A Report on Mesopotamia by T.E. Lawrence, Sunday Times, August 22, (1920).
- 56. T. Rajamoorthy, Deceit and Duplicity: Some Reflections on Western Intervention in Iraq, Third World Resurgence, March-April, (2003).
- 57. P. Knightley and C. Simpson, *The Secret Lives of Lawrence of Arabia*, Nelson, London, (1969).
- 58. G. Lenczowski, *The Middle East in World Affairs*, Cornell University Press, (1962).
- 59. Y. Nakash, The Shi'is of Iraq, Princeton University Press, (1994).
- 60. D. Fromkin, A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East, Owl Books, (2001).
- 61. S.K. Aburish, Saddam Hussein: The Politics of Revenge, Bloomsbury, London, (2001).
- 62. M. Muffti, Sovereign Creations: Pan-Arabism and Political Order in Syria and Iraq, Cornell University Press, (1996).
- C. Clover, Lessons of the 1920 Revolt Lost on Bremer, Financial Times, November 17, (2003).
- 64. J. Kifner, Britain Tried First. Iraq Was No Picnic Then, New York Times, July 20, (2003).
- 65. D. Omissi, Baghdad and British Bombers, Guardian, January 19, (1991).
- 66. D. Vernet, Postmodern Imperialism, Le Monde, April 24, (2003).
- 67. J. Buchan, Miss Bell's Lines in the Sand, Guardian, March 12, (2003).

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- 68. C. Tripp, *Iraq: The Imperial Precedent*, Le Monde Diplomatique, January, (2003).
- 69. G.H.W. Bush and B. Scowcroft, *Why We Didn't Remove Saddam*, Time, 2 March, (1998).
- J.A. Baker III, The Politics of Diplomacy: Revolution, War and Peace, 1989-1992, G.P. Putnam's Sons, New York, (1995).
- D. Rose, Bush and Blair Made Secret Pact for Iraq War, Observer, April 4, (2004).
- B. Gellman, Allied Air War Struck Broadly in Iraq; Officials Acknowledge Strategy Went Beyond Purely Military Targets, Washington Post, June 23, (1991).
- M. Fletcher and M. Theodoulou, Baker Says Sanctions Must Stay as Long as Saddam Holds Power, Times, May 23, (1991).
- J. Pienaar and L. Doyle, UK Maintains Tough Line on Sanctions Against Iraq, Independent, May 11, (1991).
- 75. C. Johnson, *America's Empire of Bases*, TomDispatch.com, January, (2004).
- B. Blum (translator), Ex-National Security Chief Brzezinski Admits: Afghan Islamism Was Made in Washington, Nouvel Observateur, January 15, (1998).
- 77. D. Rose, Bush and Blair Made Secret Pact for Iraq War, The Observer, Sunday April 4, (1994).
- 78. G. Vidal, *Dreaming War: Blood for Oil and the Bush-Cheney Junta*, Thunder's Mouth Press, (2002).
- H. Thomas, Preventive War Sets Serious Precedent, Seattle Post-Intelligencer, March 20, (2003).
- 80. C. Johnson, *The Sorrows of Empire: Militarism, Secrecy, and the End of the Republic*, Henry Hold and Company, New York, (2004).
- 81. C. Johnson, *Blowback: The Costs and Consequences of American Empire*, Henry Hold and Company, New York, (2000).
- M. Parenti, Against Empire: The Brutal Realities of U.S. Global Domination, City Lights Books, 261 Columbus Avenue, San Francisco, CA94133, (1995).
- 83. E. Ahmad, *Confronting Empire*, South End Press, (2000).
- 84. W. Greider, Fortress America, Public Affairs Press, (1998).
- 85. R. Mahajan, Full Spectrum Dominance: U.S. Power in Iraq and Beyond, Seven Stories Press, (2003).
- 86. J. Pilger, *Hidden Agendas*, The New Press, (1998).
- 87. S.R. Shalom, Imperial Alibis, South End Press, (1993).
- 88. C. Boggs (editor), Masters of War: Militarism and Blowback in the Era of American Empire, Routledge, (2003).

- 89. J. Pilger, The New Rulers of the World, Verso, (2992).
- 90. G. Vidal, Perpetual War for Perpetual Peace: How We Got To Be So Hated, Thunder's Mouth Press, (2002).
- 91. W. Blum, Rogue State: A Guide to the World's Only Superpower, Common Courage Press, (2000).
- 92. M. Parenti, The Sword and the Dollar, St. Martin's Press, 175 Fifth Avenue, New York, NY 10010, (1989).
- 93. K. Grossman, Weapons in Space, Seven Stories Press, (2001).
- 94. R.J. Barnet, Intervention and Revolution: The United States in the Third World, World Publishing, (1968).
- 95. T. Bodenheimer and R. Gould, *Rollback: Right-wing Power in U.S. For*eign Policy, South End Press, (1989).
- 96. G. Guma, Uneasy Empire: Repression, Globalization, and What We Can Do, Toward Freedom, (2003).
- 97. W. Blum, A Brief History of U.S. Interventions: 1945 to the Present, Z magazine, June, (1999).
- 98. W. Blum, Killing Hope: U.S. Military and CIA Intervention Since World War II
- 99. M. Klare, *Endless Military Superiority*, The Nation magazine, July 15, (2002).
- 100. J.M. Cypher, *The Iron Triangle: The New Military Buildup*, Dollars and Sense magazine, January/February, (2002).
- L. Meyer, *The Power of One*, (World Press Review), Reforma, Mexico City, August 5, (1999).
- 102. C. Johnson, *Time to Bring the Troops Home*, The Nation magazine, May 14, (2001).
- 103. W. Hartung, F. Berrigan and M. Ciarrocca, Operation Endless Deployment: The War With Iraq Is Part of a Larger Plan for Global Military Dominance, The Nation magazine, October 21, (2002).
- 104. I. Ramonet, Servile States, Le Monde diplomatique, Paris, October (2002), World Press Review, December, (2002).
- 105. J.K. Galbraith, *The Unbearable Costs of Empire*, American Prospect magazine, November, (2002).
- 106. G. Monbiot, *The Logic of Empire*, The Guardian, August 6, (2002), World Press Review, October, (2002).
- 107. W.R. Pitt and S. Ritter, War on Iraq, Context Books
- 108. W.R. Pitt, The Greatest Sedition is Silence, Pluto Press, (2003).
- 109. J. Wilson, *Republic or Empire?*, The Nation magazine, March 3, (2003).
- 110. R. Dreyfuss, Just the Beginning: Is Iraq the Opening Salvo in a War to Remake the World?, The American Prospect magazine, April, (2003).

- 111. D. Moberg, The Road From Baghdad: The Bush Team Has Big Plans For the 21st Century. Can the Rest of the World Stop Them?, These Times magazine, May, (2003).
- 112. P. Cain and T. Hopkins, British Imperialism, 1688-200, Longman, (2000).
- 113. N. Ferguson, Empire: The Rise and Demise of the British World Order and the Lessons for Global Power, Basic Books, (2003).
- 114. E.J. Hobsbawn, The Age of Empire, 1875-1914, Vintage Books, (1989).
- 115. L. James, *The Rise and Fall of the British Empire*, St Martin's Press, (1997).
- 116. S. Schama, The Fate of Empire, 1776-2000, Miramax, (2002).
- 117. A.P. Thorton, *The Imperial Idea and Its Enemies: A Study in British Power*, Palgrave Macmillan, (1985).
- 118. G. Kolko, Another Century of War, New Press, (2002).
- 119. G. Kolko, Confronting the Third World: United States Foreign Policy, 1945-1980, Pantheon Books, (1988).
- 120. J. Feffer, B. Egrenreich and M.T. Klare, *Power Trip: US Unilateralism* and Global Strategy After September 11, Seven Stories Press, (2003).
- 121. R.S. Foot, S.N. MacFarlane and M. Mastanduno, US Hegemony and International Organizations: The United States and Multilateral Institutions, Oxford University Press, (2003).
- 122. P. Bennis and N. Chomsky, *Before and After: US Foreign Policy and the September 11th Crisis*, Olive Branch Press, (2002).
- 123. J. Garrison, America as Empire: Global Leader or Rouge Power?, Berrett-Koehler Publishers, (2004).
- 124. A.J. Bacevich, American Empire: The Realities and Consequences of US Diplomacy, Harvard University Press, (2002).
- 125. D.R. Francis, *Hidden Defense Costs Add Up to Double Trouble*, Christian Science Monator, February 23, (2004).
- 126. E.J. Hobsbawn, The Age of Empire, 1875-1914, Vintage Books, (1989).
- 127. L. James, *The Rise and Fall of the British Empire*, St Martin's Press, (1997).
- 128. N. Ferguson, Empire: The Rise and Demise of the British World Order and the Lessons for Global Power, Basic Books, (2003).
- 129. S. Schama, The Fate of Empire, 1776-2000, Miramax, (2002).
- 130. A.P. Thorton, *The Imperial Idea and Its Enemies: A Study in British Power*, Palgrave Macmillan, (1985).
- H. Mejcher, Imperial Quest for Oil: Iraq, 1910-1928, Ithaca Books, London, (1976).
- 132. P. Sluglett, Britain in Iraq, 1914-1932, Ithaca Press, London, (1976).
- D.E. Omissi, British Air Power and Colonial Control in Iraq, 1920-1925, Manchester University Press, Manchester, (1990).

- V.G. Kiernan, Colonial Empires and Armies, 1815-1960, Sutton, Stroud, (1998).
- 135. R. Solh, Britain's 2 Wars With Iraq, Ithaca Press, Reading, (1996).
- 136. D. Hiro, *The Longest War: The Iran-Iraq Military Conflict*, Routledge, New York, (1991).
- 137. T.E. Lawrence, A Report on Mesopotamia by T.E. Lawrence, Sunday Times, August 22, (1920).
- 138. D. Fromkin, A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East, Owl Books, (2001).
- 139. T. Rajamoorthy, Deceit and Duplicity: Some Reflections on Western Intervention in Iraq, Third World Resurgence, March-April, (2003).
- 140. P. Knightley and C. Simpson, The Secret Lives of Lawrence of Arabia, Nelson, London, (1969).
- 141. G. Lenczowski, *The Middle East in World Affairs*, Cornell University Press, (1962).
- 142. John A. Hobson, *Imperialism; A Study*, (1902).
- 143. P. Cain and T. Hopkins, British Imperialism, 1688-200, Longman, (2000).
- 144. N. Ferguson, Empire: The Rise and Demise of the British World Order and the Lessons for Global Power, Basic Books, (2003).
- 145. G. Kolko, Another Century of War, New Press, (2002).
- 146. G. Kolko, Confronting the Third World: United States Foreign Policy, 1945-1980, Pantheon Books, (1988).
- 147. M.T. Klare, *Resource Wars: The New Landscape of Global Conflict*, Owl Books reprint edition, New York, (2002).

Chapter 9

CARING FOR OUR NEIGHBORS

9.1 Education for world citizenship

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", a part of which is 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 the message: All humans are brothers and sisters - not just some - all! It is almost a national anthem of humanity. The feelings that the music and words provoke are similar to patriotism, but broader. It is this higher loyalty to humanity as a whole, this sense of a universal human family, that 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 who have contributed. Our modern civilization 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, chili peppers, pineapples, quinine, etc. 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 as a precious heritage - far too precious to be risked in a thermonuclear war.

Reform is also urgently needed in the teaching of economics and business. The economics of growth must be replaced by equilibrium economics, where considerations of ecology, carrying capacity, and sustainability are given their proper weight, and where the quality of life of future generations has as much importance as present profits.

Secondly, the education of economists and businessmen needs to face the problems of global poverty - the painful contrast between the affluence and wastefulness of the industrial North and the malnutrition, disease and illiteracy endemic in the South. Students of economics and business must look for the roots of poverty not only in population growth and war, but also in the history of colonialism and neocolonialism, and in defects in global financial institutions and trade agreements. They must be encouraged to formulate proposals for the correction of North-South economic inequality.

The economic impact of war and preparation for war should be included in the training of economists. Both the direct and indirect costs of war should be studied, for example the effect of unimaginably enormous military budgets in reducing the money available to solve pressing problems posed by the resurgence of infectious disease (e.g. AIDS, and drug-resistant forms of malaria and tuberculosis); the problem of population stabilization; food problems; loss of arable land; future energy problems; the problem of finding substitutes for vanishing nonrenewable resources, and so on.

Finally, economics curricula should include the problems of converting warrelated industries to peaceful ones - the problem of beating swords into plowshares. It is often said that our economies are dependent on arms industries. If this is so, it is an unhealthy dependence, analogous to drug addiction, since arms industries do not contribute to future-oriented infrastructure. The problem of conversion is an important one. It is the economic analog of the problem of ending a narcotics addiction, and it ought to be given proper weight in the education of economists.

Law students should be made aware of the importance of international law. They should be familiar with its history, starting with Grotius and the Law of the Sea. They should know the histories of the International Court of Justice and the Nüremberg Principles. They should study the United Nations Charter (especially the articles making war illegal) and the Universal Declaration of Human Rights, as well as the Rome Treaty and the foundation of the International Criminal Court. They should be made aware of a deficiency in the present United Nations - the lack of a legislature with the power to make laws that are binding on individuals.

Students of law should be familiar with all of the details of the World

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Court's historic Advisory Opinion on Nuclear Weapons, a decision that make the use or threat of use of nuclear weapons illegal. They should also study the Hague and Geneva Conventions, and the various international treaties related to nuclear, chemical and biological weapons. The relationship between the laws of the European Union and those of its member states should be given high importance. The decision by the British Parliament that the laws of the EU take precedence over British law should be a part of the curriculum.

In teaching science too, reforms are needed. Graduates in science and engineering should be conscious of their responsibilities. They must resolve never to use their education in the service of war, nor for the production of weapons, nor in any way that might be harmful to society or to the environment.

Science and engineering students ought to have some knowledge of the history and social impact of science. They could be given a course on the history of scientific ideas, and in connection with modern historical developments such as the industrial revolution, the global population explosion, the development of nuclear weapons, genetic engineering, and information technology, some discussion of social impact could be introduced. One might hope to build up in science and engineering students an understanding of the way in which their own work is related to the general welfare of humankind, and a sense of individual social and ethical responsibility. These elements are needed in science education if rapid technological progress is to be beneficial to society rather than harmful.

9.2 The role of the mass media

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.

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. Unfortunately the culture of television, films and computer games is more often a culture of violence than a culture of peace.

Computer games designed for young boys often give the strongest imaginable support to our present culture of violence. For example, a game entitled "Full Spectrum Warrior" was recently reviewed in a Danish newspaper. According to the reviewer, "...An almost perfect combination of graphics, sound, band design, and gameplay makes it seem exactly like the film Black Hawk Down - with the player as the main character. This is not just a coincidence, because the game is based on an army training program. ... Full Spectrum Warrior is an extremely intense experience, and despite the advanced possibilities, the controls are simple enough so that young children can play it. ... The player is completely drawn into the screen, and remains there until the end of the mission." The reviewer gave the game six stars (the maximum).

If entertainment is evaluated only on the basis of popularity, what might be called "the pornography of violence" gets high marks. However, there is another way of looking at entertainment. It is a part, and a very important part, of our total educational system. In modern industrial societies, this important educational function has been given by default to commercial interests. We would not want Coca Cola to run our schools, but entertainment is just as important as the school or home environment in forming values and norms, and entertainment is in the hands of commerce.

Today we are faced with the task of creating a new global ethic in which loyalty to family, religion and nation will be supplemented by a higher loyalty to humanity as a whole. In addition, our present culture of violence must be replaced by a culture of peace. To achieve these essential goals, we urgently need the cooperation of the mass media.

One is faced with a dilemma, because on the one hand artistic freedom is desirable and censorship undesirable, but on the other hand some degree of responsibility ought to be exercised by the mass media because of their enormous influence in creating norms and values.

Of course we cannot say to the entertainment industry, "From now on you must not show anything but David Attenborough and the life of Gandhi". However, it would be enormously helpful if every film or broadcast or computer game could be evaluated not only for its popularity and artistic merit, but also in terms of the good or harm that it does in the task of building a peaceful world.

Why doesn't the United Nations have its own global television and radio network? 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. A United Nations television and radio network would at least give viewers and listeners a choice between programs supporting militarism, and programs supporting a global culture of peace. At present they have little choice.

9.3 The role of religion

Finally, let us turn to religion, with its enormous influence on human thought and behavior.

In the 6th century B.C., Prince Gautama Buddha founded a new religion in India, with a universal (non-tribal) code of ethics. Among the sayings of the Buddha are as follows:

"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."

Similarly, Christianity 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 that characterize the present conflicts in the Middle East and the recent troubles in 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 whole populations should be killed in a "massive retaliation", innocent children along with guilty politicians.

The startling contradiction between what 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 longer I live, and especially now, when I vividly feel the nearness of death, the more I want to tell others what I feel so particularly clearly and what to my mind is of great importance - namely that which is called passive resistance, but which is in reality nothing else but the teaching of love, uncorrupted by false interpretations. That love - i.e. the striving for the union of human souls and the activity derived from that striving - is the highest and only law of human life, and in the depth of his soul every human being knows this (as we most clearly see in children); he knows this until he is entangled in the false teachings of the world. This law was proclaimed by all - by the Indian as by the Chinese, Hebrew, Greek and Roman sages of the world. I think that this law was most clearly expressed by Christ, who plainly said that 'in this alone is all the law and the prophets.' ..."

"...The peoples of the Christian world have solemnly accepted this law, while at the same time they have permitted violence and built their lives on violence; and that is why the whole life of the Christian peoples is a continuous contradiction between what 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..."

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. Later, non-violence was successfully applied by Martin Luther King, and by Nelson Mandela. Gandhi was firm in pointing out that the ends do not justify the means, since violent methods inevitably contaminate the result achieved. The same theme can be seen in the following quotation from Martin Luther King.

"Why should we love our enemies?", Dr. King wrote, "Returning hate for hate multiplies hate, adding deeper darkness to a night already devoid of stars. Darkness cannot drive out darkness; only light can do that. Hate cannot drive out hate. Only love can do that. ... Love is the only force capable of transforming an enemy into a friend. We never get rid of an enemy by meeting hate with hate; we get rid of an enemy by getting rid of enmity. ... It is this attitude that made it possible for Lincoln to speak a kind word about the South during the Civil War, when feeling was most bitter. Asked by a shocked bystander how he could do this, Lincoln said, 'Madam, do I not destroy my enemies when I make them my friends?' This is the power of redemptive love."

In 1967, a year before his assassination, Dr. King forcefully condemned the Viet Nam war in an address at a massive peace rally in New York City. He felt that opposition to war followed naturally from his advocacy of non-violence. Regarding nuclear weapons, Dr. King wrote, "Wisdom born of experience

9.4. REFORMED TEACHING OF HISTORY



Figure 9.1: Sir Joseph Rotblat (1908-2005).

should tell us that war is obsolete. There may have been a time when war served a negative good by preventing the spread of an evil force, but the power of modern weapons eliminates even the possibility that war may serve as a negative good. If we assume that life is worth living, and that man has a right to survival, then we must find an alternative to war. ... I am convinced that the Church cannot be silent while mankind faces the threat of nuclear annihilation. If the church is true to her mission, she must call for an end to the nuclear arms race."

9.4 Reformed teaching of history

"We have to extend our loyalty to the whole of the human race.... A war-free world will be seen by many as Utopian. It is not Utopian. There already exist in the world large regions, for example the European Union, within which war is inconceivable. What is needed is to extend these...", Sir Joseph Rotblat, Nobel Peace Prize Acceptance Speech, 1995.

Since modern war has become prohibitively dangerous, there is an urgent need for peace education. Why do we pay colossal sums for war, which we know is the source of so much human suffering, and which threatens to destroy human civilization? Why not instead support peace and peace education?

The growth of global consciousness

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", a part of which is 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 the message: All humans are brothers and sisters - not just some - all! It is almost a national anthem of humanity. The feelings that the music and words provoke are similar to patriotism, but broader. It is this sense of a universal human family that we need to cultivate in education, in the mass media, and in religion. We already appreciate music, art and literature from the entire world, and scientific achievements are shared by all, regardless of their country of origin. We need to develop this principle of universal humanism so that it will become the cornerstone of a new ethic.

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 who have contributed. Our modern civilization 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, chili peppers, pineapples, quinine, etc. 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 as a precious heritage - far too precious to be risked in a thermonuclear war.

The teaching of history should also focus on the times and places where good government and internal peace have been achieved, and the methods by which this has been accomplished. Students should be encouraged to think about what is needed if we are to apply the same methods to the world as a whole. In particular, the histories of successful federations should be studied, for example the Hanseatic League, the Universal Postal Union, the federal governments of Australia, Brazil, Germany, Switzerland, the United States, Canada, and so on. The recent history of the European Union provides another extremely important example. Not only the successes, but also the problems of federations should be studied in the light of the principle of subsidiarity¹.

¹The principle of subsidiarity states that within a federation, decisions should be taken at the lowest level at which there are no important externalities. Thus, for example, decisions affecting air quality within Europe should be taken in Bruxelles because winds blow freely across national boundaries, but decisions affecting only the local environment should be taken locally.

The essential features of federations should be clarified², as well as the reasons why weaker forms of union have proved to be unsuccessful.

9.5 Reformed education of economists and businessmen

The education of economists and businessmen needs to face the problems of global poverty - the painful contrast between the affluence and wastefulness of the industrial North and the malnutrition, disease and illiteracy endemic in the South. Students of economics and business must look for the roots of poverty not only in population growth and war, but also in the history of colonialism and neocolonialism, and in defects in global financial institutions and trade agreements. They must be encouraged to formulate proposals for the correction of North-South economic inequality.

The economic impact of war and preparation for war should be included in the training of economists. Both direct and indirect costs should be studied. An example of an indirect cost of war is the effect of unimaginably enormous military budgets in reducing the amount of money available for solving the serious problems facing the world today.

9.6 Law for a united world

Law students should be made aware of the importance of international law. They should be familiar with its history, starting with Grotius and the Law of the Sea. They should know the histories of the International Court of Justice and the Nuremberg Principles. They should study the United Nations Charter (especially the articles making war illegal) and the Universal Declaration of Human Rights, as well as the Rome Treaty and the foundation of the International Criminal Court. They should be made aware of a deficiency in the present United Nations - the lack of a legislature with the power to make laws that are binding on individuals.

Students of law should be familiar with all of the details of the World Court's historic Advisory Opinion on Nuclear Weapons, a decision that make the use or threat of use of nuclear weapons illegal. They should also study the Hague and Geneva Conventions, and the various international treaties related to nuclear, chemical and biological weapons. The relationship between the

²One of the most important of these features is that federations have the power to make and enforce laws that are binding on individuals, rather than trying to coerce their member states.

laws of the European Union and those of its member states should be given high importance. The decision by the British Parliament that the laws of the EU take precedence over British law should be a part of the curriculum.

9.7 Teaching global ethics

Professors of theology should emphasize three absolutely central components of religious ethics: the duty to love and forgive one's enemies, the prohibition against killing, and the concept of universal human brotherhood. They should make their students conscious of a responsibility to give sermons that are relevant to the major political problems of the modern world, and especially to relate the three ethical principles just mentioned to the problem of war. Students of theology should be made conscious of their responsibility to soften the boundaries between ethnic groups, to contribute to interreligious understanding, and to make marriage across racial and religious boundaries more easy and frequent.

9.8 The social responsibility of scientists

In teaching science too, reforms are needed. Graduates in science and engineering should be conscious of their responsibilities. They must resolve never to use their education in the service of war, nor for the production of weapons, nor in any way that might be harmful to society or to the environment.

Science and engineering students ought to have some knowledge of the history and social impact of science. They could be given a course on the history of scientific ideas; but in connection with modern historical developments such as the industrial revolution, the global population explosion, the development of nuclear weapons, genetic engineering, and information technology, some discussion of social impact of science could be introduced. One might hope to build up in science and engineering students an understanding of the way in which their own work is related to the general welfare of humankind, and a sense of individual social and ethical responsibility. These elements are needed in science education if rapid technological progress is to be beneficial to society rather than harmful.

The changes just mentioned in the specialized lawyers, theologians, scientists and engineers should have a counterpart in elementary education. The basic facts about peace and war should be communicated to children in simple language, and related to the everyday experiences of children. Teachers' training colleges ought to discuss with their student-teachers the methods that can be used to make peace education a part of the curriculum at various levels, and how it can be related to familiar concepts. They should also discuss the degree to which the painful realities of war can be explained to children of various ages without creating an undesirable amount of anxiety.

Peace education can be made a part of the curriculum of elementary schools through (for example) theme days or theme weeks in which the whole school participates. This method has been used successfully in many European schools. During the theme days the children have been encouraged to produce essays, poems and drawings illustrating the difference between peace and war, and between negative peace and positive peace³. Another activity has been to list words inspired by the concept "peace", rapidly and by free association, and to do the same for the concept "war". Drama has also been used successfully in elementary school peace education, and films have proved to be another useful teaching aid.

The problems of reducing global inequalities, of protecting human rights, and of achieving a war-free world can be introduced into grade school courses in history, geography, religion and civics. The curriculum of these courses is frequently revised, and advocates of peace education can take curriculum revisions as opportunities to introduce much-needed reforms that will make the students more international in their outlook. The argument (a true one) should be that changes in the direction of peace education will make students better prepared for a future in which peace will be a central issue and in which they will interact with people of other nations to a much greater extent than was the case in previous generations. The same can be said for curriculum revisions at the university level.

9.9 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

 $^{^{3}}$ Negative peace is merely the absence of war. In positive peace, neighboring nations are actively engaged in common projects of mutual benefit, in cultural exchanges, in trade, in exchanges of students and so on.

peaceful and cooperative societies, cannot the same methods of government be applied globally?

But what are the methods that nations use to achieve internal peace? Firstly, every true government needs to have the power to make and enforce laws that are binding on individual citizens. Secondly the power of taxation is a necessity. These two requirements of every true government have already been mentioned; but there is a third point that still remains to be discussed:

Within their own territories, almost all nations have more military power than any of their subunits. For example, the US Army is more powerful than the State Militia of Illinois. This unbalance of power contributes to the stability of the Federal Government of the United States. When the FBI wanted to arrest Al Capone, it did not have to bomb Chicago. Agents just went into the city and arrested the gangster. Even if Capone had been enormously popular in Illinois, the government of the state would have realized in advance that it had no chance of resisting the US Federal Government, and it still would have allowed the "Feds" to make their arrest. Similar considerations hold for almost all nations within which there is internal peace. It is true that there are some nations within which subnational groups have more power than the national government, but these are frequently characterized by civil wars.

Of the large land areas within which internal peace has been achieved, the European Union differs from the others because its member states still maintain powerful armies. The EU forms a realistic model for what can be achieved globally in the near future by reforming and strengthening the United Nations. In the distant future, however, we can imagine a time when a world federal authority will have much more power than any of its member states, and when national armies will have only the size needed to maintain local order.

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.

9.10 Culture, education and human solidarity

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



Figure 9.2: Malala Yousefzai, winner of the 2014 Nobel Peace Prize, says: "One child, one teacher, one book and one pen can change the world!"

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 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.⁴

⁴http://www.fredsakademiet.dk/library/need.pdf

http://eruditio.worldacademy.org/issue-5/article/urgent-need-renewable-energy

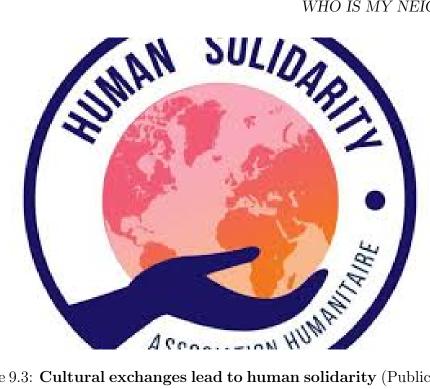


Figure 9.3: Cultural exchanges lead to human solidarity (Public domain)

UNESCO and peace education

Advocates of education for peace can obtain important guidance and encouragement from UNESCO - the United Nations Educational, Scientific and Cultural Organization⁵. The Constitution of UNESCO, was written immediately after the end of the Second World War, during which education had been misused (especially in Hitler's Germany) to indoctrinate students in such a way that they became uncritical and fanatical supporters of military dictatorships. The founders of the United Nations were anxious to correct this misuse, and to make education instead one of the foundations of a peaceful world. One can see this hope in the following paragraph from UNESCO's Constitution:

"The purpose of the Organization is to contribute to peace and security by promoting collaboration among nations through education, science and culture in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language or religion, by the Charter of the United Nations."

In other words, UNESCO was given the task of promoting education for peace, and of promoting peace through international cooperation in education.

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⁵http://www.unicef.org/education/files/PeaceEducation.pdf

In 1946 the General Conference of UNESCO adopted a nine-point resolution concerning the improvement of textbooks in such a way as to make them support international understanding, paying particular attention to history teaching and civic education. During the next decade, UNESCO produced publications and hosted seminars to promote improvements in the teaching of history, geography and modern languages, so that these subjects could be more instrumental in developing mutual understanding between nations and between cultures. A meeting of French, German, British and American teachers was organized in 1952, with the goal of removing national prejudices from textbooks. Every two years after this date bilateral and multilateral consultations of history teachers have taken place under the auspices of UNESCO.

Here are a few voices that express the aims and ideals of UNESCO over the years:

- Ellen Wilkinson (United Kingdom) (Former UK Minister of Education, Chairwoman of the conference establishing UNESCO in 1945): What can this organization do? Can we replace nationalist teaching by a conception of humanity that trains children to have a sense of mankind as well as of national citizenship? That means working for international understanding
- Maria Montessori (Italy), pioneer of modern education and education for peace, Fourth Session of the General Conference of UNESCO, Florence 1950: If one day UNESCO resolved to involve children in the reconstruction of the world and building peace, if it chose to call on them, to discuss with them, and recognize the value of all the revelations they have for us, it would find them of immense help in infusing new life into this society which must be founded on the cooperation of all.
- Jamie Torres Bodet (Mexico), Director-General of UNESCO, 1948-1952, (The UNESCO Courier, 1951): Knowledge and understanding of the principles of the Universal Declaration of Human Rights and their practical application must begin during childhood. Efforts to make known the rights and duties they imply will never be fully effective unless schools in all countries make teaching about the declaration a regular part of their curriculum...
- Lionel Elvin (United Kingdom), Director of the Department of Education of UNESCO, 1950-1956 (UNESCO Courier, 1953): If UNESCO were only an office in Paris, its task would be impossible. It is more than that: it is an association of some sixty-five countries which have pledged

themselves to do all they can, not only internationally but within their own boundaries, to advance the common aim of educating for peace. The international side comes in because we shall obviously do this faster and better and with more mutual trust if we do it together.

- Jawaharlal Nehru (India) Prime Minister, 1947-1964 (Address on a visit to UNESCO, 1962): It is then the minds and hearts of men that have to be approached for mutual understanding, knowledge and appreciation of each other and through the proper kind of education... But we have seen that education by itself does not lead to a conversion of minds towards peaceful purposes. Something more is necessary, new standards, new values and perhaps a kind of spiritual background and a feeling of commonness of mankind.
- James P. Grant (United States). Executive Director of UNICEF, 1980-1995, (International Conference on Education, Geneva, 1994): Education for peace must be global, for as the communications revolution transforms the world into a single community, everyone must come to understand that they are affected by what happens elsewhere, and that their lives, too, have an impact. Solidarity is a survival strategy in the global village.

During the time when he was Secretary-General of UNESCO, Federico Mayor Zaragoza of Spain introduced the concept of a *Culture of Peace*. He felt, as many did, that civilization was entering a period of crisis. Federico Mayor believed this crisis to be as much spiritual as it was economic and political. It was necessary, he felt, to counteract our present power-worshiping culture of violence with a Culture of Peace, a set of ethical and aesthetic values, habits and customs, attitudes towards others, forms of behavior and ways of life that express

- Respect for life and for the dignity and human rights of individuals.
- Rejection of violence.
- Recognition of equal rights for men and women.
- Upholding the principles of democracy, freedom, justice, solidarity, tolerance and the acceptance of differences.
- Understanding between nations and countries and between ethnic, religious, cultural and social groups.

Mayor and UNESCO implemented this idea by designating the year 2000 as the International Year of the Culture of Peace. In preparation for this year, a meeting of Nobel Peace Prize Laureates launched *Manifesto 2000*, a campaign in which the following pledge of the Culture of Peace was widely circulated and signed:

Recognizing my share of responsibility for the future of humanity, especially for today's children and those of future generations, I pledge - in my daily life, in my family, my work, my community, my country and my region - to:

- 1. respect the life and dignity of every person without discrimination or prejudice;
- 2. practice active non-violence, rejecting violence in all its forms: physical, sexual, psychological, economical and social, in particular towards the most deprived and vulnerable such as children and adolescents;
- 3. share my time and material resources in a spirit of generosity to put an end to exclusion, injustice and political and economic oppression;
- 4. defend freedom of expression and cultural diversity, giving preference always to dialogue and listening without engaging in fanaticism, defamation and the rejection of others;
- 5. promote consumer behavior that is responsible and development practices that respect all forms of life and preserve the balance of nature on the planet;
- 6. contribute to the development of my community, with the full participation of women and respect for democratic principles, in order to create together new forms of solidarity.

In addition, Federico Mayor and UNESCO initiated a Campaign for the Children of the World, and this eventually developed into the International Decade for a Culture of Peace and Non-Violence for the Children of the World (2001-2010). In support of this work, the UN General Assembly drafted a Program of Action on a Culture of Peace (53rd Session, 2000). The Program of Action obliges it signatories to "ensure that children, from an early age, benefit from education on the values, attitudes, modes of behavior and ways of life to enable them to resolve any dispute peacefully and in a spirit of respect for human dignity and of tolerance and non-discrimination", and to "encourage the revision of educational curricula, including textbooks..."

Just as this program was starting, the September 11 terrorist attacks gave an enormous present to the culture of violence and war, and almost silenced the voices speaking for a Culture of Peace. However, military solutions have never provided true security, even for the strongest countries. Expensive and technologically advanced weapons systems may enrich arms manufacturers and military lobbies, but they do not provide security - only an unbelievably expensive case of the jitters. By contrast, the Culture of Peace can give us hope for the future.

9.11 We stand on each other's shoulders

Cultural evolution depends on the non-genetic storage, transmission, diffusion and utilization of information. The development of human speech, the invention of writing, the development of paper and printing, and finally, in modern times, mass media, computers and the Internet: all these have been crucial steps in society's explosive accumulation of information and knowledge. Human cultural evolution proceeds at a constantly-accelerating speed, so great in fact that it threatens to shake society to pieces.

In many respects, our cultural evolution can be regarded as an enormous success. However, at the start of the 21st century, most thoughtful observers agree that civilization is entering a period of crisis. As all curves move exponentially upward, population, production, consumption, rates of scientific discovery, and so on, one can observe signs of increasing environmental stress, while the continued existence and spread of nuclear weapons threaten civilization with destruction. Thus, while the explosive growth of knowledge has brought many benefits, the problem of achieving a stable, peaceful and sustainable world remains serious, challenging and unsolved.

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, chili peppers, and quinine are gifts from the American Indians.

The sharing of scientific and technological knowledge is essential to modern civilization. The great power of science is derived from an enormous concentration of attention and resources on the understanding of a tiny fragment of nature. It would make no sense to proceed in this way if knowledge were not permanent, and if it were not shared by the entire world.

Science is not competitive. It is cooperative. It is a great monument built by many thousands of hands, each adding a stone to the cairn. This is true not only of scientific knowledge but also of every aspect of our culture, history, art and literature, as well as the skills that produce everyday objects upon which our lives depend. Civilization is cooperative. It is not competitive.

Our cultural heritage is not only immensely valuable; it is also so great that no individual comprehends all of it. We are all specialists, who understand only a tiny fragment of the enormous edifice. No scientist understands all of science. Perhaps Leonardo da Vinci could come close in his day, but today it is impossible. Nor do the vast majority people who use cell phones, personal computers and television sets every day understand in detail how they work. Our health is preserved by medicines, which are made by processes that most of us do not understand, and we travel to work in automobiles and buses that we would be completely unable to construct.

9.12 The fragility of modern society

As our civilization has become more and more complex, it has become increasingly vulnerable to disasters. We see this whenever there are power cuts or transportation failures due to severe storms. If electricity should fail for a very long period of time, our complex society would cease to function. The population of the world is now so large that it is completely dependent on the high efficiency of modern agriculture. We are also very dependent on the stability of our economic system.

The fragility of modern society is particularly worrying, because, with a little thought, we can predict several future threats which will stress our civilization very severely. We will need much wisdom and solidarity to get safely through the difficulties that now loom ahead of us.

We can already see the the problem of famine in vulnerable parts of the world. Climate change will make this problem more severe by bringing aridity to parts of the world that are now large producers of grain, for example the Middle West of the United States. Climate change has caused the melting of glaciers in the Himalayas and the Andes. When these glaciers are completely melted, China, India and several countries in South America will be deprived of their summer water supply. Water for irrigation will also become increasingly problematic because of falling water tables. Rising sea levels will drown many rice-growing areas in South-East Asia. Finally, modern agriculture is very dependent on fossil fuels for the production of fertilizer and for driving farm machinery. In the future, high-yield agriculture will be dealt a severe blow by the rising price of fossil fuels.

Economic collapse is another threat that we will have to face in the future. Our present fractional reserve banking system is dependent on economic growth. But perpetual growth of industry on a finite planet is a logical impossibility. Thus we are faced with a period of stress, where reform of our growth-based economic system and great changes of lifestyle will both become necessary.

How will we get through the difficult period ahead? I believe that solutions to the difficult problems of the future are possible, but only if we face the problems honestly and make the adjustments which they demand. Above all, we must maintain our human solidarity.

The great and complex edifice of human civilization is far too precious to be risked in a thermonuclear war. It has been built by all humans, working together. And by working together, we must now ensure that it is handed on intact to our children and grandchildren.

9.13 The collective human consciousness

No man is an island entire of itself; every man is a piece of the continent, a part of the main, John Donne (1572-1631)

If I have seen further it is by standing on ye shoulders of Giants, Isaac Newton (1643-1727)

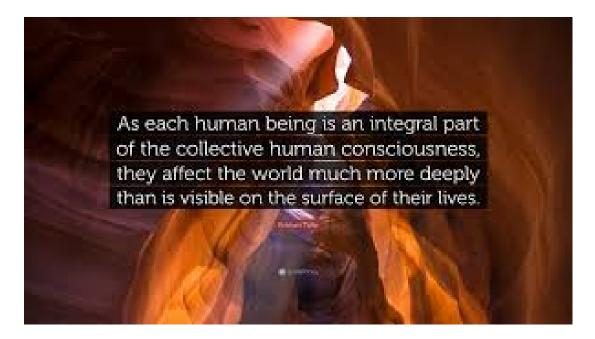
One needs an exceptional stupidity even to question the urgency we are under to establish some effective World Pax, before gathering disaster overwhelms us. The problem of reshaping human affairs on a world-scale, this World problem, is drawing together an ever-increasing multitude of minds. H.G. Wells (1866-1946)

The Open Access Movement has fought valiantly to ensure that scientists do not sign their copyrights away but instead ensure their work is published on the Internet, under terms that allow anyone to access it., Aaron Schwartz (1986-2013)

Sharp qualitative discontinuities have occurred several times before during the earth's 4-billion year evolutionary history: A dramatic change occurred when autocatalytic systems first became surrounded by a cell membrane. Another sharp transition occurred when photosynthesis evolved, and a third when the enormously more complex eukaryotic cells developed from the prokaryotes. The evolution of multicellular organisms also represents a sharp qualitative change. Undoubtedly the change from molecular information transfer to cultural information transfer is an even more dramatic shift to a higher mode of evolution than the four sudden evolutionary gear-shifts just mentioned. Human cultural evolution began only an instant ago on the time-scale of genetic evolution. Already it has completely changed the planet. We have no idea where it will lead.

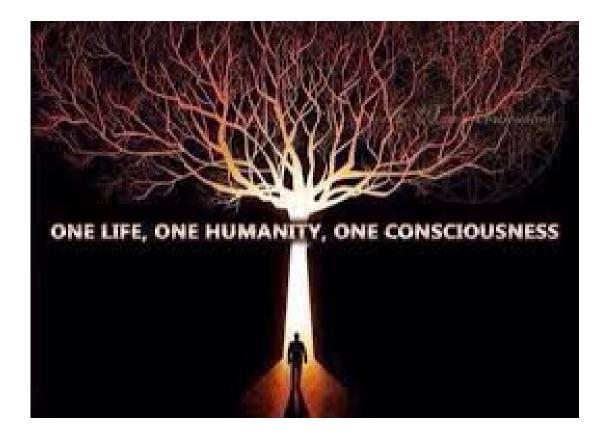
The whole is greater than the sum of its parts. Human society is a superorganism, far greater than any individual in history or in the present. The human superorganism has a supermind, a collective consciousness far greater than the consciousness of individuals. Each individual contributes a stone to the cairn of civilization, but our astonishing understanding of the universe is a collective achievement.

Science derives its great power from the concentration of enormous resources on a tiny fragment of reality. It would make no sense to proceed in this way if knowledge were not permanent and if information were not shared globally. But scientists of all nations pool their knowledge at international



conferences and through international publications. Scientists stand on each other's shoulders. Their shared knowledge is far greater than the fragments that each contributes.

Other aspects of culture are also cooperative and global. For example, Japanese woodblock printers influenced the French Impressionists. The nonviolent tradition of Shelly, Thoreau, Tolstoy, Gandhi, Martin Luther King and Nelson Mandela is international. Culture is cooperative. It is not competitive. Global cultural cooperation can lead us to a sustainable and peaceful society. Our almost miraculous modern communications media, if properly used, can give us a stable, prosperous and cooperative future society.





WHO IS MY NEIGHBOR?



9.13. THE COLLECTIVE HUMAN CONSCIOUSNESS



Suggestions for further reading

- 1. R. Axelrod, *The Evolution of Cooperation*, Basic Books, New York, (1984).
- 2. W. Brandt, World Armament and World Hunger: A Call for Action, Victor Gollanz Ltd., London, (1982).
- 3. E. Chivian, and others (eds.), Last Aid: The Medical Dimensions of Nuclear War, W.H. Freeman, San Fransisco, (1982).
- I. Eibl-Eibesfeldt, The Biology of War and Peace, Thames and Hudson, New York, (1979).
- R.A. Hinde, Biological Basis for Human Social Behaviour, McGraw-Hill, New York, (1977).
- R.A. Hinde, Towards Understanding Relationships, Academic Press, London, (1979).
- M. Khanert and others (eds.), *Children and War*, Peace Union of Finland, Helsinki, (1983).
- 8. K. Lorentz, On Aggression, Bantam Books, New York, (1977).
- 9. Medical Association's Board of Science and Education, *The Medical Effects of Nuclear War*, Wiley, (1983).
- 10. M. Renner, Swords into Plowshares: Converting to a Peace Economy, Worldwatch Paper 96, Worldwatch Institute, Washington D.C., (1990).
- 11. J. Rotblat (ed.), Shaping Our Common Future: Dangers and Opportunities (Proceedings of the Forty-Second Pugwash Conference on Science and World Affairs), World Scientific, London, (1994).
- R.L. Sivard, World Military and Social Expenditures, World Priorities, Box 25140, Washington, D.C. 20007, (published annually).
- J.E. Slater, *Governance*, Aspen Institute for Humanistic Studies, New York, (1976).
- P.B. Smith, J.D. Schilling and A.P. Haines, Introduction and Summary, in Draft Report of the Pugwash Study Group: The World at the Crossroads, Berlin, (1992).
- 15. A. Szent-Györgyi, *The Crazy Ape*, Philosophical Library, New York, (1970).
- 16. J. Tinbergen (coordinator), *Reshaping the International Order*, Dutton, New York, (1976).
- C. Zahn-Waxler, Altruism and Aggression: Biological and Social Origins, Cambridge University Press, (1986).
- 18. J.L. Henderson, *Hiroshima*, Longmans (1974).
- A. Osada, Children of the A-Bomb, The Testament of Boys and Girls of Hiroshima, Putnam, New York (1963).
- 20. M. Hachiya, M.D., *Hiroshima Diary*, The University of North Carolina Press, Chapel Hill, N.C. (1955).

354

- 21. M. Yass, *Hiroshima*, G.P. Putnam's Sons, New York (1972).
- 22. R. Jungk, *Children of the Ashes*, Harcourt, Brace and World (1961).
- B. Hirschfield, A Cloud Over Hiroshima, Baily Brothers and Swinfin Ltd. (1974).
- 24. J. Hersey, *Hiroshima*, Penguin Books Ltd. (1975).
- 25. R. Rhodes, *Dark Sun: The Making of the Hydrogen Bomb*, Simon and Schuster, New York, (1995)
- 26. R. Rhodes, *The Making of the Atomic Bomb*, Simon and Schuster, New York, (1988).
- 27. D.V. Babst et al., Accidental Nuclear War: The Growing Peril, Peace Research Institute, Dundas, Ontario, (1984).
- 28. S. Britten, The Invisible Event: An Assessment of the Risk of Accidental or Unauthorized Detonation of Nuclear Weapons and of War by Miscalculation, Menard Press, London, (1983).
- 29. M. Dando and P. Rogers, *The Death of Deterrence*, CND Publications, London, (1984).
- N.F. Dixon, On the Psychology of Military Incompetence, Futura, London, (1976).
- D. Frei and C. Catrina, Risks of Unintentional Nuclear War, United Nations, Geneva, (1982).
- 32. H. L'Etang, *Fit to Lead?*, Heinemann Medical, London, (1980).
- SPANW, Nuclear War by Mistake Inevitable or Preventable?, Swedish Physicians Against Nuclear War, Lulea, (1985).
- 34. J. Goldblat, Nuclear Non-proliferation: The Why and the Wherefore, (SIPRI Publications), Taylor and Francis, (1985).
- 35. IAEA, International Safeguards and the Non-proliferation of Nuclear Weapons, International Atomic Energy Agency, Vienna, (1985).
- J. Schear, ed., Nuclear Weapons Proliferation and Nuclear Risk, Gower, London, (1984).
- 37. D.P. Barash and J.E. Lipton, *Stop Nuclear War! A Handbook*, Grove Press, New York, (1982).
- C.F. Barnaby and G.P. Thomas, eds., *The Nuclear Arms Race: Control* or Catastrophe, Francis Pinter, London, (1982).
- 39. L.R. Beres, *Apocalypse: Nuclear Catastrophe in World Politics*, Chicago University press, Chicago, IL, (1980).
- 40. F. Blackaby et al., eds., *No-first-use*, Taylor and Francis, London, (1984).
- NS, ed., New Statesman Papers on Destruction and Disarmament (NS Report No. 3), New Statesman, London, (1981).
- H. Caldicot, Missile Envy: The Arms Race and Nuclear War, William Morrow, New York, (1984).

- R. Ehrlich, Waging the Peace: The Technology and Politics of Nuclear Weapons, State University of New York Press, Albany, NY, (1985).
- 44. W. Epstein, *The Prevention of Nuclear War: A United Nations Perspective*, Gunn and Hain, Cambridge, MA, (1984).
- 45. W. Epstein and T. Toyoda, eds., A New Design for Nuclear Disarmament, Spokesman, Nottingham, (1975).
- 46. G.F. Kennan, *The Nuclear Delusion*, Pantheon, New York, (1983).
- 47. R.J. Lifton and R. Falk, *Indefensible Weapons: The Political and Psy*chological Case Against Nuclearism, Basic Books, New York, (1982).
- 48. J.R. Macy, *Despair and Personal Power in the Nuclear Age*, New Society Publishers, Philadelphia, PA, (1983).
- 49. A.S. Miller et al., eds., *Nuclear Weapons and Law*, Greenwood Press, Westport, CT, (1984).
- 50. MIT Coalition on Disarmament, eds., *The Nuclear Almanac: Confronting the Atom in War and Peace*, Addison-Wesley, Reading, MA, (1984).
- 51. UN, Nuclear Weapons: Report of the Secretary-General of the United Nations, United Nations, New York, (1980).
- 52. IC, Proceedings of the Conference on Understanding Nuclear War, Imperial College, London, (1980).
- B. Russell, Common Sense and Nuclear Warfare, Allen and Unwin, London, (1959).
- 54. F. Barnaby, *The Nuclear Age*, Almqvist and Wiksell, Stockholm, (1974).
- D. Albright, F. Berkhout and W. Walker, *Plutonium and Highly En*riched Uranium 1996: World Inventories, Capabilities and Policies, Oxford University Press, Oxford, (1997).
- 56. G.T. Allison et al., Avoiding Nuclear Anarchy: Containing the Threat of Loose Russian Nuclear Weapons and Fissile Material, MIT Press, Cambridge MA, (1996).
- 57. B. Bailin, The Making of the Indian Atomic Bomb: Science, Secrecy, and the Post-colonial State, Zed Books, London, (1998).
- 58. G.K. Bertsch and S.R. Grillot, (Eds.), Arms on the Market: Reducing the Risks of Proliferation in the Former Soviet Union, Routledge, New York, (1998).
- 59. P. Bidawi and A. Vanaik, South Asia on a Short Fuse: Nuclear Politics and the Future of Global Disarmament, Oxford University Press, Oxford, (2001).
- 60. F.A. Boyle, The Criminality of Nuclear Deterrence: Could the U.S. War on Terrorism Go Nuclear?, Clarity Press, Atlanta GA, (2002).
- G. Burns, The Atomic Papers: A Citizen's Guide to Selected Books and Articles on the Bomb, the Arms Race, Nuclear Power, the Peace Movement, and Related Issues, Scarecrow Press, Metuchen NJ, (1984).

- L. Butler, A Voice of Reason, The Bulletin of Atomic Scientists, 54, 58-61, (1998).
- 63. R. Butler, Fatal Choice: Nuclear Weapons and the Illusion of Missile Defense, Westview Press, Boulder CO, (2001).
- 64. R.P. Carlisle (Ed.), *Encyclopedia of the Atomic Age*, Facts on File, New York, (2001).
- 65. G.A. Cheney, Nuclear Proliferation: The Problems and Possibilities, Franklin Watts, New York, (1999).
- A. Cohen, Israel and the Bomb, Colombia University Press, New York, (1998).
- S.J. Diehl and J.C. Moltz, Nuclear Weapons and Nonproliferation: A Reference Handbook, ABC-Clio Information Services, Santa Barbara CA, (2002).
- H.A. Feiveson (Ed.), The Nuclear Turning Point: A Blueprint for Deep Cuts and De-Alerting of Nuclear Weapons, Brookings Institution Press, Washington D.C., (1999).
- 69. R. Forsberg et al., Nonproliferation Primer: Preventing the Spread of Nuclear, Chemical and Biological Weapons, MIT Press, Cambridge, (1995).
- 70. R. Hilsman, From Nuclear Military Strategy to a World Without War: A History and a Proposal, Praeger Publishers, Westport, (1999).
- International Physicians for the Prevention of Nuclear War and The Institute for Energy and Environmental Research *Plutonium: Deadly Gold of the Nuclear Age*, International Physicians Press, Cambridge MA, (1992).
- R.W. Jones and M.G. McDonough, *Tracking Nuclear Proliferation: A Guide in Maps and Charts, 1998*, The Carnegie Endowment for International Peace, Washington D.C., (1998).
- 73. R.J. Lifton and R. Falk, *Indefensible Weapons: The Political and Psy*chological Case Against Nuclearism, Basic Books, New York, (1982).
- J. Rotblat, J. Steinberger and B. Udgaonkar (Eds.), A Nuclear-Weapon-Free World: Desirable? Feasible?, Westview Press, (1993).
- 75. The United Methodist Council of Bishops, In Defense of Creation: The Nuclear Crisis and a Just Peace, Graded Press, Nashville, (1986).
- S.R. Weart, Nuclear Fear: A History of Images, Harvard University Press, (1988).
- 77. C. Langley, Soldiers in the Laboratory: Military Involvement in Science and Technology and Some Alternatives, Scientists for Global Responsibility, (2005).
- M.T. Klare, Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum, Metropolitan Books, New York, (2004); paperback, Owl Books, (2005).

- 79. M.T. Klare, *Resource Wars: The New Landscape of Global Conflict*, reprint edition, Owl Books, New York, (2002).
- 80. M. Renner, *The Anatomy of Resource Wars*, Worldwatch Paper #162, Worldwatch Institute, (2002).
- 81. W.B. Gallie, Understanding War: Points of Conflict, Routledge, London, (1991).
- R. Falk and S.S. Kim, eds., *The War System: An Interdisciplinary Approach*, Westview, Boulder, CO, (1980).
- 83. J.D. Clarkson and T.C. Cochran, eds., War as a Social Institution, Colombia University Press, New York, (1941).
- 84. S. Melman, The Permanent War Economy, Simon and Schuster, (1974).
- 85. B. Broms, United Nations, Suomalainen Tiedeakatemia, Helsinki, (1990).
- 86. S. Rosenne, *The Law and Practice at the International Court*, Dordrecht, (1985).
- 87. S. Rosenne, *The World Court What It Is and How It Works*, Dordrecht, (1995).
- 88. J. D'Arcy and D. Harris, *The Procedural Aspects of International Law* (Book Series), Volume 25, Transnational Publishers, Ardsley, New York, (2001).
- H. Cullen, The Collective Complaints Mechanism Under the European Social Charter, European Law Review, Human Rights Survey, p. 18-30, (2000).
- 90. S.D. Bailey, The Procedure of the Security Council, Oxford, (1988).
- R.A. Akindale, The Organization and Promotion of World Peace: A Study of Universal-Regional Relationships, Univ. Toronto Press, Toronto, Ont., (1976).
- 92. J.S. Applegate, *The UN Peace Imperative*, Vantage Press, New York, (1992).
- 93. S.E. Atkins, Arms Control, Disarmament, International Security and Peace: An Annotated Guide to Sources, 1980-1987, Clio Press, Santa Barbara, CA, (1988).
- 94. N. Ball and T. Halevy, *Making Peace Work: The Role of the International Development Community*, Overseas Development Council, Washington DC, (1996).
- 95. F. Barnaby, Ed., The Gaia Peace Atlas: Survival into the Third Millennium, Doubleday, New York, (1988)
- 96. J.H. Barton, *The Politics of Peace: An Evaluation of Arms Control*, Stanford Univ. Press, Stanford, CA, (1981).
- 97. W. Bello, *Visions of a Warless World*, Friends Committee on National Education Fund, Washington DC, (1986).

- 98. A. Boserup and A. Mack, Abolishing War: Cultures and Institutions; Dialogue with Peace Scholars Elise Boulding and Randall Forsberg, Boston Research Center for the Twenty-first Century, Cambridge, MA, (1998).
- 99. E. Boulding et al., *Bibliography on World Conflict and Peace*, Westview Press, Boulder, CO, (1979).
- 100. E. Boulding et al., Eds., Peace, Culture and Society: Transnational Research Dialogue, Westview Press, Boulder, CO, (1991).
- A.T. Bryan et al., Eds., Peace, Development and Security in the Caribean, St. Martins Press, New York, (1988).
- 102. A.L. Burns and N. Heathcote, *Peace-Keeping by UN Forces from Suez to Congo*, Praeger, New York, (1963).
- 103. F. Capra and C. Spretnak, *Green Politics: The Global Promise*, E.P. Dutton, New York, (1986).
- 104. N. Carstarphen, Annotated Bibliography of Conflict Analysis and Resolution, Inst. for Conflict Analysis and Resolution, George Mason Univ., Fairfax, VA, (1997).
- 105. N. Chomsky, Peace in the Middle East? Reflections on Justice and Nationhood, Vintage Books, New York, (1974).
- G. Clark and L. Sohn, World Peace Through World Law, World Without War Pubs., Chicago, IL, (1984).
- 107. K. Coates, Think Globally, Act Locally: The United Nations and the Peace Movements, Spokesman Books, Philadelphia, PA, (1988).
- 108. G. De Marco and M. Bartolo, A Second Generation United Nations: For Peace and Freedom in the 20th Century, Colombia Univ. Press, New York, (1997).
- F.M. Deng and I.W. Zartman, Eds., Conflict Resolution in Africa, Brookings Institution, Washington, DC, (1991).
- 110. W. Desan, Let the Future Come: Perspectives for a Planetary Peace, Georgetown Univ. Press, Washington, DC, (1987).
- D. Deudney, Whole Earth Security. A Geopolitics of Peace, Worldwatch paper 55. Worldwatch Institute, Washington, DC, (1983).
- 112. A.J. Donovan, World Peace? A Work Based on Interviews with Foreign Diplomats, A.J. Donovan, New York, (1986).
- R. Duffey, International Law of Peace, Oceania Pubs., Dobbs Ferry, NY, (1990).
- 114. L.J. Dumas, The Socio-Economics of Conversion From War to Peace, M.E. Sharpe, Armonk, NY, (1995).
- W. Durland, *The Illegality of War*, National Center on Law and Pacifism, Colorado Springs, CO, (1982).
- 116. F. Esack, Qur'an, Liberation and Pluralism: An Islamic Perspective on Interreligious Solidarity Against Oppression, Oxford Univ. Press, London, (1997).

- 117. I. Hauchler and P.M. Kennedy, Eds., *Global Trends: The World Almanac* of Development and Peace, Continuum Pubs., New York, (1995).
- 118. H.B. Hollins et al., The Conquest of War: Alternative Strategies for Global Security, Westview Press, Boulder, CO, (1989).
- H.J. Morgenthau, Peace, Security and the United Nations, Ayer Pubs., Salem, NH, (1973).
- C.C. Moskos, Peace Soldiers: The Sociology of a United Nations Military Force, Univ. of Chicago Press, Chicago, IL, (1976).
- L. Pauling, Science and World Peace, India Council for Cultural Relations, New Delhi, India, (1967).
- 122. C. Peck, The United Nations as a Dispute Resolution System: Improving Mechanisms for the Prevention and Resolution of Conflict, Kluwer, Law and Tax, Cambridge, MA, (1996).
- 123. D. Pepper and A. Jenkins, *The Geography of Peace and War*, Basil Blackwell, New York, (1985).
- 124. J. Perez de Cuellar, *Pilgrimage for Peace: A Secretary General's Memoir*, St. Martin's Press, New York, (1997).
- 125. R. Pickus and R. Woito, To End War: An Introduction to the Ideas, Books, Organizations and Work That Can Help, World Without War Council, Berkeley, CA, (1970).
- 126. S.R. Ratner, The New UN Peacekeeping: Building Peace in Lands of Conflict after the Cold War, St. Martins Press, New York, (1995).
- 127. I.J. Rikhye and K. Skjelsbaek, Eds., The United Nations and Peacekeeping: Results, Limitations and Prospects: The Lessons of 40 Years of Experience, St. Martins Press, New York, (1991).
- 128. J. Rotblat, Ed., Scientists in Quest for Peace: A History of the Pugwash Conferences, MIT Press, Cambridge, MA, (1972).
- 129. J. Rotblat, Ed., *Scientists, The Arms Race, and Disarmament*, Taylor and Francis, Bristol, PA, (1982).
- 130. J. Rotblat, Ed., Striving for Peace, Security and Development in the World, World Scientific, River Edge, NJ, (1991).
- J. Rotblat, Ed., Towards a War-Free World, World Scientific, River Edge, NJ, (1995).
- J. Rotblat, Ed., Nuclear Weapons: The Road to Zero, Westview, Boulder, CO, (1998).
- 133. J. Rotblat and L. Valki, Eds., Coexistance, Cooperation and Common Security, St. Martins Press, New York, (1988).
- 134. United Nations, *Peaceful Settlement of Disputes between States: A Select Bibliography*, United Nations, New York, (1991).
- 135. United States Arms Control and Disarmament Agency, Arms Control and Disarmament Agreements: Texts and Histories of Negotiations, US-ACDA, Washington, DC, (updated annually)

- 136. D. Fahrni, An Outline History of Switzerland From the Origins to the Present Day, Pro Helvetia Arts Council of Switzerland, Zurich, (1994).
- 137. J.M. Luck, A History of Switzerland, Sposs, Palo Alto, CA, (1985).
- T. Jackson, Material Concerns: Pollution, Profit and the Quality of Life, Routledge, (2004).
- 139. T. Jackson, *Motivating Sustainable Consumption*, Report to the Sustainable Development Research Network, January (2005).
- 140. T. Jackson, *The Earthscan Reader in Sustainable Consumption*, Earthscan, (2006).
- 141. J.S. Avery, Information Theory and Evolution, 2nd Edition, World Scientific, (2012).
- 142. A.J. Lotka, *Elements of Mathematical Biology*, Dover, (1956).
- E.O. Wilson Sociobiology: The New Synthesis, Harvard University Press, (1975).
- 144. E.O. Wilson, The Superorganism: The Beauty, Elegance, and Strangeness of Insect Societies, W.W. Norton, (2009).
- 145. F. Soddy, Wealth, Virtual Wealth and Debt. The solution of the economic paradox, George Allen and Unwin, (1926).
- 146. F. Soddy, *The Role of Money*, George Routledge and Sons, London, (1934)
- 147. N. Georgescu-Roegen, Energy and Economic Myths : Institutional and Analytical Economic Essays, Pergamon Press, (1976).
- N. Georgescu-Roegen, The Entropy Law and the Economic Process, Harvard University Press, (1971).
- 149. J. Rifkin and T. Howard, *Entropy: A New World View* The Viking Press, New York (1980).
- 150. P. Bartelmus, Environment, Growth and Development: The Concepts and Strategies of Sustainability, Routledge, New York, (1994).
- 151. H.E. Daly and K.N. Townsend, (editors), Valuing the Earth. Economics, Ecology, Ethics, MIT Press, Cambridge, Massachusetts, (1993)
- 152. C. Flavin, *Slowing Global Warming: A Worldwide Strategy*, Worldwatch Paper 91, Worldwatch Institute, Washington D.C., (1989).
- 153. S.H. Schneider, *The Genesis Strategy: Climate and Global Survival*, Plenum Press, (1976).
- 154. WHO/UNFPA/UNICEF, The Reproductive Health of Adolescents: A Strategy for Action, World Health Organization, Geneva, (1989).
- 155. World Commission on Environment and Development, *Our Common Future*, Oxford University Press, (1987).
- 156. W. Jackson, *Man and the Environment*, W.C. Brown, Dubuque, Iowa, (1971).

- 157. T. Berry, *The Dream of the Earth*, Sierra Club Books, San Francisco, (1988).
- 158. T.M. Swanson, ed., *The Economics and Ecology of Biodiversity Decline: The Forces Driving Global Change*, Cambridge University Press, (1995).
- 159. F.H. Bormann, Unlimited Growth: Growing, Growing, and Gone?, Bio-Science 22: 706-9, (1972).
- 160. L.G. Brookes, A Low-Energy Strategy for the United Kingdom, Atom 269: 73-8, (1979).
- 161. J. Cherfas, *Skeptics and Visionaries Examine Energy Saving*, Science 251: 154-6, (1991).
- 162. C.J. Cleveland, Energy Quality and Energy Surplus in the Extraction of Fossil Fuels in the US, Ecological Economics 6: 139-62, (1992).
- 163. C.J. Cleveland, Robert Costanza, Charlie A.S. Hall and Robert Kaufmann, *Energy and the US Economy: A Biophysical Perspective*, Science 225 (4665): 890-7, (1984).
- 164. P. Cloud, Entropy, Materials, and Prosperity, Geologische Rundschau 66: 678-96, (1978).
- 165. H.E. Daly, From Empty-World Economics to Full-World Economics: Recognizing a Historical Turning Point in Economic Development, in R. Goodland, H. E. Daly and S. Serafy (eds) Population, Technology, and Lifestyle, pp. 23-37. Washington, DC: Island Press, (1992).
- 166. H.E. Daly, On Nicholas Georgescu-Roegen's Contributions to Economics: An Obituary Essay, Ecological Economics 13: 149-54, (1995).
- 167. H.E. Daly, Georgescu-Roegen versus Solow/Stiglitz, Ecological Economics 22: 267-8, (1997).
- 168. M. Eigen, Selforganization of Matter and the Evolution of Biological Macro- molecules, Naturwissenschaften 58(10): 465-523, (1971).
- 169. S.O. Funtowicz and Jerry R. Ravetz, *Post Normal Science: A New Science for New Times*, Scientific European 266: 20-2, (1990).
- 170. N. Georgescu-Roegen, Fixed Coefficients of Production and the Marginal Productivity Theory, Review of Economic Studies 3: 40-9, (1935a).
- 171. N. Georgescu-Roegen, (1935b) Note on a Proposition of Pareto, Quarterly Journal of Economics 49: 706-14.
- 172. N. Georgescu-Roegen, Marginal Utility of Money and Elasticities of Demand, Quarterly Journal of Economics 50: 533-9, (1936a).
- 173. N. Georgescu-Roegen, *The Pure Theory of Consumer's Behavior*, Quarterly Journal of Economics 50: 545-93, (1936b).
- 174. N. Georgescu-Roegen, Process in Farming versus Process in Manufacturing: A Problem of Balanced Development, in U. Papi and C. Nunn (eds) Economic Problems of Agriculture in Industrial Societies, pp. 497-528. London: Macmillan, (1969).

- 175. N. Georgescu-Roegen, *The Entropy Law and the Economic Process*, Cambridge, MA: Harvard University Press, (1971).
- 176. N. Georgescu-Roegen, *Energy and Economic Myths*, Southern Economic Journal 41: 347-81, (1975).
- 177. N. Georgescu-Roegen, *Energy and Economic Myths.* New York: Pergamon Press, (1976).
- 178. N. Georgescu-Roegen, Inequality, Limits and Growth from a Bioeconomic View- point, Review of Social Economy 35: 361-75, (1977a).
- 179. N. Georgescu-Roegen, The Steady State and Ecological Salvation: A Thermodynamic Analysis, BioScience 27: 266-70, (1977b).
- N. Georgescu-Roegen, Energy Analysis and Economic Valuation, Southern Economic Journal 45: 1023-58, (1979a).
- N. Georgescu-Roegen, Methods in Economic Science, Journal of Economic Issues 13 (2): 317-28, (1979b).
- 182. N. Georgescu-Roegen, Methods in Economic Science: A Rejoinder, Economic Issues 15: 188-93, (1981).
- 183. N. Georgescu-Roegen, The Promethean Condition of Viable Technologies, Materials and Society 7: 425-35, (1983).
- 184. Georgescu-Roegen, Nicholas, Man and Production, in M. Baranzini and R. Scazzieri (eds) Foundations of Economics: Structures of Inquiry and Economic Theory, pp. 247-80. Oxford: Basil Blackwell, (1986).
- 185. N. Georgescu-Roegen, An Emigrant from a Developing Country: Autobiographical Notes-I, Banca Nationale del Lavoro Quarterly Review 164: 3-31, (1988a).
- 186. N. Georgescu-Roegen, The Interplay between Institutional and Material Factors: The Problem and Its Status, in J.A. Kregel, E. Matzner and A. Roncaglia (eds) Barriers to Employment, pp. 297-326. London: Macmillan, (1988b).
- 187. N. Georgescu-Roegen, Production Process and Dynamic Economics, in M. Baranzini and R. Scazzieri (eds) The Economic Theory of Structure and Change, pp. 198-226. Cambridge: Cambridge University Press, (1990).
- 188. N. Georgescu-Roegen, Nicholas Georgescu-Roegen about Himself, in M. Szenberg (ed.) Eminent Economists: Their Life Philosophies, pp. 128-59. Cambridge: Cambridge University Press, (1992).
- 189. J. Gever, Robert Kaufmann, David Skole and Charles Vörösmarty, Beyond Oil: The Threat to Food and Fuel in the Coming Decades, Niwot, CO: University Press of Colorado, (1991).
- 190. M. Giampietro, Sustainability and Technological Development in Agriculture: A Critical Appraisal of Genetic Engineering, BioScience 44(10): 677-89, (1994).

- 191. M. Giampietro and Kozo Mayumi, Another View of Development, Ecological Degradation and North-South Trade, Review of Social Economy 56: 21-37, (1998).
- 192. M. Giampietro and Kozo Mayumi, *The Biofuel Delusion: The Fallacy* of Large Scale Agro-biofuel Production, London: Earthscan, (2009).
- 193. R. Goldschmidt, Some Aspects of Evolution, Science 78: 539-47, (1933).
- 194. S.J. Gould, *The Return to Hopeful Monsters*, Natural History 86: 22-30, (1977).
- 195. S.J. Gould and Niles Eldredge, *Punctuated Equilibria: The Tempo and Mode of Evolution Reconsidered*, Paleobiology 3: 115-51, (1977).
- 196. J. Gowdy, The Value of Biodiversity: Markets, Society and Ecosystems, Land Economics 73(1): 25-41, (1997).
- 197. J. Gribbin, The Death of the Sun New York: Delacorte Press, (1980).
- 198. C.A.S. Hall, Cutler J. Cleveland and Robert Kaufman, *Energy and Resource Quality* New York: John Wiley and Sons, (1986).
- 199. S.R. Ichtiaque and Stephen H. Schneider, Atmospheric Carbon Dioxide and Aerosols: Effects of Large Increases on Global Climate, Science 173: 138-41, (1971).
- 200. K. Ito, Setting Goals and Action Plan for Energy Efficiency Improvement. Paper presented at the EAS Energy Efficiency and Conservation Conference, Tokyo (19 June), (2007).
- 201. F. Jevons, *Greenhouse: A Paradox*, Search 21: 171-2, (1990).
- 202. W.S. Jevons, *The Coal Question* (reprint of 3rd edn, 1906). New York: Augustus M. Kelley, (1965).
- 203. N. Kawamiya, Entropii to Kougyoushakai no Sentaku (Entropy and Future Choices for the Industrial Society), Tokyo: Kaimei, (1983).
- 204. J.D. Khazzoom, Economic Implications of Mandated Efficiency Standards for Household Appliances, Energy Journal 1: 21-39, (1980).
- 205. J.D. Khazzoom, Energy Saving Resulting from the Adoption of More Efficient Appliances, Energy Journal 8: 85-9, (1987).
- 206. T.C. Koopmans, *Three Essays on the State of Economic Science*, New York: McGraw-Hill Book Company, (1957).
- 207. T.S. Kuhn, *The Structure of Scientific Revolutions*, Chicago, IL: The University of Chicago Press, (1962).
- 208. J. von Liebig, *Letters on Modern Agriculture* (J. Blyth ed.). New York: John Wiley, (1959).
- 209. A.J. Lotka, *Elements of Mathematical Biology*, New York: Dover Publications, (1956).
- 210. G. Luft, Fueling the Dragon: China's Race Into the Oil Market. http://www.iags.org/ china.htm, (2007).

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- 211. K. Mayumi, The Origins of Ecological Economics: The Bioeconomics of Georgescu- Roegen, London: Routledge, (2001).
- 212. K. Mayumi, An Epistemological Critique of the Open Leontief Dynamic Model: Balanced and Sustained Growth, Delays, and Anticipatory Systems Theory, Structural Change and Economic Dynamics 16: 540-56m (2005).
- K. Mayumi, Mario Giampietro and John Gowdy, *Georgescu-Roegen/Daly versus Solow/Stiglitz Revisited*, Ecological Economics 27: 115-17. Legacies: Nicholas Georgescu-Roegen 1253, (1998).
- 214. W.H. Miernyk, Economic Growth Theory and the Georgescu-Roegen Paradigm, in K. Mayumi and J. Gowdy (eds) Bioeconomics and Sustainability: Essays in Honour of Nicholas Georgescu-Roegen, pp. 69-81. Cheltenham: Edward Elgar, (1999).
- 215. Newman, Peter, *Greenhouse*, Oil and Cities, Futures May: 335-48, (1991).
- D. Pearce, Substitution and Sustainability: Some Reflections on Georgescu-Roegen, Ecological Economics 22: 295-7, (1997).
- 217. D. Pearce, Edward Barbier and Anil Markandya, *Sustainable Development*, Hampshire: Edward Elgar, (1990).
- 218. J. Polimeni, Kozo Mayumi, Mario Giampietro and Blake Alcott, The Jevons Paradox and the Myth of Resource Efficiency Improvements, London: Earthscan, (2008).
- J.F. Randolph, Basic Real and Abstract Analysis, New York: Academic Press, (1968).
- 220. D. Ricardo, On the Principles of Political Economy and Taxation, in P. Sraffa (ed.) The Works and Correspondence of David Ricardo, Vol. 1. Cambridge: Cambridge University Press, (1951).
- 221. E. Schrödinger, What is Life? With Mind and Matter and Autobiographical Sketches, Cambridge: Cambridge University Press, (1967).
- 222. J.A. Schumpeter, *The Theory of Economic Development*, Cambridge, MA: Harvard Economic Press, (1951).
- 223. G.T. Seaborg, The Erehwon Machine: Possibilities for Reconciling Goals by Way of New Technology, in S.H. Schurr (ed.) Energy, Economic Growth, and the Environment, pp. 125-38. Baltimore, MD: Johns Hopkins University Press, (1972).
- 224. M.R. Simmons, Twilight in the Desert: The Coming Saudi Oil Shock and the World Economy New Jersey: John Wiley and Sons, Inc., (2005).
- 225. B.J. Skinner, *Earth Resource (3rd edn)*, New Jersey: Prentice Hall, (1986).
- 226. V. Smil, Global Catastrophes and Trends: The Next Fifty Years Cambridge, MA: MIT Press, (2008).
- 227. R. Solow, Technical Change and the Aggregate Production Function, Review of Economics and Statistics 39: 312-20, (1957).

- 228. R. Solow, The Economics of Resources or the Resources of Economics, American Economic Review 64: 1-14, (1974).
- 229. R.E. Ulanowicz, Growth and Development: Ecosystem Phenomenology New York: Springer-Verlag, (1986).
- 230. US Geological Survey, Commodity Statistics and Information, (2005).
- 231. G.K. Zipf, National Unity and Disunity: The Nation as a Bio-social Organism. Bloomington, IN: Principia Press, (1941).

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